State Clearinghouse Number 2002041161

2015 Facilities Master Plan Update and Physical Education Projects

Draft Subsequent Program/Project EIR to
Final Program EIR (SCH 2002041161)

Volume 3
Response to Public Comments on a Draft EIR
Appendices Only

MT. SAN ANTONIO COLLEGE
Facilities Planning & Management
Walnut, California

SID LINDMARK, AICP
Planning . Environmental . Policy
September 2016

APPENDICES (under separate cover)			
A	PUBLIC COMMENTS		
	A1.	SCAQMD/Mize	July 7, 2016
	A2.	Kizh Nation: Andrew Salas (Letter)	July 11, 2016
	A3.	Kizh Nation: Andrew Salas (DB/MBE Certification)	June 2016
	A4.	Thresholds: Scenario 1 Input File	-
	A5.	Thresholds: Scenario 1A Input File	-
	A6.	Thresholds: Scenario 1A Annual Output File	November 11, 2015
	A7.	Thresholds: Scenario 1A Winter Output File	November 11, 2015
	A8.	G & A Response to SCAQMD/Mize (A1)	July 19, 2016
	A9.	SCAQMD/Gordon Mize	July 20, 2016
	A10.	SCAG NOP Response	February 11, 2016
	A11.	County of Los Angeles Fire Department NOP Response	February 16, 2016
	A12.	Greve & Associates Response to SCAQMD/Mize (A9)	July 21, 2016
	A13.	United Walnut Taxpayers	July 21, 2016
	A14.	SCAQMD/Jillian Wong	July 27, 2016
	A15.	City of Walnut	July 28, 2016
	A16.	City of Pomona	July 28, 2016
	A18.	County Fire NOC Response	July 19, 2016
	A19.	California Department of Fish & Wildlife	August 8, 2016
	A20.	SCH CEQA Compliance Letter	July 26, 2016
	A21.	County Sanitation Districts of Los Angeles County	July 26, 2016
	A22.	Fire Hazard Zones (VHFHSZ)	September 2011
	A23.	EPT Design Detention Planting Plan	January 15, 2015
	A24.	Iteris Inc. Responses to Pomona (A16)	August 26, 2016
	A25.	Greve & Associates Responses to Exhibit B (SWAPE)	August 11, 2016
	A26.	Three Valleys Municipal Water District	August 9, 2016
	A27.	SWRCB Small MS 4 Permits	April 30, 2003
	A28.	Iteris Inc. Responses to Exhibit A (Kunzman Associates)	August 29, 2016
	A29.	Helix Responses to CDFW (A19)	August 24, 2016
	A36.	City of Walnut – Traffic Technical Appendices	August 25, 2016
	A37.	Iteris Inc. Response to City of Walnut – Traffic Technical Appendices	August 31, 2016

APPENDICES (under separate cover) (continued)			
B	NOTICES		
	B1.	NOC (Libraries & Local Agencies) – Sent Certified Mail	June 6, 2016
	B2.	NOC State Clearinghouse (SCH) Appendix C	June 9, 2016
	B3.	NOC Proof of Publication: Inland Valley Daily Bulletin (IVDB)	June 10, 2016
	B4.	NOC Proof of Publication: San Gabriel Valley Tribune (SGVT)	June 10, 2016
	B5.	NOC SCH Form F: Summary of Electronic Response Summary	June 9, 2016
	B6.	NOC Proof of Filing: County Clerk	June 9, 2016
	B7.	Notice of 10/12/16 Public Hearing & Resolution (Libraries & Local Agencies) – Sent Certified Mail	September 23, 2016
	B8.	NOD (Appendix D) of Final EIR	TBD
	B9.	Resolution for District GP/ZC/Noise Exemptions	TBD
	B10.	Notice of Public Hearing & Resolution Proof of Publication: Inland Valley Daily Bulletin (IVDB)	September 23, 2016
	B11.	Notice of Public Hearing & Resolution Proof of Publication: San Gabriel Valley Tribune (SGVT)	September 23, 2016
	B12.	Notice of Public Hearing & Resolution Proof of Filing: County Clerk	September 23, 2016
	B13.	NOD Proof of Filing: County Clerk	TBD
	B14.	NOD Proof of Filing: SCH	TBD
	B15.	NOA of the Traffic Technical Appendices: Posted (Mt. SAC)	August 16, 2016
	B16.	NOA SCH (Appendix C) for Traffic Technical Appendices	August 19, 2016
	B17.	NOA SCH Form F: Summary of Electronic Response Summary of Traffic Technical Appendices A – D	August 16, 2016
	B18.	NOA Proof of Publication Traffic Technical Appendices: Inland Valley Daily Bulletin (IVDB)	August 19, 2016
	B19.	NOA Proof of Publication Traffic Technical Appendices: San Gabriel Valley Tribune (SGVT)	August 19, 2016
	B20.	NOA Proof of Filing Traffic Technical Appendices: SCH	TBD
	B21.	NOA Proof of Filing Traffic Technical Appendices: County Clerk	August 19, 2016

APPENDICES (under separate cover) (continued)			
C	OTHER INFORMATION		
	A17.	Student Vehicle Occupancy Survey	May 25, 2016
	A30.	SEIR Traffic Study Technical Appendices A–D	April 1, 2016
	A31.	West Parcel Solar Depiction of Habitat (Mitigation) Areas (Exhibit E)	July 27, 2016
	A32.	Vegetation Map - Detention Basin (Figure 4b)	-
	A33.	Fire Academy Vegetation Map (Figure 4c)	-
	A34.	Wildlife Sanctuary Vegetation Map (Figure 4d)	-
	A35.	Temple Avenue and South Campus Drive Street Improvement Signing and Striping	December 22, 2015
D	2016 MITIGATION MONITORING PROGRAM		
	D1	Mitigation Monitoring Program	October 10, 2016
E	FINAL TRAFFIC STUDY & FINAL APPENDICES (September 1, 2016)		
	A38.	Final SEIR Traffic Study	September 1, 2016
	A39.	Final SEIR Traffic Study Technical Appendices	September 1, 2016

From: Gordon Mize <gmize@aqmd.gov>
To: Mikaela Klein <Mikaela.Klein@mtsac.edu>
Date: 07/07/2016 05:24 PM
Subject: Question AQ Analysis SCH 2002041161

Mikaela Klein, Senior Facilities Planner
Facilities Planning & Management
Mt. San Antonio College

Hi Mikaela,

I am looking at the DSEIR for the proposed 1) 2015 FMPU; 2) Thresholds of Significance Review; and 3) The proposed emission impacts from the Olympic Track and Field Trials.

1) Could the CalEEMod run output sheets for Scenario 1A be sent to me please? I have the output sheets for the first scenario (Scenario 1). I want to also look at the modeling inputs for both, if I could. The SCAQMD staff does recognize surrogate analyses but the caution is that a variation of a project (an increase in the amount of equipment used, soil disturbance, a decrease in the amount of time to building the project, etc., causes SCAQMD staff to compare the project description of the surrogate analysis with a project description that might be different to see if the project analysis varies from the assumptions from the surrogate.

In addition, the SCAQMD periodically updates the analysis tools used to estimate project air quality impacts. This is done so that recognized emission estimate tools include more current emission factors from more recent fleet averages. For example, the SCAQMD is likely to release CalEEMod 2016 later this year replacing CalEEMod 2013. In practice, over the years, if an analysis is older, the SCAQMD staff might recommend re-analyzing the project's potential emission impacts using the more current analysis tools.

2) I see a CO hotspots analysis for the additional vehicle trips estimated for the proposed Olympic Trials activities but no actual emission estimates in the DSEIR or the associated air study. The proposed two week activity projects a total attendance of 112,000 people (20,000 daily, page 415). Were the emissions from the vehicles, shuttle buses (should identify how the vehicles are fueled, etc. included in the analyses? If so, I need to see the emissions as well as the methodologies used, emission factors, equations, etc., as part of our review.

Also, since the event could occur with students, faculty and administrative staff on campus, the peak day analysis (worst-case) should include emissions from those sources plus the vehicle emissions added during the eight days of Olympic Trials, unless the DSEIR precludes the overlap of the summer session activities with the Olympic Trials.

Comments are due to the Lead Agency no later than Thursday, July 28, 2016. If you have any questions about my requests, please feel free to contact me.

Sincerely,

Gordon

Thank you.

Gordon

Gordon E. Mize
Air Quality Specialist
South Coast Air Quality Management District
CEQA, Inter-Governmental Review
(909) 396-3302 Phone
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GABRIELENO BAND OF MISSION INDIANS - KIZH NATION
Historically known as The San Gabriel Band of Mission Indians
Recognized by the State of California as the aboriginal tribe of the Los Angeles basin

Dear Mikaela Klein,

Subject: Notice of Completion (NOC) of the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects Draft Subsequent Project and Environmental Impact Report (SCH 200204116)

"The project locale lies in an area where the Ancestral & traditional territories of the Kizh(Kitc) Gabrieleño villages, adjoined and overlapped with each other, at least during the Late Prehistoric and Protohistoric Periods. The homeland of the Kizh (Kitc) Gabrieleños , probably the most influential Native American group in aboriginal southern California (Bean and Smith 1978a:538), was centered in the Los Angeles Basin, and reached as far east as the San Bernardino-Riverside area. The homeland of the Serranos was primarily the San Bernardino Mountains, including the slopes and lowlands on the north and south flanks. Whatever the linguistic affiliation, Native Americans in and around the project area exhibited similar organization and resource procurement strategies. Villages were based on clan or lineage groups. Their home/ base sites are marked by midden deposits, often with bedrock mortars. During their seasonal rounds to exploit plant resources, small groups would migrate within their traditional territory in search of specific plants and animals. Their gathering strategies often left behind signs of special use sites, usually grinding slicks on bedrock boulders, at the locations of the resources. Therefore in order to protect our resources we're requesting one of our experienced & certified Native American monitors to be on site during any & all ground disturbances (this includes but is not limited to pavement removal, pot-holing or auguring, boring, grading, excavation and trenching).

In all cases, when the NAHC states there are "No" records of sacred sites" in the subject area; they always refer the contractors back to the Native American Tribes whose tribal territory the project area is in. This is due to the fact, that the NAHC is only aware of general information on each California NA Tribe they are "NOT " the "experts" on our Tribe. Our Elder Committee & Tribal Historians are the experts and is the reason why the NAHC will always refer contractors to the local tribes.

In addition, we are also often told that an area has been previously developed or disturbed and thus there are no concerns for cultural resources and thus minimal impacts would be expected. I have two major recent examples of how similar statements on other projects were proven very inadequate. An archaeological study claimed there would be no impacts to an area adjacent to the Plaza Church at Olvera Street, the original Spanish settlement of Los Angeles, now in downtown Los Angeles. In fact, this site was the Gabrieleno village of Yangna long before it became what it is now today. The new development wrongfully began their construction and they, in the process, dug up and desecrated 118 burials. The area that was dismissed as culturally sensitive was in fact the First Cemetery of Los Angeles where it had been well documented at the Huntington Library that 400 of our Tribe's ancestors were buried there along with the founding families of Los Angeles (Pico's, Sepulveda's, and Alvarado's to name a few). In addition, there was another inappropriate study for the development of a new sports complex at Fedde Middle School in the City of Hawaiian Gardens could commence. Again, a village and burial site were desecrated despite their mitigation measures. Thankfully, we were able to work alongside the school district to quickly and respectfully mitigate a mutually beneficial resolution.

Given all the above, the proper thing to do for your project would be for our Tribe to monitor ground disturbing construction work. Native American monitors and/or consultant can see that cultural resources are treated appropriately from the Native American point of view. Because we are the lineal descendants of the vast area of Los Angeles and Orange Counties, we hold sacred the ability to protect what little of our culture remains. We thank you for taking seriously your role and responsibility in assisting us in preserving our culture.

With respect,

Please contact our office regarding this project to coordinate a Native American Monitor to be present. Thank You

Andrew Salas, Chairman
Cell (626) 926-4131

Addendum: clarification regarding some confusions regarding consultation under AB52:

AB52 clearly states that consultation must occur with tribes that claim traditional and cultural affiliation with a project site. Unfortunately, this statement has been left open to interpretation so much that neighboring tribes are claiming affiliation with projects well outside their traditional tribal territory. The territories of our surrounding Native American tribes such as the Luiseno, Chumash, and Cahuilla tribal entities. Each of our tribal territories has been well defined by historians, ethnographers, archaeologists, and ethnographers – a list of resources we can provide upon request. Often, each Tribe as well educates the public on their very own website as to the definition of their tribal boundaries. You may have received a consultation request from another Tribe. However we are responding because your project site lies within our Ancestral tribal territory, which, again, has been well documented. What does Ancestrally or Ancestral mean? The people who were in your family in past times, Of, belonging to, inherited from, or denoting an ancestor or ancestors http://www.thefreedictionary.com/ancestral. . If you have questions regarding the validity of the "traditional and cultural affiliation" of another Tribe, we urge you to contact the Native American Heritage Commission directly. Section 5 section 21080.3.1 (c) states "…the Native American Heritage Commission shall assist the lead agency in identifying the California Native American tribes that are traditionally and culturally affiliated with the project area." In addition, ***please see the map below.***

CC: NAHC

APPENDIX 1: Map 1-2; Bean and Smith 1978 map.

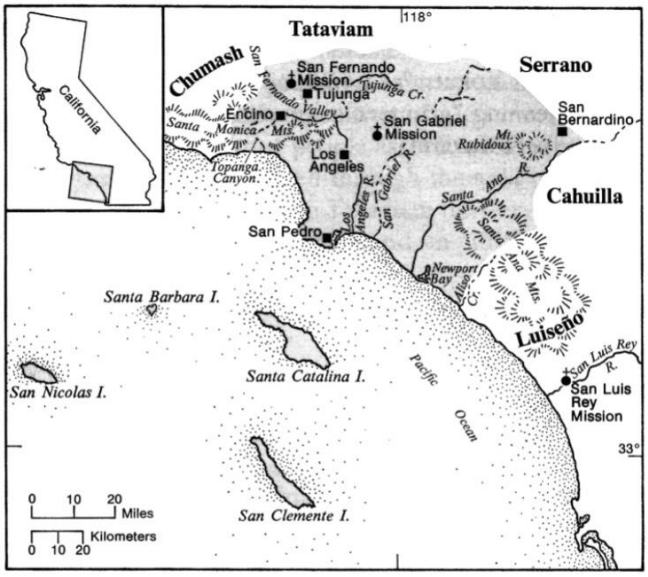

Fig. 1. Tribal territory.

The United States National Museum's Map of Gabrielino Territory:

Bean, Lowell John and Charles R. Smith
1978 Gabrielino IN *Handbook of North American Indians, California*, Vol. 8, edited by R.F. Heizer, Smithsonian Institution Press, Washington, D.C., pp. 538-549

Andrew Salas, Chairman | Nadine Salas, Vice-Chairman | Christina Swindall Martinez, secretary

Albert Perez, treasurer I | Martha Gonzalez Lemos, treasurer II | Richard Gradias, Chairman of the council of Elders

PO Box 393 Covina, CA 91723 www.gabrielenoindians@yahoo.com gabrielenoindians@yahoo.com

GABRIELENO BAND OF MISSION INDIANS - KIZH NATION
Historically known as The San Gabriel Band of Mission Indians
recognized by the State of California as the aboriginal tribe of the Los Angeles basin

To our future business partners

re: DBE/MBE Certification (June 2016)

I am pleased to announce to lead agencies that the Gabrieleno Band of Mission Indians, LLC has met the Requirements and qualifications and is now certified as a Disadvantaged Business Enterprise (DBE) with the Department of Transportation CUCP (Regulation 49 CFR Part 26; verification #43503) listed under the following areas of expertise: NAICS 2007 541620 (Environmental consulting services), 541690 (other scientific and consulting services) and 541990 (all other professional, scientific and technical services. In addition, we are also now a Minority Business Enterprise (MBE) with the Supplier Clearinghouse (pursuant to Commission General Order 156; verification order #16000312) and thus listed in the CUCP. Now we are able to partner with you to help you meet your small business/DBE goals.

Gabrieleno Band of Mission Indians, LLC has developed partnerships between our Tribe and local professionals to provide the following services:

- Cultural, Archaeological, Paleontological & Biological consulting
- GIS mapping & consulting
- Historical research
- CEQA/NEPA Compliance (AB52/SB18)
- Native American monitoring
- Traditional cultural places consultation
- Cultural, Archaeological, Paleontological & Biological surveys and reports
- Restoration/revegetation design, installation & maintenance
- Invasive species ID and removal
- Grading, grubbing and vegetation removal
- Legal refuse site for disposal of native vegetation

Land stewardship and professional services have been created by our Tribe to support the various development and land rehabilitation efforts occurring throughout our historic tribal territory. Our environmental services combine our elder's cultural knowledge of land management practices attained over a millennia of generations with modern collegiate scientific knowledge attained by our younger generations of tribal members. This combination of old and new enables us to bring a sound and practical foundation that can handle any array of environmental services land stewardship projects.

If any of these services can be of use to you for any of your projects, please contact us at your convenience. We thank you again for your earnest interest in supporting our Tribe's efforts to sustain and build upon the natural integrity, beauty, and provisions that our land has always provided. Together, our land can still provide for the generations of tomorrow.

With gratitude,

Andrew Salas, Chairman
cell (626)926-4131

ProjectNan	LocationSc	EMFAC_ID	WindSpee	Precipitatio	ClimateZor	Urbanizatic	Operationa	UtilityComp
Thresholds	AD	SCAQMD	2.2	31	9	Urban	2017	Southern C

CO2Intens	CH4Intensi	N2OIntensi	TotalPopul	TotalLotAc	UsingHistoricalEnergyUseData
630.89	0.029	0.006	0	3	0

PollutantSe	PollutantFu	PollutantName
1	Reactive O	ROG
1	Nitrogen O	NOX
1	Carbon Mo	CO
1	Sulfur Diox	SO2
1	Particulate	PM10
1	Particulate	PM2_5
1	Fugitive PM	PM10_FUG
1	Fugitive PM	PM25_FUG
1	Biogenic C	CO2_BIO
1	Non-Biogei	CO2_NBIO
1	Carbon Dio	CO2
1	Methane (C	CH4
1	Nitrous Oxi	N2O
1	CO2 Equiv	CO2E

LandUseTy	LandUseSu	LandUseUn	LandUseSi	LotAcreage	LandUseSq	Population
Educationa	Junior Colle	95	1000sqft	3	95000	0

tblConstructionPhase

PhaseNum	PhaseNam	PhaseType	PhaseStart	PhaseEndI	NumDaysV	NumDays	PhaseDescription
1	Demolition	Demolition	2016/01/01	2016/01/28	5	20	
2	Site Prepar	Site Prepar	2016/01/29	2016/02/02	5	3	
3	Grading	Grading	2016/02/03	2016/02/10	5	6	
4	Building Co	Building Co	2016/02/11	2016/12/14	5	220	
5	Paving	Paving	2016/12/15	2016/12/28	5	10	
6	Architectur	Architectur	2016/12/29	2017/01/11	5	10	

PhaseNam	OffRoadEq	OffRoadEq	UsageHou	HorsePow	LoadFactor
Demolition	Concrete/Ir	1	8	81	0.73
Demolition	Excavators	3	8	162	0.38
Demolition	Rubber Tir	2	8	255	0.4
Site Prepar	Rubber Tir	3	8	255	0.4
Site Prepar	Tractors/Lo	4	8	97	0.37
Grading	Excavators	1	8	162	0.38
Grading	Graders	1	8	174	0.41
Grading	Rubber Tir	1	8	255	0.4
Grading	Tractors/Lo	3	8	97	0.37
Building Co	Cranes	1	7	226	0.29
Building Co	Forklifts	3	8	89	0.2
Building Co	Generator	1	8	84	0.74
Building Co	Tractors/Lo	3	7	97	0.37
Building Co	Welders	1	8	46	0.45
Paving	Cement an	2	6	9	0.56
Paving	Pavers	1	8	125	0.42
Paving	Paving Equ	2	6	130	0.36
Paving	Rollers	2	6	80	0.38
Paving	Tractors/Lo	1	8	97	0.37
Architectur	Air Compre	1	6	78	0.48

PhaseNam	WorkerTrip	VendorTrip	HaulingTrip	WorkerTrip	VendorTrip	HaulingTrip	WorkerVeh	VendorVeh
Demolition	15	0	0	14.7	6.9	20	LD_Mix	HDT_Mix
Site Prepar	18	0	0	14.7	6.9	20	LD_Mix	HDT_Mix
Grading	15	0	0	14.7	6.9	20	LD_Mix	HDT_Mix
Building Co	40	16	0	14.7	6.9	20	LD_Mix	HDT_Mix
Paving	20	0	0	14.7	6.9	20	LD_Mix	HDT_Mix
Architectur	8	0	0	14.7	6.9	20	LD_Mix	HDT_Mix

HaulingVehicleClass
HHDT
HHDT
HHDT
HHDT
HHDT
HHDT

PhaseNam	WorkerPer	VendorPer	HaulingPer	RoadSiltLo	MaterialSilt	MaterialMo	AverageVe	MeanVehic
Demolition	100	100	100	0.1	8.5	0.5	2.4	40
Site Prepar	100	100	100	0.1	8.5	0.5	2.4	40
Grading	100	100	100	0.1	8.5	0.5	2.4	40
Building Cc	100	100	100	0.1	8.5	0.5	2.4	40
Paving	100	100	100	0.1	8.5	0.5	2.4	40
Architectur	100	100	100	0.1	8.5	0.5	2.4	40

leSpeed

tblDemolition

PhaseNam	Demolition	DemolitionUnitAmount
Demolition		

PhaseNam	MaterialIm	MaterialEx	GradingSiz	ImportExp	MeanVehic	AcresOfGr	MaterialMo	MaterialMo
Site Prepa	0	0	0	7.1	0	7.9	12	
Grading	0	0	0	7.1	3	7.9	12	

MaterialSiltContent
6.9
6.9

PhaseNam	Architectur	Architectur	EF_Reside	ConstArea_	EF_Reside	ConstArea_	EF_Nonres	ConstArea_
Architectur	2008/07/01	3000/12/31	50	0	100	0	125	142500

EF_Nonres	ConstArea_Nonresidential_Exterior
125	47500

ParkingLotAcreage

VehicleTrip	VehicleTrip	WD_TR	ST_TR	SU_TR	HW_TL	HS_TL	HO_TL	CC_TL
Junior Coll	1000sqft	27.49	11.23	1.21	0	0	0	8.4

CW_TL	CNW_TL	PR_TP	DV_TP	PB_TP	HW_TTP	HS_TTP	HO_TTP	CC_TTP
16.6	6.9	92	7	1	0	0	0	88.6

CW_TTP	CNW_TTP
6.4	5

Season	EmissionTy	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD
A	FleetMix	0.512163	0.060173	0.180257	0.139094	0.042244	0.006664	0.016017
A	CH4_IDLE	0	0	0	0	0.001297	0.001014	0.007328
A	CH4_RUNI	0.011887	0.025331	0.016684	0.026843	0.014266	0.01007	0.004744
A	CH4_STRE	0.007961	0.02074	0.011382	0.022407	0.024609	0.015362	0
A	CO_IDLEX	0	0	0	0	0.187969	0.15121	1.823498
A	CO_RUNE	0.993244	2.625779	1.408522	2.188115	1.356769	0.932386	1.023053
A	CO_STRE	1.86534	4.81029	2.751505	4.605301	4.718021	2.890746	18.1538
A	CO2_NBIC	0	0	0	0	8.121999	8.946405	598.7027
A	CO2_NBIC	283.4051	339.2661	410.9078	538.816	560.9122	540.5906	971.6759
A	CO2_NBIC	60.0286	70.95168	85.83112	112.4553	43.63869	29.89634	54.81789
A	NOX_IDLE	0	0	0	0	0.045883	0.097096	5.917678
A	NOX_RUN	0.089657	0.261336	0.160255	0.275006	1.227755	1.969901	2.771458
A	NOX_STRI	0.121862	0.277867	0.255243	0.441646	1.398037	0.930742	1.940752
A	PM10_IDLI	0	0	0	0	0.000483	0.001059	0.019577
A	PM10_PMI	0.03675	0.03675	0.03675	0.03675	0.046171	0.062676	0.112923
A	PM10_PM	0.008	0.008	0.008	0.008	0.008949	0.009978	0.011256
A	PM10_RUI	0.001918	0.0043	0.001956	0.002257	0.007833	0.015048	0.070883
A	PM10_STF	0.002898	0.004975	0.002913	0.00332	0.001199	0.000717	0.002538
A	PM25_IDLI	0	0	0	0	0.000444	0.000974	0.018011
A	PM25_PMI	0.01575	0.01575	0.01575	0.01575	0.019788	0.026861	0.048396
A	PM25_PM	0.002	0.002	0.002	0.002	0.002237	0.002494	0.002814
A	PM25_RUI	0.001767	0.00397	0.001804	0.00208	0.00721	0.013845	0.065211
A	PM25_STF	0.002672	0.004596	0.002691	0.003064	0.0011	0.000652	0.002204
A	ROG_DIUF	0.053622	0.173765	0.070018	0.090853	0.002888	0.001746	0.003018
A	ROG_HTS	0.123443	0.306051	0.154574	0.202785	0.074815	0.048642	0.114925
A	ROG_IDLE	0	0	0	0	0.030109	0.023321	0.157768
A	ROG_RES	0.04664	0.130225	0.063816	0.08523	0.001696	0.001042	0.001804
A	ROG_RUN	0.024562	0.070432	0.032623	0.060702	0.098509	0.091775	0.131805
A	ROG_RUN	0.272396	1.060118	0.48168	0.614552	0.436052	0.276735	0.510748
A	ROG_STR	0.139477	0.365875	0.200778	0.395253	0.434501	0.270294	1.157453
A	SO2_IDLE	0	0	0	0	0.000088	0.000094	0.006013
A	SO2_RUNI	0.003606	0.004166	0.004902	0.006216	0.005861	0.005578	0.009818
A	SO2_STRE	0.000768	0.000928	0.00105	0.00135	0.000546	0.000368	0.000898
A	TOG_DIUF	0.053622	0.173765	0.070018	0.090853	0.002888	0.001746	0.003018
A	TOG_HTSI	0.123443	0.306051	0.154574	0.202785	0.074815	0.048642	0.114925
A	TOG_IDLE	0	0	0	0	0.031999	0.024995	0.179606
A	TOG_RES	0.04664	0.130225	0.063816	0.08523	0.001696	0.001042	0.001804
A	TOG_RUN	0.03686	0.096859	0.04984	0.088486	0.116615	0.107958	0.151777
A	TOG_RUN	0.272396	1.060118	0.48168	0.614552	0.436052	0.276735	0.510748
A	TOG_STRI	0.149015	0.390754	0.214432	0.422132	0.464026	0.288714	1.237968
S	FleetMix	0.512163	0.060173	0.180257	0.139094	0.042244	0.006664	0.016017
S	CH4_IDLE	0	0	0	0	0.001297	0.001014	0.006906
S	CH4_RUNI	0.011887	0.025331	0.016684	0.026843	0.014266	0.01007	0.004744
S	CH4_STRE	0.007961	0.02074	0.011382	0.022407	0.024609	0.015362	0
S	CO_IDLEX	0	0	0	0	0.187969	0.15121	1.325029
S	CO_RUNE	1.095612	2.862758	1.551348	2.406997	1.378952	0.940792	1.030765
S	CO_STRE	1.472775	3.803053	2.169856	3.633636	3.826485	2.361697	14.81004
S	CO2_NBIC	0	0	0	0	8.122	8.946405	634.2726
S	CO2_NBIC	298.0147	356.0131	431.6292	566.5204	560.9122	540.5906	971.6759
S	CO2_NBIC	60.02861	70.95169	85.83112	112.4553	43.63869	29.89634	54.81789
S	NOX_IDLE	0	0	0	0	0.045883	0.097096	6.108037
S	NOX_RUN	0.079266	0.229345	0.141385	0.242822	1.139404	1.853092	2.605315
S	NOX_STRI	0.113323	0.258204	0.237368	0.410553	1.345144	0.895469	1.862927
S	PM10_IDLI	0	0	0	0	0.000483	0.001059	0.016503
S	PM10_PMI	0.03675	0.03675	0.03675	0.03675	0.046171	0.062676	0.112923

S	PM10_PM	0.008	0.008	0.008	0.008	0.008949	0.009978	0.011256
S	PM10_RUI	0.001918	0.0043	0.001956	0.002257	0.007833	0.015048	0.070883
S	PM10_STF	0.002898	0.004975	0.002913	0.00332	0.001199	0.000717	0.002538
S	PM25_IDLI	0	0	0	0	0.000444	0.000974	0.015183
S	PM25_PMI	0.01575	0.01575	0.01575	0.01575	0.019788	0.026861	0.048396
S	PM25_PM	0.002	0.002	0.002	0.002	0.002237	0.002494	0.002814
S	PM25_RUI	0.001767	0.00397	0.001804	0.00208	0.00721	0.013845	0.065211
S	PM25_STF	0.002672	0.004596	0.002691	0.003064	0.0011	0.000652	0.002204
S	ROG_DIUF	0.085917	0.282968	0.112818	0.147542	0.004552	0.00272	0.004703
S	ROG_HTS	0.129853	0.33135	0.163957	0.214905	0.080404	0.052003	0.120434
S	ROG_IDLE	0	0	0	0	0.030109	0.023321	0.148681
S	ROG_RES	0.070409	0.203243	0.096391	0.129656	0.002676	0.00162	0.00283
S	ROG_RUN	0.025623	0.074071	0.034315	0.064178	0.100279	0.092387	0.132345
S	ROG_RUN	0.260111	0.993949	0.452468	0.580878	0.426801	0.269601	0.498583
S	ROG_STR	0.118322	0.311119	0.170912	0.336113	0.384692	0.239931	1.01023
S	SO2_IDLE	0	0	0	0	0.000088	0.000094	0.00637
S	SO2_RUNI	0.003795	0.004377	0.005153	0.00654	0.005861	0.005578	0.009818
S	SO2_STRE	0.000761	0.00091	0.00104	0.001333	0.000531	0.000359	0.00084
S	TOG_DIUF	0.085917	0.282968	0.112818	0.147542	0.004552	0.00272	0.004703
S	TOG_HTSI	0.129853	0.33135	0.163957	0.214905	0.080404	0.052003	0.120434
S	TOG_IDLE	0	0	0	0	0.031999	0.024995	0.169262
S	TOG_RES	0.070409	0.203243	0.096391	0.129656	0.002676	0.00162	0.00283
S	TOG_RUN	0.038651	0.10162	0.052487	0.093219	0.1186	0.10868	0.152379
S	TOG_RUN	0.260111	0.993949	0.452468	0.580878	0.426801	0.269601	0.498583
S	TOG_STRI	0.126415	0.332277	0.182536	0.358972	0.410827	0.256276	1.080431
W	FleetMix	0.512163	0.060173	0.180257	0.139094	0.042244	0.006664	0.016017
W	CH4_IDLE	0	0	0	0	0.001297	0.001014	0.007911
W	CH4_RUNI	0.011887	0.025331	0.016684	0.026843	0.014266	0.01007	0.004744
W	CH4_STRE	0.007961	0.02074	0.011382	0.022407	0.024609	0.015362	0
W	CO_IDLEX	0	0	0	0	0.187969	0.15121	2.51186
W	CO_RUNE	0.959482	2.548686	1.362039	2.117585	1.352028	0.930127	1.020723
W	CO_STRE	1.929531	4.957324	2.843835	4.746729	4.761883	2.929421	18.55171
W	CO2_NBIC	0	0	0	0	8.122	8.946405	549.5824
W	CO2_NBIC	278.8658	334.265	404.5452	530.6184	560.9122	540.5906	971.6759
W	CO2_NBIC	60.02861	70.95169	85.83112	112.4553	43.63869	29.89634	54.81789
W	NOX_IDLE	0	0	0	0	0.045883	0.097096	5.654801
W	NOX_RUN	0.086687	0.252951	0.15493	0.265758	1.203883	1.935337	2.719645
W	NOX_STRI	0.123351	0.280982	0.258297	0.446529	1.403257	0.934908	1.953756
W	PM10_IDLI	0	0	0	0	0.000483	0.001059	0.023821
W	PM10_PMI	0.03675	0.03675	0.03675	0.03675	0.046171	0.062676	0.112923
W	PM10_PM	0.008	0.008	0.008	0.008	0.008949	0.009978	0.011256
W	PM10_RUI	0.001918	0.0043	0.001956	0.002257	0.007833	0.015048	0.070883
W	PM10_STF	0.002898	0.004975	0.002913	0.00332	0.001199	0.000717	0.002538
W	PM25_IDLI	0	0	0	0	0.000444	0.000974	0.021915
W	PM25_PMI	0.01575	0.01575	0.01575	0.01575	0.019788	0.026861	0.048396
W	PM25_PM	0.002	0.002	0.002	0.002	0.002237	0.002494	0.002814
W	PM25_RUI	0.001767	0.00397	0.001804	0.00208	0.00721	0.013845	0.065211
W	PM25_STF	0.002672	0.004596	0.002691	0.003064	0.0011	0.000652	0.002204
W	ROG_DIUF	0.053845	0.179873	0.069124	0.088735	0.00313	0.001872	0.003317
W	ROG_HTS	0.137116	0.350344	0.170555	0.221568	0.086321	0.055683	0.136495
W	ROG_IDLE	0	0	0	0	0.030109	0.023321	0.170316
W	ROG_RES	0.045423	0.126873	0.061892	0.08284	0.001727	0.001048	0.00186
W	ROG_RUN	0.02417	0.069216	0.032055	0.059585	0.098113	0.091625	0.131658
W	ROG_RUN	0.306097	1.254646	0.563169	0.713621	0.47305	0.301766	0.554232
W	ROG_STR	0.142558	0.372836	0.204992	0.402782	0.438526	0.273375	1.177107
W	SO2_IDLE	0	0	0	0	0.000088	0.000094	0.005519

W	SO2_RUNI	0.003548	0.004103	0.004826	0.00612	0.005861	0.005578	0.009818
W	SO2_STRE	0.000769	0.00093	0.001051	0.001353	0.000547	0.000369	0.000904
W	TOG_DIUF	0.053845	0.179873	0.069124	0.088735	0.00313	0.001872	0.003317
W	TOG_HTSI	0.137116	0.350344	0.170555	0.221568	0.086321	0.055683	0.136495
W	TOG_IDLE	0	0	0	0	0.031999	0.024995	0.193891
W	TOG_RES	0.045423	0.126873	0.061892	0.08284	0.001727	0.001048	0.00186
W	TOG_RUN	0.03625	0.095318	0.048998	0.087011	0.116175	0.107784	0.151614
W	TOG_RUN	0.306097	1.254646	0.563169	0.713621	0.47305	0.301766	0.554232
W	TOG_STRI	0.152306	0.398188	0.218932	0.430172	0.468325	0.292004	1.258984

HHD	OBUS	UBUS	MCY	SBUS	MH
0.03188	0.00194	0.002497	0.004356	0.000592	0.002122
0.023843	0.01879	0	0	0.005444	0
0.01055	0.002834	0	0	0.007996	0
0	0	0	0	0	0
2.879964	2.366964	0	0	1.069962	0
1.723958	1.258883	5.173299	21.94037	4.411048	3.222207
57.96346	10.20164	10.42068	9.889836	31.6682	7.801339
557.7798	563.7421	0	0	562.5478	0
1617.357	1071.957	2068.246	146.3078	1104.923	639.5417
55.64343	35.01206	28.95247	42.23871	125.5688	30.21727
4.567347	5.547784	0	0	8.052276	0
5.563719	3.640217	12.46801	1.174646	8.198724	1.523179
3.712519	1.42206	1.198318	0.305908	2.162113	0.800692
0.010451	0.010511	0	0	0.026779	0
0.060117	0.095719	0.678998	0.036749	0.573124	0.050413
0.034795	0.01052	0.008	0.008	0.01103	0.008584
0.089208	0.041936	0.199926	0.000432	0.08899	0.026153
0.002114	0.000826	0.000771	0.001367	0.006088	0.00116
0.009614	0.00967	0	0	0.024636	0
0.025764	0.041023	0.290999	0.01575	0.245624	0.021605
0.008699	0.00263	0.002	0.002	0.002758	0.002146
0.082071	0.038582	0.183917	0.000355	0.08182	0.02405
0.001765	0.000742	0.00069	0.001101	0.005286	0.001031
0.001858	0.000985	0.005719	0.984976	0.037509	1.204509
0.090885	0.028119	0.099916	0.440785	0.261081	0.077088
0.513334	0.404538	0	0	0.117215	0
0.001266	0.000513	0.003151	0.560615	0.016205	0.474179
0.238152	0.133056	0.791125	2.443332	0.407375	0.109197
0.378018	0.309856	0.738771	1.412684	2.14228	1.905793
1.835657	0.631566	0.770803	2.096877	2.113059	0.453342
0.005602	0.005661	0	0	0.005649	0
0.016257	0.010879	0.020907	0.001961	0.011245	0.006701
0.001552	0.000548	0.000492	0.000666	0.001883	0.000454
0.001858	0.000985	0.005719	0.984976	0.037509	1.204509
0.090885	0.028119	0.099916	0.440785	0.261081	0.077088
0.584392	0.460536	0	0	0.133441	0
0.001266	0.000513	0.003151	0.560615	0.016205	0.474179
0.271879	0.156243	0.881147	2.68316	0.45508	0.134369
0.378018	0.309856	0.738771	1.412684	2.14228	1.905793
1.963774	0.674661	0.82348	2.253141	2.261057	0.484655
0.03188	0.00194	0.002497	0.004356	0.000592	0.002122
0.02247	0.017708	0	0	0.005131	0
0.01055	0.002834	0	0	0.007996	0
0	0	0	0	0	0
2.0927	1.719934	0	0	0.777478	0
1.734755	1.275047	5.20809	21.22847	4.406053	3.276775
47.3778	8.274584	8.780156	8.76773	27.12036	6.19427
590.9184	597.2349	0	0	595.9696	0
1617.357	1071.957	2068.246	146.3078	1104.923	639.5417
55.64343	35.01206	28.95247	42.23871	125.5688	30.21727
4.714269	5.726244	0	0	8.311301	0
5.258202	3.419155	11.74415	1.022491	7.713009	1.395581
3.562385	1.365385	1.14543	0.289988	2.044587	0.768838
0.00881	0.008861	0	0	0.022575	0
0.060117	0.095719	0.678998	0.036749	0.573124	0.050413

0.034795	0.01052	0.008	0.008	0.01103	0.008584
0.089208	0.041936	0.199926	0.000432	0.08899	0.026153
0.002114	0.000826	0.000771	0.001367	0.006088	0.00116
0.008105	0.008152	0	0	0.020769	0
0.025764	0.041023	0.290999	0.01575	0.245624	0.021605
0.008699	0.00263	0.002	0.002	0.002758	0.002146
0.082071	0.038582	0.183917	0.000355	0.08182	0.02405
0.001765	0.000742	0.00069	0.001101	0.005286	0.001031
0.003037	0.001481	0.008455	1.677569	0.056828	1.867978
0.094814	0.029078	0.104006	0.533601	0.265473	0.081403
0.483769	0.38124	0	0	0.110464	0
0.002117	0.000774	0.004811	1.065727	0.025222	0.754367
0.238392	0.133995	0.800476	2.377836	0.410193	0.110656
0.375076	0.302752	0.69142	1.326895	1.97453	1.872256
1.581932	0.557468	0.690978	1.839365	1.871779	0.387192
0.005934	0.005998	0	0	0.005985	0
0.016257	0.010879	0.020908	0.001948	0.011245	0.006702
0.001378	0.000515	0.000464	0.00064	0.001804	0.000427
0.003037	0.001481	0.008455	1.677569	0.056828	1.867978
0.094814	0.029078	0.104006	0.533601	0.265473	0.081403
0.550735	0.434012	0	0	0.125755	0
0.002117	0.000774	0.004811	1.065727	0.025222	0.754367
0.272141	0.157304	0.891045	2.614225	0.458103	0.13611
0.375076	0.302752	0.69142	1.326895	1.97453	1.872256
1.692256	0.59549	0.738186	1.976297	2.002632	0.413923
0.03188	0.00194	0.002497	0.004356	0.000592	0.002122
0.02574	0.020284	0	0	0.005877	0
0.01055	0.002834	0	0	0.007996	0
0	0	0	0	0	0
3.967137	3.260483	0	0	1.473868	0
1.721575	1.255198	5.166467	21.82141	4.399888	3.208909
58.73703	10.40942	10.55601	9.938254	32.53681	7.838522
512.017	517.4901	0	0	516.3937	0
1617.357	1071.957	2068.246	146.3078	1104.923	639.5417
55.64343	35.01206	28.95247	42.23871	125.5688	30.21727
4.364456	5.301338	0	0	7.694576	0
5.472572	3.573299	12.22884	1.142656	8.062358	1.490214
3.730105	1.430886	1.204964	0.30772	2.18812	0.803001
0.012716	0.01279	0	0	0.032584	0
0.060117	0.095719	0.678998	0.036749	0.573124	0.050413
0.034795	0.01052	0.008	0.008	0.01103	0.008584
0.089208	0.041936	0.199926	0.000432	0.08899	0.026153
0.002114	0.000826	0.000771	0.001367	0.006088	0.00116
0.011699	0.011767	0	0	0.029978	0
0.025764	0.041023	0.290999	0.01575	0.245624	0.021605
0.008699	0.00263	0.002	0.002	0.002758	0.002146
0.082071	0.038582	0.183917	0.000355	0.08182	0.02405
0.001765	0.000742	0.00069	0.001101	0.005286	0.001031
0.001988	0.001039	0.006628	1.109946	0.04365	1.406869
0.111192	0.030842	0.126181	0.579549	0.322368	0.099371
0.554162	0.436713	0	0	0.126538	0
0.001302	0.000515	0.003421	0.553911	0.017375	0.507193
0.238098	0.132835	0.789208	2.445563	0.406218	0.108857
0.403462	0.331515	0.863147	1.665214	2.525708	2.01276
1.857734	0.641137	0.779579	2.114849	2.161494	0.456297
0.005142	0.005197	0	0	0.005186	0

0.016257	0.010879	0.020907	0.00196	0.011244	0.006701
0.001565	0.000552	0.000495	0.000667	0.001899	0.000455
0.001988	0.001039	0.006628	1.109946	0.04365	1.406869
0.111192	0.030842	0.126181	0.579549	0.322368	0.099371
0.630871	0.497165	0	0	0.144054	0
0.001302	0.000515	0.003421	0.553911	0.017375	0.507193
0.27182	0.155994	0.879122	2.685496	0.45385	0.133975
0.403462	0.331515	0.863147	1.665214	2.525708	2.01276
1.987394	0.684885	0.832863	2.272447	2.312901	0.487816

RoadPerce	RoadSiltLo	MaterialSilt	MaterialMo	MobileAver	MeanVehicleSpeed
100	0.1	4.3	0.5	2.4	40

Woodstove	NumberCo	NumberCa	NumberNo	NumberPe	Woodstove	WoodstoveWoodMass

FireplacesI	NumberWo	NumberGa	NumberPro	NumberNo	FireplaceH	FireplaceD	FireplaceWoodMass

ROG_EF
1.98E-05

Area_EF_F	Area_Resi	Area_EF_F	Area_Resi	Area_EF_N	Area_Nonr	Area_EF_N	Area_Nonr	Reapplicati
50	0	100	0	250	142500	125	47500	10

onRatePercent

NumberSn	NumberSummerDays
0	250

EnergyUse	T24E	NT24E	LightingEle	T24NG	NT24NG
Junior Coll	3.71	3.59	3.86	27.88	0.59

WaterLand	WaterLand	IndoorWat	OutdoorWa	ElectricityIr	ElectricityIr	ElectricityIr	ElectricityIr	SepticTank
Junior Coll	1000sqft	4659658	7288183	9727	111	1272	1911	10.33

AerobicPer	Anaerobica	AnaDigest(	AnaDigestCogen	CombDigestGasPercent
87.46	2.21	100	0	

SolidWaste	SolidWaste	SolidWaste	LandfillNoC	LandfillCap	LandfillCaptureGasEnergyRecovery
Junior Coll	1000sqft	123.5	6	94	0

Vegetation	Vegetation	AcresBegir	AcresEnd	CO2peracre

BroadSpec NumberOfI CO2perTree

tblConstEquipMitigation

ConstMitig	FuelType	Tier	NumberOff	TotalNumb	DPF	OxidationCatalyst
Air Compre	Diesel	No Change	0	1	No Change	0
Cement an	Diesel	No Change	0	2	No Change	0
Concrete/I	Diesel	No Change	0	1	No Change	0
Cranes	Diesel	No Change	0	1	No Change	0
Excavators	Diesel	No Change	0	4	No Change	0
Forklifts	Diesel	No Change	0	3	No Change	0
Generator	Diesel	No Change	0	1	No Change	0
Graders	Diesel	No Change	0	1	No Change	0
Pavers	Diesel	No Change	0	1	No Change	0
Paving Equ	Diesel	No Change	0	2	No Change	0
Rollers	Diesel	No Change	0	2	No Change	0
Rubber Tir	Diesel	No Change	0	6	No Change	0
Tractors/L	Diesel	No Change	0	11	No Change	0
Welders	Diesel	No Change	0	1	No Change	0

SoilStabiliz	SoilStabiliz	SoilStabiliz	ReplaceGr	ReplaceGr	ReplaceGr	WaterExpo	WaterExpo	WaterExpo
0	0	0	0	0	0	1	2	55

WaterExpo	WaterUnpa	WaterUnpa	WaterUnpa	WaterUnpa	CleanPavedRoadPercentReduction
55	0	0	0	0	0

ProjectSett	IncreaseDe	IncreaseDe	IncreaseDe	IncreaseDi	ImproveWa	ImproveWa	ImproveDe	ImproveDe

IncreaseTr	IncreaseTr	IntegrateBe	IntegrateBe	ImprovePe	ImprovePe	ProvideTra	ProvideTra	ProvideTra

Implementl	Implementl	LimitParkin	LimitParkin	UnbundleP	UnbundleP	OnStreetM	OnStreetM	ProvideBR

ProvideBR	ExpandTra	ExpandTra	IncreaseTr	IncreaseTr	IncreaseTransitFrequencyHeadwaysPercentF

Reduction

Implement	Implement	Implement	TransitSub	TransitSub	TransitSub	ImplementI	ImplementI	Workplace
0			0			0		0

Workplace	Workplace	Encourage	Encourage	Encourage	Encourage	MarketCon	MarketCon	EmployeeV
		0					0	0

EmployeeV	EmployeeV	ProvideRid	ProvideRid	ImplementS	ImplementSchoolBusProgramPercentFamilyL
	2	0		0	

Jsing

Landscape	Landscape	Landscape	Landscape	Landscape	Landscape	UseLowVC	UseLowVC	UseLowVC
0		0		0		0	50	0

UseLowVC	UseLowVC	UseLowVC	UseLowVC	UseLowVC	HearthOnly	NoHearthC	UseLowVOC	CleaningS
100	0	250	0	250	0	0	0	

SuppliesCheck

ExceedTitl	ExceedTitl	InstallHighE	InstallHighE	OnSiteRen	KwhGener	KwhGener	PercentOfE	PercentOfE

ElectricityUseGenerated

tblApplianceMitigation

ApplianceT	ApplianceL	PercentImprovement
ClothWasher		30
DishWasher		15
Fan		50
Refrigerator		15

ApplyWate	ApplyWate	ApplyWate	UseReclair	PercentOu	PercentInd	UseGreyW	PercentOu	PercentInd
0			0			0		

InstallLowF	PercentRe	InstallLowF	PercentRe	InstallLowF	PercentRe	InstallLowF	PercentRe	TurfReduct
0	32	0	18	0	20	0	20	0

TurfReduc	TurfReduc	UseWaterE	UseWaterE	WaterEffici	MAWA	ETWU
		0	6.1	0		

InstituteRe InstituteRecyclingAndCompostingServicesWastePercentReduction

OperOffRo	OperOffRo	OperHours	OperDaysF	OperHorse	OperLoadF	OperFuelType

SubModule	PhaseNam	Season	Remarks
1			
3			Acreage set at 3 acres
10			VOC of paint set at 125 g/l
18			VOC of paint set at 125 g/l for operational painting too.
25			

ProjectNan	LocationSc	EMFAC_ID	WindSpee	Precipitatio	ClimateZor	Urbanizatic	Operationa	UtilityComp
Thresholds	AD	SCAQMD	2.2	31	9	Urban	2017	Southern C

CO2Intens	CH4Intensi	N2OIntensi	TotalPopul	TotalLotAc	UsingHistoricalEnergyUseData
630.89	0.029	0.006	0	3	0

PollutantSe	PollutantFu	PollutantName
1	Reactive O	ROG
1	Nitrogen O	NOX
1	Carbon Mo	CO
1	Sulfur Diox	SO2
1	Particulate	PM10
1	Particulate	PM2_5
1	Fugitive PM	PM10_FUG
1	Fugitive PM	PM25_FUG
1	Biogenic C	CO2_BIO
1	Non-Biogei	CO2_NBIO
1	Carbon Dio	CO2
1	Methane (C	CH4
1	Nitrous Oxi	N2O
1	CO2 Equiv	CO2E

LandUseTy	LandUseSu	LandUseUn	LandUseSi	LotAcreage	LandUseSq	Population
Educationa	Junior Colle	95	1000sqft	3	95000	0

tblConstructionPhase

PhaseNum	PhaseNam	PhaseType	PhaseStart	PhaseEndI	NumDaysV	NumDays	PhaseDescription
1	Demolition	Demolition	2016/01/01	2016/01/28	5	20	
2	Site Prepar	Site Prepar	2016/01/29	2016/02/02	5	3	
3	Grading	Grading	2016/02/03	2016/02/10	5	6	
4	Building Co	Building Co	2016/02/11	2016/12/14	5	220	
5	Paving	Paving	2016/12/15	2016/12/28	5	10	
6	Architectur	Architectur	2016/12/29	2017/01/11	5	10	

PhaseNam	OffRoadEq	OffRoadEq	UsageHou	HorsePow	LoadFactor
Demolition	Concrete/Ir	1	8	81	0.73
Demolition	Excavators	3	8	162	0.38
Demolition	Rubber Tir	2	8	255	0.4
Site Prepar	Rubber Tir	3	8	255	0.4
Site Prepar	Tractors/Lo	4	8	97	0.37
Grading	Excavators	1	8	162	0.38
Grading	Graders	1	8	174	0.41
Grading	Rubber Tir	1	8	255	0.4
Grading	Tractors/Lo	3	8	97	0.37
Building Co	Cranes	1	7	226	0.29
Building Co	Forklifts	3	8	89	0.2
Building Co	Generator	1	8	84	0.74
Building Co	Tractors/Lo	3	7	97	0.37
Building Co	Welders	1	8	46	0.45
Paving	Cement an	2	6	9	0.56
Paving	Pavers	1	8	125	0.42
Paving	Paving Equ	2	6	130	0.36
Paving	Rollers	2	6	80	0.38
Paving	Tractors/Lo	1	8	97	0.37
Architectur	Air Compre	1	6	78	0.48

PhaseNam	WorkerTrip	VendorTrip	HaulingTrip	WorkerTrip	VendorTrip	HaulingTrip	WorkerVeh	VendorVeh
Demolition	15	0	0	14.7	6.9	20	LD_Mix	HDT_Mix
Site Prepar	18	0	0	14.7	6.9	20	LD_Mix	HDT_Mix
Grading	15	0	1250	14.7	6.9	20	LD_Mix	HDT_Mix
Building Co	40	16	0	14.7	6.9	20	LD_Mix	HDT_Mix
Paving	20	0	0	14.7	6.9	20	LD_Mix	HDT_Mix
Architectur	8	0	0	14.7	6.9	20	LD_Mix	HDT_Mix

HaulingVehicleClass
HHDT
HHDT
HHDT
HHDT
HHDT
HHDT

PhaseNam	WorkerPer	VendorPer	HaulingPer	RoadSiltLo	MaterialSilt	MaterialMo	AverageVe	MeanVehic
Demolition	100	100	100	0.1	8.5	0.5	2.4	40
Site Prepar	100	100	100	0.1	8.5	0.5	2.4	40
Grading	100	100	100	0.1	8.5	0.5	2.4	40
Building Cc	100	100	100	0.1	8.5	0.5	2.4	40
Paving	100	100	100	0.1	8.5	0.5	2.4	40
Architectur	100	100	100	0.1	8.5	0.5	2.4	40

leSpeed

tblDemolition

PhaseNam	Demolition	DemolitionUnitAmount
Demolition		

PhaseNam	MaterialIm	MaterialEx	GradingSiz	ImportExp	MeanVehic	AcresOfGr	MaterialMo	MaterialMo
Site Prepa	0	0		0	7.1	0	7.9	12
Grading	0	10000	Cubic Yard	0	7.1	3	7.9	12

MaterialSiltContent
6.9
6.9

PhaseNam	Architectur	Architectur	EF_Reside	ConstArea_	EF_Reside	ConstArea_	EF_Nonres	ConstArea_
Architectur	2008/07/01	3000/12/31	50	0	100	0	125	142500

EF_Nonres	ConstArea_Nonresidential_Exterior
125	47500

ParkingLotAcreage

VehicleTrip	VehicleTrip	WD_TR	ST_TR	SU_TR	HW_TL	HS_TL	HO_TL	CC_TL
Junior Coll	1000sqft	27.49	11.23	1.21	0	0	0	8.4

CW_TL	CNW_TL	PR_TP	DV_TP	PB_TP	HW_TTP	HS_TTP	HO_TTP	CC_TTP
16.6	6.9	92	7	1	0	0	0	88.6

CW_TTP	CNW_TTP
6.4	5

Season	EmissionTy	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD
A	FleetMix	0.512163	0.060173	0.180257	0.139094	0.042244	0.006664	0.016017
A	CH4_IDLE	0	0	0	0	0.001297	0.001014	0.007328
A	CH4_RUNI	0.011887	0.025331	0.016684	0.026843	0.014266	0.01007	0.004744
A	CH4_STRE	0.007961	0.02074	0.011382	0.022407	0.024609	0.015362	0
A	CO_IDLEX	0	0	0	0	0.187969	0.15121	1.823498
A	CO_RUNE	0.993244	2.625779	1.408522	2.188115	1.356769	0.932386	1.023053
A	CO_STRE	1.86534	4.81029	2.751505	4.605301	4.718021	2.890746	18.1538
A	CO2_NBIC	0	0	0	0	8.121999	8.946405	598.7027
A	CO2_NBIC	283.4051	339.2661	410.9078	538.816	560.9122	540.5906	971.6759
A	CO2_NBIC	60.0286	70.95168	85.83112	112.4553	43.63869	29.89634	54.81789
A	NOX_IDLE	0	0	0	0	0.045883	0.097096	5.917678
A	NOX_RUN	0.089657	0.261336	0.160255	0.275006	1.227755	1.969901	2.771458
A	NOX_STRI	0.121862	0.277867	0.255243	0.441646	1.398037	0.930742	1.940752
A	PM10_IDLI	0	0	0	0	0.000483	0.001059	0.019577
A	PM10_PMI	0.03675	0.03675	0.03675	0.03675	0.046171	0.062676	0.112923
A	PM10_PM	0.008	0.008	0.008	0.008	0.008949	0.009978	0.011256
A	PM10_RUI	0.001918	0.0043	0.001956	0.002257	0.007833	0.015048	0.070883
A	PM10_STF	0.002898	0.004975	0.002913	0.00332	0.001199	0.000717	0.002538
A	PM25_IDLI	0	0	0	0	0.000444	0.000974	0.018011
A	PM25_PMI	0.01575	0.01575	0.01575	0.01575	0.019788	0.026861	0.048396
A	PM25_PM	0.002	0.002	0.002	0.002	0.002237	0.002494	0.002814
A	PM25_RUI	0.001767	0.00397	0.001804	0.00208	0.00721	0.013845	0.065211
A	PM25_STF	0.002672	0.004596	0.002691	0.003064	0.0011	0.000652	0.002204
A	ROG_DIUF	0.053622	0.173765	0.070018	0.090853	0.002888	0.001746	0.003018
A	ROG_HTS	0.123443	0.306051	0.154574	0.202785	0.074815	0.048642	0.114925
A	ROG_IDLE	0	0	0	0	0.030109	0.023321	0.157768
A	ROG_RES	0.04664	0.130225	0.063816	0.08523	0.001696	0.001042	0.001804
A	ROG_RUN	0.024562	0.070432	0.032623	0.060702	0.098509	0.091775	0.131805
A	ROG_RUN	0.272396	1.060118	0.48168	0.614552	0.436052	0.276735	0.510748
A	ROG_STR	0.139477	0.365875	0.200778	0.395253	0.434501	0.270294	1.157453
A	SO2_IDLE	0	0	0	0	0.000088	0.000094	0.006013
A	SO2_RUNI	0.003606	0.004166	0.004902	0.006216	0.005861	0.005578	0.009818
A	SO2_STRE	0.000768	0.000928	0.00105	0.00135	0.000546	0.000368	0.000898
A	TOG_DIUF	0.053622	0.173765	0.070018	0.090853	0.002888	0.001746	0.003018
A	TOG_HTSI	0.123443	0.306051	0.154574	0.202785	0.074815	0.048642	0.114925
A	TOG_IDLE	0	0	0	0	0.031999	0.024995	0.179606
A	TOG_RES	0.04664	0.130225	0.063816	0.08523	0.001696	0.001042	0.001804
A	TOG_RUN	0.03686	0.096859	0.04984	0.088486	0.116615	0.107958	0.151777
A	TOG_RUN	0.272396	1.060118	0.48168	0.614552	0.436052	0.276735	0.510748
A	TOG_STRI	0.149015	0.390754	0.214432	0.422132	0.464026	0.288714	1.237968
S	FleetMix	0.512163	0.060173	0.180257	0.139094	0.042244	0.006664	0.016017
S	CH4_IDLE	0	0	0	0	0.001297	0.001014	0.006906
S	CH4_RUNI	0.011887	0.025331	0.016684	0.026843	0.014266	0.01007	0.004744
S	CH4_STRE	0.007961	0.02074	0.011382	0.022407	0.024609	0.015362	0
S	CO_IDLEX	0	0	0	0	0.187969	0.15121	1.325029
S	CO_RUNE	1.095612	2.862758	1.551348	2.406997	1.378952	0.940792	1.030765
S	CO_STRE	1.472775	3.803053	2.169856	3.633636	3.826485	2.361697	14.81004
S	CO2_NBIC	0	0	0	0	8.122	8.946405	634.2726
S	CO2_NBIC	298.0147	356.0131	431.6292	566.5204	560.9122	540.5906	971.6759
S	CO2_NBIC	60.02861	70.95169	85.83112	112.4553	43.63869	29.89634	54.81789
S	NOX_IDLE	0	0	0	0	0.045883	0.097096	6.108037
S	NOX_RUN	0.079266	0.229345	0.141385	0.242822	1.139404	1.853092	2.605315
S	NOX_STRI	0.113323	0.258204	0.237368	0.410553	1.345144	0.895469	1.862927
S	PM10_IDLI	0	0	0	0	0.000483	0.001059	0.016503
S	PM10_PMI	0.03675	0.03675	0.03675	0.03675	0.046171	0.062676	0.112923

S	PM10_PM	0.008	0.008	0.008	0.008	0.008949	0.009978	0.011256
S	PM10_RUI	0.001918	0.0043	0.001956	0.002257	0.007833	0.015048	0.070883
S	PM10_STF	0.002898	0.004975	0.002913	0.00332	0.001199	0.000717	0.002538
S	PM25_IDLI	0	0	0	0	0.000444	0.000974	0.015183
S	PM25_PMI	0.01575	0.01575	0.01575	0.01575	0.019788	0.026861	0.048396
S	PM25_PM	0.002	0.002	0.002	0.002	0.002237	0.002494	0.002814
S	PM25_RUI	0.001767	0.00397	0.001804	0.00208	0.00721	0.013845	0.065211
S	PM25_STF	0.002672	0.004596	0.002691	0.003064	0.0011	0.000652	0.002204
S	ROG_DIUF	0.085917	0.282968	0.112818	0.147542	0.004552	0.00272	0.004703
S	ROG_HTS	0.129853	0.33135	0.163957	0.214905	0.080404	0.052003	0.120434
S	ROG_IDLE	0	0	0	0	0.030109	0.023321	0.148681
S	ROG_RES	0.070409	0.203243	0.096391	0.129656	0.002676	0.00162	0.00283
S	ROG_RUN	0.025623	0.074071	0.034315	0.064178	0.100279	0.092387	0.132345
S	ROG_RUN	0.260111	0.993949	0.452468	0.580878	0.426801	0.269601	0.498583
S	ROG_STR	0.118322	0.311119	0.170912	0.336113	0.384692	0.239931	1.01023
S	SO2_IDLE	0	0	0	0	0.000088	0.000094	0.00637
S	SO2_RUNI	0.003795	0.004377	0.005153	0.00654	0.005861	0.005578	0.009818
S	SO2_STRE	0.000761	0.00091	0.00104	0.001333	0.000531	0.000359	0.00084
S	TOG_DIUF	0.085917	0.282968	0.112818	0.147542	0.004552	0.00272	0.004703
S	TOG_HTSI	0.129853	0.33135	0.163957	0.214905	0.080404	0.052003	0.120434
S	TOG_IDLE	0	0	0	0	0.031999	0.024995	0.169262
S	TOG_RES	0.070409	0.203243	0.096391	0.129656	0.002676	0.00162	0.00283
S	TOG_RUN	0.038651	0.10162	0.052487	0.093219	0.1186	0.10868	0.152379
S	TOG_RUN	0.260111	0.993949	0.452468	0.580878	0.426801	0.269601	0.498583
S	TOG_STRI	0.126415	0.332277	0.182536	0.358972	0.410827	0.256276	1.080431
W	FleetMix	0.512163	0.060173	0.180257	0.139094	0.042244	0.006664	0.016017
W	CH4_IDLE	0	0	0	0	0.001297	0.001014	0.007911
W	CH4_RUNI	0.011887	0.025331	0.016684	0.026843	0.014266	0.01007	0.004744
W	CH4_STRE	0.007961	0.02074	0.011382	0.022407	0.024609	0.015362	0
W	CO_IDLEX	0	0	0	0	0.187969	0.15121	2.51186
W	CO_RUNE	0.959482	2.548686	1.362039	2.117585	1.352028	0.930127	1.020723
W	CO_STRE	1.929531	4.957324	2.843835	4.746729	4.761883	2.929421	18.55171
W	CO2_NBIC	0	0	0	0	8.122	8.946405	549.5824
W	CO2_NBIC	278.8658	334.265	404.5452	530.6184	560.9122	540.5906	971.6759
W	CO2_NBIC	60.02861	70.95169	85.83112	112.4553	43.63869	29.89634	54.81789
W	NOX_IDLE	0	0	0	0	0.045883	0.097096	5.654801
W	NOX_RUN	0.086687	0.252951	0.15493	0.265758	1.203883	1.935337	2.719645
W	NOX_STRI	0.123351	0.280982	0.258297	0.446529	1.403257	0.934908	1.953756
W	PM10_IDLI	0	0	0	0	0.000483	0.001059	0.023821
W	PM10_PMI	0.03675	0.03675	0.03675	0.03675	0.046171	0.062676	0.112923
W	PM10_PM	0.008	0.008	0.008	0.008	0.008949	0.009978	0.011256
W	PM10_RUI	0.001918	0.0043	0.001956	0.002257	0.007833	0.015048	0.070883
W	PM10_STF	0.002898	0.004975	0.002913	0.00332	0.001199	0.000717	0.002538
W	PM25_IDLI	0	0	0	0	0.000444	0.000974	0.021915
W	PM25_PMI	0.01575	0.01575	0.01575	0.01575	0.019788	0.026861	0.048396
W	PM25_PM	0.002	0.002	0.002	0.002	0.002237	0.002494	0.002814
W	PM25_RUI	0.001767	0.00397	0.001804	0.00208	0.00721	0.013845	0.065211
W	PM25_STF	0.002672	0.004596	0.002691	0.003064	0.0011	0.000652	0.002204
W	ROG_DIUF	0.053845	0.179873	0.069124	0.088735	0.00313	0.001872	0.003317
W	ROG_HTS	0.137116	0.350344	0.170555	0.221568	0.086321	0.055683	0.136495
W	ROG_IDLE	0	0	0	0	0.030109	0.023321	0.170316
W	ROG_RES	0.045423	0.126873	0.061892	0.08284	0.001727	0.001048	0.00186
W	ROG_RUN	0.02417	0.069216	0.032055	0.059585	0.098113	0.091625	0.131658
W	ROG_RUN	0.306097	1.254646	0.563169	0.713621	0.47305	0.301766	0.554232
W	ROG_STR	0.142558	0.372836	0.204992	0.402782	0.438526	0.273375	1.177107
W	SO2_IDLE	0	0	0	0	0.000088	0.000094	0.005519

W	SO2_RUNI	0.003548	0.004103	0.004826	0.00612	0.005861	0.005578	0.009818
W	SO2_STRE	0.000769	0.00093	0.001051	0.001353	0.000547	0.000369	0.000904
W	TOG_DIUF	0.053845	0.179873	0.069124	0.088735	0.00313	0.001872	0.003317
W	TOG_HTSI	0.137116	0.350344	0.170555	0.221568	0.086321	0.055683	0.136495
W	TOG_IDLE	0	0	0	0	0.031999	0.024995	0.193891
W	TOG_RES	0.045423	0.126873	0.061892	0.08284	0.001727	0.001048	0.00186
W	TOG_RUN	0.03625	0.095318	0.048998	0.087011	0.116175	0.107784	0.151614
W	TOG_RUN	0.306097	1.254646	0.563169	0.713621	0.47305	0.301766	0.554232
W	TOG_STRI	0.152306	0.398188	0.218932	0.430172	0.468325	0.292004	1.258984

HHD	OBUS	UBUS	MCY	SBUS	MH
0.03188	0.00194	0.002497	0.004356	0.000592	0.002122
0.023843	0.01879	0	0	0.005444	0
0.01055	0.002834	0	0	0.007996	0
0	0	0	0	0	0
2.879964	2.366964	0	0	1.069962	0
1.723958	1.258883	5.173299	21.94037	4.411048	3.222207
57.96346	10.20164	10.42068	9.889836	31.6682	7.801339
557.7798	563.7421	0	0	562.5478	0
1617.357	1071.957	2068.246	146.3078	1104.923	639.5417
55.64343	35.01206	28.95247	42.23871	125.5688	30.21727
4.567347	5.547784	0	0	8.052276	0
5.563719	3.640217	12.46801	1.174646	8.198724	1.523179
3.712519	1.42206	1.198318	0.305908	2.162113	0.800692
0.010451	0.010511	0	0	0.026779	0
0.060117	0.095719	0.678998	0.036749	0.573124	0.050413
0.034795	0.01052	0.008	0.008	0.01103	0.008584
0.089208	0.041936	0.199926	0.000432	0.08899	0.026153
0.002114	0.000826	0.000771	0.001367	0.006088	0.00116
0.009614	0.00967	0	0	0.024636	0
0.025764	0.041023	0.290999	0.01575	0.245624	0.021605
0.008699	0.00263	0.002	0.002	0.002758	0.002146
0.082071	0.038582	0.183917	0.000355	0.08182	0.02405
0.001765	0.000742	0.00069	0.001101	0.005286	0.001031
0.001858	0.000985	0.005719	0.984976	0.037509	1.204509
0.090885	0.028119	0.099916	0.440785	0.261081	0.077088
0.513334	0.404538	0	0	0.117215	0
0.001266	0.000513	0.003151	0.560615	0.016205	0.474179
0.238152	0.133056	0.791125	2.443332	0.407375	0.109197
0.378018	0.309856	0.738771	1.412684	2.14228	1.905793
1.835657	0.631566	0.770803	2.096877	2.113059	0.453342
0.005602	0.005661	0	0	0.005649	0
0.016257	0.010879	0.020907	0.001961	0.011245	0.006701
0.001552	0.000548	0.000492	0.000666	0.001883	0.000454
0.001858	0.000985	0.005719	0.984976	0.037509	1.204509
0.090885	0.028119	0.099916	0.440785	0.261081	0.077088
0.584392	0.460536	0	0	0.133441	0
0.001266	0.000513	0.003151	0.560615	0.016205	0.474179
0.271879	0.156243	0.881147	2.68316	0.45508	0.134369
0.378018	0.309856	0.738771	1.412684	2.14228	1.905793
1.963774	0.674661	0.82348	2.253141	2.261057	0.484655
0.03188	0.00194	0.002497	0.004356	0.000592	0.002122
0.02247	0.017708	0	0	0.005131	0
0.01055	0.002834	0	0	0.007996	0
0	0	0	0	0	0
2.0927	1.719934	0	0	0.777478	0
1.734755	1.275047	5.20809	21.22847	4.406053	3.276775
47.3778	8.274584	8.780156	8.76773	27.12036	6.19427
590.9184	597.2349	0	0	595.9696	0
1617.357	1071.957	2068.246	146.3078	1104.923	639.5417
55.64343	35.01206	28.95247	42.23871	125.5688	30.21727
4.714269	5.726244	0	0	8.311301	0
5.258202	3.419155	11.74415	1.022491	7.713009	1.395581
3.562385	1.365385	1.14543	0.289988	2.044587	0.768838
0.00881	0.008861	0	0	0.022575	0
0.060117	0.095719	0.678998	0.036749	0.573124	0.050413

0.034795	0.01052	0.008	0.008	0.01103	0.008584
0.089208	0.041936	0.199926	0.000432	0.08899	0.026153
0.002114	0.000826	0.000771	0.001367	0.006088	0.00116
0.008105	0.008152	0	0	0.020769	0
0.025764	0.041023	0.290999	0.01575	0.245624	0.021605
0.008699	0.00263	0.002	0.002	0.002758	0.002146
0.082071	0.038582	0.183917	0.000355	0.08182	0.02405
0.001765	0.000742	0.00069	0.001101	0.005286	0.001031
0.003037	0.001481	0.008455	1.677569	0.056828	1.867978
0.094814	0.029078	0.104006	0.533601	0.265473	0.081403
0.483769	0.38124	0	0	0.110464	0
0.002117	0.000774	0.004811	1.065727	0.025222	0.754367
0.238392	0.133995	0.800476	2.377836	0.410193	0.110656
0.375076	0.302752	0.69142	1.326895	1.97453	1.872256
1.581932	0.557468	0.690978	1.839365	1.871779	0.387192
0.005934	0.005998	0	0	0.005985	0
0.016257	0.010879	0.020908	0.001948	0.011245	0.006702
0.001378	0.000515	0.000464	0.00064	0.001804	0.000427
0.003037	0.001481	0.008455	1.677569	0.056828	1.867978
0.094814	0.029078	0.104006	0.533601	0.265473	0.081403
0.550735	0.434012	0	0	0.125755	0
0.002117	0.000774	0.004811	1.065727	0.025222	0.754367
0.272141	0.157304	0.891045	2.614225	0.458103	0.13611
0.375076	0.302752	0.69142	1.326895	1.97453	1.872256
1.692256	0.59549	0.738186	1.976297	2.002632	0.413923
0.03188	0.00194	0.002497	0.004356	0.000592	0.002122
0.02574	0.020284	0	0	0.005877	0
0.01055	0.002834	0	0	0.007996	0
0	0	0	0	0	0
3.967137	3.260483	0	0	1.473868	0
1.721575	1.255198	5.166467	21.82141	4.399888	3.208909
58.73703	10.40942	10.55601	9.938254	32.53681	7.838522
512.017	517.4901	0	0	516.3937	0
1617.357	1071.957	2068.246	146.3078	1104.923	639.5417
55.64343	35.01206	28.95247	42.23871	125.5688	30.21727
4.364456	5.301338	0	0	7.694576	0
5.472572	3.573299	12.22884	1.142656	8.062358	1.490214
3.730105	1.430886	1.204964	0.30772	2.18812	0.803001
0.012716	0.01279	0	0	0.032584	0
0.060117	0.095719	0.678998	0.036749	0.573124	0.050413
0.034795	0.01052	0.008	0.008	0.01103	0.008584
0.089208	0.041936	0.199926	0.000432	0.08899	0.026153
0.002114	0.000826	0.000771	0.001367	0.006088	0.00116
0.011699	0.011767	0	0	0.029978	0
0.025764	0.041023	0.290999	0.01575	0.245624	0.021605
0.008699	0.00263	0.002	0.002	0.002758	0.002146
0.082071	0.038582	0.183917	0.000355	0.08182	0.02405
0.001765	0.000742	0.00069	0.001101	0.005286	0.001031
0.001988	0.001039	0.006628	1.109946	0.04365	1.406869
0.111192	0.030842	0.126181	0.579549	0.322368	0.099371
0.554162	0.436713	0	0	0.126538	0
0.001302	0.000515	0.003421	0.553911	0.017375	0.507193
0.238098	0.132835	0.789208	2.445563	0.406218	0.108857
0.403462	0.331515	0.863147	1.665214	2.525708	2.01276
1.857734	0.641137	0.779579	2.114849	2.161494	0.456297
0.005142	0.005197	0	0	0.005186	0

0.016257	0.010879	0.020907	0.00196	0.011244	0.006701
0.001565	0.000552	0.000495	0.000667	0.001899	0.000455
0.001988	0.001039	0.006628	1.109946	0.04365	1.406869
0.111192	0.030842	0.126181	0.579549	0.322368	0.099371
0.630871	0.497165	0	0	0.144054	0
0.001302	0.000515	0.003421	0.553911	0.017375	0.507193
0.27182	0.155994	0.879122	2.685496	0.45385	0.133975
0.403462	0.331515	0.863147	1.665214	2.525708	2.01276
1.987394	0.684885	0.832863	2.272447	2.312901	0.487816

RoadPerce	RoadSiltLo	MaterialSilt	MaterialMo	MobileAver	MeanVehicleSpeed
100	0.1	4.3	0.5	2.4	40

Woodstove	NumberCo	NumberCa	NumberNo	NumberPe	Woodstove	WoodstoveWoodMass

FireplacesI	NumberWo	NumberGa	NumberPro	NumberNo	FireplaceH	FireplaceD	FireplaceWoodMass

ROG_EF
1.98E-05

Area_EF_F	Area_Resi	Area_EF_F	Area_Resi	Area_EF_N	Area_Nonr	Area_EF_N	Area_Nonr	Reapplicati
50	0	100	0	250	142500	125	47500	10

onRatePercent

NumberSn	NumberSummerDays
0	250

EnergyUse	T24E	NT24E	LightingEle	T24NG	NT24NG
Junior Coll	3.71	3.59	3.86	27.88	0.59

WaterLand	WaterLand	IndoorWat	OutdoorWa	ElectricityIr	ElectricityIr	ElectricityIr	ElectricityIr	SepticTank
Junior Coll	1000sqft	4659658	7288183	9727	111	1272	1911	10.33

AerobicPer	Anaerobica	AnaDigest(	AnaDigestCogen	CombDigestGasPercent
87.46	2.21	100	0	

SolidWaste	SolidWaste	SolidWaste	LandfillNoC	LandfillCap	LandfillCaptureGasEnergyRecovery
Junior Coll	1000sqft	123.5	6	94	0

Vegetation	Vegetation	AcresBegir	AcresEnd	CO2peracre

BroadSpec NumberOfI CO2perTree

tblConstEquipMitigation

ConstMitig	FuelType	Tier	NumberOff	TotalNumb	DPF	OxidationCatalyst
Air Compre	Diesel	No Change	0	1	No Change	0
Cement an	Diesel	No Change	0	2	No Change	0
Concrete/I	Diesel	No Change	0	1	No Change	0
Cranes	Diesel	No Change	0	1	No Change	0
Excavators	Diesel	No Change	0	4	No Change	0
Forklifts	Diesel	No Change	0	3	No Change	0
Generator	Diesel	No Change	0	1	No Change	0
Graders	Diesel	No Change	0	1	No Change	0
Pavers	Diesel	No Change	0	1	No Change	0
Paving Equ	Diesel	No Change	0	2	No Change	0
Rollers	Diesel	No Change	0	2	No Change	0
Rubber Tir	Diesel	No Change	0	6	No Change	0
Tractors/L	Diesel	No Change	0	11	No Change	0
Welders	Diesel	No Change	0	1	No Change	0

SoilStabiliz	SoilStabiliz	SoilStabiliz	ReplaceGr	ReplaceGr	ReplaceGr	WaterExpo	WaterExpo	WaterExpo
0	0	0	0	0	0	1	2	55

WaterExpo	WaterUnpa	WaterUnpa	WaterUnpa	WaterUnpa	CleanPavedRoadPercentReduction
55	0	0	0	0	0

ProjectSett	IncreaseDe	IncreaseDe	IncreaseDe	IncreaseDi	ImproveWa	ImproveWa	ImproveDe	ImproveDe

IncreaseTr	IncreaseTr	IntegrateBe	IntegrateBe	ImprovePe	ImprovePe	ProvideTra	ProvideTra	ProvideTra

Implementl	Implementl	LimitParkin	LimitParkin	UnbundleP	UnbundleP	OnStreetM	OnStreetM	ProvideBR

ProvideBR	ExpandTra	ExpandTra	IncreaseTr	IncreaseTr	IncreaseTransitFrequencyHeadwaysPercentF

Reduction

Implement	Implement	Implement	TransitSub	TransitSub	TransitSub	ImplementI	ImplementI	Workplace
0			0			0		0

Workplace	Workplace	Encourage	Encourage	Encourage	Encourage	MarketCon	MarketCon	EmployeeV
		0					0	0

EmployeeV	EmployeeV	ProvideRid	ProvideRid	ImplementS	ImplementSchoolBusProgramPercentFamilyL
	2	0		0	

Jsing

Landscape	Landscape	Landscape	Landscape	Landscape	Landscape	UseLowVC	UseLowVC	UseLowVC
0		0		0		0	50	0

UseLowVC	UseLowVC	UseLowVC	UseLowVC	UseLowVC	HearthOnly	NoHearthC	UseLowVOC	CleaningS
100	0	250	0	250	0	0	0	

SuppliesCheck

ExceedTitl	ExceedTitl	InstallHighE	InstallHighE	OnSiteRen	KwhGener	KwhGener	PercentOfE	PercentOfE

ElectricityUseGenerated

tblApplianceMitigation

ApplianceT	ApplianceL	PercentImprovement
ClothWasher		30
DishWasher		15
Fan		50
Refrigerator		15

ApplyWate	ApplyWate	ApplyWate	UseReclair	PercentOu	PercentInd	UseGreyW	PercentOu	PercentInd
0			0			0		

InstallLowF	PercentRe	InstallLowF	PercentRe	InstallLowF	PercentRe	InstallLowF	PercentRe	TurfReduct
0	32	0	18	0	20	0	20	0

TurfReduc	TurfReduc	UseWaterE	UseWaterE	WaterEffici	MAWA	ETWU
		0	6.1	0		

InstituteRe InstituteRecyclingAndCompostingServicesWastePercentReduction

OperOffRo	OperOffRo	OperHours	OperDaysF	OperHorse	OperLoadF	OperFuelType

SubModule	PhaseNam	Season	Remarks
1			
3			Acreage set at 3 acres
9			
10			VOC of paint set at 125 g/l
18			VOC of paint set at 125 g/l for operational painting too.
25			

Thresholds Scenario 1A

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	95.00	1000sqft	3.00	95,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Acreage set at 3 acres

Architectural Coating - VOC of paint set at 125 g/l

Area Coating - VOC of paint set at 125 g/l for operational painting too.

Construction Off-road Equipment Mitigation -

Grading -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	125.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	125.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	125
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	125	250

tblGrading	MaterialExported	0.00	10,000.00
tblLandUse	LotAcreage	2.18	3.00
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.6014	4.2510	3.2222	5.0700e-003	0.1208	0.2617	0.3825	0.0449	0.2453	0.2902	0.0000	451.7027	451.7027	0.0861	0.0000	453.5107
2017	0.4418	8.9100e-003	9.2400e-003	2.0000e-005	3.5000e-004	7.0000e-004	1.0500e-003	9.0000e-005	7.0000e-004	7.9000e-004	0.0000	1.3376	1.3376	1.2000e-004	0.0000	1.3402
Total	**1.0431**	**4.2599**	**3.2314**	**5.0900e-003**	**0.1211**	**0.2624**	**0.3836**	**0.0450**	**0.2460**	**0.2910**	**0.0000**	**453.0403**	**453.0403**	**0.0862**	**0.0000**	**454.8509**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.6014	4.2510	3.2222	5.0700e-003	0.0947	0.2617	0.3565	0.0311	0.2453	0.2764	0.0000	451.7023	451.7023	0.0861	0.0000	453.5103
2017	0.4418	8.9100e-003	9.2400e-003	2.0000e-005	3.5000e-004	7.0000e-004	1.0500e-003	9.0000e-005	7.0000e-004	7.9000e-004	0.0000	1.3376	1.3376	1.2000e-004	0.0000	1.3402
Total	**1.0431**	**4.2599**	**3.2314**	**5.0900e-003**	**0.0951**	**0.2624**	**0.3575**	**0.0312**	**0.2460**	**0.2772**	**0.0000**	**453.0399**	**453.0399**	**0.0862**	**0.0000**	**454.8505**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**21.49**	**0.00**	**6.78**	**30.67**	**0.00**	**4.74**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4397	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3600e-003	2.3600e-003	1.0000e-005	0.0000	2.5000e-003
Energy	0.0146	0.1326	0.1114	8.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	447.7246	447.7246	0.0167	5.5300e-003	449.7903
Mobile	1.2360	3.7047	14.0876	0.0342	2.3285	0.0504	2.3789	0.6231	0.0464	0.6695	0.0000	2,644.9737	2,644.9737	0.1041	0.0000	2,647.1601
Waste						0.0000	0.0000		0.0000	0.0000	25.0694	0.0000	25.0694	1.4816	0.0000	56.1821
Water						0.0000	0.0000		0.0000	0.0000	1.4783	40.5341	42.0124	0.1537	3.9700e-003	46.4710
Total	**1.6903**	**3.8373**	**14.2002**	**0.0350**	**2.3285**	**0.0605**	**2.3889**	**0.6231**	**0.0565**	**0.6796**	**26.5477**	**3,133.2347**	**3,159.7824**	**1.7561**	**9.5000e-003**	**3,199.6060**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4397	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3600e-003	2.3600e-003	1.0000e-005	0.0000	2.5000e-003
Energy	0.0146	0.1326	0.1114	8.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	447.7246	447.7246	0.0167	5.5300e-003	449.7903
Mobile	1.2360	3.7047	14.0876	0.0342	2.3285	0.0504	2.3789	0.6231	0.0464	0.6695	0.0000	2,644.9737	2,644.9737	0.1041	0.0000	2,647.1601

Waste						0.0000	0.0000		0.0000	0.0000	25.0694	0.0000	25.0694	1.4816	0.0000	56.1821
Water						0.0000	0.0000		0.0000	0.0000	1.4783	40.5341	42.0124	0.1537	3.9600e-003	46.4686
Total	**1.6903**	**3.8373**	**14.2002**	**0.0350**	**2.3285**	**0.0605**	**2.3889**	**0.6231**	**0.0565**	**0.6796**	**26.5477**	**3,133.2347**	**3,159.7824**	**1.7561**	**9.4900e-003**	**3,199.6036**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.11**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2016	1/28/2016	5	20	
2	Site Preparation	Site Preparation	1/29/2016	2/2/2016	5	3	
3	Grading	Grading	2/3/2016	2/10/2016	5	6	
4	Building Construction	Building Construction	2/11/2016	12/14/2016	5	220	
5	Paving	Paving	12/15/2016	12/28/2016	5	10	
6	Architectural Coating	Architectural Coating	12/29/2016	1/11/2017	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 142,500; Non-Residential Outdoor: 47,500 (Architectural

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73

Demolition	Excavators	3	8.00	162	0.38
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	162	0.38
Paving	Pavers	1	8.00	125	0.42
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Paving	Paving Equipment	2	6.00	130	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	1,250.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	40.00	16.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0429	0.4566	0.3503	4.0000e-004		0.0229	0.0229		0.0214	0.0214	0.0000	37.0974	37.0974	0.0101	0.0000	37.3092
Total	**0.0429**	**0.4566**	**0.3503**	**4.0000e-004**		**0.0229**	**0.0229**		**0.0214**	**0.0214**	**0.0000**	**37.0974**	**37.0974**	**0.0101**	**0.0000**	**37.3092**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	8.9000e-004	9.2000e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5418	1.5418	8.0000e-005	0.0000	1.5436
Total	**6.0000e-004**	**8.9000e-004**	**9.2000e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.5418**	**1.5418**	**8.0000e-005**	**0.0000**	**1.5436**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0429	0.4566	0.3503	4.0000e-004		0.0229	0.0229		0.0214	0.0214	0.0000	37.0973	37.0973	0.0101	0.0000	37.3092
Total	**0.0429**	**0.4566**	**0.3503**	**4.0000e-004**		**0.0229**	**0.0229**		**0.0214**	**0.0214**	**0.0000**	**37.0973**	**37.0973**	**0.0101**	**0.0000**	**37.3092**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	8.9000e-004	9.2000e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5418	1.5418	8.0000e-005	0.0000	1.5436
Total	**6.0000e-004**	**8.9000e-004**	**9.2000e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.5418**	**1.5418**	**8.0000e-005**	**0.0000**	**1.5436**

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					0.0271	0.0000	0.0271	0.0149	0.0000	0.0149	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.6200e-003	0.0820	0.0617	6.0000e-005		4.4100e-003	4.4100e-003		4.0600e-003	4.0600e-003	0.0000	5.5316	5.5316	1.6700e-003	0.0000	5.5666
Total	**7.6200e-003**	**0.0820**	**0.0617**	**6.0000e-005**	**0.0271**	**4.4100e-003**	**0.0315**	**0.0149**	**4.0600e-003**	**0.0190**	**0.0000**	**5.5316**	**5.5316**	**1.6700e-003**	**0.0000**	**5.5666**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.6000e-004	1.6600e-003	0.0000	3.0000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2775	0.2775	1.0000e-005	0.0000	0.2778
Total	**1.1000e-004**	**1.6000e-004**	**1.6600e-003**	**0.0000**	**3.0000e-004**	**0.0000**	**3.0000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2775**	**0.2775**	**1.0000e-005**	**0.0000**	**0.2778**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0122	0.0000	0.0122	6.7000e-003	0.0000	6.7000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.6200e-003	0.0820	0.0617	6.0000e-005		4.4100e-003	4.4100e-003		4.0600e-003	4.0600e-003	0.0000	5.5316	5.5316	1.6700e-003	0.0000	5.5666
Total	**7.6200e-003**	**0.0820**	**0.0617**	**6.0000e-005**	**0.0122**	**4.4100e-003**	**0.0166**	**6.7000e-003**	**4.0600e-003**	**0.0108**	**0.0000**	**5.5316**	**5.5316**	**1.6700e-003**	**0.0000**	**5.5666**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.6000e-004	1.6600e-003	0.0000	3.0000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2775	0.2775	1.0000e-005	0.0000	0.2778
Total	**1.1000e-004**	**1.6000e-004**	**1.6600e-003**	**0.0000**	**3.0000e-004**	**0.0000**	**3.0000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2775**	**0.2775**	**1.0000e-005**	**0.0000**	**0.2778**

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0202	0.0000	0.0202	0.0102	0.0000	0.0102	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0110	0.1153	0.0782	9.0000e-005		6.6000e-003	6.6000e-003		6.0700e-003	6.0700e-003	0.0000	8.4199	8.4199	2.5400e-003	0.0000	8.4733
Total	**0.0110**	**0.1153**	**0.0782**	**9.0000e-005**	**0.0202**	**6.6000e-003**	**0.0268**	**0.0102**	**6.0700e-003**	**0.0163**	**0.0000**	**8.4199**	**8.4199**	**2.5400e-003**	**0.0000**	**8.4733**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0111	0.1806	0.1365	4.6000e-004	0.0107	2.7200e-003	0.0134	2.9400e-003	2.5000e-003	5.4400e-003	0.0000	42.0939	42.0939	3.0000e-004	0.0000	42.1002
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	2.7000e-004	2.7600e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4625	0.4625	2.0000e-005	0.0000	0.4631
Total	**0.0113**	**0.1809**	**0.1393**	**4.7000e-004**	**0.0112**	**2.7200e-003**	**0.0139**	**3.0700e-003**	**2.5000e-003**	**5.5700e-003**	**0.0000**	**42.5565**	**42.5565**	**3.2000e-004**	**0.0000**	**42.5633**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.1000e-003	0.0000	9.1000e-003	4.5800e-003	0.0000	4.5800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0110	0.1153	0.0782	9.0000e-005		6.6000e-003	6.6000e-003		6.0700e-003	6.0700e-003	0.0000	8.4199	8.4199	2.5400e-003	0.0000	8.4732
Total	**0.0110**	**0.1153**	**0.0782**	**9.0000e-005**	**9.1000e-003**	**6.6000e-003**	**0.0157**	**4.5800e-003**	**6.0700e-003**	**0.0107**	**0.0000**	**8.4199**	**8.4199**	**2.5400e-003**	**0.0000**	**8.4732**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0111	0.1806	0.1365	4.6000e-004	0.0107	2.7200e-003	0.0134	2.9400e-003	2.5000e-003	5.4400e-003	0.0000	42.0939	42.0939	3.0000e-004	0.0000	42.1002
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	2.7000e-004	2.7600e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4625	0.4625	2.0000e-005	0.0000	0.4631

Total	**0.0113**	**0.1809**	**0.1393**	**4.7000e-004**	**0.0112**	**2.7200e-003**	**0.0139**	**3.0700e-003**	**2.5000e-003**	**5.5700e-003**	**0.0000**	**42.5565**	**42.5565**	**3.2000e-004**	**0.0000**	**42.5633**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3747	3.1357	2.0357	2.9500e-003		0.2164	0.2164		0.2033	0.2033	0.0000	266.3690	266.3690	0.0661	0.0000	267.7563
Total	**0.3747**	**3.1357**	**2.0357**	**2.9500e-003**		**0.2164**	**0.2164**		**0.2033**	**0.2033**	**0.0000**	**266.3690**	**266.3690**	**0.0661**	**0.0000**	**267.7563**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0156	0.1589	0.2048	3.8000e-004	0.0108	2.5100e-003	0.0133	3.0900e-003	2.3100e-003	5.4000e-003	0.0000	34.6889	34.6889	2.5000e-004	0.0000	34.6942
Worker	0.0177	0.0260	0.2700	5.9000e-004	0.0483	4.1000e-004	0.0487	0.0128	3.8000e-004	0.0132	0.0000	45.2265	45.2265	2.4400e-003	0.0000	45.2776
Total	**0.0333**	**0.1849**	**0.4748**	**9.7000e-004**	**0.0591**	**2.9200e-003**	**0.0620**	**0.0159**	**2.6900e-003**	**0.0186**	**0.0000**	**79.9153**	**79.9153**	**2.6900e-003**	**0.0000**	**79.9718**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3747	3.1357	2.0357	2.9500e-003		0.2164	0.2164		0.2033	0.2033	0.0000	266.3686	266.3686	0.0661	0.0000	267.7560
Total	**0.3747**	**3.1357**	**2.0357**	**2.9500e-003**		**0.2164**	**0.2164**		**0.2033**	**0.2033**	**0.0000**	**266.3686**	**266.3686**	**0.0661**	**0.0000**	**267.7560**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0156	0.1589	0.2048	3.8000e-004	0.0108	2.5100e-003	0.0133	3.0900e-003	2.3100e-003	5.4000e-003	0.0000	34.6889	34.6889	2.5000e-004	0.0000	34.6942
Worker	0.0177	0.0260	0.2700	5.9000e-004	0.0483	4.1000e-004	0.0487	0.0128	3.8000e-004	0.0132	0.0000	45.2265	45.2265	2.4400e-003	0.0000	45.2776
Total	**0.0333**	**0.1849**	**0.4748**	**9.7000e-004**	**0.0591**	**2.9200e-003**	**0.0620**	**0.0159**	**2.6900e-003**	**0.0186**	**0.0000**	**79.9153**	**79.9153**	**2.6900e-003**	**0.0000**	**79.9718**

3.6 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	8.9800e-003	0.0917	0.0628	9.0000e-005		5.5300e-003	5.5300e-003		5.1000e-003	5.1000e-003	0.0000	8.6283	8.6283	2.5300e-003	0.0000	8.6816
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.9800e-003**	**0.0917**	**0.0628**	**9.0000e-005**		**5.5300e-003**	**5.5300e-003**		**5.1000e-003**	**5.1000e-003**	**0.0000**	**8.6283**	**8.6283**	**2.5300e-003**	**0.0000**	**8.6816**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	5.9000e-004	6.1400e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0279	1.0279	6.0000e-005	0.0000	1.0290
Total	**4.0000e-004**	**5.9000e-004**	**6.1400e-003**	**1.0000e-005**	**1.1000e-003**	**1.0000e-005**	**1.1100e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**1.0279**	**1.0279**	**6.0000e-005**	**0.0000**	**1.0290**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.9800e-003	0.0917	0.0628	9.0000e-005		5.5300e-003	5.5300e-003		5.1000e-003	5.1000e-003	0.0000	8.6283	8.6283	2.5300e-003	0.0000	8.6816
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.9800e-003**	**0.0917**	**0.0628**	**9.0000e-005**		**5.5300e-003**	**5.5300e-003**		**5.1000e-003**	**5.1000e-003**	**0.0000**	**8.6283**	**8.6283**	**2.5300e-003**	**0.0000**	**8.6816**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	5.9000e-004	6.1400e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0279	1.0279	6.0000e-005	0.0000	1.0290
Total	**4.0000e-004**	**5.9000e-004**	**6.1400e-003**	**1.0000e-005**	**1.1000e-003**	**1.0000e-005**	**1.1100e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**1.0279**	**1.0279**	**6.0000e-005**	**0.0000**	**1.0290**

3.7 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1101					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7000e-004	2.3700e-003	1.8800e-003	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.2553	0.2553	3.0000e-005	0.0000	0.2560
Total	**0.1105**	**2.3700e-003**	**1.8800e-003**	**0.0000**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**0.2553**	**0.2553**	**3.0000e-005**	**0.0000**	**0.2560**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	5.0000e-005	4.9000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0822	0.0822	0.0000	0.0000	0.0823
Total	**3.0000e-005**	**5.0000e-005**	**4.9000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0822**	**0.0822**	**0.0000**	**0.0000**	**0.0823**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1101					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7000e-004	2.3700e-003	1.8800e-003	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.2553	0.2553	3.0000e-005	0.0000	0.2560
Total	**0.1105**	**2.3700e-003**	**1.8800e-003**	**0.0000**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**0.2553**	**0.2553**	**3.0000e-005**	**0.0000**	**0.2560**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	5.0000e-005	4.9000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0822	0.0822	0.0000	0.0000	0.0823

Total	**3.0000e-005**	**5.0000e-005**	**4.9000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0822**	**0.0822**	**0.0000**	**0.0000**	**0.0823**

3.7 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4403					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3300e-003	8.7400e-003	7.4700e-003	1.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	1.0213	1.0213	1.1000e-004	0.0000	1.0236
Total	**0.4417**	**8.7400e-003**	**7.4700e-003**	**1.0000e-005**		**6.9000e-004**	**6.9000e-004**		**6.9000e-004**	**6.9000e-004**	**0.0000**	**1.0213**	**1.0213**	**1.1000e-004**	**0.0000**	**1.0236**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	1.7000e-004	1.7700e-003	0.0000	3.5000e-004	0.0000	3.5000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3163	0.3163	2.0000e-005	0.0000	0.3166
Total	**1.2000e-004**	**1.7000e-004**	**1.7700e-003**	**0.0000**	**3.5000e-004**	**0.0000**	**3.5000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3163**	**0.3163**	**2.0000e-005**	**0.0000**	**0.3166**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4403					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3300e-003	8.7400e-003	7.4700e-003	1.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	1.0213	1.0213	1.1000e-004	0.0000	1.0236
Total	**0.4417**	**8.7400e-003**	**7.4700e-003**	**1.0000e-005**		**6.9000e-004**	**6.9000e-004**		**6.9000e-004**	**6.9000e-004**	**0.0000**	**1.0213**	**1.0213**	**1.1000e-004**	**0.0000**	**1.0236**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	1.7000e-004	1.7700e-003	0.0000	3.5000e-004	0.0000	3.5000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3163	0.3163	2.0000e-005	0.0000	0.3166
Total	**1.2000e-004**	**1.7000e-004**	**1.7700e-003**	**0.0000**	**3.5000e-004**	**0.0000**	**3.5000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3163**	**0.3163**	**2.0000e-005**	**0.0000**	**0.3166**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2360	3.7047	14.0876	0.0342	2.3285	0.0504	2.3789	0.6231	0.0464	0.6695	0.0000	2,644.9737	2,644.9737	0.1041	0.0000	2,647.1601
Unmitigated	1.2360	3.7047	14.0876	0.0342	2.3285	0.0504	2.3789	0.6231	0.0464	0.6695	0.0000	2,644.9737	2,644.9737	0.1041	0.0000	2,647.1601

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	2,611.55	1,066.85	114.95	6,144,077	6,144,077
Total	2,611.55	1,066.85	114.95	6,144,077	6,144,077

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.512163	0.060173	0.180257	0.139094	0.042244	0.006664	0.016017	0.031880	0.001940	0.002497	0.004356	0.000592	0.002122

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	303.3941	303.3941	0.0140	2.8900e-003	304.5815
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	303.3941	303.3941	0.0140	2.8900e-003	304.5815
NaturalGas Mitigated	0.0146	0.1326	0.1114	8.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	144.3304	144.3304	2.7700e-003	2.6500e-003	145.2088
NaturalGas Unmitigated	0.0146	0.1326	0.1114	8.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	144.3304	144.3304	2.7700e-003	2.6500e-003	145.2088

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	2.70465e+006	0.0146	0.1326	0.1114	8.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	144.3304	144.3304	2.7700e-003	2.6500e-003	145.2088
Total		**0.0146**	**0.1326**	**0.1114**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**	**0.0000**	**144.3304**	**144.3304**	**2.7700e-003**	**2.6500e-003**	**145.2088**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	2.70465e+006	0.0146	0.1326	0.1114	8.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	144.3304	144.3304	2.7700e-003	2.6500e-003	145.2088
Total		**0.0146**	**0.1326**	**0.1114**	**8.0000e-004**		**0.0101**	**0.0101**		**0.0101**	**0.0101**	**0.0000**	**144.3304**	**144.3304**	**2.7700e-003**	**2.6500e-003**	**145.2088**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	1.0602e+006	303.3941	0.0140	2.8900e-003	304.5815
Total		**303.3941**	**0.0140**	**2.8900e-003**	**304.5815**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	1.0602e+006	303.3941	0.0140	2.8900e-003	304.5815
Total		**303.3941**	**0.0140**	**2.8900e-003**	**304.5815**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4397	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3600e-003	2.3600e-003	1.0000e-005	0.0000	2.5000e-003
Unmitigated	0.4397	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3600e-003	2.3600e-003	1.0000e-005	0.0000	2.5000e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0963					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3433					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e-004	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3600e-003	2.3600e-003	1.0000e-005	0.0000	2.5000e-003
Total	**0.4397**	**1.0000e-005**	**1.2400e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.3600e-003**	**2.3600e-003**	**1.0000e-005**	**0.0000**	**2.5000e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					

Architectural Coating	0.0963					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3433					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e-004	1.0000e-005	1.2400e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3600e-003	2.3600e-003	1.0000e-005	0.0000	2.5000e-003
Total	**0.4397**	**1.0000e-005**	**1.2400e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.3600e-003**	**2.3600e-003**	**1.0000e-005**	**0.0000**	**2.5000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	42.0124	0.1537	3.9600e-003	46.4686
Unmitigated	42.0124	0.1537	3.9700e-003	46.4710

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	4.65966 / 7.28818	42.0124	0.1537	3.9700e-003	46.4710
Total		**42.0124**	**0.1537**	**3.9700e-003**	**46.4710**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	4.65966 / 7.28818	42.0124	0.1537	3.9600e-003	46.4686
Total		**42.0124**	**0.1537**	**3.9600e-003**	**46.4686**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	25.0694	1.4816	0.0000	56.1821
Unmitigated	25.0694	1.4816	0.0000	56.1821

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	123.5	25.0694	1.4816	0.0000	56.1821
Total		**25.0694**	**1.4816**	**0.0000**	**56.1821**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	123.5	25.0694	1.4816	0.0000	56.1821
Total		**25.0694**	**1.4816**	**0.0000**	**56.1821**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Thresholds Scenario 1

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	95.00	1000sqft	3.00	95,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Acreage set at 3 acres

Architectural Coating - VOC of paint set at 125 g/l

Area Coating - VOC of paint set at 125 g/l for operational painting too.

Construction Off-road Equipment Mitigation -

Grading -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	125.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	125.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	125
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	125	250

tblGrading	MaterialExported	0.00	10,000.00
tblLandUse	LotAcreage	2.18	3.00
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	110.4838	97.7134	73.2817	0.1851	18.2675	3.1085	21.2078	9.9840	2.8597	12.6892	0.0000	18,706.6612	18,706.6612	1.2371	0.0000	18,732.6411
2017	110.4442	2.2264	2.2999	4.0300e-003	0.0894	0.1741	0.2635	0.0237	0.1740	0.1977	0.0000	367.2769	367.2769	0.0342	0.0000	367.9955
Total	**220.9280**	**99.9398**	**75.5817**	**0.1891**	**18.3569**	**3.2825**	**21.4713**	**10.0078**	**3.0337**	**12.8869**	**0.0000**	**19,073.9382**	**19,073.9382**	**1.2714**	**0.0000**	**19,100.6366**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	110.4838	97.7134	73.2817	0.1851	8.3310	3.1085	11.2714	4.5222	2.8597	7.2273	0.0000	18,706.6612	18,706.6612	1.2371	0.0000	18,732.6411
2017	110.4442	2.2264	2.2999	4.0300e-003	0.0894	0.1741	0.2635	0.0237	0.1740	0.1977	0.0000	367.2769	367.2769	0.0342	0.0000	367.9955
Total	**220.9280**	**99.9398**	**75.5817**	**0.1891**	**8.4204**	**3.2825**	**11.5349**	**4.5459**	**3.0337**	**7.4250**	**0.0000**	**19,073.9382**	**19,073.9382**	**1.2714**	**0.0000**	**19,100.6366**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**54.13**	**0.00**	**46.28**	**54.58**	**0.00**	**42.38**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.4097	9.0000e-005	9.8800e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0208	0.0208	6.0000e-005		0.0220
Energy	0.0799	0.7265	0.6102	4.3600e-003		0.0552	0.0552		0.0552	0.0552		871.7647	871.7647	0.0167	0.0160	877.0701
Mobile	9.1808	25.6268	98.4543	0.2385	16.7288	0.3568	17.0856	4.4699	0.3284	4.7982		20,342.3957	20,342.3957	0.8110		20,359.4256
Total	**11.6705**	**26.3534**	**99.0745**	**0.2429**	**16.7288**	**0.4120**	**17.1409**	**4.4699**	**0.3836**	**4.8535**		**21,214.1812**	**21,214.1812**	**0.8277**	**0.0160**	**21,236.5178**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.4097	9.0000e-005	9.8800e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0208	0.0208	6.0000e-005		0.0220
Energy	0.0799	0.7265	0.6102	4.3600e-003		0.0552	0.0552		0.0552	0.0552		871.7647	871.7647	0.0167	0.0160	877.0701
Mobile	9.1808	25.6268	98.4543	0.2385	16.7288	0.3568	17.0856	4.4699	0.3284	4.7982		20,342.3957	20,342.3957	0.8110		20,359.4256
Total	**11.6705**	**26.3534**	**99.0745**	**0.2429**	**16.7288**	**0.4120**	**17.1409**	**4.4699**	**0.3836**	**4.8535**		**21,214.1812**	**21,214.1812**	**0.8277**	**0.0160**	**21,236.5178**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2016	1/28/2016	5	20	
2	Site Preparation	Site Preparation	1/29/2016	2/2/2016	5	3	
3	Grading	Grading	2/3/2016	2/10/2016	5	6	
4	Building Construction	Building Construction	2/11/2016	12/14/2016	5	220	
5	Paving	Paving	12/15/2016	12/28/2016	5	10	
6	Architectural Coating	Architectural Coating	12/29/2016	1/11/2017	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 142,500; Non-Residential Outdoor: 47,500 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	162	0.38
Paving	Pavers	1	8.00	125	0.42

Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Paving	Paving Equipment	2	6.00	130	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	1,250.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	40.00	16.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365		4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**		**2.2921**	**2.2921**		**2.1365**	**2.1365**		**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0640	0.0860	0.8984	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3573	167.3573	9.1500e-003		167.5495
Total	**0.0640**	**0.0860**	**0.8984**	**1.9900e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**167.3573**	**167.3573**	**9.1500e-003**		**167.5495**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365	0.0000	4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**		**2.2921**	**2.2921**		**2.1365**	**2.1365**	**0.0000**	**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0640	0.0860	0.8984	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3573	167.3573	9.1500e-003		167.5495
Total	**0.0640**	**0.0860**	**0.8984**	**1.9900e-003**	**0.1677**	**1.4000e-003**	**0.1691**	**0.0445**	**1.2900e-003**	**0.0458**		**167.3573**	**167.3573**	**9.1500e-003**		**167.5495**

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036		4,065.0053	4,065.0053	1.2262		4,090.7544
Total	**5.0771**	**54.6323**	**41.1053**	**0.0391**	**18.0663**	**2.9387**	**21.0049**	**9.9307**	**2.7036**	**12.6343**		**4,065.0053**	**4,065.0053**	**1.2262**		**4,090.7544**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0768	0.1032	1.0780	2.3900e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		200.8288	200.8288	0.0110		201.0594
Total	**0.0768**	**0.1032**	**1.0780**	**2.3900e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**200.8288**	**200.8288**	**0.0110**		**201.0594**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036	0.0000	4,065.0053	4,065.0053	1.2262		4,090.7544
Total	**5.0771**	**54.6323**	**41.1053**	**0.0391**	**8.1298**	**2.9387**	**11.0685**	**4.4688**	**2.7036**	**7.1724**	**0.0000**	**4,065.0053**	**4,065.0053**	**1.2262**		**4,090.7544**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0768	0.1032	1.0780	2.3900e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		200.8288	200.8288	0.0110		201.0594
Total	**0.0768**	**0.1032**	**1.0780**	**2.3900e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**200.8288**	**200.8288**	**0.0110**		**201.0594**

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Fugitive Dust					6.7408	0.0000	6.7408	3.3960	0.0000	3.3960			0.0000			0.0000
Off-Road	3.6669	38.4466	26.0787	0.0298		2.1984	2.1984		2.0225	2.0225		3,093.7889	3,093.7889	0.9332		3,113.3860
Total	**3.6669**	**38.4466**	**26.0787**	**0.0298**	**6.7408**	**2.1984**	**8.9392**	**3.3960**	**2.0225**	**5.4186**		**3,093.7889**	**3,093.7889**	**0.9332**		**3,113.3860**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	3.7649	59.1808	46.3047	0.1533	3.6300	0.9087	4.5387	0.9940	0.8358	1.8299		15,445.5151	15,445.5151	0.1115		15,447.8563
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0640	0.0860	0.8984	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3573	167.3573	9.1500e-003		167.5495

Total	**3.8289**	**59.2668**	**47.2030**	**0.1553**	**3.7977**	**0.9101**	**4.7077**	**1.0385**	**0.8371**	**1.8756**		**15,612.8723**	**15,612.8723**	**0.1206**		**15,615.4058**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.0334	0.0000	3.0334	1.5282	0.0000	1.5282			0.0000			0.0000
Off-Road	3.6669	38.4466	26.0787	0.0298		2.1984	2.1984		2.0225	2.0225	0.0000	3,093.7889	3,093.7889	0.9332		3,113.3860
Total	**3.6669**	**38.4466**	**26.0787**	**0.0298**	**3.0334**	**2.1984**	**5.2318**	**1.5282**	**2.0225**	**3.5507**	**0.0000**	**3,093.7889**	**3,093.7889**	**0.9332**		**3,113.3860**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.7649	59.1808	46.3047	0.1533	3.6300	0.9087	4.5387	0.9940	0.8358	1.8299		15,445.5151	15,445.5151	0.1115		15,447.8563
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0640	0.0860	0.8984	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3573	167.3573	9.1500e-003		167.5495
Total	**3.8289**	**59.2668**	**47.2030**	**0.1553**	**3.7977**	**0.9101**	**4.7077**	**1.0385**	**0.8371**	**1.8756**		**15,612.8723**	**15,612.8723**	**0.1206**		**15,615.4058**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1461	1.4168	1.9130	3.4500e-003	0.1000	0.0230	0.1230	0.0285	0.0211	0.0496		345.9207	345.9207	2.5600e-003		345.9745
Worker	0.1706	0.2293	2.3957	5.3100e-003	0.4471	3.7400e-003	0.4508	0.1186	3.4400e-003	0.1220		446.2861	446.2861	0.0244		446.7987
Total	**0.3167**	**1.6461**	**4.3086**	**8.7600e-003**	**0.5471**	**0.0267**	**0.5738**	**0.1471**	**0.0246**	**0.1716**		**792.2068**	**792.2068**	**0.0270**		**792.7732**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1461	1.4168	1.9130	3.4500e-003	0.1000	0.0230	0.1230	0.0285	0.0211	0.0496		345.9207	345.9207	2.5600e-003		345.9745
Worker	0.1706	0.2293	2.3957	5.3100e-003	0.4471	3.7400e-003	0.4508	0.1186	3.4400e-003	0.1220		446.2861	446.2861	0.0244		446.7987
Total	**0.3167**	**1.6461**	**4.3086**	**8.7600e-003**	**0.5471**	**0.0267**	**0.5738**	**0.1471**	**0.0246**	**0.1716**		**792.2068**	**792.2068**	**0.0270**		**792.7732**

3.6 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198		1,902.2212	1,902.2212	0.5588		1,913.9557
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7956**	**18.3417**	**12.5623**	**0.0186**		**1.1065**	**1.1065**		**1.0198**	**1.0198**		**1,902.2212**	**1,902.2212**	**0.5588**		**1,913.9557**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0853	0.1147	1.1978	2.6500e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		223.1431	223.1431	0.0122		223.3994
Total	**0.0853**	**0.1147**	**1.1978**	**2.6500e-003**	**0.2236**	**1.8700e-003**	**0.2254**	**0.0593**	**1.7200e-003**	**0.0610**		**223.1431**	**223.1431**	**0.0122**		**223.3994**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7956	18.3417	12.5623	0.0186		1.1065	1.1065		1.0198	1.0198	0.0000	1,902.2212	1,902.2212	0.5588		1,913.9557
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7956**	**18.3417**	**12.5623**	**0.0186**		**1.1065**	**1.1065**		**1.0198**	**1.0198**	**0.0000**	**1,902.2212**	**1,902.2212**	**0.5588**		**1,913.9557**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0853	0.1147	1.1978	2.6500e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		223.1431	223.1431	0.0122		223.3994
Total	**0.0853**	**0.1147**	**1.1978**	**2.6500e-003**	**0.2236**	**1.8700e-003**	**0.2254**	**0.0593**	**1.7200e-003**	**0.0610**		**223.1431**	**223.1431**	**0.0122**		**223.3994**

3.7 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Archit. Coating	110.0813					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**110.4497**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0341	0.0459	0.4791	1.0600e-003	0.0894	7.5000e-004	0.0902	0.0237	6.9000e-004	0.0244		89.2572	89.2572	4.8800e-003		89.3598

Total	**0.0341**	**0.0459**	**0.4791**	**1.0600e-003**	**0.0894**	**7.5000e-004**	**0.0902**	**0.0237**	**6.9000e-004**	**0.0244**		**89.2572**	**89.2572**	**4.8800e-003**		**89.3598**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	110.0813					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**110.4497**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0341	0.0459	0.4791	1.0600e-003	0.0894	7.5000e-004	0.0902	0.0237	6.9000e-004	0.0244		89.2572	89.2572	4.8800e-003		89.3598
Total	**0.0341**	**0.0459**	**0.4791**	**1.0600e-003**	**0.0894**	**7.5000e-004**	**0.0902**	**0.0237**	**6.9000e-004**	**0.0244**		**89.2572**	**89.2572**	**4.8800e-003**		**89.3598**

3.7 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	110.0813					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**110.4136**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0306	0.0414	0.4318	1.0600e-003	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		85.8289	85.8289	4.5000e-003		85.9235
Total	**0.0306**	**0.0414**	**0.4318**	**1.0600e-003**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**85.8289**	**85.8289**	**4.5000e-003**		**85.9235**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Archit. Coating	110.0813					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**110.4136**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0306	0.0414	0.4318	1.0600e-003	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		85.8289	85.8289	4.5000e-003		85.9235
Total	**0.0306**	**0.0414**	**0.4318**	**1.0600e-003**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**85.8289**	**85.8289**	**4.5000e-003**		**85.9235**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.1808	25.6268	98.4543	0.2385	16.7288	0.3568	17.0856	4.4699	0.3284	4.7982		20,342.3957	20,342.3957	0.8110		20,359.4256
Unmitigated	9.1808	25.6268	98.4543	0.2385	16.7288	0.3568	17.0856	4.4699	0.3284	4.7982		20,342.3957	20,342.3957	0.8110		20,359.4256

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	2,611.55	1,066.85	114.95	6,144,077	6,144,077
Total	2,611.55	1,066.85	114.95	6,144,077	6,144,077

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.512163	0.060173	0.180257	0.139094	0.042244	0.006664	0.016017	0.031880	0.001940	0.002497	0.004356	0.000592	0.002122

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0799	0.7265	0.6102	4.3600e-003		0.0552	0.0552		0.0552	0.0552		871.7647	871.7647	0.0167	0.0160	877.0701
NaturalGas Unmitigated	0.0799	0.7265	0.6102	4.3600e-003		0.0552	0.0552		0.0552	0.0552		871.7647	871.7647	0.0167	0.0160	877.0701

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	7410	0.0799	0.7265	0.6102	4.3600e-003		0.0552	0.0552		0.0552	0.0552		871.7647	871.7647	0.0167	0.0160	877.0701
Total		**0.0799**	**0.7265**	**0.6102**	**4.3600e-003**		**0.0552**	**0.0552**		**0.0552**	**0.0552**		**871.7647**	**871.7647**	**0.0167**	**0.0160**	**877.0701**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	7.41	0.0799	0.7265	0.6102	4.3600e-003		0.0552	0.0552		0.0552	0.0552		871.7647	871.7647	0.0167	0.0160	877.0701
Total		**0.0799**	**0.7265**	**0.6102**	**4.3600e-003**		**0.0552**	**0.0552**		**0.0552**	**0.0552**		**871.7647**	**871.7647**	**0.0167**	**0.0160**	**877.0701**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.4097	9.0000e-005	9.8800e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0208	0.0208	6.0000e-005		0.0220
Unmitigated	2.4097	9.0000e-005	9.8800e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0208	0.0208	6.0000e-005		0.0220

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5278					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8810					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5000e-004	9.0000e-005	9.8800e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0208	0.0208	6.0000e-005		0.0220
Total	**2.4097**	**9.0000e-005**	**9.8800e-003**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0208**	**0.0208**	**6.0000e-005**		**0.0220**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Consumer Products	1.8810					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.5000e-004	9.0000e-005	9.8800e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0208	0.0208	6.0000e-005		0.0220

Architectural Coating	0.5278					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4097**	**9.0000e-005**	**9.8800e-003**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0208**	**0.0208**	**6.0000e-005**		**0.0220**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Memorandum

Date: July 19, 2016

To: Gordon Mize, SCAQMD

CC: Mika Klein, Mt. SAC
Sid Lindmark, Sid Lindmark and Associates

From: Fred Greve, Greve & Associates

Subject: Preliminary Responses to Comments Made on Mt.SAC EIRs

Please see our responses to your comments made on the Mt. San Antonio College EIRs.

6-4.1 "Could the CalEEMod run output sheets for Scenario 1A be sent to me please? I have the output sheets for the first scenario (Scenario 1). I want to also look at the modeling inputs for both, if I could. The SCAQMD staff does recognize surrogate analyses but the caution is that a variation of a project (an increase in the amount of equipment used, soil disturbance, a decrease in the amount of time to building the project, etc., causes SCAQMD staff to compare the project description of the surrogate analysis with a project description that might be different to see if the project analysis varies from the assumptions from the surrogate".

Response to 6.4.1 The comment relates to the CalEEMod output sheets included in the Appendices for CEQA Thresholds and Procedures for Air Quality (Report #15-116A) prepared by Greve & Associates, dated December 7, 2015. The comment is not a comment on the Draft EIR. The report provides the technical basis for establishing the District;s threshold for air quality for construction projects. Scenario 1A included no export of earth from a 3-acre site and Scenario 1 included earth export of 10,000 cubic yards. The CalEEMod output sheets for Scenario 1A were forwarded to the respondent, as well as the input files for Scenario 1 and 1A.

6-4.2 "In addition, the SCAQMD periodically updates the analysis tools used to estimate project air quality impacts. This is done so that recognized emission estimate tools include

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more current emission factors from more recent fleet averages. For example, the SCAQMD is likely to release CalEEMod 2016 later this year replacing CalEEMod 2013. In practice, over the years, if an analysis is older, the SCAQMD staff might recommend re-analyzing the project's potential emission impacts using the more current analysis tools".

Response to 6.4.2 When CalEEMod is updated, the analysis used for the Thresholds of Significance will also be updated. However, it is unlikely that the update will result in a more stringent acreage or square footage requirement since the emission factors used in CalEEMod for vehicles and construction equipment generally decline in future years. Therefore the current CalEEMod analysis will likely remain to be an appropriate analysis for thresholds for future projects. SCAQMD will receive copies for review and comment whenever the current District's Thresholds of Significance are updated.

6-4.3 "I see a CO hotspots analysis for the additional vehicle trips estimated for the proposed Olympic Trials activities but no actual emission estimates in the DSEIR or the associated air study. The proposed two week activity projects a total attendance of 112,000 people (20,000 daily, page 415). Were the emissions from the vehicles, shuttle buses (should identify how the vehicles are fueled, etc. included in the analyses? If so, I need to see the emissions as well as the methodologies used, emission factors, equations, etc., as part of our review".

Response to 6.4.3 Appendix C1 (pp. 18-20) includes the air quality analysis for the 2015 FMPU and for the Olympic Trials. Table 11 (buildout of the 2015 FMPU) indicates all of the intersection volumes are well below the intersection volumes used in the 2005 SCAB CO Redesignation Request, which established the CO concentrations for specific intersection volumes. This analysis is also included on pages 166-167 of the DSEIR. No additional CalEEMod hotspot analysis is required for the 2015 FMPU. Table 12 (Olympic Trials) in Appendix C1 estimated the intersection volumes for the Olympic Trials based on parking management plans A and B. Again, all of the intersection volumes associated with hosting the Olympic Trials were below the volumes used in the Redesignation Request. Therefore, the impact of buildout of the 2015 FMPU or the impact of hosting the 2020 Olympic Trials does not result in significant hotspots at area intersections.

6-4.4 "Also, since the event <u>could</u> occur with students, faculty and administrative staff on campus, the peak day analysis (worst-case) should include emissions from those sources plus the vehicle emissions added during the eight days of Olympic Trials, unless the DSEIR precludes the overlap of the summer session activities with the Olympic Trials".

Response to 6.4.4 The possibility of hosting the Olympic Trials when classes are in session is remote. The 2020 class schedule is subject to legal agreements with the faculty, and those agreements have not been completed to date. However, all planning efforts for hosting the Trials is predicated on classes not being in session if the District hosts the Trials.

From: Gordon Mize <gmize@aqmd.gov>

Subject: RE: Responses to Questions on Mt SAC EIRs

Date: July 20, 2016 at 11:30:23 AM MDT

To: Fred Greve <fred@greveandassociates.com>

Hi Fred,

Thank you for responding to my e-mail questions.

I have looked at the cites mentioned in the from the DSEIR. I also see the wording and the CO hotspots analysis discussion on pages 166-167. We might recommend in our comments is that the Olympic Trials applicable criteria regional and localized significance threshold emissions should be included, i.e., broken out and presented separately in the Final DSEIR. The reason for this is that the Olympic Trials is a unique and separate activity as pointed out in the project description that is expected to draw an estimated 20,000 daily visitors during that 8-10 day period. Besides vendor, maintenance and support traffic, this would involve passenger vehicles including carpools, as well as buses and shuttles for the participants and visitors. This will give the general public and other interested parties a feel for those impacts compared to the applicable thresholds of significance.

Gordon

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February 11, 2016

Ms. Mikaela Klein, Senior Facilities Planner
Facilities Planning & Management
1100 North Grand Avenue
Walnut, California 91789
Phone: (909) 274-5720
E-mail: mikaela.klein@mtsac.edu

RE: SCAG Comments on the Notice of Preparation of a Draft Environmental Impact Report for the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects [SCAG NO. IGR1788]

Dear Ms. Klein,

Thank you for submitting the Notice of Preparation of a Draft Environmental Impact Report for the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects ("proposed project") to the Southern California Association of Governments (SCAG) for review and comment. SCAG is the authorized regional agency for Inter-Governmental Review (IGR) of programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12372. Additionally, SCAG reviews the Environmental Impact Reports of projects of regional significance for consistency with regional plans pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.

SCAG is also the designated Regional Transportation Planning Agency under state law, and is responsible for preparation of the Regional Transportation Plan (RTP) including its Sustainable Communities Strategy (SCS) component pursuant to SB 375. As the clearinghouse for regionally significant projects per Executive Order 12372, SCAG reviews the consistency of local plans, projects, and programs with regional plans.[1] Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of the regional goals and policies in the RTP/SCS.

SCAG staff has reviewed the Notice of Preparation of a Draft Environmental Impact Report for the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects. The proposed project includes the update of the 2012 Facilities Master Plan. The update includes the re-design of the athletic facilities and the Physical Education Complex, the relocation of the Public Transportation Center, and expanded Wildlife Sanctuary and Open Space on approximately 500,000 gross acres.

When available, please send environmental documentation to SCAG's *office in Los Angeles or by email to sunl@scag.ca.gov* providing, at a minimum, the full public comment period for review. If you have any questions regarding the attached comments, please contact the Inter-Governmental Review (IGR) Program, attn.: Lijin Sun, Esq., Senior Regional Planner, at (213) 236-1882 or sunl@scag.ca.gov. Thank you.

Sincerely,

Ping Chang

Ping Chang
Program Manager II, Land Use and Environmental Planning

[1] SB 375 amends CEQA to add Chapter 4.2 Implementation of the Sustainable Communities Strategy, which allows for certain CEQA streamlining for projects consistent with the RTP/SCS. Lead agencies (including local jurisdictions) maintain the discretion and will be solely responsible for determining "consistency" of any future project with the SCS. Any "consistency" finding by SCAG pursuant to the IGR process should not be construed as a finding of consistency under SB 375 for purposes of CEQA streamlining.

COMMENTS ON THE NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE MT. SAN ANTONIO COLLEGE 2015 FACILITIES MASTER PLAN UPDATE AND PHYSICAL EDUCATION PROJECTS [SCAG NO. IGR1788]

CONSISTENCY WITH RTP/SCS

SCAG reviews environmental documents for regionally significant projects for their consistency with the adopted RTP/SCS.

2012 RTP/SCS GOALS

The SCAG Regional Council adopted the 2012 RTP/SCS in April 2012. The 2012 RTP/SCS links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations (see http://rtpscs.scag.ca.gov). The goals included in the 2012 RTP/SCS may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project within the context of regional goals and policies. Among the relevant goals of the 2012 RTP/SCS are the following:

SCAG 2012 RTP/SCS GOALS	
RTP/SCS G1:	*Align the plan investments and policies with improving regional economic development and competitiveness*
RTP/SCS G2:	*Maximize mobility and accessibility for all people and goods in the region*
RTP/SCS G3:	*Ensure travel safety and reliability for all people and goods in the region*
RTP/SCS G4:	*Preserve and ensure a sustainable regional transportation system*
RTP/SCS G5:	*Maximize the productivity of our transportation system*
RTP/SCS G6:	*Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking)*
RTP/SCS G7:	*Actively encourage and create incentives for energy efficiency, where possible*
RTP/SCS G8:	*Encourage land use and growth patterns that facilitate transit and non-motorized transportation*
RTP/SCS G9:	*Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies*

For ease of review, we encourage the use of a side-by-side comparison of SCAG goals with discussions of the consistency, non-consistency or non-applicability of the policy and supportive analysis in a table format. Suggested format is as follows:

SCAG 2012 RTP/SCS GOALS		
Goal		Analysis
RTP/SCS G1:	*Align the plan investments and policies with improving regional economic development and competitiveness*	*Consistent: Statement as to why;* *Not-Consistent: Statement as to why;* *Or* *Not Applicable: Statement as to why;* *DEIR page number reference*
RTP/SCS G2:	*Maximize mobility and accessibility for all people and goods in the region*	*Consistent: Statement as to why;* *Not-Consistent: Statement as to why;* *Or* *Not Applicable: Statement as to why;* *DEIR page number reference*
etc.		etc.

RTP/SCS STRATEGIES

To achieve the goals of the 2012 RTP/SCS, a wide range of strategies are included in SCS Chapter (starting on page 152) of the RTP/SCS focusing on four key areas: 1) Land Use Actions and Strategies; 2) Transportation Network Actions and Strategies; 3) Transportation Demand Management (TDM) Actions and Strategies and; 4) Transportation System Management (TSM) Actions and Strategies. If applicable to the proposed project, please refer to these strategies as guidance for considering the proposed project within the context of regional goals and policies. To access a listing of the strategies, please visit http://rtpscs.scag.ca.gov/Documents/2012/final/f2012RTPSCS.pdf (Tables 4.3 – 4.7, beginning on page 152).

REGIONAL GROWTH FORECASTS

At the time of this letter, the most recently adopted SCAG forecasts, at the jurisdictional level, consists of the 2020 and 2035 RTP/SCS population, household and employment forecasts. To view them, please visit http://scag.ca.gov/Documents/2012AdoptedGrowthForecastPDF.pdf. The forecasts for the region and applicable jurisdictions are below.

	Adopted SCAG Region Wide Forecasts		Adopted City of Walnut Forecasts	
	Year 2020	Year 2035	Year 2020	Year 2035
Population	19,663,000	22,091,000	32,600	33,200
Households	6,458,000	7,325,000	9,800	10,000
Employment	8,414,000	9,441,000	9,500	10,000

MITIGATION

SCAG staff recommends that you review the SCAG 2012 RTP/SCS Final Program EIR Mitigation Measures for guidance, as appropriate. See Chapter 6 (beginning on page 143) at:
http://rtpscs.scag.ca.gov/Documents/peir/2012/final/Final2012PEIR.pdf

As referenced in Chapter 6, a comprehensive list of example mitigation measures that may be considered as appropriate is included in Appendix G: *Examples of Measures that Could Reduce Impacts from Planning, Development and Transportation Projects.* Appendix G can be accessed at:
http://rtpscs.scag.ca.gov/Documents/peir/2012/final/2012fPEIR_AppendixG_ExampleMeasures.pdf

COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294

DARYL L. OSBY
FIRE CHIEF
FORESTER & FIRE WARDEN

February 16, 2016

Mikaela Klein, Senior Facilities Planner
Mt. San Antonio College
Facilities Planning and Management
1100 North Grand Avenue
Walnut, CA 91789

Dear Ms. Klein:

NOTICE OF PREPARATION OF A DRAFT SUBSEQUENT PROJECT AND PROGRAM ENVIRONMENTAL IMPACT REPORT, "MT. SAN ANTONIO COLLEGE 2015 FACILITIES MASTER PLAN UPDATE AND PHYSICAL EDUCATION PROJECTS", SERVES SIXTEEN CITIES AND UNINCORPRATED AREAS IN THE EASTERN PART, THE INCREASED ENROLLMENT OF 3,745 STUDENTS WILL RESULT IN AN INCREASE OF 4,606 TRIPS IN 2020, UP TO TWENTY LOCATIONS WILL BE ANALYZED AND PARKING DEMAND AND SUPPLY PROJECTED, WALNUT (FFER 201600016)

The Notice of Preparation of a Draft Subsequent Project and Program Environmental Impact Report has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department. The following are their comments:

PLANNING DIVISION:

1. We will reserve our comments for the Draft EIR.

LAND DEVELOPMENT UNIT:

The Land Development Unit is reviewing the proposed Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects for access and water

system requirements. The Land Development Unit comments are only general requirements. Specific fire and life safety requirements will be addressed during the review for building and fire plan check phases. There may be additional requirements during this time.

The development of this project must comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows, and fire hydrants.

Access Requirements:

1. The proposed development will require multiple ingress/egress access for the circulation of traffic and emergency response issues.

2. All on-site Fire Department's vehicular access roads shall be labeled as "Private Driveway and Fire Lane" on the site plan along with the widths clearly depicted on the plan. Labeling is necessary to assure the access availability for Fire Department use. The designation allows for appropriate signage prohibiting parking.

    a. The Fire Apparatus Access Road shall be cross-hatch on the site plan with the width clearly noted on the plan.

3. Every building constructed shall be accessible to Fire Department's apparatus by way of access roadways with an all-weather surface of not less than the prescribed width. The roadway shall be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building.

4. Fire Apparatus Access Roads must be installed and maintained in a serviceable manner prior to and during the time of construction.

5. The edge of the Fire Apparatus Access Road shall be located a minimum of 5 feet from the building or any projections there from.

6. The Fire Apparatus Access Roads and designated fire lanes shall be measured from flow line to flow line.

7. The dimensions of the approved Fire Apparatus Access Roads shall be maintained as originally approved by the fire code official.

8. Provide a minimum unobstructed width of 28 feet exclusive of shoulders and an unobstructed vertical clearance "clear to sky" Fire Department's vehicular access to within 150 feet of all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building when the height of the building above the lowest level of the Fire Department's vehicular access road is more than 30 feet high or the building is more than three stories. The access roadway shall be located a minimum of 15 feet and a maximum of 30 feet from the building and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial fire apparatus access road is positioned shall be approved by the fire code official.

9. If the Fire Apparatus Access Road is separated by island, provide a minimum unobstructed width of 20 feet exclusive of shoulders and an unobstructed vertical clearance "clear to sky" Fire Department's vehicular access to within 150 feet of all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building.

10. Dead-end Fire Apparatus Access Roads in excess of 150 feet in length shall be provided with an approved Fire Department turnaround. Include the dimensions of the turnaround with the orientation of the turnaround shall be properly placed in the direction of travel of the access roadway.

11. Fire Department Access Roads shall be provided with a 32 foot centerline turning radius. Indicate the centerline, inside, and outside turning radii for each change in direction on the site plan

12. Fire Apparatus Access Roads shall be designed and maintained to support the imposed load of fire apparatus weighing 75,000 lbs., and shall be surfaced so as to provide all-weather driving capabilities. Fire apparatus access roads having a grade of 10 percent or greater shall have a paved or concrete surface.

13. Provide approved signs or other approved notices or markings that include the words "NO PARKING - FIRE LANE". Signs shall have a minimum dimension of 12 inches wide by 18 inches high and have red letters on a white reflective background. Signs shall be provided for fire apparatus access roads, to clearly indicate the entrance to such road or prohibit the obstruction thereof and at intervals as required by the Fire Inspector.

14. A minimum 5 foot wide approved firefighter access walkway leading from the fire department access road to all required openings in the building's exterior walls shall be provided for firefighting and rescue purposes. Clearly identify firefighter

walkway access routes on the site plan. Indicate the slope and walking surface material. Clearly show the required width on the site plan.

15. Fire Apparatus Access Roads shall not be obstructed in any manner including by the parking of vehicles or the use of traffic calming devices including but not limited to, speed bumps, or speed humps. The minimum widths and clearances established in Fire Code Section 503.2.1 shall be maintained at all times.

16. Traffic Calming Devices including but not limited to, speed bumps, and speed humps shall be prohibited unless approved by the fire code official.

17. Security barriers, visual screen barriers, or other obstructions shall not be installed on the roof of any building in such a manner as to obstruct firefighter access or egress in the event of fire or other emergency. Parapets shall not exceed 48 inches from the top of the parapet to the roof surface on more than two sides. Clearly indicate the height of all parapets in a section view.

18. Approved building address numbers, building numbers, or approved building identification shall be provided and maintained so as to be plainly visible and legible from the street fronting the property. The numbers shall contrast with their background, be Arabic numerals or alphabet letters and be a minimum of 4 inches high with a minimum stroke width of 0.5 inch.

19. Multiple residential and commercial buildings having entrances to individual units not visible from the street or road shall have unit numbers displayed in groups for all units within each structure. Such numbers may be grouped on the wall of the structure or mounted on a post independent of the structure and shall be positioned to be plainly visible from the street or road as required by Fire Code 505.3 and in accordance with Fire Code 505.1.

20. Gate Requirements: The method of gate control shall be subject to review by the Fire Department prior to approval. All gates, to control vehicular access shall be in compliance with the following:

    a. Any single gated opening used for ingress and egress shall be a minimum of 28 feet in-width, clear-to-sky.

    b. Any divided gate opening (when each gate is used for a single direction of travel i.e., ingress or egress) shall be a minimum width of 20 feet clear-to-sky.

c. Gates and/or control devices shall be positioned a minimum of 50 feet from a public right-of-way and shall be provided with a turnaround having a minimum of 32 feet of turning radius. If an intercom system is used, the 50 feet shall be measured from the right-of-way to the intercom control device.

d. The security gate shall be provided with an approved means of emergency operation and shall be maintained operational at all times and replaced or repaired when defective. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed, and installed to comply with the requirements of ASTM F220. Gates shall be of the swinging or sliding type. Construction of gates shall be of materials that allow manual operation by one person.

e. Gate plans shall be submitted to the Fire Department prior to installation. These plans shall show all locations, widths, and details of the proposed gates.

Water System Requirements:

1. All fire hydrants shall measure 6"x 4"x 2-1/2" brass or bronze, conforming to current AWWA standard C503 or approved equal and shall be installed in accordance with the County of Los Angeles Fire Department Regulation 8.

2. The development may require fire flows up to 8,000 gallons per minute at 20 pounds per square inch residual pressure for up to a five-hour duration. Final fire flows will be based on the size of buildings, the installation of an automatic fire sprinkler system, and type(s) of construction used.

3. The fire hydrant spacing shall be every 300 feet for both the public and the on-site hydrants. The fire hydrants shall meet the following requirements:

   a. No portion of lot frontage shall be more than 200 feet via vehicular access from a public fire hydrant.

   b. No portion of a building shall exceed 400 feet via vehicular access from a properly spaced public fire hydrant.

   c. Additional hydrants will be required if hydrant spacing exceeds specified distances.

4. All required PUBLIC fire hydrants shall be installed, tested, and accepted prior to beginning construction.

5. All private on-site fire hydrants shall be installed, tested, and approved prior to building occupancy.

    a. Plans showing underground piping for private on-site fire hydrants shall be submitted to the Sprinkler Plan Check Unit for review and approval prior to installation.

6. An approved automatic fire sprinkler system is required for the proposed buildings within this development. Submit design plans to the Fire Department Sprinkler Plan Check Unit for review and approval prior to installation.

For any questions regarding the report, please contact Inspector Claudia Soiza at (323) 890-4243, or at Claudia.soiza@fire.lacounty.gov.

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

1. The statutory responsibilities of the County of Los Angeles Fire Department's Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources, and the County Oak Tree Ordinance. Potential impacts in these areas should be addressed in the Draft Environmental Impact Report.

HEALTH HAZARDOUS MATERIALS DIVISION:

1. The Health Hazardous Materials Division (HHMD) of the Los Angeles County Fire Department has no comment regarding the project at this time.

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

KEVIN T. JOHNSON, ACTING CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

KTJ:ad

Memorandum

Date: July 21, 2016

To: Gordon Mize, SCAQMD

CC: Mika Klein, Mt. SAC

From: Fred Greve, Greve & Associates
Sid Lindmark, Sid Lindmark and Associates
Deepak Kaushik, Iteris

Subject: Preliminary Responses to Comment 6-5.1 on Mt.SAC EIRs

Please see our responses to your latest comment made on the Mt. San Antonio College EIRs. I hope this clarifies the situation.

SCAQMD Comment 6-5.1. *"I have looked at the cities mentioned in the DSEIR. I also see the wording and the CO hotspots analysis discussion on pages 166-167. We might recommend in our comments is that the Olympic Trials applicable criteria regional and localized significance threshold emissions should be included, i.e., broken out and presented separately in the Final DSEIR. The reason for this is that the Olympic Trials is a unique and separate activity as pointed out in the project description that is expected to draw an estimated 20,000 daily visitors during that 8-10 day period. Besides vendor, maintenance and support traffic, this would involve passenger vehicles including carpools, as well as buses and shuttles for the participants and visitors. This will give the general public and other interested parties a feel for those impacts compared to the applicable thresholds of significance."*

Response to Comment 6.5.1. The comment concerning the cities (i.e. presumably the cities in which shuttle lots may occur for the Trials) and the CO hotspots analysis on pages 166-167 is noted. To our knowledge, there are no special or unique SCAQMD criteria for regional and local significance threshold emissions for special events, whether they are consecutive daily tournament events for many days, or multiple sporting events. Events are evaluated on a daily basis.

The DSEIR uses the proper SCAQMD regional and local significance threshold emissions for the SCAB and SRA 10. While the analysis may be fragmented between the traffic, 2020 Olympic Track & Field Trials parking plans and the air quality analysis, we believe all the relevant components are included in the DSEIR and result in an adequate air quality analysis for hosting the event on campus. The following four points support this conclusion.

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First, the 2020 Olympic Track & Field Trial trips assigned to the network within the traffic study area (19 intersections in Figure 1 in Appendix M1) are the trips resulting from Parking Plan A (Table 8) and the trip distribution in Figure 5. These assumptions allowed the total trips for the guest carpools to the campus or shuttle parking lots within the traffic study area (i.e. based on the required vehicle occupancy requirements for the shuttle or campus parking lots), faculty and staff trips to the campus, the capacity of the shuttles, the trip distribution, and the distance to be determined. The Preliminary Event Schedule (Table 5) Shuttle Service Schedule (Table 6) and Shuttle Lot Locations (Figure 3) provide the information needed to assign Trial event trips to the network. The resulting trips for carpools, faculty/staff trips and shuttles were then assigned to each link in the area circulation system so the traffic level of service could be calculated.

The trip link volumes for Plan A described above were also used for the air quality analysis for the Trials in Appendix C1. The intersection volumes for the Trials (VPH) were projected in Table 12 (p. 20 of Appendix C1). The Trials trip volumes are then compared to the volumes in the hotspot analysis for the Redesignation Request (Response 6.4.3 above). No significant air quality emissions occur.

Second, while the traffic analysis does not explicitly include the capacity of vendor, maintenance and support traffic, the magnitude of the trips from these sources will likely occur before the Trials begin, and after the Trials end. The magnitude of trips associated with vendors, maintenance or support traffic during the Trials will be minimal, and should only include re-supply efforts if vendors need additional supplies or materials. The disposal of solid waste (i.e. support traffic) may not occur on a daily basis. Solid waste can be stored temporarily on campus. All of the trips associated with vendors, maintenance and support traffic can also occur outside of peak hours. Therefore, these trip modes have little impact on daily air quality emissions.

Third, while the Ontario Airport, Covina high schools, and Diamond Bar High School shuttle lot locations are in cities outside of the traffic study area, the trips associated with these remote lots are not of a high magnitude and are a very small proportion of the freeway volumes. The airport shuttle activity is also concentrated before Session 1, before Session 2, and after the event closes; not on a daily basis.

Fourth, the VMT for the campus in 2015, 2020 and 2025 is known. Table 6.5.1 is based on the CalEEMod output files in Appendix C2. The VMT data can be compared with the ADT data to derive an estimate of the VMT for hosting the Olympic Trials with classes not in session.

This campus generates 44,263 ADT in 2015. Student enrollment increases will result in an increase of 4,606 ADT for assigned trips for 2020 and an increase of 8,798 ADT in 2025 (Tables 5 and 6 in Appendix C1).

With classes not in session, hosting the 2020 Olympic Trials results in only 36 percent of the 2015 campus ADT and has no significant impact on VMT and associated regional air quality emissions.

Table 6.5.1
Vehicle Miles Traveled

Year	Annual VMT	Daily VMT	ADT
2015	100,305,908	385,792	44,363
2020	110,744,868	425,942	48,969
2025	120,243,333	462,475	53,061
2020 Trials (Plan A)	---	167,648 (1)	15,938
Source: CalEEMod Output Files, Appendix C2, pp. 94, 103; (1) Derived from VMT/ADT ratio for 2020. Based on 260 days for CalEEMod academic calendar year and 10 day 2020 Olympics Track & Field Trials.			

The guest carpool trips for Parking Plan C for the Trials with classes in session account for 42 percent (5,941/14,064 spaces) of the total trips (Table 3.11.9 in DSEIR). Plan C requires both students and guests to achieve high vehicle occupancy (usually 4.0). The number of shuttle lots off-campus increases from six to nine so trips and air quality impacts occur over a larger geographical area. Hosting the Olympics is also a single event, while cumulative projects are permanent.

In conclusion, the District maintains the existing air quality analysis is adequate and is based on the on-campus and off-campus parking plans for hosting the projected number of daily guests.

OBJECTIONS TO 2015 FACILITIES MASTER PLAN UPDATE AND PHYSICAL EDUCATION PROJECTS, DRAFT SUBSEQUENT PROGRAM/PROJECT EIR TO FINAL PROGRAM EIR

By United Walnut Taxpayers
Dennis G. Majors, P.E., UWT Board Member
July 21, 2016

The following comments are provided in objection to the 2015 Facilities Master Plan Update and Physical Education Projects, Draft Subsequent Program/Project EIR to Final Program EIR (2015 SEIR/FMP). Additionally, the following objections have been filed with the Mt. SAC Board of Trustees reflecting concerns with the Mt. SAC capital improvement program, which are relevant to the current 2015 SEIR/FMP objections.

Objections to Draft Addendum to the Mt. San Antonio College 2012 Facility Master Plan, by United Walnut Taxpayers, Dennis G. Majors, P.E., UWT Board Member, January 13, 2016

Comments on NOP Draft Subsequent Project and Program EIR for 2015 Master Plan Update and Physical Education Projects, by United Walnut Taxpayers, Dennis G. Majors, P.E., UWT Board Member, February 10, 2016

Comments on Notice of Intent to Make Findings Pursuant to CEQA Guidelines and Adopt CEQA Thresholds of Significance, by United Walnut Taxpayers, Dennis G. Majors, P.E., UWT Board Member, April 1, 2016

CONSIDERATION AND DISCUSSION OF ALTERNATIVES TO THE PROPOSED PROJECT

CEQA Guidelines Section 15126.6 (a) Alternatives to the Proposed Project state, "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives, which are infeasible".

However, an interpretation of alternatives in the traditional sense of a project and array of alternatives that would feasibly attain most of the basic objectives of the project as prescribed by CEQA 15126.6. (a) Alternatives to the Proposed Project, is difficult since comparable alternatives are not clearly defined. Specifically, Alternative 2 omits comparably sized parking structures at the different locations to fulfill build-out parking needs. Alternative stadium

development and operational options in Alternatives 1, 3 and 4 are not comparably sized or functionally equivalent, but provide some basis for comparison in the 2015 SEIR/FMP.

The proposed "Project" consists of those new projects added by the 2015 Facilities Master Plan Update which will be occupied by 2020, including the Physical Education Project (Phase 1), Physical Education Project (Phase 2), Pedestrian Overcrossing at Bonita and Temple and Communications Tower.

No parking structure or other alternatives were presented in the Notice of Preparation so there has been no opportunity to comment at an early stage. The alternatives to the project selected for further evaluation include the No-Project (no-build) Alternative (35,986 fall enrollment headcount); Alternative 1: Revise Physical Education Project, which restricts all future development as of January 2016; Alternative 2: Parking Structures, which includes three parking structure locations of different capacities; Alternative 3: No 2020 Olympic Track & Field Trials, which builds new Phase 1 and 2 Physical Education Projects but does not host the Olympic Track & Field Trials; and Alternative 4, which would include build out of all of the projects included in the 2012 Facilities Master Plan, meaning with respect to the stadium that only renovation would occur.

The SEIR describes Alternative 2, Parking Structures, as the "preferred" alternative to the "Project" which is not comprehensible given the "Project" is defined in the SEIR as those new projects added by the 2015 Facilities Master Plan Update which will be occupied by 2020. Table 2.5, New Projects Added by the 2015 Facilities Master Plan Update describes these facilities as the Physical Education Project (Phase 1), the Physical Education Project (Phase 2), Pedestrian Overcrossing at Bonita and Temple and Communications Tower. Given the definition of the "preferred" alternative as Parking Structures (Alternative 2), meaning that other stadium alternatives are rejected (Alternatives 1, 3 or 4), we are left with the conclusion that the "Project" alternative has been selected as well, which includes the Physical Education Projects (Phase 1 and 2). The logic that emerges from this narrative and as noted later in these objections is that Mt. SAC currently intends to build Parking Structure J and Physical Education Project (Phase 1) at a cost of $111 million dollars (SEIR, Table 5.1, Page 471), none of which were identified in Measure RR Ballot Materials provided voters.

Heretofore in the 2012 Facilities Master Plan, the Physical Education Project (Phase 1) was defined as stadium renovation facilities, while Physical Education Project (Phase 2) was defined as reconstruction of the existing gym and pool complex south of Temple and east of Bonita. However, in a recent redefinition of terms, Mt. SAC has changed the term "stadium renovation" in 2012 SEIR and FMP to "Physical Education Project (Phase 1)", in an apparent attempt to

draw the term “stadium renovation” after-the-fact in line with wording contained in Measure RR Ballot Materials provided to the voters in 2008.

While the development of a stadium renovation is described in the 2012 SEIR and FMP, neither stadium renovation or stadium demolition and reconstruction are not described in Measure RR Ballot Materials provided voters in 2008. The current stadium demolition and reconstruction plans at a cost of $66 million dollars are clearly omitted from and violate the intent of 2008 Ballot Materials.

PROJECT IMPACTS OF LAND USE PLANS (Section 3.1.2)

The Residential Planned Development (RPD) zoning designation and the designation of “School” in the City of Walnut General Plan are appropriate land use designation at Mt. SAC to institute reasonable controls for compatible land use development within the City. This zoning designation provides the mechanism for land use planning and decision-making for development consistent with residential land uses, particularly in the peripheral areas of campus that abut residential communities providing *"appropriate and desirable use of land which is sufficiently unique in its physical characteristics and other circumstances to warrant special methods of development." Walnut City Code § 25-88.* RPD zoning as a matter of history, has not denied consideration of Mt. SAC development in both scale and purpose proposed by the college. However, in the case of Parking Structure J and the West Parcel Solar Project, RPD zoning places a check on peripheral land uses of the campus that are “sufficiently unique to warrant special methods of development” and fundamentally inconsistent with adjacent high-value residential land uses. In particular, the 2,300 space parking structure places a major underground facility as close as 125 feet away from Walnut residents and the West Parcel Solar Project converts highly visible open space forming the northern gateway to the City into a disposal dump site for excess dirt dug out from campus projects.

The significance of the RPD zoning designation is highlighted and reinforced in rulings of the LA Superior Court in favor of United Walnut Taxpayers in 2015 and 2016. RPD zoning was specifically cited in Judge Lavin’s ruling on the Preliminary Injunction, May 13, 2015, stating that such zoning calls for:

> *...."appropriate and desirable use of land which is sufficiently unique in its physical characteristics and other circumstances to warrant special methods of development." Walnut City Code § 25-88.*

Further, Judge James C. Chalfant on January 21, 2016 reiterated Judge Lavin’s ruling stating,

> *..."the parking structure is a no classroom facility that cannot be exempted from the City's zoning laws under Section 53094." Sherman Decl. Ex. A, p.4. Walnut further alleges that*

District is not entitled to the exemption in Government Code section 53094(a) because District is a community college district, not a school district. Thus, under Government Code section 53091, Walnut adequately alleges that District has a mandatory duty to comply with City's zoning laws. This IS sufficient for standing under CCP section 1085."

EVALUATIONS AT PARKING STRUCTURE J, PARKING STRUCTURE D AND PARKING STRUCTURE F (Section 5.0)

Section 5.0 Alternatives to the Project, Alternative 2: Parking Structures includes parking structures at three locations of differing space counts. Mt. SAC recommends building a Parking Structure J (2,300 spaces) by 2020, Parking Structure D (1,400 spaces) by 2025, and Parking Structure F (1,528 spaces) by 2025, however acknowledges that "the costs for constructing up to three parking structures in the next fifteen years is prohibitive, since structured parking spaces are extremely expensive (e.g. about $19,600 per space)". It goes on to state, "However, given the long timeframe to secure funding, approvals and construction, this is not an unreasonable timeframe for completion". The United Walnut Taxpayers concur that the cost to construct the three parking structures is prohibitive, particularly since no funding source has been identified to build the structures at a combined cost of $102 million dollars (SEIR, Table 5.1).

Project build-out parking needs in 2025 is 8,716 spaces (SEIR, Table 3.2.9). The total parking spaces that exist on campus today are 8,985 spaces (Table 3.2.3) or sufficient to meet all future need if parking spaces that exist today could be retained. However, Mt SAC will remove 2,459 spaces in the future to build new facilities or parking structures on them, meaning the parking deficit Mt. SAC will experience is largely self-imposed. Further, as noted in the SEIR, page 474 of the SEIR, "the costs for constructing up to three parking structures in the next fifteen years is prohibitive….." The cost penalty of removing 2,459 parking spaces as proposed by Mt. SAC comes at a cost of at least $45 million dollars (Parking Structure J, SEIR, Table 5.1) currently without any source of public funding.

Adding the 2,300 parking spaces to the campus results in a total of 9,016 parking spaces at project build-out in 2025 compared to a total parking need of 8,716 spaces, which as noted in SEIR, Tables 3.2.3 and 3.2.9 assumes 2,459 spaces lost from campus construction activities through 2025. Parking could also be added through the expansion of either Parking Structure D or Parking Structure F to 2,300 total spaces since the footprint areas available at these sites are at or greater than that available at Parking Structure J (Parking Structure J: about 180,000 square feet; Parking Structure D: about 200,000 square feet; Parking Structure F: about 300,000 square feet after deleting new classroom areas). Approximate measurements of footprint areas cited above are taken from the 2012 Facility Master Plan, page 10.

CUMULATIVE IMPACTS OF PARKING STRUCTURE J (LOT A, LOT 1A, PAY LOT A)

An additional significant impact of Parking Structure J is its contribution to traffic gridlock during a combined emergency evacuation involving Timberline and Mt. SAC, which could occur during a severe fire combined with moderate winds, which prevail on most days. Cumulative traffic impacts must be addressed regarding the evacuation of a Parking Structure J in an emergency when already significant traffic congestion exists on roadways shared with the Timberline community and Mt. SAC, as demonstrated by the March 24, 2016 evacuation of the Mt. SAC campus resulting from a bomb threat. Regarding Cumulative Impacts, CEQA Guidelines §15355, Cumulative Impacts states:

> "Cumulative impacts" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.
>
> (a) The individual effects may be changes resulting from a single project or a number of separate projects.
>
> (b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period.

However, Section 3.2.6, Traffic/Parking CEQA Cumulative Conditions Impacts, omits the disclosure of existing + project + cumulative impacts, which account for fire emergencies addressing concurrent evacuation of the entire Timberline community and the Mt. SAC campus. As noted in comments to Findings Pursuant to CEQA Guidelines and Adopt CEQA Thresholds of Significance by the United Walnut Taxpayers, April 1, 2016, Mt. SAC cannot unilaterally claim exemption from such evaluation of cumulative impacts in CEQA documents, particularly involving public safety issues.

In the evacuation of the Mt. SAC campus due to a bomb threat on March 24, 2016, I witnessed up to a 20-minute delay exiting on Mountaineer Road from the Timberline community to Grand Avenue. I witnessed an individual making an illegal right turn from Stoddard Wells Road into wrong way traffic on south bound Edinger Way in desperation to somehow find a way to the Grand Avenue exit. A severe fire emergency accompanied by daily prevailing winds initiated in or near the Mt. SAC campus or Timberline community could spread through the community and Mt. SAC lands mobilizing the evacuation of all Timeline residents and Mt. SAC. Even without any evacuation of Timberline, the emergency evacuation of Mt. SAC during the recent bomb threat caused a severe delay. The added evacuation of Parking Structure J in these circumstances would complicate traffic gridlock and the potentially catastrophic consequences of fire spread and smoke inhalation.

Since fire spread in an uncontrolled wildfire are primarily influenced by wind speed and terrain slope, the relatively steep natural terrain in the Timberline community of up the 50% and daily breezes which can exceed 5 -10 mpg (http://www.sailflow.com/map), create conditions for relatively rapid fire spread rate (http://www.fs.fed.us/psw/publications/weise/psw_2005_weise(koo)005.pdf). It should be anticipated in such a fire event that evacuation of the Timberline community and Mt. SAC campus would be ordered resulting in uncertain risks to residents and students desiring to quickly exit the area through Mountaineer Road to Grand Avenue or through other exits for Mt. SAC students. Given this combined evacuation of Mt. SAC students and Timberline residents, and the implicit availability of other alternative parking structure locations, Mt. SAC cannot employ a Statement of Overriding Concerns considering the public safety and life-threatening circumstances that would prevail.

IMPROPER USE OF MEASURE RR FUNDS FOR STADIUM RECONSTRUCTION

As previously noted in comments to the NOP, Measure RR has been characterized as a "Classroom Repair, Education Improvement, Public Safety/Job Training Measure" supporting educational interests of Mt. San Antonio College by highlighting needs to renovate, construct and update classroom facilities. However, the subject 2015 SEIR/FMP seeks to change the objective of Measure RR by characterizing a stadium reconstruction project not identified in Measure RR Ballot Materials provided to the voters as a "physical education" facility, in an attempt to align and associate the stadium reconstruction with two vaguely worded Ballot Materials citations that address physical education facilities, stating:

….“Upgrade….physical and health education …..facilities”…….

….“phase two of the athletic complex, including hard courts, gym, fields and tracks,”…

While the Measure RR ballot narrative clearly documents the need for classroom and technology related upgrades, the proposed stadium reconstruction, vastly expanded field house beneath the reconstructed west bleachers and ancillary structures are excluded. Most notably the terms "stadium", "stadium renovations", "stadium reconstruction" or "new stadium" were not even mentioned in Ballot Materials provided voters. The use of Measure RR funds for such facilities violates the intended use of these bond funds. For example, Mt. SAC has improperly funded mass excavation of a large hill formation west of the existing stadium to achieve final grades for stadium demolition and reconstruction, proposes a $66 million dollar Phase 1 stadium reconstruction project marketed to the US Olympics Committee as the site of the 2020 US Olympic Track and Field Trials, and proposes the dangerous trucking of excess dirt from the hill through public streets, to be piled up some 70 feet above Grand Avenue in front of homes at their West Parcel Solar Project site using Measure RR funds which were also not disclosed in Ballot Materials to voters.

Most importantly, there was no mention of stadium renovation or reconstruction of any type in the 2008 SEIRs and FMPs, and only scant mention of upgrading "field and Tracks" in the Measure RR Ballot Materials. The scale of the Phase 2 Physical Education Project, including a 77,569 square foot field house underneath the west bleachers more than seven times its current size, could have never been anticipated in Ballot Materials provided voters, which briefing states " physical education" facilities. The 2008 and 2012 SEIRs and FMPs included reference to replacing the existing "gym". However, the proposed expanded 117, 898 square foot athletic complex more than doubling the size of the existing "gym" could not have been expected given the vaguely wording Ballot Materials.

IMPROPER USE OF MEASURE RR FUNDS FOR STADIUM RECONSTRUCTION PHASE 1 GRADING AND EARLIER GRADING CONTRACTS

As noted above, the terms "stadium", "stadium renovations", "stadium reconstruction" or "new stadium" was not mentioned in Measure RR Ballot Materials provided voters. The use of Measure RR funds for such facilities or related earthwork activities violates the intended use of these bond funds. SEIR, page 333 states the initial preliminary grading for athletic buildings D1 - D5 began in June 2014 and was completed in September. This excavation, which was exported to the Lot M Fire Academy area, also helped achieve final grades for stadium reconstruction. The scope and scale of these dirt moving activities violates the intent of Measure RR since such work was never presented to and could have never been anticipated by voters in the written Ballot Materials provided to them.

Remarkably, Mt. SAC intends to use Measure RR funds in proposed Phase 1 Grading to move the dirt that is left at the stadium hill (estimated to be around 160,000 cubic yards) to the West Parcel Solar site. Specifically, the SEIR, page 56, Table 2.2, Projects with Measure RR Bond Funding (May 2016) includes Physical Education Project (Phase 1 Grading). However, this work is not defined as either export from the stadium hill or import to the West Parcel site in Measure RR. The scope of the dirt moving activities violates the intent of Measure RR since it was never presented to and could have never been anticipated by voters from the written Measure RR Ballot Materials. Amplifying this concern is the fact that Mt. SAC proposes the dangerous trucking of this dirt through public streets, to be piled up some 70 feet above Grand Avenue in front of homes at their West Parcel Solar Project site.

IMPROPER USE OF MEASURE RR FUNDS FOR STADIUM RECONSTRUCTION PHASE 2 GRADING

The SEIR, page 331 states, "Truck Hauling Plan for PEP Earth Export Iteris, Inc. completed a Truck Haul Plan for Phase 2 Grading of the PEP site in April 2016". Earlier this year, Mt. SAC exported dirt from the Business Computer Technology Center (BCT) and placed the dirt on the top of the excavated stadium hill remnant that was left after cutting the hill down in 2014. Based

on visual assessment, roughly 70,000 cubic yards of dirt has been placed on top of the hill remnant. This was an apparent temporary storage location for the excess dirt from the BCT that will later be removed to help achieve final construction grades for the new stadium and athletic complex (Physical Education Project, Phases 1 and 2). Specifically, Mt. SAC now intends to export to an offsite location about 81,429 cubic yards of dirt from the hill (Phase 2 Grading) via the Bonita Avenue/Grand Avenue intersection, east along Temple Avenue to SR-57 and north on SR-57 to an unspecified destination. Empty trucks would return along the same route to the campus.

The Notice of Preparation (NOP) of a Draft Subsequent Project and Program EIR for the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects states, "The District intends to use Measure RR funds to design and construct the Physical Education Projects". Again, as in the case of Phase 1 Grading, the Phase 2 Grading violates the intent of Measure RR since such work was never presented to and could have never been anticipated by voters from the written Measure RR Ballot Materials.

WEST PARCEL SOLAR PROJECT

The SEIR, page 57 states, "The West Parcel Solar project (as of May 2016) is subject to litigation pending in the Superior Court of Los Angeles County. A motion or preliminary injunction was denied by the Court on January 21, 2016. In addition, the West parcel Solar project cannot commence until receipt of Section 404 Nationwide Permit from the Army Corps, Section 401 Water Quality Certification from the California State Water Resources Board, a Section 1600 Streambed Alteration Agreement from the California Department of Fish and Wildlife and recorded Restrictive Covent that will install, preserve, and maintain into perpetuity a habitat plan for the West Parcel Solar project". SEIR, Table 2.3 Projects Under Construction (January 2016) also states that the project is formally "On Hold" apparently in large part because of the permit status described above.

SEIR, page 484 states, "The no-project alternative is rejected from further consideration because the facilities required for the College to meet its educational objectives would not be fulfilled and the Habitat Mitigation Plan previously adopted by the Board of Trustees would not be implemented. The District would also be in violation of permits received from the California Fish & Wildlife Service for the West Parcel Solar Project". The fulfillment of a project mitigation program cannot be cited as a valid CEQA rationale for not proceeding with a project because the mitigation program is the "consequence" of the project and not the project itself. The expansion of the wildlife preserve is a separately disclosed action that can proceed independent of the Solar Project mitigation program.

Further, SEIR, page 485 states "The 2015 FMP is rated as environmentally superior to the 2012 FMP since it implements the habitat mitigation plans required for the West Parcel Solar project

and complies with the state and federal agency permit requirements for the project. The 2015 FMPU also expands the acreage for the Open Space/Wildlife Sanctuary Zone". Again, the fulfillment of a project mitigation program cannot be cited as a valid CEQA rationale for proceeding with a project because the mitigation program is itself a "consequence" of the project and not the project itself. The expansion of the wildlife preserve is a separately disclosed action that can proceed independently.

The United Walnut Taxpayers delivered objections on the draft Addendum to the Mt. San Antonio College 2012 Facility Master Plan Subsequent Program EIR to the Mt. SAC Board of Trustees at their meeting of January 13, 2016. The comments focused on visual impacts through a line of sight analysis, severe land form reconfiguration, inappropriate use of an Addendum in lieu of a project specific EIR with comprehensive alternatives analyses, significant changes to site plans since 2013, and public safety risks imposed by commingling a dangerous dirt moving haul route with pubic traffic on city streets.

Mt. SAC has not disclosed the significant aesthetic impacts of natural hillsides destruction at the northern entrance of the City witnessed by thousands of motorists and residents each day. While limited aesthetics line of sight analysis were presented by staff to the Board of Trustees to secure approval of the project, on September 16, 2015, these studies were undisclosed and omitted the line of sight hillside devastation experienced by motorists. Mt. SAC conducted limited line of site aesthetic impact evaluation regarding the effects of the solar project on surrounding residents, however these studies were not included in the Addendum to the SEIR. Further, there has been no evaluation of the solar project's significant aesthetic impact with respect to the City of Walnut's designation of Grand Avenue as a scenic highway. A related effect is the destruction of rare native habitat that supports bird species such as the coastal California gnatcatcher and coastal cactus wren.

The West Parcel Solar Project results in severe community, aesthetics and hillside coastal sage scrub habitat impacts, and lacks alternatives analysis to avoid or minimize these impacts and to avoid impacts to waters of the United States. As well, the project lacks critical community input highlighting significant impacts to the heart of the City, the effects of which have heretofore been consistently discounted by Mt. SAC. The alternative of using of canopy-mounted solar panels over existing parking lots, as opposed to ground-mounted systems at the West Parcel, offers a unique opportunity to achieve the equivalent solar power benefits while completely avoiding impacts to waters of United States.

The United States Environmental Protection Agency website (https://www.epa.gov/cwa-404/section-404-permit-program) states, "The basic premise of the Clean Water Act Section 404 Program is that no discharge of dredged or fill material may be permitted if: (1) a practicable alternative exists that is less damaging to the aquatic environment or (2) the nation's waters

would be significantly degraded. In other words, when you apply for a permit, you must first show that steps have been taken to avoid impacts to wetlands, streams and other aquatic resources; that potential impacts have been minimized; and that compensation will be provided for all remaining unavoidable impacts."

Mt. SAC must initially demonstrate that steps have been taken to avoid impacts to wetlands, streams and other aquatic resources through a project alternatives analysis. However, there is no evidence from Mt. SAC's solar project initiatives that any effort to avoid impacts to waters of the United States has been pursued through such analysis. Significantly, the practicable alternative of canopy-mounted solar panels over existing parking lots would in fact have absolutely no impact to the waters of the United States, but has not been disclosed in CEQA documents and subjected to public review. Such alternatives evaluation to avoid impacts to waters of the United States and address alternatives to the proposed project must be considered in CEQA documents.

Dirt moving operations for the Solar Project alone involve 11,000 dump truck loads of dirt transport along city streets, which is a major construction operation. An Addendum to current CEQA documents discloses dump trucks will be dispatched from the Stadium Hill borrow source to the Solar Project at a rate of twenty (20) truckloads per hour or at a spacing of 3 minute intervals, 9 hours a days for 73 days over a 6-mile haul route through the cities of Walnut, Pomona and Industry, two college campuses and an unincorporated county area. The City of Walnut by letter of November 4, 2015 informed Mt. SAC that an any such truck traffic would require a Conditional Use Permit (CUP) from the City including truck routes and other conditions which to date has not been provided. In disregard of the City's requirement, the Thresholds of Significance only require traffic congestion analysis when truck hauling exceeds fifteen (15) truckloads per hour and 100,000 cubic yards of earth movement for a single project, meaning much of the massive earthmoving operations to construct the Solar Project would be considered insignificant. Real time safety implications of such operations are not addressed, particularly for the generally unprecedented and dangerous co-mingling of a 6-mile long dirt moving haul route on public streets.

Mt. SAC has not disclosed alternatives analyses of the Solar Project in CEQA environmental documents as requested by the City of Walnut and the United Walnut Taxpayers. Further, in an email of September 23, 2015, US Fish and Wildlife Service requested a review of a canopy-mounted solar panel alternative above parking lots similar to those at Cal Poly Pomona. The City of Walnut has stated in their letter of October 28, 2015 to Mt. SAC that "Absent new environmental analysis of the Solar Project by Mt. SAC, the City will assume lead agency role pursuant to CEQA Guidelines Section 15096(e). Pending the City's approval of such CEQA documentation and Conditional Use Permit (CUP), Mt. SAC must not commence any construction activity". The City has consistently requested comprehensive alternatives analyses in CEQA documents, which heretofore has not been conducted. The Addendum to CEQA

documents certified on January 13, 2016, provided an opportunity to disclose these alternatives; however, Mt. SAC chose to exclude these analyses in the Addendum in indifference to the requests for alternatives analysis by the City of Walnut, the United Walnut Taxpayers and the US Fish and Wildlife Service.

Internal Mt. SAC studies (2013) obtained by UWT have stated that canopy-mounted solar panels over parking lots could not be constructed effectively because of disruption to student traffic. However, current thermal tank and building construction on the north side of campus is eliminating more than 900 parking spaces for more than a year apparently with acceptable effects to student parking. In contrast, canopy-mounted solar panels can be pre-fabricated off-site and installed with minimal traffic disruption during recess periods of several months a year. Canopy-mounted solar panels completely avoid the destruction of hillsides, critical habitat, wildlife and primary viewsheds of the City.

CHRONOLOGY OF EXCAVATION AND TRANSPORT OF DIRT AT THE STADIUM HILL TO ON-CAMPUS AND OFF-CAMPUS LOCATIONS

The strategy for excavation and transport dirt to support on campus construction programs has been a central element of the Mt. SAC capital improvement program. It is instructive to summarize the timing and quantities of dirt movement to shed light on Mt. SAC's objectives and related concerns to the Untied Walnut Taxpayers.

2011: Psomas Associates develops earthwork plan identifying 261,000 cubic yards of earth export from the stadium hill entirely to the West Parcel site (8-19-11). This plan was placed in the 2012 SEIR, however the West Parcel Solar Site did not move ahead upon SEIR completion in 2013 as planned and dirt exports from the stadium hill had to go elsewhere.

2012: Psomas Associates develops earthwork plan identifying 425,450 cubic yards of dirt import to the Driving Range Parcel (7-24-12). While there was no Fire Trading Academy identified at the driving range at that time, the 425,450 cubic yards was adequate to accommodate dirt exports from excavating the lower levels of Parking Structure J, cutting down a part of the stadium hill to make space for the new stadium and athletic facilities, and other excavation exports from the central portion of campus. This plan was also placed in the 2012 SEIR as a site to dispose of dirt exports from other parts of campus largely because the West Parcel was unavailable at the time.

2014: The stadium hill was partially cut down with dirt exports placed at the Driving Range Parcel (now named the Fire Training Academy). It is concluded that the 261,000 cubic yards of dirt originally intended for the West Parcel was diverted to the Driving Range Parcel because the West Parcel was unavailable at the time.

2015: Excavation from the lower levels for the Parking Structure J in an amount of about 100,000 cubic yards was to be placed at the Driving Range Parcel (now named the Fire Training Academy), but the contract to do so was terminated as a result of Judge Luis A. Lavin's May 13, 2015 Injunction.

2016: About 70,000 cubic yards of dirt was exported from the Business Computer Technology Center (BCT) and placed on the top of the excavated stadium hill remnant that was left after cutting the hill down in 2014. As a temporary storage site, this dirt now has to be exported off site, as noted above under Phase 2 Grading.

2017: Mt. SAC intends to move about 160,000 cubic yards of dirt from the remaining stadium hill remnant to the West Parcel disposal site, which will finally bring the hill down to surrounding ground level in preparation for new stadium and athletic complex construction.

As a result, approximately 261,000 cubic yards has been placed at the Driving Range Parcel by partially cutting down the stadium hill in 2014. About 70,000 cubic yards of dirt has been exported from the Business Technology Center, which has temporally built the hill back up again, to be removed and exported off-site under Phase 2 Grading. All of this work has been done using Measure RR funds, which was not described in Measure RR Ballot Materials provided to voters.

IMPROPER APPLICATION OF CEQA THRESHOLDS OF SIGNIFICANCE BY MT. SAC IN THE 2015 SEIR/FMP (SEIR, Section 3.0)

The United Walnut Taxpayers have filed objections with the Mt. SAC Board of Trustees relative to Mt. SAC's Notice of Intent to Make Findings Pursuant to CEQA Guidelines and Adopt CEQA Thresholds of Significance on April 1, 2016.

The Thresholds of Significance appear to employ a tailored CEQA compliance mechanism to controvert valid city and county zoning and ordinances for the protection to and compatibility with residential and open space areas of the City. The Thresholds of Significance state that non-compliance with their self-defined internal Land Use Plan, Facility Master Plan and Campus Zoning is a significant impact, which does not constitute valid impact assessment under CEQA. Nonetheless, the college excludes recognition of CA Gov. Code 53094(b), which requires compliance with applicable city and county zoning. As such, Mt. SAC appears to render irrelevant the City of Walnut's planning and zoning ordinances, specifically the application of Residential Planned Development (RPD) zoning which has been upheld and favorably ruled on by the LA Superior Court in 2015 and 2016. UWT objects to any inappropriate application of CEQA procedures to potentially controvert the application of City of Walnut zoning and ordinances.

Non-compliance with a discretionary Energy Conservation Plan as a significant impact does not constitute a valid impact assessment under CEQA. A self-imposed Energy Conservation compliance mechanism would be one method of citing significant impacts of not implementing site-specific projects, which conversely requires the implementation of the project to reduce impacts to a level of insignificance. The consequence of such an interpretation could require implementation, for example, of the West Parcel Solar Project to reduce self-imposed impacts to a level of insignificance, but providing justification for the acceptance of other significant impacts of the project.

Within the Thresholds of Significance document, Mt. SAC defines environment impacts as baseline + project impacts, while excluding the disclosure of existing + project + cumulative impacts. Mt. SAC cannot unilaterally claim exclusion from evaluation of cumulative impacts in CEQA documents. An example is the cumulative traffic impacts that must be considered when the need arises to evacuate a potential Parking Structure J during an actual fire emergency when already significant traffic congestion exists on roadways shared with the Timberline community and Mt. SAC, as demonstrated by the March 24, 2016 evacuation of the Mt. SAC campus resulting from a bomb threat.

The Thresholds of Significance set self-identified impact thresholds indicating that non-compliance with campus parking demand projections for the latest FMP (or that occurring every five years) is a significant impact. However, non-compliance with parking demand projections is not a valid impact category under CEQA. The Thresholds of Significance also require traffic congestion analysis when truck hauling exceeds fifteen (15) trucks per hour and 100,000 cubic yards of dirt movement for a single project, meaning anything less than these criteria is not significant. Further, no analysis can consider real time safety implications of such operations, particularly for the generally unprecedented and dangerous co-mingling of a 6-mile long dirt moving haul route on public streets proposed with the solar project.

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July 27, 2016

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Draft Subsequent Program/Project Environmental Impact Report (DSEIR) for the Proposed Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects (SCH #2002041161)

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final CEQA document.

The Lead Agency proposes new development including 1) a redesign of the athletic facilities south Temple Avenue and east of Bonita Avenue; 2) demolition of the existing stadium and construction of a new stadium at the same location; 3) relocation of the Public Transportation Center; 4) a new pedestrian bridge over Temple Avenue; and other improvements. This new development is part of the 2015 Facilities Master Plan Update (FMPU) for educational programs based on a current enrollment of 35,986 students (from the 2014-2015 fall enrollment) and approximately 1,556,400 gross square feet (gsf) of facilities on campus in August 2015. The proposed development addresses a projected fall student enrollment increase from the current enrollment of approximately 3,745 students in academic year 2020-21 (to 39,731 students) and an increase of 7,153 students (to 43,139 students) from the current enrollment in academic year 2025-26. The proposed FMPU will result in a net increase of approximately 425,900 gsf in 2020 and 752,200 in 2025. The DSEIR addresses potential impacts to make the prior 2002-2012 documentation adequate for the current project and projected student enrollments that update the previously certified Final Program EIR (SCH #2002041161), the latest certified in December 2013.

The Lead Agency also seeks comments on using surrogate analyses for projects that estimated regional and localized significance thresholds emission impacts using the California Emissions Estimator Model (CalEEMod land use model) based on two hypothetical project description scenarios.[1] The Lead Agency desires to use these analyses for CEQA projects only at the Mt. SAC site as a screening tool to determine if future projects similar or smaller in scope can be used for CEQA air quality purposes (regional and localized significance thresholds). Further, Tools used to estimate project impacts are constantly being updated. For example, CalEEMod 2016 is set to be released as the recommended version to be used for project analyses later this year replacing CalEEMod 2013. The SCAQMD staff recommends that over time, this analysis

[1] Revised Draft 2016 CEQA Thresholds of Significance Memorandum (April 28, 2016), "CEQA Thresholds and Procedures for Air Quality (Report #15-116A)", Greve & Associates, LLC, December 7, 2015.

might need to be updated with a more current version of the land use model to ensure that the estimated emissions reflect more current emission factors and other relevant information.

Lastly, the Lead Agency includes hosting of the 2020 U.S. Track & Field Olympic Trials at the project site that could include an estimated 20,000 daily visitors for 8-10 days during the Summer Term (around July-August). In the traffic analysis, approximately 12,000 average daily trips (ADT) area trips reduced by the use of a shuttle system by about 3,600 ADT and vehicle miles traveled (approximately 14,400 VMT) were estimated for the Olympic Trials.[2] Since the proposed Olympic Trials may or may not overlap with the Summer Term (students attending classes, faculty and administrative staff present, etc., the SCAQMD staff recommends that the Final SEIR include peak daily regional and localized emission estimates from the Olympic Trials to compare to applicable thresholds. If the change in these emissions impacts from the baseline emissions exceeds the SCAQMD recommended operational thresholds of significance, mitigation should be incorporated into the project description and air quality analyses, as applicable, to reduce those impacts. Mitigation could include having parking staff to direct vehicles to parking spaces quickly to avoid unnecessary operations or idling in the venue parking lots, separate entrances and exits including routes in and out of the venue sites for visiting passenger cars and special shuttles, use of clean fuel shuttles, and restrictions to tailgate parties (if air quality is predicted to be Unhealthy for Sensitive Groups[3]).

Pursuant to Public Resources Code Section 21092.5, SCAQMD staff requests that the Lead Agency provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final SEIR. Further, staff is available to work with the Lead Agency to address these issues and any other questions that may arise. Please contact Gordon Mize, Air Quality Specialist, at (909) 396-3302, if you have any questions regarding the enclosed comments.

Sincerely,

Jillian Wong

Jillian Wong, Ph.D.
Planning and Rules Manager
Planning, Rule Development & Area Sources

JW:GM

LAC160610-04
Control Number

[2] DEIR, Section 3.11 Olympic Track & Field Trials Starting on Page 415 (2020 Olympic T & F Trials Focused Traffic Study by Iteris,, Inc., April 15, 2016).
[3] http://www.aqmd.gov/ See Air Quality Index for current reading. To sign up for SCAQMD Air Quality Alerts, see http://aqmd.enviroflash.info/

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CITY OF WALNUT

July 28, 2016

Mikaela Klein, Senior Facilities Planner
Mt. San Antonio Community College District
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VIA E-MAIL and U.S. MAIL

Re: *Comments to the Mt. San Antonio College District 2015 Facilities Master Plan Update and Physical Education Projects Draft Subsequent Program/Project EIR to Final Program EIR (SCH 2002041161)*

Dear Ms. Klein,

On behalf of the City of Walnut (the "City"), we appreciate this opportunity to review and provide comments to the District's circulation of its 2015 Facilities Master Plan Update ("FMPU") and Physical Education Projects ("PEP") (collectively referred to herein as the "Project") Draft Subsequent Program and Project Environmental Impact Report, State Clearinghouse No. 2002041161 (the "DEIR").

The Project contemplates the future development of Mt. San Antonio Community College through the year 2025, including construction of several new buildings and other major campus facilities, including a new stadium, fire training academy, and library. The DEIR is a subsequent EIR because substantial changes have occurred in the Project since the 2012 Facilities Master Plan Final EIR was certified, one or more significant impacts may occur, and new information is available on prior projects that was not previously assessed. The DEIR combines a Program-level EIR for the Facilities Master Plan Update with a Project-level EIR for the Physical Education Projects Phases 1 and 2.

The Project proposes an increase of approximately 238,089 assignable square footage (ASF) from existing conditions. As compared to the 2012 Facility Master Plan buildout, the 2015 Facility Master Plan Update will result in an additional 465,000 ASF increase at buildout.

The DEIR finds the Project will result in significant and unavoidable adverse traffic impacts, limited air quality cumulative impacts, and historic resource impacts, for which a

Statement of Overriding Considerations will be required. The DEIR finds all other adverse impacts to be Less Than Significant with Mitigation Incorporated. The DEIR considers four alternatives and one No-Project alternative.

The City believes that the DEIR fails to comply with the requirements of the California Environmental Quality Act ("CEQA") (Pub. Res. Code §§ 21000, *et seq.),* and the State of California Guidelines for the California Environmental Quality Act ("Guidelines")(14 Cal. Code Regs. §§15000 *et seq.).* Accordingly, the City requests that the District suspend any further consideration of the Project until a DEIR that fully discloses and analyzes the potential impacts of the Project, fully considers feasible alternatives (including alternative locations and alternative technologies), and fully complies with all other CEQA requirements has been prepared and recirculated for public review and comment.

GENERAL COMMENTS

The City retained two environmental consulting firms, Soil / Water / Air Protection Enterprise (SWAPE) and Kunzman Associates, Inc. to provide technical peer review of the DEIR's analysis of the Project's potential Air Quality, Greenhouse Gas, and Traffic impacts. Those comment letters are attached as Exhibit A and Exhibit B and are incorporated by reference.

The City of Walnut Municipal Code and Zoning Regulations Apply to the Project

The Mt. SAC campus is geographically contained within the City, and the DEIR's identification of responsible or interested agencies should in every case include the City. Likewise, the DEIR's identification of relevant regulations should include the Walnut General Plan and Walnut Municipal Code.

The City objects to the DEIR's claim that the District is now, or can be after Board of Trustees action, wholly exempt from the City's General Plan and Zoning controls pursuant to Government Code Section 53094. (DEIR p. 91-92.) That provision of the Government Code allows school districts to render a city's zoning code inapplicable to a proposed use, but the district may not take this action when the proposed use of the property by the school district is for nonclassroom facilities. (Gov. Code § 53094 (b).) The term "nonclassroom facilities" applies where the district's facility is "not directly used for or related to student instruction." ((*People ex rel. Cooper v. Rancho Santiago College* (1990) 226 Cal.App.3d 1281.) The District should acknowledge that those proposed uses under the 2015 FMPU or PEP that will not be "directly used for or related to student instruction," are not exempt from the City's zoning code, which among other things requires consistency with the City's General Plan.

The West Parcel Solar and Parking Structure J Projects Should be Revised to Lessen Impacts

Another preliminary matter is related to a statement in the DEIR's introduction, in which the District discusses "initial potential areas of controversy for the project." (DEIR p. 16.) The District states,

> [R]esidents near campus have objected to the construction of the West Parcel Solar project and to the construction of Parking Structure J. However, as discussed in [CEQA Guidelines] Section 15064 (f) (5) argument, speculation, unsubstantiated opinion or narrative, or evidence that is clearly inaccurate or erroneous, or evidence that is not credible, shall not constitute substantial evidence. Substantial evidence shall include facts, reasonable assumption predicated upon facts, and expert opinion supported by facts.

(DEIR p. 16.)

The District presumably makes this assertion to preempt any future comments by residents objecting to the location and construction of the West Parcel Solar site and/or the construction of Parking Structure J based on those residents' scenic and aesthetic concerns and observations. The DEIR's reliance on CEQA Guidelines Section 15064 (f)(5) to dismiss the City residents' concerns is misplaced.

The residents' personal observations that the Project will have significant adverse aesthetic impacts constitutes substantial evidence sufficient to satisfy CEQA.

> Relevant personal observations of area residents on nontechnical subjects may qualify as substantial evidence for a fair argument. (*Ocean View Estates Homeowners Assn, Inc. v. Montecito Water Dist.* (2004) 116 Cal.App.4th 396, 402; *Arviv Enterprises, Inc. v. South Valley Area Planning Com.* (2002) 101 Cal.App.4th 1333, 1347.) So may expert opinion if supported by facts, even if not based on specific observations as to the site under review. (*Friends of the Old Trees v. Department of Forestry & Fire Protection* (1997) 52 Cal.App.4th 1383, 1398–1399 & fn. 10 [expert testimony for fair argument purposes need not meet standard required of such testimony at trial].)

(Pocket Protectors v. City of Sacramento (2004) 124 Cal.App.4th 903, 928.)

In the specific case of substantial evidence of aesthetic impacts, "the opinions of area residents, if based on direct observation, may be relevant as to aesthetic impact and may constitute substantial evidence in support of a fair argument; no special expertise is required on this topic." (Id., at p. 937.) Thus, the opinions of City residents are substantial evidence of the Project's adverse aesthetic impacts and must be adequately addressed in a recirculated DEIR.

In addition to the above-referenced residents' objections to the West Parcel Solar project and Parking Structure J, the City is also concerned that these two projects are either not described in sufficient detail in the 2015 FMPU or are described in confusing and often conflicting terms which has the same result as an incomplete description. For example, the section of the DEIR describing a comparison between the 2012 Facility Master Plan and the 2015 FMPU lists Parking Structure J and simultaneously "retained in its approved location from

the 2012 FMP" and "removed from Exhibit 1.4 [the Mt. SAC 2015 FMPU Land Use Plan]". (DEIR p. 10.) In addition the DEIR states both the West Parcel Solar project and Parking Structure J "received their CEQA clearances in the 2012 Final EIR." (DEIR p. 161.) The City obviously objects to this claim, as evidenced by its pending lawsuit against the District disputing the sufficiency of the 2012 Final EIR analysis of these two projects. (*United Walnut Taxpayers v. Mt. San Antonio Community College District, et al.*, Los Angeles County Superior Court Case No. BC576587.)

In addition, DEIR Table 2.3 "Projects Under Construction (January 2016)" lists the West Parcel Solar and Parking Structure J as "On Hold" yet describes and analyzes Parking Structure J under Noise Impacts (p. 218), Parking Impacts (p. 289), Lighting Guidelines (p. 305), Brooks/Mt. SAC Relays Impacts (p. 399), Table 5.1 "Future Parking Structures" (p. 474), and Alternatives 1–4 (p. 482). While the DEIR contains references to Parking Structure J being on hold, or sometimes includes discussion of project impacts without Parking Structure J, the overall message is unclear as to whether the District has conclusive plans to proceed with construction, and if so, when. Likewise, the DEIR lists the West Parcel Solar ("WPS") project as "On Hold" but also contains mixed messages regarding the District's future plans for moving forward with the project. (DEIR p. 57, 323 ["Future grading will continue to export earth to the West Parcel Solar site in 2016 or 2017."].) The DEIR should be updated and recirculated to clarify the scope of the Project as to these proposed facilities and eliminate internal inconsistencies .

One last point regarding the WPS project and Parking Structure J: the City wants to make clear that it is not opposed to the District's purpose behind seeking to construct these two projects. Additional parking and alternative sources of clean energy generation are laudable goals. However, the way the District has so far approached the development of these two projects not only fails to adequately evaluate and mitigate negative environmental impacts, but demonstrates a lack of foresight and poor planning and complete disregard of the City's land use regulations. The City urges the District to include these two projects specifically in the updated and recirculated DEIR's discussion and analysis of project alternatives. The alternatives analysis should include alternative locations for these facilities and a discussion of solar canopies or roof-mounted solar systems for energy generation. The District should specifically consider a roof-mounted set of solar canopies that allows the District to meet its two-fold goal of increased parking and solar power generation while at the same time lessening impacts from these projects as currently planned.

The DEIR Relies on Outdated, Irrelevant, or Incorrect Methodologies

The DEIR relies on only somewhat relevant and often incorrect methodologies to back up its studies. For example, the Air Quality comment letter prepared for the City by environmental consultant SWAPE (the "SWAPE letter") shows the District should not have relied on the South Coast Air Quality Management District's Localized Significance Threshold (LST) in conducting its air quality assessment, because the LST method can only be applied to projects that are less than five acres in size. (SWAPE letter, p. 3.) Additionally, the comment letter prepared for the City by environmental consultant Kunzman Associates, Inc. (the "Kunzman letter") regarding traffic impacts notes the DEIR several incorrect calculations in the DEIR's trip generation analysis. (Kunzman letter, p. 3.) The use of only partially relevant and old data and predictions

renders the DEIR inaccurate and calls into question the subsequent reliance on this document for later implementing projects. As such, the DEIR does not present an adequate, complete document and a "good faith effort at full disclosure" as required by CEQA. (Guidelines § 15151)

The Mitigation Monitoring Program Fails to Require Feasible and Enforceable Mitigation Measures

Discussed in greater detail below, the DEIR fails to require all feasible mitigation of the Project and ensure mitigation is enforceable. For example, as noted in the SWAPE letter, the Mitigation Monitoring Program ("MMP") for the Project sets forth an unrealistic and unenforceable mitigation measure relating to the use of lower-emission construction equipment. (SWAPE letter, p. 16.) The example highlighted by the SWAPE letter is but one of several vague, unenforceable, or infeasible mitigation measures contained within the MMP.

Where feasible mitigation exists which can substantially lessen the environmental impacts of a project, CEQA requires those feasible mitigation measures be adopted. All mitigation measures required in the DEIR must also be fully enforceable and certain to occur. Here, the DEIR cites only minimal mitigation for the Project's significant impacts, and that mitigation proposed is extremely vague, uncertain to occur, and unenforceable. Additional mitigation should be required. The mitigation measures included in the DEIR should be modified as requested below to ensure they are implemented and enforceable.

AESTHETICS

The MMP focuses its aesthetics analysis of impacts almost exclusively on lighting, glare, and landscaping, with a single mitigation measure, AES-06, devoted to ensuring the Project's "consistency between projects and the local built environment." (MMP, pp. 1–2.) The City considers AES-06 and the remainder of the mitigation measures to be vague and inadequate to address aesthetic impacts on adjacent City property and the surrounding community. For example, the MMP does not provide mitigation measures to address the Project's consistency with the architectural style, materials, design, scale, and character of the surrounding community. As discussed above, the City residents' concerns over the Project's aesthetic impacts constitute substantial evidence of significant impacts. The City proposes the following measure be added to the MMP to better mitigate impacts to the local community abutting the campus:

> AES-08 Architectural and site design of proposed structures shall consider the existing scale of the surrounding community and implement appropriate measures to reduce bulk and scale. Measures to be considered shall include the following:
>
> - Implementation of architectural design strategies to reduce the bulk and scale of new buildings abutting or fronting roadways. Strategies to consider may include step-back design for future development above street level to reduce spatial impingement on adjacent roadways and suitably articulated architectural facades to provide visual interest.

- Future on-campus facilities shall strive to utilize a unifying architectural style that contributes to a unified campus appearance and reflects a consistent architectural character among existing campus facilities in the immediate area.

LAND USE

The DEIR correctly states the "campus area east of Grand Avenue, which includes the PEP project site, is designated with a Civic Center Overlay and a residential designation (RPD 61,700 – 0.6 du). (DEIR, p. 92.) The DEIR claims the Project will not "conflict with any specific plan, policy or regulation adopted to avoid or mitigate environmental effect." (DEIR, p. 90.) However, the DEIR does not perform any analysis to substantiate that claim, and indeed, mitigation measure LU-03 clearly demonstrates the Project's *inconsistency* with the City's General Plan and zoning ordinance. (MMP, p. 16.) In a presumptuous attempt to circumvent the effort of adopting a meaningful, enforceable mitigation measure, LU-03 proposes the *City* should be responsible for resolving this inconsistency by revising its General Plan to match the District's proposed uses. Although the City is engaged in a General Plan update, this is not an excuse for the District to shirk its responsibility to prepare adequate mitigation measures.

Furthermore, as previously discussed, the District's claim of a blanket exemption from the City's General Plan and Zoning Code is incorrect. The District may not exempt all of its facilities and proposed uses from the City's zoning and other land use controls; rather, each proposed use must be analyzed to determine whether it may be exempt. Each section of the DEIR discussing the Project's impacts should include an analysis of the proposed use's consistency with the City's General Plan and Municipal Code.

Although the District claims exemption from the City zoning code, unless and until the District satisfies the requisite procedural steps to qualify for an exemption, no exemption is available. Even then, *nonexempt* District projects and facilities must comply with the City's land use and zoning regulations. For proposed uses the District finds are not exempt from the City's zoning and other land use regulations, the District must seek the appropriate City entitlements. Lastly, for all proposed uses, the District should consult and, where possible, coordinate with City staff to ensure the Project's compatibility and consistency with the City's General Plan and other land use regulations as the Project use moves forward.

TRAFFIC/PARKING

As noted above, the DEIR's traffic impact analysis was reviewed by the City's consultant Kunzman Associates, Inc. and contained in the attached Kunzman Letter. Notably, the Project's traffic impacts remain significant and unavoidable, thereby requiring a Statement of Overriding Considerations. The City urges the District to continue evaluating mitigation measures to reduce the level of impacts to Less Than Significant with Mitigation Measures.

The City notes that Mitigation Measure TR-56 requires an approved truck haul route for "hauling operations of more than 15 trucks per hour and more than 100,000 cubic yards." With the massive grading and hauling work planned for the Project, the District should be aware that

the Walnut Municipal Code ("WMC") establishes vehicle weight limits for certain City streets under the City's general police power authority. WMC section 16-8(b) provides:

> "Pursuant to Section 35701 of the California Vehicle Code, when signs are erected giving notice thereof, no person shall operate a vehicle exceeding the maximum gross weight limit of ten thousand pounds upon the following streets or highways within the city:
>
> (b) Grand Avenue."

A single driveway on Grand Avenue is the only point of ingress or egress to or from parts of the proposed Project site such as the West Parcel Solar Project. Currently, Grand Avenue displays signage in conformity with the WMC section listed above, and therefore the 10,000-pound weight limit is in full effect along Grand Avenue. Shown above, a single unladen commercial dump truck typically weighs over 10,000. Filled with the type of dirt that will be used for grading purposes, a truck's weight will increase to anywhere from 45,000 to 55,000 pounds—well above the stated weight limit allowed along Grand Avenue.

For this reason the District is required to comply with the WMC's vehicle weight limits and seek City approval before beginning hauling within the City. In addition, the District should coordinate and work with the City to determine an appropriate Truck Haul Route and hauling schedule.

The City also objects to the MMP's plan to defer parking mitigation to a later date by requiring the District to conduct a study every five years and then come up with a recommendation as to the number of parking spaces needed at that particular time. (MMP p. 24.) This sort of mitigation measure deferral is not allowed under CEQA. In the leading case on deferred mitigation, *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 307-309, the court disapproved a negative declaration requiring the project proponent to perform two studies in the future, holding that deferring evaluation of environmental impacts until after adoption of a negative declaration would amount to a post hoc rationalization and would skirt the required procedure for public review and agency scrutiny of potential impacts. The same holds true for EIRs. The CEQA Guidelines require an EIR to identify and describe *feasible* mitigation measures to minimize significant impacts on the environment. (Guidelines §15126.4(a); emphasis added.) CEQA defines "feasible" as meaning "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." (Public Resources Code § 21061.1.) Mitigation measure TR-28 is not a feasible mitigation measure.

AIR QUALITY/GREENHOUSE GASES

The DEIR's Air Quality and Greenhouse Gas analysis was peer reviewed by the City's consultant, Soil / Water / Air Protection Enterprise (SWAPE) and contained in the attached SWAPE letter. The SWAPE letter recommends the DEIR conduct a new air quality assessment using updated methodologies and study models. In light of the clear defects in the DEIR's Air Quality and Greenhouse Gas Assessments, those portions of the DEIR should be revised and recirculated in an updated DEIR.

In addition, the City disputes the DEIR's Greenhouse Gas Assessment's claim that "the decline in GHG emissions due to more energy efficient motor vehicles more than offset the increased GHG emission due to total square footage increases on campus and the associated operational emissions." Therefore, the resulting changes negative." (DEIR, p. 189.) The purpose of the DEIR is to analyze the Project's impacts on the environment from the baseline year of 2015. By including an arbitrary external factor such as increasingly energy efficiency vehicles to conclude the Project will result in a reduction in GHG emissions is misleading at best and disingenuous at worst.

NOISE

The City appreciates the inclusion of its Noise Ordinance in the DEIR's Noise Impact analysis. However, the City once again objects to the claim that the "District is exempt from City zoning and the City's Noise Ordinance pursuant to California Government code section 53096." (DEIR, p. 196.) Section 53096 relates to facilities related to storage or transmission of water or electrical energy, and would not apply to other potential sources of noise emanating from the Mt. SAC campus. As discussed above, other similar provisions of the Government Code likewise do not exempt the District from the City's Zoning Code and, the City's Noise Ordinance is applicable to potential violations when noise levels exceed established limits.

In particular, the City is concerned that noise impacts from construction activities may be significant due to the fact that construction activities are allowed from 7:00 AM to 7:00 PM Monday through Saturday. The DEIR states that, "projects requiring more than one year of construction located near sensitive receptors may result in a noise impact and may require further analysis prior to the initiation of construction to determine what mitigation is feasible and if the mitigation is effective." (DEIR, pp. 207-208.) Such deferral of analysis and mitigation is not allowed under CEQA. (*Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 307, "By deferring environmental assessment to a future date, the conditions run counter to that policy of CEQA which requires environmental review at the earliest feasible stage in the planning process.") As such, the Project may result in significant noise impacts, but those impacts will not be known unless properly analyzed in a DEIR that is updated and recirculated.

BIOLOGICAL RESOURCES

The City has a few suggestions to add to the DEIR's coverage of Project impacts to Biological Resources and proposed Mitigation Measures. The phrase "prior to" should be inserted after the word "days" and the work "of" should be deleted in the third sentence of Mitigation Measure BIO-02 on page 6. The new third sentence of Mitigation Measure BIO-02

should read, "A pre-construction nest/owl survey should be completed for each project or work area within 14 days prior to the start of construction." (MMP p. 6.) The City believes this simple addition will clear up any possible confusion that a nest/owl survey should be completed *before* construction begins.

Mitigation Measure BIO-13 proposes an unrealistic mitigation measure to reduce impacts to biological resources on the West Parcel and MSAC Hill to less than significant. (DEIR, p. 12.) The DEIR states that construction grading will be avoided during prime nesting season of threatened or special status birds in order to minimize impacts on these areas. But this measure seems all but impossible when actual nesting seasons for these species are considered. For instance, the California Gnatcatcher, which is an endangered species of special concern found at the West Parcel site, has a nesting season from February to July. Given the size of these projects, it is unlikely that construction will actually be limited to 5 or 6 months out of the year. The DEIR should propose a more feasible mitigation measure that the District is likely to enforce and implement.

WATER QUALITY

Mitigation measure HYD-02 outlines the requirements that the District update the *Master Campus Drainage Plan* prior to commencement of grading for the Fire Training Academy and Athletics Education Building. (MMP, p. 15.) The mitigation measure states that the *Master Campus Drainage Plan* "shall meet any requirements of the County of Los Angeles Department of Public Works and the City of Walnut." The "City of Walnut Storm Water Management and Discharge Control Ordinance" (Walnut Municipal Code Title V Article III Chapter 21-60 *et seq.*) and the City of Walnut Standard Urban Storm Water Mitigation Plan (Walnut Municipal Code Title V Article IV Chapter 21-80 *et seq.*) contain comprehensive regulations related to construction and storm water drainage and discharge. The City appreciates the requirement that the District's *Master Campus Drainage Plan* shall comply with the City's discharge and drainage regulations, and would like to see more stringent, enforceable mitigation measures implemented to ensure compliance.

CUMULATIVE IMPACTS

The DEIR consistently fails to accurately or adequately evaluate cumulative impacts of the Project. The DEIR tends to generalize the cumulative impact evaluation rather than apply significance thresholds to cumulative effects. As such, cumulative impacts are understated or incorrectly omitted altogether. Cumulative impact analysis for each section should be revisited and revised where appropriate.

ALTERNATIVES

Although the DEIR analysis of the alternatives is not required to be as comprehensive as the DEIR analysis of the Project, the alternative's discussion is so cursory as to prevent a meaningful comparison. The DEIR is, by its own definition, a program-level, project-level, and subsequent EIR. (DEIR, pp. 1–2.) Despite the DEIR's tripartite nature, however, the Alternatives analysis only addresses alternatives to the overall program rather than any individual project contained within. For instance, Alternatives section describes the Project as "a renovation and

modernization program for existing campus facilities," and as such considers an alternative location only to the entire campus-wide program rather than any disparate projects within the program that might possibly be relocated to lessen overall Project impacts. (DEIR, p. 467–69.) As a result, the DEIR fails to comply with CEQA's directive to "describe a reasonable range of alternatives to the project...." (Guidelines, § 15126.6(a).) The City urges the District to make another attempt at considering and analyzing a range of alternatives

Moreover, the alternatives analysis contains an error that implies a careless approach to the preparation and analysis of Project alternatives: the Alternative 1 Traffic Impact analysis is simply a cut-and-paste copy of the No-Project Alternative. Consequently, the Alternative 1 Traffic Impact analysis is plainly an impossible scenario because Alternative 1 still contemplates buildout of a significant portion of the proposed Project with an attendant increase in student enrollment (DEIR, p. 471.) Alternative 1 needs to be revisited to correct this error before it can meet CEQA's mandate as a sufficient alternative description.

UNAVOIDABLE ADVERSE IMPACTS

The City objects to the District's decision to prepare a Statement of Overriding Consideration for unavoidable adverse impacts to traffic within the City. As shown in the Kunzman letter, the traffic impact analysis is, based on inaccurate methodologies and incorrect calculations. Therefore, the traffic impact analysis should be redone and removed from a Statement of Overriding Consideration until such time as the complete and proper traffic impact analysis is completed.

Overall, and as detailed herein, the DEIR fails to adequately disclose, evaluate, and discuss mitigation for the potential significant effects of the Project. The DEIR should be revised significantly and recirculated after completion and incorporation of additional studies. For the reasons detailed herein, the evaluations and analyses in the DEIR must be updated, and the DEIR recirculated for additional public review and comment.

Thank you for your consideration of these comments.

Sincerely,

Tom Weiner
Community Development Director
City of Walnut

Attachments:

Exhibit A: SWAPE comments to the Air Quality and Greenhouse Gas impacts analysis
Exhibit B: Kunzman Associates, Inc. comments to the Traffic impacts analysis

cc: Mayor Ching and City Council Members
City Manager Wishner
City Attorney Leibold
City Clerk De Dios

EXHIBIT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Paul Rosenfeld, Ph.D.
(310) 452-5555
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July 21, 2016

Tom Weiner
City of Walnut
21201 La Puente Road
Walnut, CA 91789

Subject: Comments on the Mt. San Antonio College Project

Dear Mr. Weiner:

We have reviewed the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects Draft Subsequent Program/Project EIR to Final Program EIR (DEIR); the April 15, 2016 Air Quality Assessment for the Mt. San Antonio College Facilities Master Plan Update and Physical Education Projects ("Air Quality Assessment"); and the April 15, 2016 Greenhouse Gas Assessment for the Mt. San Antonio College Facilities Master Plan Update and Physical Education Projects ("Greenhouse Gas Assessment") prepared for the proposed Mt. San Antonio College Project ("Project"). This subsequent DEIR was prepared because substantial changes have occurred in the Project since the 2012 Facilities Master Plan Final EIR was certified, one or more significant impacts may occur, and new information is available on prior projects that was not previously assessed.

Buildout of the 2015 Facilities Master Plan Update (2015 FMPU) in 2020 will result in a net increase of 238,098 assignable square feet (ASF) from existing conditions, and a net increase of approximately 4.5 percent ASF when compared to the 2012 Facilities Master Plan (2012 FMP) (DEIR, p. 59). The DEIR proposes development of the Physical Education Project (PEP) in two phases, the Athletic Complex East (Phase 1) and the Physical Education Complex (Phase 2) (DEIR, p. 78).

Our review concludes that the subsequent DEIR fails to adequately assess the Project's health risk and air quality impacts. As a result, the Project's impact on regional and local air quality is underestimated. An updated DEIR should be prepared to adequately assess the Project's health risk and air quality impacts, and additional mitigation measures should be implemented, where necessary.

Air Quality

Health Risk from Diesel Particulate Matter Emissions Inadequately Evaluated

The Air Quality Assessment concludes that the health risk posed to nearby sensitive receptors from exposure to diesel particulate matter (DPM) emissions released during Project construction and operation would be less than significant, yet fails to quantify the risk and compare it to applicable thresholds (p. 30). By failing to prepare a construction or an operational health risk assessment, the Air Quality Assessment is inconsistent with SCAQMD CEQA Guidelines, as well as with recommendations set forth by the Office of Environmental Health Hazard Assessment (OEHHA), the organization responsible for providing recommendations for health risk assessments in California.

In an effort to demonstrate the potential risk posed by the Project to nearby sensitive receptors, we prepared a simple screening-level health risk assessment. The results of our assessment, as described below, demonstrate that construction-related and operational DPM emissions may result in a potentially significant health risk impact. As a result, a revised DEIR should be prepared to adequately assess the health risk impacts from construction and operation of the Project.

Failure to Quantify Risk from Project Construction

The Air Quality Assessment attempts to justify the omission of an actual construction-related health risk assessment (HRA) by stating the following:

> "Impacts from toxic substances are related to cumulative exposure and are assessed over a 70-year period. Cancer risk is expressed as the maximum number of new cases of cancer projected to occur in a population of one million people due to exposure to the cancer causing substance over a 70-year lifetime (California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Guide to Health Risk Assessment.) Grading for the PEP Phase 1 and Phase 2, when the peak diesel exhaust emissions would occur, is expected to take less than 6 months total with all construction expected to be completed in less than 4 years. Because of the relatively short duration of construction compared to a 70-year lifespan, diesel emissions resulting from the construction of the project, including truck traffic associated with the project, are not expected to result in a significant impact" (p. 28).

This justification, however, is incorrect. By failing to quantify the risk associated with Project construction, the Air Quality Assessment is inconsistent with the most recent guidance published by Office of Environmental Health Hazard Assessment (OEHHA), the organization responsible for providing recommendations and guidance on how to conduct health risk assessments in California. In February of 2015, OEHHA released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments*, which was formally adopted in March of 2015.[1] This guidance document

[1] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/hotspots2015.html

describes the types of projects that warrant the preparation of a health risk assessment. Construction of the entire Project will produce emissions of DPM, a human carcinogen, through the exhaust stacks of construction equipment over a construction period of at least five years (Air Quality Assessment, p. 13). The OEHHA document recommends that all short-term projects lasting at least two months be evaluated for cancer risks to nearby sensitive receptors.[2] This recommendation reflects the most recent health risk policy, and as such, an assessment of health risks to nearby sensitive receptors from construction should be included in a revised DEIR for the Project.

Failure to Quantify Risk from Project Operation

Furthermore, instead of preparing a health risk assessment to determine the Project's operational impact, the Air Quality Assessment instead relies on the South Coast Air Quality Management District's (SCAQMD) Localized Significance Thresholds (LST) Methodology to determine whether or not operation of the Project would expose sensitive receptors to substantial air pollutants (p. 11-12). Using this method, the Air Quality Assessment concludes that the Project would not expose sensitive receptors to substantial air pollutants, thus resulting is a less than significant long term impact (p. 30). The use of this method, as well as the significance determination made using this method, is entirely incorrect. While the LST method assesses the impacts of pollutants at a local level, it only evaluates impacts from criteria air pollutants. As a result, health impacts from exposure to toxic air contaminants (TACs), such as DPM, were not analyzed, thus leaving a gap within the Air Quality Assessment's analysis.

According to the Air Quality Assessment, the Final Localized Significance Threshold Methodology document prepared by the SCAQMD applies to projects that are less than 5 acres in size and are only applicable with NO_x, CO, PM10, and PM2.5 emissions, which are collectively referred to as criteria air pollutants (p. 12). Because the LST method can only be applied to criteria air pollutants, this method cannot be used to determine whether operational emissions from diesel particulate matter (DPM), a known human carcinogen, will result in a significant health risk impact to nearby sensitive receptors. By failing to prepare a health risk assessment in addition to the LST analysis, the Air Quality Assessment fails to provide a comprehensive analysis of the sensitive receptor impacts that may occur as a result of exposure to substantial air pollutants. The SCAQMD provides a specific numerical threshold of 10 in one million for determining a project's health risk impact. Therefore, the Air Quality Assessment should have conducted an assessment that compares the Project's operational health risk to this threshold in order to determine the Project's health risk impact.

Modeling Parameters

As of 2011, the EPA recommends AERSCREEN as the leading air dispersion model, due to improvements in simulating local meteorological conditions based on simple input parameters.[3] The model replaced

[2] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf, p. 8-18

[3] "AERSCREEN Released as the EPA Recommended Screening Model," USEPA, April 11, 2011, *available at:* http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf

SCREEN3, which is included in OEHHA[4] and CAPCOA[5] guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs"). A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project.

We prepared a preliminary health risk screening assessment of the Project's construction and operational impact to sensitive receptors using the annual estimates from the Project's CalEEMod model, which can be found within the DEIR's Air Quality Assessment and Greenhouse Gas Assessment. According to the Air Quality Assessment, "construction emissions will vary for different phases of construction, and from project to project" (p. 13). As a result of this variability, we conducted a construction-related health risk assessment for each component of the proposed Project using each component's emission estimates and construction durations. Specifically, we assessed the health risk impacts from construction of the following Project components: Building G, Building A, PEP Phase 1, and PEP Phase 2 (p. 13). Using the CalEEMod construction schedules for each component, and accounting for the overlap that will potentially occur between these phases, we estimate that construction of Building G, PEP Phase 1, and PEP Phase 2 would occur over the course of approximately four years with a total of 1,457 days (see table below).

Construction Phase	Start	End	Duration (Years)	Duration (Days)
PEP Phase 1	10/3/2016	1/31/2018	1.3	486
PEP Phase 1 & Phase 2	2/1/2018	8/16/2018	0.5	197
PEP Phase 2	8/17/2018	12/31/2018	0.4	137
Building G & PEP Phase 2	1/1/2019	2/24/2020	1.2	420
PEP Phase 2	2/25/2020	9/28/2020	0.6	217
Total Construction Duration			**4.0**	**1,457**

According to the Air Quality Assessment, construction of Building A is not anticipated to occur until 2025, which leaves a gap between the completion of PEP Phase 2 and the start of Building A construction (p. 15). However, OEHHA requires that a continuous residential exposure duration of 30 years be used when assessing health risks, starting from the infantile stage of life. Therefore, to remain consistent with recommendations set forth by OEHHA, we assumed for the remaining 26 years of exposure, operation of Building G, PEP Phase 1, and PEP Phase 2 would occur right after construction of PEP Phase 2 was complete, and up until construction of Building A began. Then after construction of Building A was completed, we assumed that operation of the entire Project would occur, with no gaps between stages (see table below).

[4] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf
[5] "Health Risk Assessments for Proposed Land Use Projects," CAPCOA, July 2009, *available at:* http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf

Phase	Start	End	Duration (Years)	Duration (Days)
FMPU 2020 - Operation	9/29/2020	12/31/2024	4.26	1,555
Building A	1/1/2025	12/11/2025	0.95	345
FMPU 2025 - Operation	12/12/2025	9/26/2046	20.8	7,593
Total Duration			**26.0**	**9,493**

The Air Quality Assessment assumes the closest sensitive receptors to the Project site are located about 978 feet north (p. 15, 16).

The AERSCREEN model relies on a continuous average emissions rate to simulate maximum downwind concentrations from point, area, and volume emissions sources. To account for the variability in construction equipment usage over the many phases of Project construction and operation, we calculated an average DPM emissions rate for construction by the following equation.

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{lbs\ of\ DPM}{days\ of\ Construction} \times \frac{453.6\ grams}{lb} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds}$$

Because the duration, start year, year of completion, and activity type vary between each phase of construction and operation, we calculated an emission rate specific to each of the Project phases (see table below).

Project Phase	Duration (Years)	Duration (Days)	DPM Emissions (Tons/Phase Duration)	DPM Emission Rate (g/s)
PEP Phase 1	1.33	486	0.3459	0.0075
PEP Phase 1 & Phase 2	0.54	197	0.7698	0.0410
PEP Phase 2	0.38	137	0.4239	0.0325
Building G & PEP Phase 2	1.15	420	0.6088	0.0152
PEP Phase 2	0.59	217	0.4239	0.0205
FMPU 2020 - Operation	4.26	1,555	4.4009	0.0297
Building A	0.95	345	0.0485	0.0015
FMPU 2025 - Operation	20.8	7,593	23.4946	0.0325
Total Exposure Duration	**30.0**	**10,950**	**-**	**-**

Using Google Earth, we measured the total area that each of the Project phases would encompass, as the location and total area of each construction and operational activity varies. Each Project phase was simulated as a rectangular area source in AERSCREEN, with dimensions that reflected these phase-specific areas measured in Google Earth. A release height of three meters was selected to represent the height of exhaust stacks on construction equipment and on-road vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution.

Modeling Results

The AERSCREEN model generated maximum reasonable estimates of single hour downwind DPM concentrations from the Project site. EPA guidance suggests that in screening procedures, the annualized average concentration of an air pollutant may be estimated by multiplying the single-hour concentration by 10%.[6] For example, the maximum single-hour downwind concentration in the AERSCREEN output for construction of PEP Phase I was approximately 1.95 µg/m^3 DPM 298 meters (978 feet) downwind. Therefore, the annualized average concentration for the sensitive receptor located 298 meters away from the Project site during construction of PEP Phase I was estimated to be 0.195 µg/m^3. We estimated the annualized average concentration for the remaining phases of the Project in this same fashion (see table below).

Project Phase	Maximum Single Hour DPM Concentration (µg/m^3)	Annualized Average DPM Concentration (µg/m^3)
PEP Phase 1	1.95	0.195
PEP Phase 1 & Phase 2	11.06	1.106
PEP Phase 2	11.92	1.192
Building G & PEP Phase 2	4.83	0.483
PEP Phase 2	7.52	0.752
FMPU 2020 - Operation	9.65	0.965
Building A	5.66	0.566
FMPU 2025 - Operation	10.17	1.017

Exposure Assumptions

We calculated the excess cancer risk for each sensitive receptor location, for adults, children, and/or infant receptors using applicable HRA methodologies prescribed by OEHHA. OEHHA recommends the use of Age Sensitivity Factors ("ASFs") to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution.[7] According to the revised guidance, quantified cancer risk should be multiplied by a factor of ten during the first two years of life (infant), and by a factor of three for the subsequent fourteen years of life (child aged two until sixteen). Furthermore, in accordance with guidance set forth by the SCAQMD and OEHHA, we used 95th percentile breathing rates for infants and 80th percentile breathing rates for children and adults.[8] We used a cancer potency factor of 1.1 (mg/kg-day)$^{-1}$ and an averaging time of 25,550 days.

[6] http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019_OCR.pdf

[7] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf

[8] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act," SCAQMD, June 5, 2015, *available at:* http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588-risk-assessment-guidelines.pdf?sfvrsn=6, p. 19

Health Risk Impact to Sensitive Receptor

As previously discussed, OEHHA recommends that a 30-year exposure duration be used as the basis for estimating cancer risk at the closest residential receptor.[9] Consistent with OEHHA guidance, exposure to the receptor was assumed to begin in the infantile stage of life to provide the most conservative estimate of air quality hazards. The results of our calculations are shown below.

Health Risk Impact from Exposure to Construction and Operational Diesel Exhaust Emissions

Project Phase	Start Date	End Date	Duration (years)	Concentration ($\mu g/m^3$)	Breathing Rate (L/kg-day)	Age Sensitivity Factor	Cancer Risk
PEP Phase 1	10/3/2016	1/31/2018	1.33	0.195	1090	10	4.3E-05
PEP Phase 1 & Phase 2	2/1/2018	8/16/2018	0.54	1.106	1090	10	9.8E-05
PEP Phase 2	8/17/2018	12/31/2018	0.38	1.192	1090	10	7.3E-05
	Infant Exposure Duration		***2.25***			***Infant Exposure***	***2.14E-04***
Building G & PEP Phase 2	1/1/2019	2/24/2020	1.15	0.48	572	3	1.4E-05
PEP Phase 2	2/25/2020	9/28/2020	0.59	0.75	572	3	1.2E-05
FMPU 2020 - Operation	9/29/2020	12/31/2024	4.26	0.96	572	3	1.1E-04
Building A	1/1/2025	12/11/2025	0.95	0.57	572	3	1.4E-05
FMPU 2025 - Operation	12/12/2025	9/27/2032	6.80	1.02	572	3	1.8E-04
	Child Exposure Duration		***13.75***			***Child Exposure***	***3.25E-04***
FMPU 2025 - Operation	9/28/2032	9/26/2046	14.0	1.02	233	1	5.0E-05
	Adult Exposure Duration		***14.0***			***Adult Exposure***	***5.00E-05***
	Lifetime Exposure Duration		**30.0**			**Lifetime Exposure**	**5.89E-04**

The excess cancer risk to adults, children, and infants at the sensitive receptor closest to the Project site are 50, 325, and 214 in one million, respectively. Furthermore, the excess cancer risk over the course of a residential lifetime (30 years) is approximately 589 in one million. The infantile, child, and lifetime cancer risk greatly exceed the SCAQMD threshold of 10 in one million. As a result, construction and operation of the Project could have a potentially significant health risk impact to sensitive receptors located nearby.

It should be noted that our health risk assessment summarized in the table above takes into account the DPM emissions from existing operations, as well as the DPM emissions from 2020 and 2025 FMPU build out operations. Therefore, the values provided in the table above may overestimate the Project's health risk impact. In an effort to correct for this issue, we prepared an additional health risk assessment that only accounts for the Project's construction-related health risk. As you can see in the table below, even if we were to remove the operational risk and only calculate the construction health risk impact, we find that nearby sensitive receptors are subject to a potentially significant health risk impact (see table below).

[9] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf, p. 8-1.

Health Risk Impact from Exposure to Construction Diesel Exhaust Emissions Only							
Project Phase	**Start Date**	**End Date**	**Duration (years)**	**Concentration ($\mu g/m^3$)**	**Breathing Rate (L/kg-day)**	**Age Sensitivity Factor**	**Cancer Risk**
PEP Phase 1	10/3/2016	1/31/2018	1.33	0.195	1090	10	4.3E-05
PEP Phase 1 & Phase 2	2/1/2018	8/16/2018	0.54	1.106	1090	10	9.8E-05
PEP Phase 2	8/17/2018	12/31/2018	0.38	1.192	1090	10	7.3E-05
	Infant Exposure Duration		***2.25***			***Infant Exposure***	***2.14E-04***
Building G & PEP Phase 2	1/1/2019	2/24/2020	1.15	0.48	572	3	1.4E-05
PEP Phase 2	2/25/2020	9/28/2020	0.59	0.75	572	3	1.2E-05
FMPU 2020 - Operation	9/29/2020	12/31/2024	-	-	-	-	-
Building A	1/1/2025	12/11/2025	0.95	0.57	572	3	1.4E-05
FMPU 2025 - Operation	12/12/2025	9/27/2032	-	-	-	-	-
	Child Exposure Duration		***13.75***			***Child Exposure***	***3.97E-05***
FMPU 2025 - Operation	9/28/2032	9/26/2046	-	-	-	-	-
	Adult Exposure Duration		***14.0***			***Adult Exposure***	***-***
	Lifetime Exposure Duration		**30.0**			**Lifetime Exposure**	**2.54E-04**

As demonstrated in the table above, even when emissions from operation are excluded, the excess cancer risk to children and infants at the sensitive receptor closest to the Project site are 39.7 and 214 in one million, respectively. Furthermore, the excess cancer risk over the course of a residential lifetime (30 years) is approximately 254 in one million when operation is not included, which still greatly exceeds the SCAQMD threshold of 10 in one million. Our analysis demonstrates that the infantile, child, and lifetime cancer risk still greatly exceed the SCAQMD threshold of 10 in one million, even when emissions from operation are excluded. As a result, construction of the Project could have a potentially significant health risk impact to sensitive receptors located nearby.

Our analysis represents a screening-level health risk assessment, which is known to be more conservative, and tends to err on the side of health protection.[10] The purpose of a screening-level health risk assessment, however, is to determine if a more refined health risk assessment needs to be conducted. If the results of a screening-level health risk are above applicable thresholds, then the Project needs to conduct a more refined health risk assessment that is more representative of site specific concentrations. Our screening-level health risk assessment demonstrates that construction and operation of the Project could result in a potentially significant health risk impact. As a result, a refined health risk assessment must be prepared to examine air quality impacts generated by Project construction using site-specific meteorology and specific equipment usage schedules.

[10] http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf p. 1-5

Failure to Adequately Compare Project Emissions to Applicable Thresholds

According to the DEIR's Air Quality Assessment, since the Project's overall construction emissions are well below the significance thresholds established by the SCAQMD, construction will generally not impact regional air quality, resulting in a less than significant impact (p. 14, p. 30). This significance determination, however, is incorrect, as it compares averaged emissions, rather than maximum daily emissions, to the SCAQMD's maximum daily emission thresholds. As a result, the Air Quality Assessment's conclusion of a less than significant air quality impact from construction-related emissions is incorrect. An updated DEIR should be prepared to adequately assess the Project's construction-related impacts by comparing the correct emissions estimates to the appropriate significance thresholds, and additional mitigation should be incorporated, where necessary.

Since construction schedules have not been developed for most of the projects in the FMPU, the emissions potentially generated during construction of the FMPU are considered for various scenarios within the DEIR's Air Quality Assessment (p. 12). Overall construction emissions for the 2015 FMPU are first considered, and are summarized in Table 5 of the Air Quality Assessment (see excerpt below) (p. 12, 13).

Table 5 Construction Emissions for the 2015 FMPU

	ROG	NOx	CO	SOx	PM10	PM2.5
			Pollutant Emissions (lbs.)			
FMPU (Excluding PEP)	2,922	9,526	8,672	14	1,093	695
PEP Phase 1	12,130	23,763	32,064	63	4,438	1,942
PEP Phase 2	2,219	6,537	6,858	12	701	442
Total Construction	17,271	39,826	47,594	90	6,232	3,079
			Pollutant Emissions (lbs. per day)			
Average Over 5 Years	13.2	30.6	36.5	0.1	4.8	2.4
Average Over 10 Years	6.6	15.3	18.3	0.0	2.4	1.2
SCQAMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Exceed Threshold?	*No*	*No*	*No*	*No*	*No*	*No*

According to the Air Quality Assessment, "the first lines of the table present the total emissions generated by the buildout and associated demolition of the FMPU (excluding PEP), then the emissions for PEP Phases 1 and 2, and finally the total emissions for everything combined. The following two lines in Table 5 average the total emissions over a 5 year and 10 year period assuming a 5- day workweek" (p. 13). The Air Quality Assessment then takes these averaged overall construction emissions and compares them to the SCAQMD's significance thresholds. This method of determining Project significance, however, is incorrect, as the SCAQMD requires that the Project's maximum daily emissions be compared

to the mass daily significance thresholds, not the Project's average daily emissions.[11] By taking the average daily construction emissions and comparing them to the SCAQMD mass daily thresholds, the Air Quality Assessment greatly underestimates the Project's maximum daily impact.

As is common practice, significance determinations are based on the maximum daily emissions during a construction period, which provides a "worst-case" analysis of the construction emissions.[12] Therefore, as is conducted in other CEQA evaluations, if the Project's peak daily construction emissions exceed the SCAQMD's mass daily thresholds, then the Project would have a potentially significant air quality impact.[13] And while the Air Quality Assessment's claim that the 5-year averaging period represents the "worst-case approach for construction on campus" may be true, the emissions averaged over this period do not reflect a "worst-case" analysis of the construction emissions (p. 13). Rather, the maximum daily emissions that would occur during this 5-year construction period are representative of a "worst-case" analysis, and as such, these peak emissions should have been used.

In an effort to correctly determine the Project's short term regional impact, we took the maximum daily construction emissions for each of the phases included in Table 5, which can be found in the CalEEMod output files provided at the end of the Air Quality Assessment, and compared them to the SCAQMD's mass daily thresholds. When the Project's maximum daily construction emissions are correctly summarized and then compared to thresholds, we find that the Project's construction-related emissions, even after mitigation, would result in a significant impact (see table below).

Mitigated Construction Emissions for the 2015 FMPU (lbs/day)

Activity	Year	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
FMPU (Excluding PEP)	2017	5	52	40	0	11	7
FMPU (Excluding PEP)	2018	**90**	27	27	0	3	2
PEP Phase 1	2016	11	**147**	107	0	33	12
PEP Phase 1	2017	11	**136**	102	0	14	7
PEP Phase 1	2018	10	44	72	0	10	4
PEP Phase 2	2018	4	46	37	0	11	7
PEP Phase 2	2019	3	24	25	0	3	2
PEP Phase 2	2020	10	81	81	0	31	7
SCAQMD Threshold	-	**75**	**100**	**550**	**150**	**150**	**55**
Exceed?		***Yes***	***Yes***	*No*	*No*	*No*	*No*

[11] South Coast Air Quality Management District, CEQA Air Quality Handbook, 1993; SCAQMD Comment Letter on the Mitigated Negative Declaration (MND) for the Proposed Asphalt Plant No. 1 Replacement and Modernization Project, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2016/january/mndasphalt1.pdf

[12] AECOM, Air Quality and Climate Change Technical Report for the North Torrance Wellfield Project, *available at:* https://www.torranceca.gov/PDF/Attachment_2_-_Air_Quality_and_Climate_Change_Technical_Report_NTWF.pdf, p. 22

[13] *See* Scholl Canyon Landfill Expansion EIR, Section 7.0 Cumulative Impacts, *available at:* http://www.glendaleca.gov/home/showdocument?id=20264, p. 7-6; and
See Air Quality Study for the Long Beach Emergency Repowering Project, *available at:* http://www.polb.com/civica/filebank/blobdload.asp?BlobID=3574, p. 7-1.

Specifically, we find that the peak daily ROG emissions of 90 lbs/day generated during construction of the FMPU would exceed the SCAQMD threshold of 75 lbs/day for ROG, and that the peak daily NOx emissions of 147 and 136 lbs/day generated during construction of PEP Phase 1 would exceed the SCAQMD threshold of 100 lbs/day for NOx. Our analysis demonstrates that when emissions are summarized correctly and compared to thresholds, the Project would result in a potentially significant impact, contrary to the conclusion made in the Air Quality Assessment. As a result, an updated DEIR should be prepared to include a revised air quality analysis that correctly determines the Project's overall construction-related regional air quality impact, and additional mitigation measures should be implemented, where necessary.

Additional Mitigation Measures Available to Reduce Construction Emissions

Numerous additional, feasible mitigation measures are available to reduce ROG emissions, also referred to as VOC emissions (for the sake of this analysis, the terms ROG and VOC are used interchangeably), including the following which are routinely identified in other CEQA matters as feasible mitigation measures:

Use of Zero-VOC Emissions Paint

The Mitigation Monitoring Program only commits to using VOC coatings with VOC content of 80 g/L or less (p. 5 of 33). The use of zero-VOC emission paint has been required for numerous projects that have undergone CEQA review. Zero-VOC emission VOC paints are commercially available. Other low-VOC standards should be incorporated into mitigation including use of "supercompliant" paints, which have a VOC standard of less than 10 g/L.[14]

Use of Material that do Not Require Paint

Using materials that do not require painting is a common mitigation measure where VOC emissions are a concern. Interior and exterior surfaces, such as concrete, can be left unpainted.

Use of Spray Equipment with Greater Transfer Efficiencies

Various coatings and adhesives are required to be applied by specified methods such as electrostatic spray, high-volume, low-pressure (HVLP) spray, roll coater, flow coater, dip coater, etc. in order to maximize the transfer efficiency. Transfer efficiency is typically defined as the ratio of the weight of coating solids adhering to an object to the total weight of coating solids used in the application process, expressed as a percentage. When it comes to spray applications, the rules typically require the use of either electrostatic spray equipment or HVLP spray equipment. The SCAQMD is now able to certify high-volume low-pressure (HVLP) spray applicators and other application technologies at efficiency rates of 65 percent or greater.[15]

When combined together, these measures offer a feasible way to effectively reduce the Project's construction-related VOC emissions to a less than significant level. As such, these mitigation measures should be considered in a DEIR to reduce these emissions to a less than significant level.

[14] http://www.aqmd.gov/home/programs/business/business-detail?title=super-compliant-coatings
[15] http://www.aqmd.gov/home/permits/spray-equipment-transfer-efficiency

Furthermore, there are additional mitigation measures available to reduce the Project's construction-related NO_x emissions. Additional mitigation measures can be found in CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures,* which attempt to reduce Greenhouse Gas (GHG) levels, as well as reduce Criteria Air Pollutants such as NO_x.[16] NO_x is a byproduct of fuel combustion, and is emitted by on-road vehicles and by off-road construction equipment. Mitigation for criteria pollutant emissions should include consideration of the following measures in an effort to reduce NOx construction emissions to below SCAQMD thresholds.

Limit Construction Equipment Idling Beyond Regulation Requirements

Heavy duty vehicles will idle during loading/unloading and during layovers or rest periods with the engine still on, which requires fuel use and results in emissions. The California Air Resources Board (CARB) Heavy-Duty Vehicle Idling Emissions Reduction Program limits idling of diesel-fueled commercial motor vehicles to five minutes. Reduction in idling time beyond the five minutes required under the regulation would further reduce fuel consumption and thus emissions. The Project applicant must develop an enforceable mechanism that monitors the idling time to ensure compliance with this mitigation measure.

Repower or Replace Older Construction Equipment Engines

The NEDC recognizes that availability of equipment that meets the EPA's newer standards is limited.[17] Due to this limitation, the NEDC proposes actions that can be taken to reduce emissions from existing equipment in the *Best Practices for Clean Diesel Construction* report.[18] These actions include but are not limited to:

- Repowering equipment (i.e. replacing older engines with newer, cleaner engines and leaving the body of the equipment intact).

Engine repower may be a cost-effective emissions reduction strategy when a vehicle or machine has a long useful life and the cost of the engine does not approach the cost of the entire vehicle or machine. Examples of good potential replacement candidates include marine vessels, locomotives, and large construction machines.[19] Older diesel vehicles or machines can be repowered with newer diesel engines or in some cases with engines that operate on alternative fuels (see section "Use Alternative Fuels for Construction Equipment" for details). The original engine is taken out of service and a new engine with reduced emission characteristics is installed. Significant emission reductions can be achieved, depending on the newer engine and the vehicle or machine's ability to accept a more modern engine and emission control system. It should be noted, however, that newer engines or higher tier engines are not necessarily cleaner engines, so it is important that the Project Applicant check the actual

[16] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf
[17] http://northeastdiesel.org/pdf/BestPractices4CleanDieselConstructionAug2012.pdf
[18] http://northeastdiesel.org/pdf/BestPractices4CleanDieselConstructionAug2012.pdf
[19] Repair, Rebuild, and Repower, EPA, *available at:* https://www.epa.gov/verified-diesel-tech/learn-about-verified-technologies-clean-diesel#repair

emission standard level of the current (existing) and new engines to ensure the repower product is reducing emissions for NO_x. [20]

- Replacement of older equipment with equipment meeting the latest emission standards.

Engine replacement can include substituting a cleaner highway engine for a nonroad engine. Diesel equipment may also be replaced with other technologies or fuels. Examples include hybrid switcher locomotives, electric cranes, LNG, CNG, LPG or propane yard tractors, forklifts or loaders. Replacements using natural gas may require changes to fueling infrastructure.[21] Replacements often require some re-engineering work due to differences in size and configuration. Typically there are benefits in fuel efficiency, reliability, warranty, and maintenance costs.[22]

Install Retrofit Devices on Existing Construction Equipment

PM and NOx emissions from alternatively-fueled construction equipment can be further reduced by installing retrofit devices on existing and/or new equipment. The most common retrofit technologies are retrofit devices for engine exhaust after-treatment. These devices are installed in the exhaust system to reduce emissions and should not impact engine or vehicle operation. [23] Below is a table, prepared by the EPA, that summarizes the commonly used retrofit technologies and the typical cost and emission reductions associated with each technology.[24] It should be noted that actual emissions reductions and costs will depend on specific manufacturers, technologies and applications.

Technology	Typical Emissions Reductions (percent)				Typical Costs ($)
	PM	NOx	HC	CO	
Diesel Oxidation Catalyst (DOC)	20-40	-	40-70	40-60	Material: $600-$4,000 Installation: 1-3 hours
Diesel Particulate Filter (DPF)	85-95	-	85-95	50-90	Material: $8,000-$50,000 Installation: 6-8 hours
Partial Diesel Particulate Filter (pDPF)	up to 60	-	40-75	10-60	Material: $4,000-$6,000 Installation: 6-8 hours
Selective Catalyst Reduction (SCR)	-	up to 75	-	-	$10,000-$20,000; Urea $0.80/gal

[20] Diesel Emissions Reduction Program (DERA): Technologies, Fleets and Projects Information, *available at:* http://www2.epa.gov/sites/production/files/2015-09/documents/420p11001.pdf
[21] Alternative Fuel Conversion, EPA, *available at:* https://www3.epa.gov/otaq/consumer/fuels/altfuels/altfuels.htm#fact
[22] Cleaner Fuels, EPA, *available at:* https://www.epa.gov/verified-diesel-tech/learn-about-verified-technologies-clean-diesel#cleaner
[23] Retrofit Technologies, EPA, *available at:* https://www.epa.gov/verified-diesel-tech/learn-about-verified-technologies-clean-diesel#retrofit
[24] Cleaner Diesels: Low Cost Ways to Reduce Emissions from Construction Equipment, March 2007, *available at:* https://www.epa.gov/sites/production/files/2015-09/documents/cleaner-diesels-low-cost-ways-to-reduce-emissions-from-construction-equipment.pdf, p. 26

Closed Crankcase Ventilation (CCV)	varies	-	-	-	-
Exhaust Gas Recirculation (EGR)	-	25-40	-	-	-
Lean NOx Catalyst (LNC)	-	5-40	-	-	$6,500-$10,000

Use Electric and Hybrid Construction Equipment

CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*[25] report also proposes the use of electric and/or hybrid construction equipment as a way to mitigate NO_x emissions. When construction equipment is powered by grid electricity rather than fossil fuel, direct emissions from fuel combustion are replaced with indirect emissions associated with the electricity used to power the equipment. Furthermore, when construction equipment is powered by hybrid-electric drives, emissions from fuel combustion are also greatly reduced. Electric construction equipment is available commercially from companies such as Peterson Pacific Corporation,[26] which specialize in the mechanical processing equipment like grinders and shredders. Construction equipment powered by hybrid-electric drives is also commercially available from companies such as Caterpillar[27]. For example, Caterpillar reports that during an 8-hour shift, its D7E hybrid dozer burns 19.5 percent fewer gallons of fuel than a conventional dozer while achieving a 10.3 percent increase in productivity. The D7E model burns 6.2 gallons per hour compared to a conventional dozer which burns 7.7 gallons per hour.[28] Fuel usage and savings are dependent on the make and model of the construction equipment used. The Project Applicant should calculate project-specific savings and provide manufacturer specifications indicating fuel burned per hour.

Furthermore, the contractor should submit to the developer's representative a monthly report that, for each onroad construction vehicle, nonroad construction equipment, or generator onsite, includes: [29]

- Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date.
- Any problems with the equipment or emission controls.
- Certified copies of fuel deliveries for the time period that identify:
    - Source of supply
    - Quantity of fuel
    - Quality of fuel, including sulfur content (percent by weight).

[25] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf
[26] Peterson Electric Grinders Brochure, *available at:* http://www.petersoncorp.com/wp-content/uploads/peterson_electric_grinders1.pdf
[27] Electric Power Products, *available at:* http://www.cat.com/en_US/products/new/power-systems/electric-power-generation.html
[28] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf
[29] Diesel Emission Controls in Construction Projects, *available at:* http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf

In addition to these measures, we also recommend the Applicant to implement the following NO_x mitigation measures, called "Enhanced Exhaust Control Practices,"[30] that are recommended by the Sacramento Metropolitan Air Quality Management District (SMAQMD):

1. The project representative shall submit to the lead agency a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project.
    - The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment.
    - The project representative shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.
    - This information shall be submitted at least 4 business days prior to the use of subject heavy-duty off-road equipment.
    - The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs.
2. The project representative shall provide a plan for approval by the lead agency demonstrating that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NO_X reduction and 45% particulate reduction compared to the most recent California Air Resources Board (ARB) fleet average.
    - This plan shall be submitted in conjunction with the equipment inventory.
    - Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.
    - The District's Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction.
3. The project representative shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour.
    - Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. Non-compliant equipment will be documented and a summary provided to the lead agency monthly.
    - A visual survey of all in-operation equipment shall be made at least weekly.
    - A monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey.

[30] http://www.airquality.org/ceqa/Ch3EnhancedExhaustControl_10-2013.pdf

4. The District and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other District, state or federal rules or regulations.

These measures are more stringent and prescriptive than those measures identified in the DEIR, Mitigation Monitoring Plan, and Air Quality Assessment. When combined together, these measures offer a cost-effective, feasible way to incorporate lower-emitting equipment into the Project's construction fleet, which subsequently, reduces NO_x emissions released during Project construction. A DEIR must be prepared to include additional mitigation measures, as well as include an updated air quality assessment to ensure that the necessary mitigation measures are implemented to reduce construction emissions to below thresholds. Furthermore, the Project Applicant needs to demonstrate commitment to the implementation of these measures prior to Project approval, to ensure that the Project's construction-related emissions are reduced to the maximum extent possible.

Incorrectly Presumed the Use of Tier 4 Final Engines

According to the 2016 Mitigation Monitoring Program (MMP) for the proposed Project, all off-road diesel-powered construction equipment greater than 50 HP will meet Tier 4 emission standards "where available" (AQ-05, p. 4 of 33). Furthermore, the MMP also states that all off-road diesel-powered construction equipment greater than 50 hp used during construction of PEP Phase 1 will also comply with EPA-Certified Tier 4 emission controls "where available" (AQ-09, p. 5 of 33). The MMP makes no mention, however, of an actual commitment to the implementation of these mitigation measures, nor does it discuss the feasibility of actually obtaining an entirely Tier 4 fleet. Although off-road Tier 4 equipment is available for purchase, it is not required that off-road construction fleets be comprised solely of Tier 4 Final engines. Furthermore, based on availability and cost, it is unrealistic to presume that all of the construction equipment utilized for the Project will have Tier 4 engines. As a result, this mitigation measure should not be relied upon to reduce the Project's construction emissions to below levels of significance. Rather, the Project should pursue additional mitigation measures that are more technically feasible to implement.

The United States Environmental Protection Agency's (USEPA) 1998 nonroad engine emission standards were structured as a three-tiered progression. Tier 1 standards were phased-in from 1996 to 2000 and Tier 2 emission standards were phased in from 2001 to 2006. Tier 3 standards, which applied to engines from 37-560 kilowatts (kW) only, were phased in from 2006 to 2008. The Tier 4 emission standards were introduced in 2004, and were phased in from 2008 – 2015. [31] These tiered emission standards, however, are only applicable to newly manufactured nonroad equipment. According to the United States Environmental Protection Agency (USEPA) "if products were built before EPA emission standards started to apply, they are generally not affected by the standards or other regulatory requirements."[32]

[31] Emission Standards, Nonroad Diesel Engines, *available at:* https://www.dieselnet.com/standards/us/nonroad.php#tier3

[32] "Frequently Asked Questions from Owners and Operators of Nonroad Engines, Vehicles, and Equipment Certified to EPA Standards." United States Environmental Protection Agency, August 2012. *Available at:* http://www.epa.gov/oms/highway-diesel/regs/420f12053.pdf

Therefore, pieces of equipment manufactured prior to 2000 are not required to adhere to Tier 2 emission standards, and pieces of equipment manufactured prior to 2008 are not required to adhere to Tier 4 emission standards. Construction equipment often lasts more than 30 years; as a result, Tier 1 equipment and non-certified equipment are currently still in use.[33] It is estimated that of the two million diesel engines currently used in construction, 31 percent were manufactured before the introduction of emissions regulations.[34]

Furthermore, in a 2010 white paper, the California Industry Air Quality Coalition estimated that approximately 7% and less than 1% of all off-road heavy duty diesel equipment in California was equipped with Tier 2 and Tier 3 engines, respectively.[35] It goes on to explain that "cleaner burning Tier 4 engines…are not expected to come online in significant numbers until 2014." Given that significant production activities have only just begun within the last couple of years, it can be presumed that there is limited availability of Tier 4 equipment. Furthermore, due to the complexity of Tier 4 engines, it is very difficult if not nearly impossible, to retrofit older model machinery with this technology.[36] Therefore, available off-road machinery equipped with Tier 4 engines are most likely new. According to a September 20, 2013 EPA Federal Register document, a new Tier 4 scraper or bulldozer would cost over $1,000,000 to purchase.[37] Utilizing the construction equipment list from the CalEEMod output file, it would be completely unrealistic to assume that all 18 pieces of equipment would be purchased at this price Appendix E, pp. 144). It is also relatively expensive to retrofit a piece of old machinery with a Tier 3 engine. For example, replacing a Tier 0 engine with a Tier 3 engine would cost roughly $150,000 or more.[38] Therefore, before applying mitigation measures of this caliber to a Project, the applicant should consider both the cost of the proposed equipment as well as determine the probability of obtaining an entirely Tier 4 construction fleet.

It should be noted that there are regulations, currently enforced by the California Air Resources Board (CARB), with regards to construction fleets. According to CARB, large and medium fleets (fleets with over 2,500 horse power) will not be allowed to add a vehicle with a Tier 1 engine to its fleet starting on January 1, 2014. The engine tier must be Tier 2 or higher.[39] Therefore, it is more realistic to assume that the fleet will include a mix of Tier 2, 3, and 4 engines, rather than just Tier 4 Final equipment exclusively.

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[33] "Best Practices for Clean Diesel Construction." Northeast Diesel Collaborative, August 2012. *Available at:* http://northeastdiesel.org/pdf/BestPractices4CleanDieselConstructionAug2012.pdf

[34] Northeast Diesel Collaborative Clean Construction Workgroup, *available at:* http://northeastdiesel.org/construction.html

[35] "White Paper: An Industry Perspective on the California Air Resources Board Proposed Off-Road Diesel Regulations."Construction Industry Air Quality Coalition, *available at:* http://www.agc-ca.org/uploadedFiles/Member_Services/Regulatory-Advocacy-Page-PDFs/White_Paper_CARB_OffRoad.pdf

[36] "Tier 4- How it will affect your equipment, your business and your environment."Milton CAT, *available at:* http://www.miltoncat.com/News/Documents/Articles/For%20the%20Trenches%20-%20Tier%204.pdf

[37] "Federal Register." Environmental Protection Agency, September 20, 2013, *available at:* http://www.gpo.gov/fdsys/pkg/FR-2013-09-20/pdf/2013-22930.pdf

[38] "Federal Register." Environmental Protection Agency, September 20, 2013, *available at:* http://www.gpo.gov/fdsys/pkg/FR-2013-09-20/pdf/2013-22930.pdf

[39] "Enforcement of the In-Use Off-Road Vehicle Regulations."California Air Resources Board, February 2014, *available at:* http://www.arb.ca.gov/msprog/mailouts/msc1401/msc1401.pdf

Unless the Project applicant can demonstrate to the public, either through budget or through a preliminary agreement with a contractor or supplier, that they will purchase/rent exclusively Tier 4 construction equipment, the use of Tier 2 equipment should be conservatively assumed, and an updated air quality analysis should be conducted to reflect this more realistic scenario.

Incorrect Evaluation of Operational Criteria Air Pollutant Emissions

The DEIR's Air Quality Assessment uses the change between the Project's 2020 and 2025 operational emissions and the existing 2015 baseline emissions to determine Project significance (p. 17). Using this method, the Air Quality Assessment makes the following conclusion:

> "The analysis indicates that the emissions of ROG, NO_x, and CO will decrease in future years even though the headcount will increase. The vehicular emission rates will continue to decrease in future for these emissions, and will more than offset the increase in headcount. Emissions of SO_x, PM10, and PM2.5 will increase slightly in future years. Again the emission rates for these pollutants will go down in future years, offsetting a portion of the increase in emissions caused by increasing headcount. Most importantly, all emission changes are less than the SCAQMD thresholds and no impact on regional air quality is projected" (p. 17-18).

This method of determining Project significance, however, is incorrect and is inconsistent with recommendations set forth by the SCAQMD. Per SCAQMD recommendations, when measuring Project emissions, it is appropriate to include regulatory requirements, such as the federal and state regulations that require vehicles to be more efficient and lower-emitting. However, "the proposed Project's emissions themselves should not be masked by comparing it to an existing condition baseline where air quality is worse than what it will be when the proposed Project is operational".[40] It is appropriate to assume that vehicles will comply with existing regulatory requirements; however their increase in activity needs to be accounted for and shouldn't be masked by improvements brought on by those regulations.[41]

According to a comment letter prepared by the SCAQMD for the Recirculated Draft Environmental Impact Report (RDEIR) for the Proposed General Plan Amendment No. 960: General Plan Update Project,

> "By comparing project impacts to a baseline of actual 2008 conditions, the RDEIR fails as an information document because it does not disclose true air quality impacts from the project. This is exactly the type of situation which led the California Supreme Court to state that, '[t]o the extent a departure from the 'norm[ ]' of an existing conditions baseline (Guidelines, § 15125(a)) promotes public participation and more informed decision making by providing a more accurate

[40] SCAQMD Comment Letter on the Recirculated Draft Environmental Impact Report (RDEIR) for the Proposed General Plan Amendment No. 960: General Plan Update Project, April 3 2015, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2015/april/deirno960.pdf?sfvrsn=2

[41] *Ibid.*

> picture of a proposed project's likely impacts, CEQA permits the departure.' (Neighbors for Smart Rail v. Exposition Metro Line Const. Authority (2013) 57 Cal. 4th 439, 453.)."[42]

Similar to the proposed Project, the RDEIR for the Proposed General Plan Amendment No. 960: General Plan Update Project compared future 2040 emissions to the existing 2008 baseline emissions, and found that the emissions between these two scenarios would result in a negative net increase. Consistent with the proposed Project, these negative net emissions were due to the substantial decrease in anticipated vehicle emissions from vehicles mandated by increased efficiency requirements in current Federal and State law that have been implemented and will continue to affect the motor vehicle fleet between the existing year and 2040.

In response to the conclusions made regarding this project's air quality impacts, the SCAQMD staff concludes that "although existing regulatory and other requirements have shown an improvement in the region's air quality and is expected to continue to improve over time, the decrease in emissions from compliance from such requirements should not be considered mitigation since the reduced emissions are not a result of additional actions incorporated in the project to reduce the unmitigated emissions from mobile source vehicle emission activities." [43] In order to ensure that the project's air quality impacts are accurately represented, the SCAQMD staff recommends that if a baseline analysis is being conducted to evaluate emissions impacts, it is more appropriate to compare baseline emission activities with future vehicle activity using the same baseline emission factors to show the situation if no changes are made.[44]

Therefore, to remain consistent with SCAQMD recommendations, the Air Quality Assessment should remodel the future 2020 and 2025 FMPU Buildout emissions utilizing the same vehicle emission factors as the 2015 existing model. An updated DEIR should be prepared to include an updated air quality assessment that correctly analyzes the future operational emissions to the baseline existing emissions following SCAQMD recommendations.

Updated Analysis Demonstrates a Potentially Significant Impact

In an effort to more accurately estimate the Project's emissions, we prepared an updated model for the 2025 FMPU operations using CalEEMod. It should be noted that we did not remodel 2020 FMPU operational emissions and only remodeled 2025 FMPU emissions, as the 2025 scenario represents the emissions that would occur at full Project buildout. An operational year of 2015 was inputted so that the same 2015 emission factors as the existing model were utilized, consistent with SCAQMD recommendations. All other parameters remained the same.

When correct input parameters are used to model emissions, we find that the net emissions between the 2025 FMPU buildout and existing conditions increase when compared to what is estimated in the Air

[42] *Ibid.*
[43] *Ibid.*
[44] *Ibid.*

Quality Assessment. Furthermore, we find that the difference in NO_x emissions exceed the SCAQMD threshold of 55 pounds per day (see table below).

Campus Emissions for Future Years (pounds per day)						
	ROG	**NO_x**	**CO**	**SO_x**	**PM10**	**PM2.5**
Existing	221	507	1,932	4	284	81
Year 2025	265	608	2,351	5	341	97
Net Increase	**44**	**101**	**419**	**1**	**57**	**16**
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Thresholds?	No	***Yes***	No	No	No	No

As demonstrated in the table above, the net change between the future and baseline NO_x emissions, when estimated correctly, greatly exceed the SCAQMD threshold of 55 lbs/day. Our analysis demonstrates that a potentially significant impact may occur as a result of Project operation, which was not previously identified. As such, a DEIR should be prepared that includes an updated air quality analysis to correctly evaluate the Project's air quality impacts, and should include additional mitigation measures where necessary.

Sincerely,

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James River Corp., Washington, 1995-96; Scientist
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Rosenfeld, P.E. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant*. The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting.* Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition.* Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference.* Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference.* Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference.* Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference.* Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conferenc*e. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation.* Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest.* Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell.* Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest.* Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993.

Deposition and/or Trial Testimony:

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September, 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al.,, et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant.*
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio

John Michael Abicht, et al., *Plaintiffs,* vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the Court of Common Pleas for the Second Judicial Circuit, State of South Carolina, County of Aiken
David Anderson, et al., *Plaintiffs*, vs. Norfolk Southern Corporation, et al., *Defendants*.
Case Number: 2007-CP-02-1584

In the Circuit Court of Jefferson County Alabama
Jaeanette Moss Anthony, et al., *Plaintiffs*, vs. Drummond Company Inc., et al., *Defendants*
Civil Action No. CV 2008-2076
Rosenfeld Deposition: September 2010

In the Ninth Judicial District Court, Parish of Rapides, State of Louisiana
Roger Price, et al., *Plaintiffs*, vs. Roy O. Martin, L.P., et al., *Defendants*.
Civil Suit Number 224,041 Division G
Rosenfeld Deposition: September 2008

In the United States District Court, Western District Lafayette Division
Ackle et al., *Plaintiffs*, vs. Citgo Petroleum Corporation, et al., *Defendants*.
Case Number 2:07CV1052
Rosenfeld Deposition: July 2009

In the United States District Court for the Southern District of Ohio
Carolyn Baker, et al., *Plaintiffs*, vs. Chevron Oil Company, et al., *Defendants*.
Case Number 1:05 CV 227
Rosenfeld Deposition: July 2008

In the Fourth Judicial District Court, Parish of Calcasieu, State of Louisiana
Craig Steven Arabie, et al., *Plaintiffs*, vs. Citgo Petroleum Corporation, et al., *Defendants*.
Case Number 07-2738 G

In the Fourteenth Judicial District Court, Parish of Calcasieu, State of Louisiana
Leon B. Brydels, *Plaintiffs*, vs. Conoco, Inc., et al*., Defendants.*
Case Number 2004-6941 Division A

In the District Court of Tarrant County, Texas, 153rd Judicial District
Linda Faust, *Plaintiff*, vs. Burlington Northern Santa Fe Rail Way Company, Witco Chemical Corporation A/K/A Witco Corporation, Solvents and Chemicals, Inc. and Koppers Industries, Inc., *Defendants*.
Case Number 153-212928-05
Rosenfeld Deposition: December 2006, October 2007
Rosenfeld Trial: January 2008

In the Superior Court of the State of California in and for the County of San Bernardino
Leroy Allen, et al., *Plaintiffs*, vs. Nutro Products, Inc., a California Corporation and DOES 1 to 100, inclusive, *Defendants*.
John Loney, Plaintiff, vs. James H. Didion, Sr.; Nutro Products, Inc.; DOES 1 through 20, inclusive, *Defendants*.
Case Number VCVVS044671
Rosenfeld Deposition: December 2009
Rosenfeld Trial: March 2010

In the United States District Court for the Middle District of Alabama, Northern Division
James K. Benefield, et al., *Plaintiffs*, vs. International Paper Company, *Defendant*.
Civil Action Number 2:09-cv-232-WHA-TFM
Rosenfeld Deposition: July 2010, June 2011

In the Superior Court of the State of California in and for the County of Los Angeles
Leslie Hensley and Rick Hensley, *Plaintiffs*, vs. Peter T. Hoss, as trustee on behalf of the Cone Fee Trust; Plains Exploration & Production Company, a Delaware corporation; Rayne Water Conditioning, Inc., a California Corporation; and DOES 1 through 100, *Defendants.*
Case Number SC094173
Rosenfeld Deposition: September 2008, October 2008

In the Superior Court of the State of California in and for the County of Santa Barbara, Santa Maria Branch
Clifford and Shirley Adelhelm, et al., all individually, *Plaintiffs*, vs. Unocal Corporation, a Delaware Corporation; Union Oil Company of California, a California corporation; Chevron Corporation, a California corporation; ConocoPhillips, a Texas corporation; Kerr-McGee Corporation, an Oklahoma corporation; and DOES 1 though 100, *Defendants.*
Case Number 1229251 (Consolidated with case number 1231299)
Rosenfeld Deposition: January 2008

In the United States District Court for Eastern District of Arkansas, Eastern District of Arkansas
Harry Stephens Farms, Inc, and Harry Stephens, individual and as managing partner of Stephens Partnership, *Plaintiffs*, vs. Helena Chemical Company, and Exxon Mobil Corp., successor to Mobil Chemical Co., *Defendants.*
Case Number 2:06-CV-00166 JMM (Consolidated with case number 4:07CV00278 JMM)
Rosenfeld Deposition: July 2010

In the United States District Court for the Western District of Arkansas, Texarkana Division
Rhonda Brasel, et al., *Plaintiffs*, vs. Weyerhaeuser Company and DOES 1 through 100, *Defendants.*
Civil Action Number 07-4037
Rosenfeld Deposition: March 2010
Rosenfeld Trial: October 2010

In the District Court of Texas 21st Judicial District of Burleson County
Dennis Davis, *Plaintiff*, vs. Burlington Northern Santa Fe Rail Way Company, *Defendant.*
Case Number 25,151
Rosenfeld Trial: May 2009

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs,* vs. BP Products North America, Inc., *Defendant.*
Case 3:10-cv-00622
Rosenfeld Deposition: February 2012
Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants
Case Number: 03-C-12-012487 OT
Rosenfeld Deposition: September 2013

JESSIE MARIE JAEGER

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SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

EDUCATION

UNIVERSITY OF CALIFORNIA, LOS ANGELES **B.S. CONSERVATION BIOLOGY & ENVIRONMENTAL SCIENCES** *JUNE 2014*

PROJECT EXPERIENCE

SOIL WATER AIR PROTECTION ENTERPRISE ***SANTA MONICA, CA***

AIR QUALITY SPECIALIST

SENIOR ANALYST: CEQA ANALYSIS & MODELING

- Calculated roadway, stationary source, and cumulative impacts for risk and hazard analyses at proposed land use projects.
- Quantified criteria air pollutant and greenhouse gas emissions released during construction and operational activities of proposed land use projects using CalEEMod and EMFAC2011 emission factors.
- Utilized AERSCREEN, a screening dispersion model, to determine the ambient air concentrations at sensitive receptor locations.
- Organized presentations containing figures and tables comparing results of particulate matter analyses to CEQA thresholds.
- Prepared reports that discuss results of the health risk analyses conducted for several land use redevelopment projects.

SENIOR ANALYST: GREENHOUSE GAS MODELING AND DETERMINATION OF SIGNIFICANCE

- Quantified greenhouse gas (GHG) emissions of a "business as usual" scenario for proposed land use projects using CalEEMod.
- Determined compliance of proposed projects with AB 32 GHG reduction targets, with measures described in CARB's Scoping Plan for each land use sector, and with GHG significance thresholds recommended by various Air Quality Management Districts in California.
- Produced tables and figures that compare the results of the GHG analyses to applicable CEQA thresholds and reduction targets.

PROJECT MANAGER: OFF-GASSING OF FORMALDEHYDE FROM FLOORING PRODUCTS

- Determined the appropriate standard test methods to effectively measure formaldehyde emissions from flooring products.
- Compiled and analyzed laboratory testing data. Produced tables, charts, and graphs to exhibit emission levels.
- Compared finalized testing data to Proposition 65 No Significant Risk Level (NSRL) and to CARB's Phase 2 Standard.
- Prepared a final analytical report and organized supporting data for use as Expert testimony in environmental litigation.
- Participated in meetings with clients to discuss project strategy and identify solutions to achieve short and long term goals.

PROJECT ANALYST: EXPOSURE ASSESSMENT OF CONTAMINANTS EMITTED BY INCINERATOR

- Reviewed and organized sampling data, and determined the maximum levels of arsenic, dioxin, and lead in soil samples.
- Determined cumulative and hourly particulate deposition of incinerator and modeled particle dispersion locations using GIS and AERMOD.
- Conducted risk assessment using guidance set forth by the Office of Environmental Health Hazard Assessment (OEHHA).
- Utilized LeadSpread8 to evaluate exposure, and the potential adverse health effects from exposure, to lead in the environment.
- Compared final results of assessment to the Environmental Protection Agency's (EPA) Regional Screening Levels (RSLs).

ACCOMPLISHMENTS

- **Recipient**, Bruins Advantage Scholarship, University of California, Los Angeles ***SEPT 2010 – JUNE 2014***
- **Academic Honoree,** Dean's List, University of California, Los Angeles ***SEPT 2013 – JUNE 2014***
- **Academic Wellness Director**, UCLA Undergraduate Students Associated Council ***SEPT 2013 – JUNE 2014***
- **Student Groups Support Committee Member**, UCLA Undergraduate Students Associated Council ***SEPT 2012 – JUNE 2013***

Appendix A: CalEEMod Output Tables

Mt. SAC FMPU-2025

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	43,139.00	Student	43.23	1,883,113.86	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2015
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2015 operational year will utilize 2015 emmission factors.

Land Use -

Construction Phase - Operational run only.

Off-road Equipment - Operational run only.

Energy Use -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	50.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2015

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	49.6925	0.0441	4.5559	3.3000e-004		0.0165	0.0165		0.0165	0.0165		9.4411	9.4411	0.0273		10.0151
Energy	1.5840	14.4003	12.0962	0.0864		1.0944	1.0944		1.0944	1.0944		17,280.3390	17,280.3390	0.3312	0.3168	17,385.5042
Mobile	206.4342	564.2311	2,333.8713	4.9500	331.4455	8.3394	339.7850	88.5462	7.6617	96.2080		446,842.2623	446,842.2623	18.7673		447,236.3757
Total	**257.7107**	**578.6755**	**2,350.5235**	**5.0368**	**331.4455**	**9.4503**	**340.8959**	**88.5462**	**8.7726**	**97.3189**		**464,132.0423**	**464,132.0423**	**19.1258**	**0.3168**	**464,631.8950**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	49.6925	0.0441	4.5559	3.3000e-004		0.0165	0.0165		0.0165	0.0165		9.4411	9.4411	0.0273		10.0151
Energy	1.5840	14.4003	12.0962	0.0864		1.0944	1.0944		1.0944	1.0944		17,280.3390	17,280.3390	0.3312	0.3168	17,385.5042
Mobile	206.4342	564.2311	2,333.8713	4.9500	331.4455	8.3394	339.7850	88.5462	7.6617	96.2080		446,842.2623	446,842.2623	18.7673		447,236.3757
Total	**257.7107**	**578.6755**	**2,350.5235**	**5.0368**	**331.4455**	**9.4503**	**340.8959**	**88.5462**	**8.7726**	**97.3189**		**464,132.0423**	**464,132.0423**	**19.1258**	**0.3168**	**464,631.8950**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	12/30/2016	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	0	8.00	162	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	206.4342	564.2311	2,333.8713	4.9500	331.4455	8.3394	339.7850	88.5462	7.6617	96.2080		446,842.2623	446,842.2623	18.7673		447,236.3757
Mitigated	206.4342	564.2311	2,333.8713	4.9500	331.4455	8.3394	339.7850	88.5462	7.6617	96.2080		446,842.2623	446,842.2623	18.7673		447,236.3757

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	51,766.80	18,118.38	1725.56	120,243,888	120,243,888
Total	51,766.80	18,118.38	1,725.56	120,243,888	120,243,888

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.514499	0.060499	0.179997	0.139763	0.042095	0.006675	0.015446	0.029572	0.001914	0.002508	0.004341	0.000594	0.002098

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.5840	14.4003	12.0962	0.0864		1.0944	1.0944		1.0944	1.0944		17,280.3390	17,280.3390	0.3312	0.3168	17,385.5042
NaturalGas Unmitigated	1.5840	14.4003	12.0962	0.0864		1.0944	1.0944		1.0944	1.0944		17,280.3390	17,280.3390	0.3312	0.3168	17,385.5042

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	146883	1.5840	14.4003	12.0962	0.0864		1.0944	1.0944		1.0944	1.0944		17,280.3390	17,280.3390	0.3312	0.3168	17,385.5042
Total		**1.5840**	**14.4003**	**12.0962**	**0.0864**		**1.0944**	**1.0944**		**1.0944**	**1.0944**		**17,280.3390**	**17,280.3390**	**0.3312**	**0.3168**	**17,385.5042**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	146.883	1.5840	14.4003	12.0962	0.0864		1.0944	1.0944		1.0944	1.0944		17,280.3390	17,280.3390	0.3312	0.3168	17,385.5042
Total		**1.5840**	**14.4003**	**12.0962**	**0.0864**		**1.0944**	**1.0944**		**1.0944**	**1.0944**		**17,280.3390**	**17,280.3390**	**0.3312**	**0.3168**	**17,385.5042**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	49.6925	0.0441	4.5559	3.3000e-004		0.0165	0.0165		0.0165	0.0165		9.4411	9.4411	0.0273		10.0151
Mitigated	49.6925	0.0441	4.5559	3.3000e-004		0.0165	0.0165		0.0165	0.0165		9.4411	9.4411	0.0273		10.0151

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	11.9565					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	37.2857					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.4504	0.0441	4.5559	3.3000e-004		0.0165	0.0165		0.0165	0.0165		9.4411	9.4411	0.0273		10.0151
Total	**49.6925**	**0.0441**	**4.5559**	**3.3000e-004**		**0.0165**	**0.0165**		**0.0165**	**0.0165**		**9.4411**	**9.4411**	**0.0273**		**10.0151**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	11.9565					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	37.2857					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.4504	0.0441	4.5559	3.3000e-004		0.0165	0.0165		0.0165	0.0165		9.4411	9.4411	0.0273		10.0151
Total	**49.6925**	**0.0441**	**4.5559**	**3.3000e-004**		**0.0165**	**0.0165**		**0.0165**	**0.0165**		**9.4411**	**9.4411**	**0.0273**		**10.0151**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Mt. SAC FMPU-2025

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	43,139.00	Student	43.23	1,883,113.86	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2015
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2015 operational year will utilize 2015 emmission factors.

Land Use -

Construction Phase - Operational run only.

Off-road Equipment - Operational run only.

Energy Use -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	50.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2015

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	49.6925	0.0441	4.5559	3.3000e-004		0.0165	0.0165		0.0165	0.0165		9.4411	9.4411	0.0273		10.0151
Energy	1.5840	14.4003	12.0962	0.0864		1.0944	1.0944		1.0944	1.0944		17,280.3390	17,280.3390	0.3312	0.3168	17,385.5042
Mobile	214.0955	593.5721	2,298.8544	4.7015	331.4455	8.3887	339.8342	88.5462	7.7070	96.2532		425,046.3277	425,046.3277	18.7811		425,440.7309
Total	**265.3720**	**608.0165**	**2,315.5066**	**4.7882**	**331.4455**	**9.4996**	**340.9451**	**88.5462**	**8.8179**	**97.3641**		**442,336.1078**	**442,336.1078**	**19.1396**	**0.3168**	**442,836.2502**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	49.6925	0.0441	4.5559	3.3000e-004		0.0165	0.0165		0.0165	0.0165		9.4411	9.4411	0.0273		10.0151
Energy	1.5840	14.4003	12.0962	0.0864		1.0944	1.0944		1.0944	1.0944		17,280.3390	17,280.3390	0.3312	0.3168	17,385.5042
Mobile	214.0955	593.5721	2,298.8544	4.7015	331.4455	8.3887	339.8342	88.5462	7.7070	96.2532		425,046.3277	425,046.3277	18.7811		425,440.7309
Total	**265.3720**	**608.0165**	**2,315.5066**	**4.7882**	**331.4455**	**9.4996**	**340.9451**	**88.5462**	**8.8179**	**97.3641**		**442,336.1078**	**442,336.1078**	**19.1396**	**0.3168**	**442,836.2502**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	12/30/2016	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	0	8.00	162	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	214.0955	593.5721	2,298.8544	4.7015	331.4455	8.3887	339.8342	88.5462	7.7070	96.2532		425,046.3277	425,046.3277	18.7811		425,440.7309
Mitigated	214.0955	593.5721	2,298.8544	4.7015	331.4455	8.3887	339.8342	88.5462	7.7070	96.2532		425,046.3277	425,046.3277	18.7811		425,440.7309

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	51,766.80	18,118.38	1725.56	120,243,888	120,243,888
Total	51,766.80	18,118.38	1,725.56	120,243,888	120,243,888

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.514499	0.060499	0.179997	0.139763	0.042095	0.006675	0.015446	0.029572	0.001914	0.002508	0.004341	0.000594	0.002098

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.5840	14.4003	12.0962	0.0864		1.0944	1.0944		1.0944	1.0944		17,280.3390	17,280.3390	0.3312	0.3168	17,385.5042
NaturalGas Unmitigated	1.5840	14.4003	12.0962	0.0864		1.0944	1.0944		1.0944	1.0944		17,280.3390	17,280.3390	0.3312	0.3168	17,385.5042

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	146883	1.5840	14.4003	12.0962	0.0864		1.0944	1.0944		1.0944	1.0944		17,280.3390	17,280.3390	0.3312	0.3168	17,385.5042
Total		**1.5840**	**14.4003**	**12.0962**	**0.0864**		**1.0944**	**1.0944**		**1.0944**	**1.0944**		**17,280.3390**	**17,280.3390**	**0.3312**	**0.3168**	**17,385.5042**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	146.883	1.5840	14.4003	12.0962	0.0864		1.0944	1.0944		1.0944	1.0944		17,280.3390	17,280.3390	0.3312	0.3168	17,385.5042
Total		**1.5840**	**14.4003**	**12.0962**	**0.0864**		**1.0944**	**1.0944**		**1.0944**	**1.0944**		**17,280.3390**	**17,280.3390**	**0.3312**	**0.3168**	**17,385.5042**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	49.6925	0.0441	4.5559	3.3000e-004		0.0165	0.0165		0.0165	0.0165		9.4411	9.4411	0.0273		10.0151
Mitigated	49.6925	0.0441	4.5559	3.3000e-004		0.0165	0.0165		0.0165	0.0165		9.4411	9.4411	0.0273		10.0151

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	11.9565					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	37.2857					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.4504	0.0441	4.5559	3.3000e-004		0.0165	0.0165		0.0165	0.0165		9.4411	9.4411	0.0273		10.0151
Total	**49.6925**	**0.0441**	**4.5559**	**3.3000e-004**		**0.0165**	**0.0165**		**0.0165**	**0.0165**		**9.4411**	**9.4411**	**0.0273**		**10.0151**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	11.9565					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	37.2857					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.4504	0.0441	4.5559	3.3000e-004		0.0165	0.0165		0.0165	0.0165		9.4411	9.4411	0.0273		10.0151
Total	**49.6925**	**0.0441**	**4.5559**	**3.3000e-004**		**0.0165**	**0.0165**		**0.0165**	**0.0165**		**9.4411**	**9.4411**	**0.0273**		**10.0151**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Appendix B: AERSCREEN Input and Output Files

Start date and time 07/15/16 13:25:48
AERSCREEN 11126

Building A

Building A

---------- DATA ENTRY VALIDATION ----------

** AREADATA **	METRIC	ENGLISH
Emission Rate:	0.150E-02 g/s	0.119E-01 lb/hr
Area Height:	3.00 meters	9.84 feet
Area Source Length:	80.00 meters	262.47 feet
Area Source Width:	60.00 meters	196.85 feet
Vertical Dimension:	1.50 meters	4.92 feet
Model Mode:	URBAN	
Population:	139731	
Dist to Ambient Air:	1.0 meters	3. feet

** BUILDING DATA **

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations
Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

No flagpole receptors

No discrete receptors used

** METEOROLOGY DATA **

Min/Max Temperature: 250.0 / 310.0 K -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

```
 Dominant Surface Profile: Urban
 Dominant Climate Type:    Average Moisture


 AERSCREEN output file:
 Building A.out


 *** AERSCREEN Run is Ready to Begin



 No terrain used, AERMAP will not be run
************************************************

SURFACE CHARACTERISTICS & MAKEMET
Obtaining surface characteristics...

Using AERMET seasonal surface characteristics for Urban with Average Moisture
Season             Albedo     Bo       zo
Winter              0.35     1.50     1.000
Spring              0.14     1.00     1.000
Summer              0.16     2.00     1.000
Autumn              0.18     2.00     1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR   started 07/15/16 13:26:52
 ****************************************

  Running AERMOD
 Processing Winter

Processing surface roughness sector  1

****************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   0
```

```
    ********   WARNING MESSAGES   ********

                ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   5

    ********   WARNING MESSAGES   ********

                ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  10

    ********   WARNING MESSAGES   ********

                ***  NONE  ***


**************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  15

    ********   WARNING MESSAGES   ********

                ***  NONE  ***


**************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  20

    ********   WARNING MESSAGES   ********

                ***  NONE  ***


**************************************************
Processing wind flow sector   6
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 25

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 30

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 35

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 40

******** WARNING MESSAGES ********

*** NONE ***

****

Running AERMOD
Processing Spring

Processing surface roughness sector 1

****

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 0

```
    ********   WARNING MESSAGES   ********

                ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   5

    ********   WARNING MESSAGES   ********

                ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  10

    ********   WARNING MESSAGES   ********

                ***  NONE  ***


**************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  15

    ********   WARNING MESSAGES   ********

                ***  NONE  ***


**************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  20

    ********   WARNING MESSAGES   ********

                ***  NONE  ***


**************************************************
Processing wind flow sector   6
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 25

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 30

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 35

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 40

******** WARNING MESSAGES ********

*** NONE ***

****

Running AERMOD
Processing Summer

Processing surface roughness sector 1

****

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 0

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  10

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  15

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  20

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   6
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 25

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 30

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 35

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 40

******** WARNING MESSAGES ********

*** NONE ***

****

Running AERMOD
Processing Autumn

Processing surface roughness sector 1

****

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 0

```
    ********   WARNING MESSAGES   ********

                ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   5

    ********   WARNING MESSAGES   ********

                ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  10

    ********   WARNING MESSAGES   ********

                ***  NONE  ***


**************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  15

    ********   WARNING MESSAGES   ********

                ***  NONE  ***


**************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  20

    ********   WARNING MESSAGES   ********

                ***  NONE  ***


**************************************************
Processing wind flow sector   6
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 25

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 30

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 35

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 40

******** WARNING MESSAGES ********

*** NONE ***

FLOWSECTOR ended 07/15/16 13:27:10

REFINE started 07/15/16 13:27:10

AERMOD Finishes Successfully for REFINE stage 3 Winter sector 0

******** WARNING MESSAGES ********

*** NONE ***

REFINE ended 07/15/16 13:27:12

****
AERSCREEN Finished Successfully
With no errors or warnings
Check log file for details
****

Ending date and time 07/15/16 13:27:12

Building A_max_conc_distance

Concentration	Distance	Elevation	Season/Month	Zo sector	Date	H0
U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	HT	REF TA	HT
0.48299E+01	1.00	0.00	Winter	0-360	10011001	-1.30
0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.62033E+01	25.00	0.00	Winter	0-360	10011001	-1.30
0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
* 0.69743E+01	48.00	0.00	Winter	0-360	10011001	-1.30
0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.68669E+01	50.00	0.00	Winter	0-360	10011001	-1.30
0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.36512E+01	75.00	0.00	Winter	0-360	10011001	-1.30
0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.24341E+01	100.00	0.00	Winter	0-360	10011001	-1.30
0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.18206E+01	125.00	0.00	Winter	0-360	10011001	-1.30
0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.14320E+01	150.00	0.00	Winter	0-360	10011001	-1.30
0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.11670E+01	175.00	0.00	Winter	0-360	10011001	-1.30
0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.97649E+00	200.00	0.00	Winter	0-360	10011001	-1.30
0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.83379E+00	225.00	0.00	Winter	0-360	10011001	-1.30
0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.72394E+00	250.00	0.00	Winter	0-360	10011001	-1.30
0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.63657E+00	275.00	0.00	Winter	0-360	10011001	-1.30
0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.56590E+00	300.00	0.00	Winter	0-360	10011001	-1.30
0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.50799E+00	325.00	0.00	Winter	0-360	10011001	-1.30
0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0

```
   0.45943E+00       350.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.41853E+00       375.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.38350E+00       400.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.35327E+00       425.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.32676E+00       450.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.30356E+00       475.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.28310E+00       500.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.26490E+00       525.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.24864E+00       550.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.23410E+00       575.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.22096E+00       600.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.20901E+00       625.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.19812E+00       650.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.18815E+00       675.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.17904E+00       700.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.17068E+00       725.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
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   0.16298E+00       749.99      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.15587E+00       775.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.14926E+00       800.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.14314E+00       825.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.13745E+00       850.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.13213E+00       875.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.12716E+00       900.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.12252E+00       925.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.11819E+00       950.01      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.11411E+00       975.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.11029E+00      1000.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.10669E+00      1025.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.10330E+00      1050.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.10068E+00      1075.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.97613E-01      1100.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.94714E-01      1125.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
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   0.91973E-01      1150.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.89380E-01      1175.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.86923E-01      1200.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.84594E-01      1225.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.82386E-01      1250.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.80289E-01      1275.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.78298E-01      1300.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.76405E-01      1325.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.74605E-01      1350.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.72891E-01      1375.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.71260E-01      1400.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.69706E-01      1425.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.68224E-01      1450.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.66811E-01      1475.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.65463E-01      1500.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.64175E-01      1525.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
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   0.62945E-01      1550.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.61769E-01      1574.99      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.60644E-01      1600.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.59567E-01      1625.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.58537E-01      1650.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.57550E-01      1675.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.56604E-01      1700.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.55696E-01      1725.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.54826E-01      1750.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.53990E-01      1775.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.53188E-01      1800.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.52416E-01      1824.99      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.51675E-01      1850.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.50961E-01      1875.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.50274E-01      1900.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.49612E-01      1924.99      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
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   0.48975E-01      1950.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.48360E-01      1975.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.47767E-01      1999.99      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.47194E-01      2025.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.46641E-01      2050.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.46107E-01      2075.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.45591E-01      2100.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.45091E-01      2124.99      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.44607E-01      2150.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.44138E-01      2175.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.43685E-01      2200.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.43245E-01      2224.99      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.42818E-01      2250.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.42403E-01      2275.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.42001E-01      2300.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.41610E-01      2325.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
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0.41230E-01 2350.00 0.00 Winter 0-360 10011001 -1.30
0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0
2.0
0.40861E-01 2375.00 0.00 Winter 0-360 10011001 -1.30
0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0
2.0
0.40501E-01 2400.00 0.00 Winter 0-360 10011001 -1.30
0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0
2.0
0.40151E-01 2425.00 0.00 Winter 0-360 10011001 -1.30
0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0
2.0
0.39811E-01 2450.00 0.00 Winter 0-360 10011001 -1.30
0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0
2.0
0.39478E-01 2475.00 0.00 Winter 0-360 10011001 -1.30
0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0
2.0
0.39155E-01 2500.00 0.00 Winter 0-360 10011001 -1.30
0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0
2.0
0.38839E-01 2525.00 0.00 Winter 0-360 10011001 -1.30
0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0
2.0
0.38531E-01 2550.00 0.00 Winter 0-360 10011001 -1.30
0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0
2.0
0.38230E-01 2575.00 0.00 Winter 0-360 10011001 -1.30
0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0
2.0
0.37936E-01 2600.00 0.00 Winter 0-360 10011001 -1.30
0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0
2.0
0.37649E-01 2625.00 0.00 Winter 0-360 10011001 -1.30
0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0
2.0
0.37369E-01 2650.00 0.00 Winter 0-360 10011001 -1.30
0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0
2.0
0.37094E-01 2675.00 0.00 Winter 0-360 10011001 -1.30
0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0
2.0
0.36826E-01 2700.00 0.00 Winter 0-360 10011001 -1.30
0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0
2.0
0.36563E-01 2725.00 0.00 Winter 0-360 10011001 -1.30
0.043 -9.000 0.020 -999. 21. 6.0 1.000 1.50 0.35 0.50 10.0 310.0
2.0

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   0.36306E-01      2750.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.36054E-01      2775.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.35807E-01      2800.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.35566E-01      2824.99      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.35328E-01      2850.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.35096E-01      2875.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.34868E-01      2900.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.34644E-01      2925.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.34424E-01      2950.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.34208E-01      2975.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.33996E-01      3000.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.33788E-01      3025.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.33583E-01      3050.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.33382E-01      3075.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.33184E-01      3100.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.32989E-01      3125.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
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   0.32798E-01      3150.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.32609E-01      3175.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.32424E-01      3199.99      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.32241E-01      3225.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.32061E-01      3250.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.31884E-01      3275.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.31709E-01      3300.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.31537E-01      3325.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.31368E-01      3350.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.31201E-01      3375.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.31036E-01      3400.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.30873E-01      3425.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.30713E-01      3450.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.30555E-01      3475.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.30399E-01      3500.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.30245E-01      3525.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
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   0.30094E-01      3550.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.29944E-01      3575.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.29796E-01      3600.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.29650E-01      3625.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.29505E-01      3650.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.29363E-01      3675.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.29222E-01      3700.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.29083E-01      3725.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.28946E-01      3750.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.28810E-01      3775.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.28676E-01      3800.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.28544E-01      3825.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.28413E-01      3850.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.28283E-01      3875.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.28155E-01      3900.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.28029E-01      3925.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
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   0.27904E-01      3950.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.27780E-01      3975.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.27658E-01      4000.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.27537E-01      4025.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.27417E-01      4050.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.27299E-01      4074.99      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.27181E-01      4100.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.27065E-01      4125.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.26951E-01      4150.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.26837E-01      4175.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.26725E-01      4200.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.26614E-01      4225.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.26504E-01      4250.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.26395E-01      4275.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.26287E-01      4300.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.26180E-01      4325.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
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   0.26075E-01      4350.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.25970E-01      4375.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.25866E-01      4400.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.25764E-01      4425.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.25662E-01      4450.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.25562E-01      4475.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.25462E-01      4500.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.25363E-01      4525.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.25265E-01      4550.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.25169E-01      4575.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.25073E-01      4600.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.24978E-01      4625.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.24883E-01      4650.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.24790E-01      4675.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.24698E-01      4700.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.24606E-01      4725.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
```

```
   0.24515E-01      4750.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.24425E-01      4775.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.24336E-01      4800.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.24248E-01      4825.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.24160E-01      4850.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.24073E-01      4875.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.23987E-01      4900.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.23902E-01      4925.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.23817E-01      4950.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.23733E-01      4975.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
   0.23650E-01      5000.00      0.00        Winter       0-360   10011001   -1.30
0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0   310.0
  2.0
```

Start date and time 07/15/16 13:13:31
AERSCREEN 11126

Building G & PEP Phase 2

Building G & PEP Phase 2

---------- DATA ENTRY VALIDATION ----------

** AREADATA **	METRIC	ENGLISH
Emission Rate:	0.0152 g/s	0.121 lb/hr
Area Height:	3.00 meters	9.84 feet
Area Source Length:	250.00 meters	820.21 feet
Area Source Width:	160.00 meters	524.93 feet
Vertical Dimension:	1.50 meters	4.92 feet
Model Mode:	URBAN	
Population:	139731	
Dist to Ambient Air:	1.0 meters	3. feet

** BUILDING DATA **

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations
Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

No flagpole receptors

No discrete receptors used

** METEOROLOGY DATA **

Min/Max Temperature: 250.0 / 310.0 K -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

```
 Dominant Surface Profile: Urban
 Dominant Climate Type:    Average Moisture


 AERSCREEN output file:
 Building G & PEP Phase 2.out


 *** AERSCREEN Run is Ready to Begin



 No terrain used, AERMAP will not be run
************************************************

SURFACE CHARACTERISTICS & MAKEMET
Obtaining surface characteristics...

Using AERMET seasonal surface characteristics for Urban with Average Moisture
Season             Albedo     Bo       zo
Winter              0.35     1.50     1.000
Spring              0.14     1.00     1.000
Summer              0.16     2.00     1.000
Autumn              0.18     2.00     1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR   started 07/15/16 13:14:52
 ****************************************

  Running AERMOD
 Processing Winter

Processing surface roughness sector  1

**************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   0
```

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  10

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  15

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  20

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   6
```

```
 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   8

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  35

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

 ****************************************

  Running AERMOD
 Processing Spring

Processing surface roughness sector  1

**************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   5
```

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 10

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 15

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 20

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 25

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 7

```
 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   8

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  35

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

 ****************************************

  Running AERMOD
 Processing Summer

Processing surface roughness sector  1

**************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  10
```

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 15

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 20

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 25

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 30

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 35

******** WARNING MESSAGES ********

*** NONE ***

****

Running AERMOD
Processing Autumn

Processing surface roughness sector 1

****
Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 0

******** WARNING MESSAGES ********

*** NONE ***

****
Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 5

******** WARNING MESSAGES ********

*** NONE ***

****
Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 10

******** WARNING MESSAGES ********

*** NONE ***

****
Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 15

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  20

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   6

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   8

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  35

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


FLOWSECTOR   ended 07/15/16 13:15:22

REFINE       started 07/15/16 13:15:22
```

```
 AERMOD Finishes Successfully for REFINE stage 3 Winter sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


REFINE       ended 07/15/16 13:15:25

 ********************************************
 AERSCREEN Finished Successfully
 With no errors or warnings
 Check log file for details
 ********************************************

 Ending date and time  07/15/16 13:15:25
```

Concentration	Distance	Elevation	Season/Month	Zo sector	Date	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	HT	REF TA	HT
0.10900E+02	1.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.11801E+02	25.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.12618E+02	50.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.13335E+02	75.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.13969E+02	100.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.14543E+02	125.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
* 0.14565E+02	126.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.13868E+02	150.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.99090E+01	175.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.81119E+01	200.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.68103E+01	225.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.59448E+01	250.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.53267E+01	275.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.48272E+01	300.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.44016E+01	325.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.40352E+01	350.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.37191E+01	375.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.34398E+01	400.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.31965E+01	425.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.29812E+01	450.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.27881E+01	475.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.26159E+01	500.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.24622E+01	525.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.23220E+01	550.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.21953E+01	575.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.20801E+01	600.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.19743E+01 625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.18783E+01 650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17905E+01 675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17083E+01 700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16322E+01 725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15623E+01 750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14975E+01 775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14377E+01 800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13817E+01 825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13291E+01 850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12795E+01 875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12333E+01 900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11900E+01 925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11495E+01 950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11114E+01 975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10756E+01 1000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10415E+01 1025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10093E+01 1050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.97893E+00 1075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.95030E+00 1100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.92326E+00 1125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.89744E+00 1150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.87300E+00 1175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.84985E+00 1200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.82791E+00 1225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.80710E+00 1250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.78729E+00 1275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.76827E+00 1300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.75019E+00 1325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.73300E+00 1350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.71671E+00 1375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.70116E+00 1400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.68626E+00 1425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.67210E+00 1450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.65862E+00 1475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.64576E+00 1500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.63348E+00 1525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.62175E+00 1550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.61055E+00 1575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.59971E+00 1600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.58934E+00 1625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.57942E+00 1650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.56991E+00 1675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.56080E+00 1700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.55205E+00 1725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.54355E+00 1750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.53539E+00 1775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.52756E+00 1800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.52004E+00 1825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.51281E+00 1850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.50587E+00 1875.01 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.49922E+00 1900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.49278E+00 1924.99 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.48657E+00 1950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.48059E+00 1975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.47481E+00 2000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.46925E+00 2025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.46387E+00 2050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.45868E+00 2075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.45366E+00 2100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.44880E+00 2125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.44408E+00 2150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.43952E+00 2175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.43510E+00 2200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.43083E+00 2225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.42669E+00 2250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.42268E+00 2275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.41878E+00 2300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.41499E+00 2325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.41132E+00 2350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.40774E+00 2375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.40427E+00 2400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.40086E+00 2425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.39754E+00 2450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.39429E+00 2475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.39113E+00 2500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.38805E+00 2525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.38505E+00 2550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.38209E+00 2575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.37919E+00 2600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.37636E+00 2625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.37359E+00 2650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.37088E+00 2675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.36824E+00 2700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.36565E+00 2725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.36311E+00 2750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.36064E+00 2775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.35822E+00 2800.01 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.35585E+00 2825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.35352E+00 2850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.35564E+00 2875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.35333E+00 2900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.35106E+00 2925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.34883E+00 2950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.34664E+00 2975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.34449E+00 3000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.34238E+00 3025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.34031E+00 3050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.33827E+00 3075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.33626E+00 3100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.33429E+00 3125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.33235E+00 3150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.33044E+00 3175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.32856E+00 3200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.32671E+00 3225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.32489E+00 3250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.32309E+00 3275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.32132E+00 3300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.31958E+00 3325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.31786E+00 3350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.31617E+00 3375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.31450E+00 3400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.31285E+00 3425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.31123E+00 3450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.30963E+00 3475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.30805E+00 3500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.30649E+00 3525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.30495E+00 3550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.30343E+00 3575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.30193E+00 3600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.30045E+00 3625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.29899E+00 3650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.29754E+00 3675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.29612E+00 3700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.29471E+00 3725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.29332E+00 3750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.29194E+00 3775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.29059E+00 3800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.28924E+00 3825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.28792E+00 3849.99 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.28660E+00 3875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.28531E+00 3900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.28403E+00 3925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.28276E+00 3950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.28150E+00 3975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.28026E+00 4000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.27904E+00 4025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.27782E+00 4050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.27662E+00 4075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.27544E+00 4100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.27426E+00 4125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.27310E+00 4150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.27195E+00 4175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.27081E+00 4200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.26969E+00 4225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.26857E+00 4250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.26747E+00 4275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.26638E+00 4300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.26529E+00 4325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.26422E+00 4350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.26316E+00 4375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.26211E+00 4400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.26107E+00 4425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.26004E+00 4450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.25902E+00 4475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.25801E+00 4500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.25701E+00 4525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.25602E+00 4550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.25504E+00 4575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.25407E+00 4600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.25311E+00 4625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.25215E+00 4650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.25121E+00 4675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.25027E+00 4700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.24934E+00 4725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.24842E+00 4750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.24751E+00 4775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.24660E+00 4800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.24571E+00 4825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.24482E+00 4850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.24394E+00 4875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.24307E+00 4900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.24220E+00 4925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.24135E+00 4950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.24050E+00 4975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.23965E+00 5000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0

Start date and time 07/15/16 13:22:41
AERSCREEN 11126

FMPU 2020 Operation

FMPU 2020 Operation

---------- DATA ENTRY VALIDATION ----------

** AREADATA **	METRIC	ENGLISH
Emission Rate:	0.0297 g/s	0.236 lb/hr
Area Height:	3.00 meters	9.84 feet
Area Source Length:	520.00 meters	1706.04 feet
Area Source Width:	310.00 meters	1017.06 feet
Vertical Dimension:	1.50 meters	4.92 feet
Model Mode:	URBAN	
Population:	139731	
Dist to Ambient Air:	1.0 meters	3. feet

** BUILDING DATA **

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations
Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

No flagpole receptors

No discrete receptors used

** METEOROLOGY DATA **

Min/Max Temperature: 250.0 / 310.0 K -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

 Dominant Surface Profile: Urban
 Dominant Climate Type: Average Moisture

 AERSCREEN output file:
 FMPU 2020 Operation.out

 *** AERSCREEN Run is Ready to Begin

 No terrain used, AERMAP will not be run
****

SURFACE CHARACTERISTICS & MAKEMET
Obtaining surface characteristics...

Using AERMET seasonal surface characteristics for Urban with Average Moisture

Season	Albedo	Bo	zo
Winter	0.35	1.50	1.000
Spring	0.14	1.00	1.000
Summer	0.16	2.00	1.000
Autumn	0.18	2.00	1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR   started 07/15/16 13:24:03
 ****

  Running AERMOD
 Processing Winter

Processing surface roughness sector 1

****
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   0

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  10

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  15

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  20

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   6
```

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 25

    ********   WARNING MESSAGES   ********

               *** NONE ***

****
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 30

    ********   WARNING MESSAGES   ********

               *** NONE ***

****
Processing wind flow sector   8

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 35

    ********   WARNING MESSAGES   ********

               *** NONE ***

 ****

  Running AERMOD
 Processing Spring

Processing surface roughness sector 1

****
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   0

    ********   WARNING MESSAGES   ********

               *** NONE ***

****
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   5

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  10

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  15

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  20

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   6

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   7
```

```
 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   8

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  35

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

 ****************************************

  Running AERMOD
 Processing Summer

Processing surface roughness sector  1

**************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  10
```

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 15

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 20

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 25

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 30

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 8

```
 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  35

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

 ******************************************

  Running AERMOD
 Processing Autumn

Processing surface roughness sector  1

**************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  10

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  15
```

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  20

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   6

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   8

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  35

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


FLOWSECTOR   ended 07/15/16 13:24:53

REFINE       started 07/15/16 13:24:53
```

AERMOD Finishes Successfully for REFINE stage 3 Winter sector 0

******** WARNING MESSAGES ********

*** NONE ***

REFINE ended 07/15/16 13:24:57

****
AERSCREEN Finished Successfully
With no errors or warnings
Check log file for details
****

Ending date and time 07/15/16 13:24:57

Concentration	Distance	Elevation	Season/Month	Zo sector	Date	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	HT	REF TA	HT
0.73703E+01	1.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.76255E+01	25.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.78917E+01	50.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.81464E+01	75.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.83864E+01	100.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.86136E+01	125.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.88285E+01	150.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.90327E+01	175.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.92266E+01	200.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.94113E+01	225.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.95877E+01	250.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.96992E+01	275.01	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
* 0.97059E+01	276.01	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.96462E+01	300.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.74439E+01	325.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.63081E+01	350.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.56747E+01	375.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.52695E+01	400.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.48400E+01	425.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.45066E+01	450.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.42198E+01	475.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.39685E+01	500.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.37511E+01	525.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.35809E+01	550.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.34237E+01	575.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.32772E+01	600.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0							

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.31419E+01 625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.30160E+01 650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.28972E+01 675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.27869E+01 700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.26841E+01 725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.25866E+01 750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.24949E+01 775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.24091E+01 800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.23277E+01 825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.22519E+01 850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.21789E+01 875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.21099E+01 900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.20455E+01 925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.19841E+01 950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.19257E+01 975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.18706E+01 1000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.18181E+01 1025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17677E+01 1050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17198E+01 1075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16745E+01 1100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16317E+01 1125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15913E+01 1150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15519E+01 1175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15142E+01 1200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14783E+01 1225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14443E+01 1250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14120E+01 1275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13812E+01 1300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13512E+01 1325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13227E+01 1350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12957E+01 1375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12699E+01 1400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12454E+01 1425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12216E+01 1450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11989E+01 1475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11769E+01 1500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11557E+01 1525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11355E+01 1550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11162E+01 1575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10978E+01 1600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10802E+01 1625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10633E+01 1650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10472E+01 1675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10317E+01 1700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10169E+01 1725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10024E+01 1750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.98824E+00 1775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.97462E+00 1800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.96155E+00 1825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.94900E+00 1850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.93694E+00 1875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.92535E+00 1900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.91420E+00 1925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.90347E+00 1950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.89314E+00 1975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.88319E+00 2000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.87360E+00 2025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.86435E+00 2050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.85524E+00 2075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.84640E+00 2100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.83785E+00 2125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.82959E+00 2150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.82161E+00 2175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.81388E+00 2200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.80640E+00 2225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.79900E+00 2250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.79183E+00 2275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.78487E+00 2300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.77812E+00 2325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.77157E+00 2350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.76521E+00 2375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.75902E+00 2400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.75301E+00 2425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.74716E+00 2450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.74146E+00 2475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.73592E+00 2500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.73052E+00 2525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.72510E+00 2550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.71982E+00 2575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.71466E+00 2600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.70963E+00 2625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.70471E+00 2650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.69991E+00 2675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.69522E+00 2700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.69063E+00 2725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.68614E+00 2750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.68175E+00 2775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.67745E+00 2800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.67324E+00 2825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.66911E+00 2850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.66507E+00 2875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.66110E+00 2900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.65722E+00 2925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.65335E+00 2950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.64952E+00 2975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.64578E+00 3000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.64209E+00 3025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.63847E+00 3050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.63492E+00 3075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.63143E+00 3100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.62799E+00 3125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.62461E+00 3150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.62129E+00 3175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.61802E+00 3200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.61480E+00 3225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.61157E+00 3250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.60838E+00 3275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.60523E+00 3300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.60213E+00 3325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.59907E+00 3350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.59606E+00 3375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.59309E+00 3400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.59016E+00 3425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.58728E+00 3450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.58443E+00 3475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.58164E+00 3500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.57891E+00 3525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.57622E+00 3550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.57353E+00 3575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.57085E+00 3600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.56820E+00 3625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.56559E+00 3650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.56300E+00 3675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.56046E+00 3700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.55797E+00 3725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.55550E+00 3750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.55306E+00 3775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.55066E+00 3800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.54828E+00 3825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.54593E+00 3850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.54360E+00 3875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.54131E+00 3900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.53903E+00 3925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.53679E+00 3950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.53457E+00 3975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.53237E+00 4000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.53020E+00 4025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.52806E+00 4050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.52593E+00 4075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.52381E+00 4100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.52169E+00 4125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.51959E+00 4150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.51751E+00 4175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.51546E+00 4200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.51342E+00 4225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.51141E+00 4250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.50942E+00 4275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.50744E+00 4300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.50549E+00 4325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.50356E+00 4350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.50165E+00 4375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.49973E+00 4400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.49781E+00 4425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.49591E+00 4450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.49403E+00 4475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.49216E+00 4500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.49031E+00 4525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.48849E+00 4550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.48667E+00 4575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.48488E+00 4600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.48310E+00 4625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.48134E+00 4650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.47959E+00 4675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.47786E+00 4700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.47615E+00 4725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.47445E+00 4750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.47277E+00 4775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.47111E+00 4800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.46947E+00 4825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.46785E+00 4850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.46624E+00 4875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.46464E+00 4900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.46304E+00 4925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.46146E+00 4950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.45989E+00 4975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.45833E+00 5000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0

FMPU 2025 Operation

Start date and time 07/15/16 13:28:03
AERSCREEN 11126

FMPU 2025 Operation

FMPU 2025 Operation

---------- DATA ENTRY VALIDATION ----------

** AREADATA **	METRIC	ENGLISH
Emission Rate:	0.0325 g/s	0.258 lb/hr
Area Height:	3.00 meters	9.84 feet
Area Source Length:	580.00 meters	1902.89 feet
Area Source Width:	300.00 meters	984.25 feet
Vertical Dimension:	1.50 meters	4.92 feet
Model Mode:	URBAN	
Population:	139731	
Dist to Ambient Air:	1.0 meters	3. feet

** BUILDING DATA **

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations
Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

No flagpole receptors

No discrete receptors used

** METEOROLOGY DATA **

Min/Max Temperature: 250.0 / 310.0 K -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

```
 Dominant Surface Profile: Urban
 Dominant Climate Type:    Average Moisture


 AERSCREEN output file:
 FMPU 2025 Operation.out


 *** AERSCREEN Run is Ready to Begin



 No terrain used, AERMAP will not be run
**************************************************

SURFACE CHARACTERISTICS & MAKEMET
Obtaining surface characteristics...

Using AERMET seasonal surface characteristics for Urban with Average Moisture
Season             Albedo     Bo       zo
Winter              0.35     1.50     1.000
Spring              0.14     1.00     1.000
Summer              0.16     2.00     1.000
Autumn              0.18     2.00     1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR   started 07/15/16 13:29:19
 ****************************************

  Running AERMOD
 Processing Winter

Processing surface roughness sector  1

**************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   0
```

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  10

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  15

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  20

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   6
```

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 25

    ********   WARNING MESSAGES   ********

               *** NONE ***

****
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 30

    ********   WARNING MESSAGES   ********

               *** NONE ***

 ****

  Running AERMOD
 Processing Spring

Processing surface roughness sector 1

****
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   0

    ********   WARNING MESSAGES   ********

               *** NONE ***

****
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   5

    ********   WARNING MESSAGES   ********

               *** NONE ***

****
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 10

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  15

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  20

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   6

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

 ******************************************

  Running AERMOD
 Processing Summer
```

```
Processing surface roughness sector  1

*************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


*************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


*************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  10

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


*************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  15

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


*************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  20
```

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   6

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

 ******************************************

  Running AERMOD
 Processing Autumn

Processing surface roughness sector  1

**************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   5

    ********   WARNING MESSAGES   ********
```

*** NONE ***

****
Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 10

******** WARNING MESSAGES ********

*** NONE ***

****
Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 15

******** WARNING MESSAGES ********

*** NONE ***

****
Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 20

******** WARNING MESSAGES ********

*** NONE ***

****
Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 25

******** WARNING MESSAGES ********

*** NONE ***

****
Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 30

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


FLOWSECTOR   ended 07/15/16 13:30:04

REFINE       started 07/15/16 13:30:04

 AERMOD Finishes Successfully for REFINE stage 3 Winter sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


REFINE       ended 07/15/16 13:30:08

 ********************************************
 AERSCREEN Finished Successfully
 With no errors or warnings
 Check log file for details
 ********************************************

 Ending date and time  07/15/16 13:30:09
```

Concentration	Distance	Elevation	Season/Month	Zo sector	Date	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	HT	REF TA	HT
0.77921E+01	1.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.80512E+01	25.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.83052E+01	50.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.85448E+01	75.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.87706E+01	100.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.89847E+01	125.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.91875E+01	150.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.93805E+01	175.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.95636E+01	200.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.97382E+01	225.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.99042E+01	250.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.10065E+02	275.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
* 0.10171E+02	300.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.97830E+01	325.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.77554E+01	350.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.66536E+01	375.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.59433E+01	400.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.54716E+01	425.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.51022E+01	450.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.47698E+01	475.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.44875E+01	500.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.42664E+01	525.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.40644E+01	550.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.38802E+01	575.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.37085E+01	600.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.35491E+01	625.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0							

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.34020E+01 650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.32656E+01 675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.31363E+01 700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.30171E+01 725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.29041E+01 750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.27998E+01 775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.27001E+01 800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.26065E+01 825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.25188E+01 850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.24355E+01 875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.23577E+01 900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.22845E+01 925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.22134E+01 950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.21467E+01 975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.20842E+01 1000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.20243E+01 1025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.19673E+01 1050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.19136E+01 1075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.18630E+01 1100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.18144E+01 1125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17672E+01 1150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17226E+01 1175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16803E+01 1200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16403E+01 1225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16024E+01 1250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15659E+01 1275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15308E+01 1300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14974E+01 1325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14655E+01 1350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14349E+01 1375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14058E+01 1400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13781E+01 1425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13514E+01 1450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13255E+01 1475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13009E+01 1500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12774E+01 1525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12550E+01 1550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12336E+01 1575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12131E+01 1600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11936E+01 1625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11749E+01 1650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11567E+01 1675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11388E+01 1700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11217E+01 1725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11053E+01 1750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10896E+01 1775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10746E+01 1800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10601E+01 1825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10462E+01 1850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10329E+01 1875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10201E+01 1900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10077E+01 1925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.99586E+00 1950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.98444E+00 1975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.97328E+00 2000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.96241E+00 2025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.95192E+00 2050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.94180E+00 2075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.93203E+00 2100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.92241E+00 2125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.91311E+00 2150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.90412E+00 2175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.89542E+00 2200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.88700E+00 2225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.87884E+00 2250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.87094E+00 2275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.86327E+00 2300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.85583E+00 2325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.84862E+00 2350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.84161E+00 2375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.83479E+00 2400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.82817E+00 2425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.82161E+00 2450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.81516E+00 2475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.80888E+00 2500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.80276E+00 2525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.79680E+00 2550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.79099E+00 2575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.78532E+00 2600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.77978E+00 2625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.77438E+00 2650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.76910E+00 2675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.76394E+00 2700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.75889E+00 2725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.75396E+00 2750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.74912E+00 2775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.74431E+00 2800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.73959E+00 2825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.73496E+00 2850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.73043E+00 2875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.72599E+00 2900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.72163E+00 2925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.71736E+00 2950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.71317E+00 2975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.70905E+00 3000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.70501E+00 3025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.70104E+00 3050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.69714E+00 3075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.69330E+00 3100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.68947E+00 3125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.68567E+00 3150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.68193E+00 3175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.67826E+00 3200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.67464E+00 3225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.67108E+00 3250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.66757E+00 3275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.66412E+00 3300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.66071E+00 3325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.65736E+00 3350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.65406E+00 3375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.65080E+00 3400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.64760E+00 3425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.64443E+00 3450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.64131E+00 3475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.63824E+00 3500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.63520E+00 3525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.63221E+00 3550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.62925E+00 3575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.62634E+00 3600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.62346E+00 3625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.62062E+00 3650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.61781E+00 3675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.61504E+00 3700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.61230E+00 3725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.60960E+00 3750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.60693E+00 3775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.60429E+00 3800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.60168E+00 3825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.59911E+00 3850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.59656E+00 3875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.59399E+00 3900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.59145E+00 3925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.58894E+00 3950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.58646E+00 3975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.58401E+00 4000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.58158E+00 4025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.57918E+00 4050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.57680E+00 4075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.57446E+00 4100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.57213E+00 4125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.56983E+00 4150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.56756E+00 4175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.56531E+00 4200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.56305E+00 4225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.56079E+00 4250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.55856E+00 4275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.55635E+00 4300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.55416E+00 4325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.55200E+00 4350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.54985E+00 4375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.54773E+00 4400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.54562E+00 4425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.54354E+00 4450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.54148E+00 4475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.53944E+00 4500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.53742E+00 4525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.53541E+00 4550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.53343E+00 4575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.53146E+00 4600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.52951E+00 4625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.52758E+00 4650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.52567E+00 4675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.52380E+00 4700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.52195E+00 4725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.52011E+00 4750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.51827E+00 4775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.51644E+00 4800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.51463E+00 4825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.51283E+00 4850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.51105E+00 4875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.50929E+00 4900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.50754E+00 4925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.50581E+00 4950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.50409E+00 4975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.50239E+00 5000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0

PEP Phase 1 & Phase 2

Start date and time 07/15/16 13:02:44
AERSCREEN 11126

PEP Phase 1 & Phase 2

PEP Phase 1 & Phase 2

---------- DATA ENTRY VALIDATION ----------

** AREADATA **	METRIC	ENGLISH
Emission Rate:	0.0410 g/s	0.325 lb/hr
Area Height:	3.00 meters	9.84 feet
Area Source Length:	450.00 meters	1476.38 feet
Area Source Width:	330.00 meters	1082.68 feet
Vertical Dimension:	1.50 meters	4.92 feet
Model Mode:	URBAN	
Population:	139731	
Dist to Ambient Air:	1.0 meters	3. feet

** BUILDING DATA **

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations
Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

No flagpole receptors

No discrete receptors used

** METEOROLOGY DATA **

Min/Max Temperature: 250.0 / 310.0 K -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

 Dominant Surface Profile: Urban
 Dominant Climate Type: Average Moisture

 AERSCREEN output file:
 PEP Phase 1 & Phase 2.out

 *** AERSCREEN Run is Ready to Begin

 No terrain used, AERMAP will not be run
****

SURFACE CHARACTERISTICS & MAKEMET
Obtaining surface characteristics...

Using AERMET seasonal surface characteristics for Urban with Average Moisture

Season	Albedo	Bo	zo
Winter	0.35	1.50	1.000
Spring	0.14	1.00	1.000
Summer	0.16	2.00	1.000
Autumn	0.18	2.00	1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR   started 07/15/16 13:05:41
 ****

  Running AERMOD
 Processing Winter

Processing surface roughness sector 1

****
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   0

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  10

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  15

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  20

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   6
```

```
 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   8

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  35

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   9

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  40

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

 ******************************************

  Running AERMOD
 Processing Spring

Processing surface roughness sector  1

**************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   0
```

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  10

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  15

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  20

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   6
```

```
 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   8

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  35

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   9

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  40

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

 ******************************************

  Running AERMOD
 Processing Summer

Processing surface roughness sector  1

**************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   0
```

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  10

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  15

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  20

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   6
```

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 25

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 30

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 8

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 35

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 9

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector 40

******** WARNING MESSAGES ********

*** NONE ***

****

Running AERMOD
Processing Autumn

Processing surface roughness sector 1

****

Processing wind flow sector 1

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 0

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  10

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  15

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  20

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   6
```

```
 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


***************************************************
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


***************************************************
Processing wind flow sector   8

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  35

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


***************************************************
Processing wind flow sector   9

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  40

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


FLOWSECTOR   ended 07/15/16 13:06:32

REFINE       started 07/15/16 13:06:32

 AERMOD Finishes Successfully for REFINE stage 3 Winter sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***
```

```
REFINE       ended 07/15/16 13:06:38

 ********************************************
 AERSCREEN Finished Successfully
 With no errors or warnings
 Check log file for details
 ********************************************

 Ending date and time  07/15/16 13:06:38
```

Concentration	Distance	Elevation	Season/Month	Zo sector	Date	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	HT	REF TA	HT
0.10594E+02	1.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.10996E+02	25.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.11393E+02	50.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.11769E+02	75.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.12132E+02	100.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.12478E+02	125.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.12808E+02	150.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.13130E+02	175.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.13445E+02	200.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.13748E+02	225.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.13942E+02	250.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
* 0.14145E+02	274.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.14132E+02	275.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.11064E+02	300.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.92815E+01	325.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.82915E+01	350.01	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.76451E+01	375.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.69965E+01	400.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.64675E+01	425.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.60177E+01	450.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.56294E+01	475.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.53039E+01	500.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.50170E+01	525.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.47596E+01	550.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.45293E+01	575.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.43199E+01	600.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.41360E+01 625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.39660E+01 650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.38180E+01 675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.36787E+01 700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.35491E+01 725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.34254E+01 750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.33097E+01 775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.31996E+01 800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.30971E+01 825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.29985E+01 850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.29049E+01 875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.28174E+01 900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.27335E+01 925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.26544E+01 950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.25794E+01 975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.25074E+01 1000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.24383E+01 1025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.23732E+01 1050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.23117E+01 1075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.22533E+01 1100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.21966E+01 1125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.21423E+01 1150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.20908E+01 1175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.20420E+01 1200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.19956E+01 1225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.19504E+01 1250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.19075E+01 1275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.18668E+01 1300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.18281E+01 1325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17906E+01 1350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17549E+01 1375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17203E+01 1400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16871E+01 1425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16554E+01 1450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16254E+01 1475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15964E+01 1500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15690E+01 1525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15427E+01 1550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15177E+01 1575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14932E+01 1600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14692E+01 1625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14463E+01 1650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14244E+01 1675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14036E+01 1700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13835E+01 1725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13641E+01 1750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13455E+01 1775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13278E+01 1800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13107E+01 1825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12944E+01 1850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12783E+01 1875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12628E+01 1900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12478E+01 1925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12335E+01 1950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12194E+01 1975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12058E+01 2000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11927E+01 2025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11801E+01 2050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11679E+01 2075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11561E+01 2100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11447E+01 2125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11337E+01 2150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11231E+01 2175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11128E+01 2200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11027E+01 2225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10928E+01 2250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10832E+01 2275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10739E+01 2300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10648E+01 2325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10561E+01 2350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10475E+01 2375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10393E+01 2400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10312E+01 2425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10234E+01 2450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10157E+01 2475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10081E+01 2500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10006E+01 2525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.99342E+00 2550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.98637E+00 2575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.97949E+00 2600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.97278E+00 2625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.96622E+00 2650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.95982E+00 2675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.95356E+00 2700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.94744E+00 2725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.94128E+00 2750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.93524E+00 2775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.92933E+00 2800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.92354E+00 2825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.91786E+00 2850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.91235E+00 2875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.90695E+00 2900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.90164E+00 2925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.89643E+00 2950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.89124E+00 2975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.88614E+00 3000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.88112E+00 3025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.87621E+00 3050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.87142E+00 3075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.86671E+00 3100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.86207E+00 3125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.85752E+00 3150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.85304E+00 3175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.84863E+00 3200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.84429E+00 3225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.83998E+00 3250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.83569E+00 3275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.83145E+00 3300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

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1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.82728E+00     3325.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.82317E+00     3350.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.81912E+00     3375.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.81513E+00     3400.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.81120E+00     3425.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.80732E+00     3450.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.80349E+00     3475.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.79972E+00     3500.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.79590E+00     3525.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.79213E+00     3550.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.78842E+00     3575.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.78475E+00     3600.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.78113E+00     3625.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.77755E+00     3650.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.77402E+00     3675.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.77053E+00     3700.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.76713E+00     3725.01     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.76377E+00     3750.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.76046E+00     3775.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.75718E+00     3800.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.75390E+00     3825.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.75066E+00     3850.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.74746E+00     3875.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.74429E+00     3900.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.74116E+00     3925.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.73806E+00     3950.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
1.000  1.50  0.35   0.50  10.0  310.0   2.0
  0.73500E+00     3975.00     0.00     Winter     0-360   10011001  -1.30  0.043 -9.000  0.020 -999.  21.    6.0
```

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.73197E+00 4000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.72897E+00 4025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.72598E+00 4050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.72302E+00 4075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.72009E+00 4100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.71720E+00 4125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.71433E+00 4150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.71150E+00 4175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.70872E+00 4200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.70597E+00 4225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.70325E+00 4250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.70056E+00 4275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.69789E+00 4300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.69525E+00 4325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.69264E+00 4350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.69005E+00 4375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.68749E+00 4400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.68496E+00 4425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.68244E+00 4450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.67996E+00 4475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.67749E+00 4500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.67501E+00 4525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.67254E+00 4550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.67010E+00 4575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.66767E+00 4600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.66527E+00 4625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.66290E+00 4650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.66054E+00 4675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.65821E+00 4700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.65590E+00 4725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.65361E+00 4750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.65131E+00 4775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.64901E+00 4800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.64673E+00 4825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.64447E+00 4850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.64223E+00 4875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.64000E+00 4900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.63780E+00 4925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.63562E+00 4950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.63345E+00 4975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.63131E+00 5000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0

Start date and time 07/15/16 12:55:00
AERSCREEN 11126

PEP Phase 1

PEP Phase 1

---------- DATA ENTRY VALIDATION ----------

** AREADATA **	METRIC	ENGLISH
Emission Rate:	0.750E-02 g/s	0.595E-01 lb/hr
Area Height:	3.00 meters	9.84 feet
Area Source Length:	430.00 meters	1410.76 feet
Area Source Width:	300.00 meters	984.25 feet
Vertical Dimension:	1.50 meters	4.92 feet
Model Mode:	URBAN	
Population:	139731	
Dist to Ambient Air:	1.0 meters	3. feet

** BUILDING DATA **

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations
Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

No flagpole receptors

No discrete receptors used

** METEOROLOGY DATA **

Min/Max Temperature: 250.0 / 310.0 K -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

```
 Dominant Surface Profile: Urban
 Dominant Climate Type:    Average Moisture


 AERSCREEN output file:
 PEP Phase 1.out


 *** AERSCREEN Run is Ready to Begin



 No terrain used, AERMAP will not be run
************************************************

SURFACE CHARACTERISTICS & MAKEMET
Obtaining surface characteristics...

Using AERMET seasonal surface characteristics for Urban with Average Moisture
Season             Albedo     Bo       zo
Winter              0.35     1.50     1.000
Spring              0.14     1.00     1.000
Summer              0.16     2.00     1.000
Autumn              0.18     2.00     1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR   started 07/15/16 13:00:23
 ******************************************

  Running AERMOD
 Processing Winter

Processing surface roughness sector  1

**************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   0
```

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 5

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 10

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 15

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 20

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 6

```
 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


***************************************************
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


***************************************************
Processing wind flow sector   8

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  35

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

 *****************************************

  Running AERMOD
 Processing Spring

Processing surface roughness sector  1

***************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


***************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   5
```

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 10

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 15

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 20

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 25

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 7

```
 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   8

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  35

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

 ****************************************

  Running AERMOD
 Processing Summer

Processing surface roughness sector  1

**************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  10
```

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  15

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  20

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   6

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   8
```

```
 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  35

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

 ******************************************

  Running AERMOD
 Processing Autumn

Processing surface roughness sector  1

**************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  10

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  15
```

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


*****************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  20

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


*****************************************************
Processing wind flow sector   6

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


*****************************************************
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


*****************************************************
Processing wind flow sector   8

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  35

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


FLOWSECTOR   ended 07/15/16 13:01:06

REFINE       started 07/15/16 13:01:06
```

```
 AERMOD Finishes Successfully for REFINE stage 3 Winter sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


REFINE       ended 07/15/16 13:01:12

 ********************************************
 AERSCREEN Finished Successfully
 With no errors or warnings
 Check log file for details
 ********************************************

 Ending date and time  07/15/16 13:01:12
```

Concentration	Distance	Elevation	Season/Month	Zo sector	Date	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	HT	REF TA	HT
0.21697E+01	1.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.22588E+01	25.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.23461E+01	50.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.24286E+01	75.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.25069E+01	100.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.25849E+01	125.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.26595E+01	150.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.27298E+01	175.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.27966E+01	200.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.28540E+01	225.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.28751E+01	250.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
* 0.28774E+01	253.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.23836E+01	275.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.19493E+01	300.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.17160E+01	325.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.15767E+01	350.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.14300E+01	375.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.13193E+01	400.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.12244E+01	425.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.11421E+01	450.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.10711E+01	475.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.10090E+01	500.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.95594E+00	525.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.90853E+00	550.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.86850E+00	575.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.83168E+00	600.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0							

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.79736E+00 625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.76512E+00 650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.73519E+00 675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.70714E+00 700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.68096E+00 725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.65610E+00 750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.63276E+00 775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.61111E+00 800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.59041E+00 825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.57087E+00 850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.55257E+00 875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.53496E+00 900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.51846E+00 925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.50299E+00 950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.48826E+00 975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.47398E+00 1000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.46054E+00 1025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.44788E+00 1050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.43593E+00 1075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.42436E+00 1100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.41340E+00 1125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.40301E+00 1150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.39303E+00 1175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.38358E+00 1200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.37454E+00 1225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.36581E+00 1250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.35752E+00 1275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.34965E+00 1300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.34218E+00 1325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.33506E+00 1350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.32830E+00 1375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.32172E+00 1400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.31532E+00 1425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.30923E+00 1450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.30341E+00 1475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.29790E+00 1500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.29258E+00 1525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.28752E+00 1550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.28270E+00 1575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.27809E+00 1600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.27368E+00 1625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.26936E+00 1650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.26522E+00 1675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.26124E+00 1700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.25738E+00 1725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.25368E+00 1750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.25012E+00 1775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.24672E+00 1800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.24345E+00 1825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.24031E+00 1850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.23729E+00 1875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.23438E+00 1900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.23159E+00 1925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.22888E+00 1950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.22623E+00 1975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.22367E+00 2000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.22121E+00 2025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.21883E+00 2050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.21654E+00 2075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.21432E+00 2100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.21218E+00 2125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.21010E+00 2150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.20805E+00 2175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.20608E+00 2200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.20416E+00 2225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.20230E+00 2250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.20050E+00 2275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.19876E+00 2300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.19706E+00 2325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.19542E+00 2350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.19382E+00 2375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.19225E+00 2400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.19070E+00 2425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.18919E+00 2450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.18772E+00 2475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.18628E+00 2500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.18489E+00 2525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.18353E+00 2550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.18220E+00 2575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.18092E+00 2600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17964E+00 2625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17840E+00 2650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17720E+00 2675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17602E+00 2700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17486E+00 2725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17373E+00 2750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17263E+00 2775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17155E+00 2800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17048E+00 2825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16942E+00 2850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16838E+00 2875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16737E+00 2900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16637E+00 2925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16539E+00 2950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16443E+00 2975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16348E+00 3000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16255E+00 3025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16164E+00 3050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16074E+00 3075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15983E+00 3100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15895E+00 3125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15808E+00 3150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15722E+00 3175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15637E+00 3200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15554E+00 3225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15472E+00 3250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15393E+00 3275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15314E+00 3300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15237E+00 3325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15161E+00 3350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15085E+00 3375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15010E+00 3400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14936E+00 3425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14864E+00 3450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14792E+00 3475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14721E+00 3500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14650E+00 3525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14581E+00 3550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14512E+00 3575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14444E+00 3600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14378E+00 3625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14312E+00 3650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14248E+00 3675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14184E+00 3700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14121E+00 3725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14059E+00 3750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13997E+00 3775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13937E+00 3800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13877E+00 3825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13817E+00 3850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13759E+00 3875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13701E+00 3900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13643E+00 3925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13585E+00 3950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13528E+00 3975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13472E+00 4000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13416E+00 4025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13361E+00 4050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13306E+00 4075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13252E+00 4100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13198E+00 4125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13145E+00 4150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13092E+00 4175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13039E+00 4200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12987E+00 4225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12935E+00 4250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12883E+00 4275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12833E+00 4300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12782E+00 4325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12732E+00 4350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12683E+00 4375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12634E+00 4400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12585E+00 4425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12538E+00 4450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12490E+00 4475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12443E+00 4500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12397E+00 4525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12352E+00 4550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12306E+00 4575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12261E+00 4600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12216E+00 4625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12171E+00 4650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12127E+00 4675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12084E+00 4700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12041E+00 4725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11998E+00 4750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11956E+00 4775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11914E+00 4800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11873E+00 4825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11832E+00 4850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11791E+00 4875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11751E+00 4900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11710E+00 4925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11670E+00 4950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11630E+00 4975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11590E+00 5000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0

Start date and time 07/15/16 13:07:27
AERSCREEN 11126

PEP Phase 2

PEP Phase 2

---------- DATA ENTRY VALIDATION ----------

** AREADATA **	METRIC	ENGLISH
Emission Rate:	0.0325 g/s	0.258 lb/hr
Area Height:	3.00 meters	9.84 feet
Area Source Length:	200.00 meters	656.17 feet
Area Source Width:	100.00 meters	328.08 feet
Vertical Dimension:	1.50 meters	4.92 feet
Model Mode:	URBAN	
Population:	139731	
Dist to Ambient Air:	1.0 meters	3. feet

** BUILDING DATA **

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations
Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

No flagpole receptors

No discrete receptors used

** METEOROLOGY DATA **

Min/Max Temperature: 250.0 / 310.0 K -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

```
 Dominant Surface Profile: Urban
 Dominant Climate Type:    Average Moisture


 AERSCREEN output file:
 PEP Phase 2.out


 *** AERSCREEN Run is Ready to Begin



 No terrain used, AERMAP will not be run
**************************************************

SURFACE CHARACTERISTICS & MAKEMET
Obtaining surface characteristics...

Using AERMET seasonal surface characteristics for Urban with Average Moisture
Season             Albedo     Bo       zo
Winter              0.35     1.50     1.000
Spring              0.14     1.00     1.000
Summer              0.16     2.00     1.000
Autumn              0.18     2.00     1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR   started 07/15/16 13:08:55
 ****************************************

  Running AERMOD
 Processing Winter

Processing surface roughness sector  1

**************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   0
```

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 2

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 5

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 10

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 15

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector 20

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 6

```
 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

 ****************************************

  Running AERMOD
 Processing Spring

Processing surface roughness sector  1

**************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  10
```

******** WARNING MESSAGES ********

*** NONE ***

****
Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 15

******** WARNING MESSAGES ********

*** NONE ***

****
Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 20

******** WARNING MESSAGES ********

*** NONE ***

****
Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 25

******** WARNING MESSAGES ********

*** NONE ***

****
Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 30

******** WARNING MESSAGES ********

*** NONE ***

****

Running AERMOD
Processing Summer

```
Processing surface roughness sector  1

**************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  10

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  15

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  20
```

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   6

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

 ******************************************

  Running AERMOD
 Processing Autumn

Processing surface roughness sector  1

**************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   5

    ********   WARNING MESSAGES   ********
```

*** NONE ***

****
Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 10

******** WARNING MESSAGES ********

*** NONE ***

****
Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 15

******** WARNING MESSAGES ********

*** NONE ***

****
Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 20

******** WARNING MESSAGES ********

*** NONE ***

****
Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 25

******** WARNING MESSAGES ********

*** NONE ***

****
Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 30

******** WARNING MESSAGES ********

*** NONE ***

FLOWSECTOR ended 07/15/16 13:09:15

REFINE started 07/15/16 13:09:15

AERMOD Finishes Successfully for REFINE stage 3 Winter sector 0

******** WARNING MESSAGES ********

*** NONE ***

REFINE ended 07/15/16 13:09:18

****
AERSCREEN Finished Successfully
With no errors or warnings
Check log file for details
****

Ending date and time 07/15/16 13:09:18

Concentration	Distance	Elevation	Season/Month	Zo sector	Date	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	HT	REF TA	HT
0.41456E+02	1.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.45474E+02	25.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.48853E+02	50.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.51685E+02	75.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.54577E+02	100.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
* 0.54672E+02	101.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.40624E+02	125.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.29735E+02	150.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.24204E+02	175.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.20346E+02	200.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.17430E+02	225.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.15175E+02	250.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.13375E+02	275.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.11916E+02	300.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.10720E+02	325.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.97053E+01	350.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.88553E+01	375.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.81218E+01	400.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.74916E+01	425.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.69379E+01	450.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.64506E+01	475.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.60226E+01	500.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.56439E+01	525.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.53018E+01	550.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.49922E+01	575.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	10.0	310.0	2.0
0.47132E+01	600.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0							

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.44611E+01 625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.42323E+01 650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.40233E+01 675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.38300E+01 700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.36527E+01 725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.34895E+01 750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.33390E+01 775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.31989E+01 800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.30686E+01 825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.29475E+01 850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.28347E+01 875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.27295E+01 900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.26299E+01 925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.25367E+01 950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.24492E+01 975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.23672E+01 1000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.22902E+01 1025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.22174E+01 1050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.21488E+01 1075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.20842E+01 1100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.20232E+01 1125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.19655E+01 1150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.19109E+01 1175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.18593E+01 1200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.18101E+01 1225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17634E+01 1250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17190E+01 1275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16769E+01 1300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16368E+01 1325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15985E+01 1350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15620E+01 1375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15272E+01 1400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14941E+01 1425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14626E+01 1450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14325E+01 1475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14038E+01 1500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13764E+01 1525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13502E+01 1550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13252E+01 1575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13013E+01 1600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12784E+01 1625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12564E+01 1650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12354E+01 1675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12153E+01 1700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11960E+01 1725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11775E+01 1750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11597E+01 1775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11427E+01 1800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11263E+01 1825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11105E+01 1850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11042E+01 1875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10893E+01 1900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10749E+01 1925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10611E+01 1950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10478E+01 1975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10350E+01 2000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10225E+01 2025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10106E+01 2050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.99898E+00 2075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.98779E+00 2100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.97696E+00 2125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.96648E+00 2150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.95634E+00 2175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.94650E+00 2200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.93696E+00 2225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.92772E+00 2250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.91874E+00 2275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.91002E+00 2300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.90156E+00 2325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.89332E+00 2350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.88532E+00 2375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.87753E+00 2400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.86995E+00 2425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.86256E+00 2450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.85537E+00 2475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.84835E+00 2500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.84151E+00 2525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.83483E+00 2550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.82832E+00 2575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.82195E+00 2600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.81573E+00 2625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.80965E+00 2650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.80371E+00 2675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.79789E+00 2700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.79220E+00 2725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.78663E+00 2750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.78117E+00 2775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.77583E+00 2800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.77059E+00 2825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.76545E+00 2850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.76041E+00 2875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.75547E+00 2900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.75062E+00 2925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.74585E+00 2950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.74118E+00 2975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.73659E+00 3000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.73207E+00 3025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.72764E+00 3050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.72327E+00 3075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.71899E+00 3100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.71477E+00 3125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.71062E+00 3150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.70653E+00 3174.99 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.70251E+00 3199.99 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.69855E+00 3225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.69466E+00 3250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.69082E+00 3275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.68704E+00 3300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.68331E+00 3325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.67963E+00 3350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.67602E+00 3375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.67244E+00 3400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.66892E+00 3425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.66545E+00 3450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.66203E+00 3475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.65865E+00 3500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.65532E+00 3525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.65203E+00 3550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.64878E+00 3575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.64557E+00 3600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.64241E+00 3625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.63928E+00 3650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.63620E+00 3675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.63315E+00 3700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.63014E+00 3725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.62716E+00 3750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.62422E+00 3775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.62132E+00 3800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.61845E+00 3825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.61561E+00 3849.99 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.61280E+00 3875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.61003E+00 3900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.60729E+00 3925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.60458E+00 3950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.60190E+00 3975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.59925E+00 4000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.59662E+00 4025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.59403E+00 4050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.59147E+00 4075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.58893E+00 4100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.58642E+00 4125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.58393E+00 4150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.58147E+00 4175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.57904E+00 4200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.57663E+00 4225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.57425E+00 4250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.57189E+00 4275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.56955E+00 4300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.56724E+00 4325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.56495E+00 4350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.56268E+00 4375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.56044E+00 4400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.55822E+00 4425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.55601E+00 4450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.55383E+00 4475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.55168E+00 4500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.54954E+00 4525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.54742E+00 4550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.54532E+00 4575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.54324E+00 4600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.54118E+00 4625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.53914E+00 4650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.53712E+00 4675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.53511E+00 4700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.53313E+00 4725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.53116E+00 4750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.52921E+00 4775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.52728E+00 4800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.52536E+00 4825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.52346E+00 4850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.52158E+00 4875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.51972E+00 4900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.51787E+00 4924.99 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.51604E+00 4950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.51422E+00 4975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.51242E+00 5000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0

Start date and time 07/15/16 13:16:31
AERSCREEN 11126

PEP Phase 2

PEP Phase 2

---------- DATA ENTRY VALIDATION ----------

** AREADATA **	METRIC	ENGLISH
Emission Rate:	0.0205 g/s	0.163 lb/hr
Area Height:	3.00 meters	9.84 feet
Area Source Length:	200.00 meters	656.17 feet
Area Source Width:	100.00 meters	328.08 feet
Vertical Dimension:	1.50 meters	4.92 feet
Model Mode:	URBAN	
Population:	139731	
Dist to Ambient Air:	1.0 meters	3. feet

** BUILDING DATA **

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations
Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

No flagpole receptors

No discrete receptors used

** METEOROLOGY DATA **

Min/Max Temperature: 250.0 / 310.0 K -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

```
 Dominant Surface Profile: Urban
 Dominant Climate Type:    Average Moisture


 AERSCREEN output file:
 PEP Phase 2-2.out


 *** AERSCREEN Run is Ready to Begin



 No terrain used, AERMAP will not be run
**********************************************

SURFACE CHARACTERISTICS & MAKEMET
Obtaining surface characteristics...

Using AERMET seasonal surface characteristics for Urban with Average Moisture
Season             Albedo     Bo       zo
Winter              0.35     1.50     1.000
Spring              0.14     1.00     1.000
Summer              0.16     2.00     1.000
Autumn              0.18     2.00     1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR   started 07/15/16 13:17:42
 ******************************************

  Running AERMOD
 Processing Winter

Processing surface roughness sector  1

**************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   0
```

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  10

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  15

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  20

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   6
```

```
 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

 ****************************************

  Running AERMOD
 Processing Spring

Processing surface roughness sector  1

**************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  10
```

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 15

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 20

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 25

******** WARNING MESSAGES ********

*** NONE ***

****

Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector 30

******** WARNING MESSAGES ********

*** NONE ***

****

Running AERMOD
Processing Summer

```
Processing surface roughness sector  1

**************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   5

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  10

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  15

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  20
```

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   6

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  25

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  30

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

 ******************************************

  Running AERMOD
 Processing Autumn

Processing surface roughness sector  1

**************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   0

    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   5

    ********   WARNING MESSAGES   ********
```

*** NONE ***

****
Processing wind flow sector 3

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 10

******** WARNING MESSAGES ********

*** NONE ***

****
Processing wind flow sector 4

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 15

******** WARNING MESSAGES ********

*** NONE ***

****
Processing wind flow sector 5

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 20

******** WARNING MESSAGES ********

*** NONE ***

****
Processing wind flow sector 6

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 25

******** WARNING MESSAGES ********

*** NONE ***

****
Processing wind flow sector 7

AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector 30

```
    ********   WARNING MESSAGES   ********

                ***  NONE  ***


FLOWSECTOR   ended 07/15/16 13:18:03

REFINE       started 07/15/16 13:18:03

 AERMOD Finishes Successfully for REFINE stage 3 Winter sector   0

    ********   WARNING MESSAGES   ********

                ***  NONE  ***


REFINE       ended 07/15/16 13:18:05

 ********************************************
 AERSCREEN Finished Successfully
 With no errors or warnings
 Check log file for details
 ********************************************

 Ending date and time  07/15/16 13:18:06
```

Concentration	Distance	Elevation	Season/Month	Zo sector	Date	H0	U*	W*	DT/DZ	ZICNV	ZIMCH
M-O LEN	Z0	BOWEN	ALBEDO	REF WS	HT	REF TA	HT				
0.26149E+02	1.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000
1.50	0.35	0.50	10.0	310.0	2.0								
0.28683E+02	25.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000
1.50	0.35	0.50	10.0	310.0	2.0								
0.30815E+02	50.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000
1.50	0.35	0.50	10.0	310.0	2.0								
0.32601E+02	75.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000
1.50	0.35	0.50	10.0	310.0	2.0								
0.34426E+02	100.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
* 0.34486E+02	101.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.25624E+02	125.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.18756E+02	150.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.15267E+02	175.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.12834E+02	200.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.10994E+02	225.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.95722E+01	250.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.84363E+01	275.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.75163E+01	300.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.67621E+01	325.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.61218E+01	350.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.55857E+01	375.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.51230E+01	400.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.47255E+01	425.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.43762E+01	450.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.40689E+01	475.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.37989E+01	500.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.35600E+01	525.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.33442E+01	550.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.31489E+01	575.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	
1.000	1.50	0.35	0.50	10.0	310.0	2.0							
0.29730E+01	600.00	0.00	Winter	0-360	10011001	-1.30	0.043	-9.000	0.020	-999.	21.	6.0	

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.28140E+01 625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.26696E+01 650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.25378E+01 675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.24158E+01 700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.23040E+01 725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.22011E+01 750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.21061E+01 775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.20178E+01 800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.19356E+01 825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.18592E+01 850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17881E+01 875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.17217E+01 900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16589E+01 925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.16000E+01 950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.15449E+01 975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14931E+01 1000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.14446E+01 1025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13987E+01 1050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13554E+01 1075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.13147E+01 1100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12762E+01 1125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12398E+01 1150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.12054E+01 1175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11728E+01 1200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11418E+01 1225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.11123E+01 1250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10843E+01 1275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10577E+01 1300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10325E+01 1325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.10083E+01 1350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.98526E+00 1375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.96333E+00 1400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.94244E+00 1425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.92254E+00 1450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.90355E+00 1475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.88550E+00 1500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.86821E+00 1525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.85169E+00 1550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.83590E+00 1575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.82080E+00 1600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.80635E+00 1625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.79252E+00 1650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.77927E+00 1675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.76658E+00 1700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.75441E+00 1725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.74274E+00 1750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.73153E+00 1775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.72077E+00 1800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.71043E+00 1825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.70049E+00 1850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.69646E+00 1875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.68708E+00 1900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.67803E+00 1925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.66932E+00 1950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.66092E+00 1975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.65281E+00 2000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.64499E+00 2025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.63743E+00 2050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.63013E+00 2075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.62307E+00 2100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.61624E+00 2125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.60963E+00 2150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.60323E+00 2175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.59702E+00 2200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.59101E+00 2225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.58517E+00 2250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.57951E+00 2275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.57401E+00 2300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.56867E+00 2325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.56348E+00 2350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.55843E+00 2375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.55352E+00 2400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.54874E+00 2425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.54408E+00 2450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.53954E+00 2475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.53511E+00 2500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.53080E+00 2525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.52659E+00 2550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.52248E+00 2575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.51846E+00 2600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.51454E+00 2625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.51070E+00 2650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.50695E+00 2675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.50329E+00 2700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.49970E+00 2725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.49618E+00 2750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
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0.48937E+00 2800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.48606E+00 2825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.48282E+00 2850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.47964E+00 2875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.47046E+00 2950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.46177E+00 3025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.45897E+00 3050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.45622E+00 3075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.44566E+00 3175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.44312E+00 3200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.44063E+00 3225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.43817E+00 3250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.42869E+00 3350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.41975E+00 3450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.41759E+00 3475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.41128E+00 3550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.40923E+00 3575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.40521E+00 3625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.40324E+00 3650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.40129E+00 3675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.39937E+00 3700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.39747E+00 3725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.39559E+00 3750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.39374E+00 3775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.39191E+00 3800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.39010E+00 3825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.38831E+00 3850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.38654E+00 3875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.38479E+00 3900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.38306E+00 3925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.38135E+00 3950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.37966E+00 3975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

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0.37799E+00 4000.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.37633E+00 4025.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.37470E+00 4050.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.37308E+00 4075.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.37148E+00 4100.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.36989E+00 4125.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.36833E+00 4150.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.36678E+00 4175.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.36524E+00 4200.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.36372E+00 4225.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.36222E+00 4250.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.36073E+00 4275.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.35926E+00 4300.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.35780E+00 4325.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.35635E+00 4350.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.35492E+00 4375.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.35351E+00 4400.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.35210E+00 4425.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.35072E+00 4450.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.34934E+00 4475.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.34798E+00 4500.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.34663E+00 4525.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.34529E+00 4550.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.34397E+00 4575.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.34266E+00 4600.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.34136E+00 4625.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.34007E+00 4650.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0

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0.33880E+00 4675.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.33753E+00 4700.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.33628E+00 4725.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.33504E+00 4750.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.33381E+00 4775.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.33259E+00 4800.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.33138E+00 4825.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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0.33019E+00 4850.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.32900E+00 4875.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.32782E+00 4900.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.32666E+00 4925.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.32550E+00 4950.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
1.000 1.50 0.35 0.50 10.0 310.0 2.0
0.32435E+00 4975.00 0.00 Winter 0-360 10011001 -1.30 0.043 -9.000 0.020 -999. 21. 6.0
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1.000 1.50 0.35 0.50 10.0 310.0 2.0

EXHIBIT B

KUNZMAN ASSOCIATES, INC.
OVER 40 YEARS OF EXCELLENT SERVICE

July 19, 2016

Mr. Justin Carlson, City Planner
CITY OF WALNUT
21201 La Puente Road
Walnut, CA 91789

Dear Mr. Carlson:

INTRODUCTION

The firm of Kunzman Associates, Inc. is pleased to provide this letter summarizing our peer review of the Mt. SAC 2015 Facilities Master Plan Update project in the City of Walnut. We have reviewed the Mt. SAC 2015 Facilities Master Plan Update & Physical Education Projects Traffic Impact Study Draft Report (Iteris, April 1, 2016) (hereinafter "the Traffic Impact Study") and offer the following comments.

COMMENT 1

General Comment: The Traffic Impact Study appendices only contain partial information as provided in the 2015 Facilities Master Plan Update and Physical Education Projects, Appendices – Volume 2 of 2 (June 2016). The complete set of appendices for the Traffic Impact Study should be included in the publicly available documentation.

COMMENT 2

General Comment: The project description indicates that the 2015 Facilities Master Plan Update, compared to the 2012 Facilities Master Plan, includes a redesign of the athletic facilities, relocation of the Public Transportation Center, expansion of the Wildlife Sanctuary and Open Space Area, a pedestrian bridge across Temple Avenue, a net increase in buildout square footage, and continuation of special annual events. The project description also indicates that the District is filing an application to host Olympic track and field trials in year 2020. It should be noted, the Traffic Impact Study only evaluates the traffic impacts associated with additional trips generated by a net increase in enrollment of 3,745 students by year 2020 and 7,153 students by year 2025 (compared to existing 2015 conditions). Traffic impacts associated with other aspects of the project description appear to have been evaluated in a separate document.

COMMENT 3

General Comment: The study area consisting of 19 intersections appears appropriate based on the project trip generation and trip distribution forecasts.

COMMENT 4

List of Figures: There are several inconsistencies between the titles shown in the List of Figures and the titles shown on the actual figures. For example, Figure 1 is shown as "Project Location and Study Intersections" in the List of Figures, but Figure 1 is titled "Study Area".

COMMENT 5

Figure 1, Study Area: Study intersection #2 is incorrectly shown at Creekside Drive/Amar Road instead of Lemon Avenue/Amar Road.

COMMENT 6

Pages 3/4, Roadway Configurations: The description for Amar Road/Temple Avenue states that on-street parking is prohibited; on-street parking is permitted along Temple Avenue between Mt. SAC Way and Bonita Avenue. Mountaineer Road terminates at Grand Avenue at the west end, not the east end as stated. Baker Parkway terminates at Grand Avenue at the east end, not the west end as stated.

COMMENT 7

Page 8, Table 2 – Intersection Level of Service Definitions - HCM Methodology: The source noted in the footnote of Table 2 appears to indicate the 2000 Highway Capacity Manual methodology was used to analyze intersections under Caltrans' jurisdiction. The latest version (2010) of the Highway Capacity Manual delay methodology should be used for delay calculations. Additionally, Table 2 should show the delay ranges for unsignalized intersections since the unsignalized study intersection of Lot F/Temple Avenue is also analyzed using the Highway Capacity Manual delay methodology.

COMMENT 8

Page 9, Table 3 – Intersection Significant Impact Criteria: It should be noted that Table 3 shows the thresholds of significance for corresponding Levels of Service based on "with project" conditions, whereas the Los Angeles County Public Works Traffic Impact Analysis Report Guidelines (January 1997) defines intersection thresholds of significance based on "pre-project" conditions. While inconsistent with the Los Angeles County guidelines, the thresholds of significance used in the Traffic Impact Study are more stringent based on the scenarios analyzed.

COMMENT 9

Figure 3 - Existing Intersection Lane Configuration: Nogales Street/Amar Road (#1) incorrectly shows one additional westbound through lane.

COMMENT 10

Figure 3 - Existing Intersection Lane Configuration: It should be noted that the eastbound approach at Grand Avenue/I-10 Eastbound Ramps (#4) has been restriped to consist of one left-turn lane and one right-turn lane.

COMMENT 11

Figure 3 - Existing Intersection Lane Configuration: It should be noted that the northbound approach at Grand Avenue/SR-60 Eastbound Ramps (#13) has been restriped to consist of two through lanes and one shared through/right-turn lane (identified as a mitigation measure); the southbound approach has been restriped to consist of one left-turn lane and three through lanes.

COMMENT 12

Figure 3 - Existing Intersection Lane Configuration: It should be noted, that the southbound approach at Valley Boulevard/Temple Avenue (#17) has been restriped to consist of one left-turn lane, one through lane, one shared through/right-turn lane, and one right-turn lane.

COMMENT 13

Page 13, Table 5 - 2020 Project Trip Generation: The inbound and outbound trips generated during both peak hours are incorrectly calculated based on the in/out percentages shown. The AM peak hour should equal 377 inbound trips and 72 outbound trips. The PM peak hour should equal 283 inbound trips and 166 outbound trips.

COMMENT 14

Page 13, Table 6 - 2025 Project Trip Generation: The inbound and outbound trips generated during both peak hours are incorrectly calculated based on the in/out percentages shown. The AM peak hour should equal 721 inbound trips and 137 outbound trips. The PM peak hour should equal 541 inbound trips and 317 outbound trips.

COMMENT 15

Figure 5, 2020 Project Trip Assignment: Several intersection turning movements appear incorrect based on the project trip distribution percentages shown on Figure 4. For example, based on Figure 4, it would appear that the northbound right-turn movement at Nogales Street/Amar Road (#1) should equal 15 AM peak hour trips (375 inbound AM peak hour project trips X 4% = 15). If the project trips have been improperly assigned to the study intersections, all subsequent analysis scenarios will also require revision.

COMMENT 16

Figure 6, 2025 Project Trip Assignment: Several intersection turning movements appear incorrect based on the project trip distribution percentages shown on Figure 4. For example, based on Figure 4, it would appear that the northbound right-turn movement at Nogales Street/Amar Road (#1) should equal 29 AM peak hour trips (715 inbound AM peak hour project trips X 4% = 29). If the project trips have been improperly assigned to the study intersections, all subsequent analysis scenarios will also require revision.

COMMENT 17

Page 22, first paragraph: The intersection of Grand Avenue/La Puente Road should indicate a significant impact during both the AM and PM peak hours.

COMMENT 18

Page 54, Congestion Management Program Analysis (CMP): The Los Angeles County Guidelines for CMP Transportation Impact Analysis (CMP Appendix D) state that projects must consider transit impacts as defined in Section D.8.4 even if no CMP arterial intersections or freeway locations are identified for analysis; however, the Traffic Impact Study does not provide an assessment of transit impacts.

CONCLUSIONS

Overall, the Traffic Impact Study identified significant traffic impacts at 13 of the 19 study intersections. Mitigation measures that would reduce the project's impact to a less than significant level were identified for the following seven study intersections:

- Nogales Street/Amar Road;
- Lemon Avenue/Amar Road;
- Grand Avenue/Amar Road;
- Grand Avenue/La Puente Road;
- Grand Avenue/SR-60 Eastbound Ramps;
- Mt. SAC Way/Temple Avenue; and
- Bonita Avenue/Temple Avenue.

The project's traffic impacts at the following six study intersections would remain significant and unavoidable:

- Grand Avenue/Mountaineer Road;
- Grand Avenue/San Jose Hills Road;
- Grand Avenue/Temple Avenue;
- Grand Avenue/Valley Boulevard;
- Grand Avenue/Baker Parkway; and
- Valley Boulevard/Temple Avenue.

Mr. Justin Carlson, City Planner
CITY OF WALNUT
July 19, 2016

The revisions required to correct some of the comments noted in this letter, particularly those regarding the project trip generation and trip assignment, have the potential to alter the findings of significance. The Traffic Impact Study should be revised to ensure accuracy of the findings.

It has been a pleasure to service your needs on this project. Should you have any questions or if we can be of further assistance, please do not hesitate to call at (714) 973-8383.

Sincerely,

KUNZMAN ASSOCIATES, INC.

Giancarlo Ganddini, T.E.
Manager of Traffic Engineering

JN 6619

KUNZMAN ASSOCIATES, INC.

Carl Ballard, LEED GA
Principal

THE CITY OF
POMONA

Planning Division

Development & Neighborhood
Services Department

July 28, 2016

Mikaela Klein
1100 North Grand Avenue
Walnut, CA 91789-5611

Dear Ms. Klein:

This letter is in response to the Draft EIR for the Mr. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects SEIR. The City of Pomona would request that the traffic study include the following as outlined on Figure 4 Project Trip Distribution:

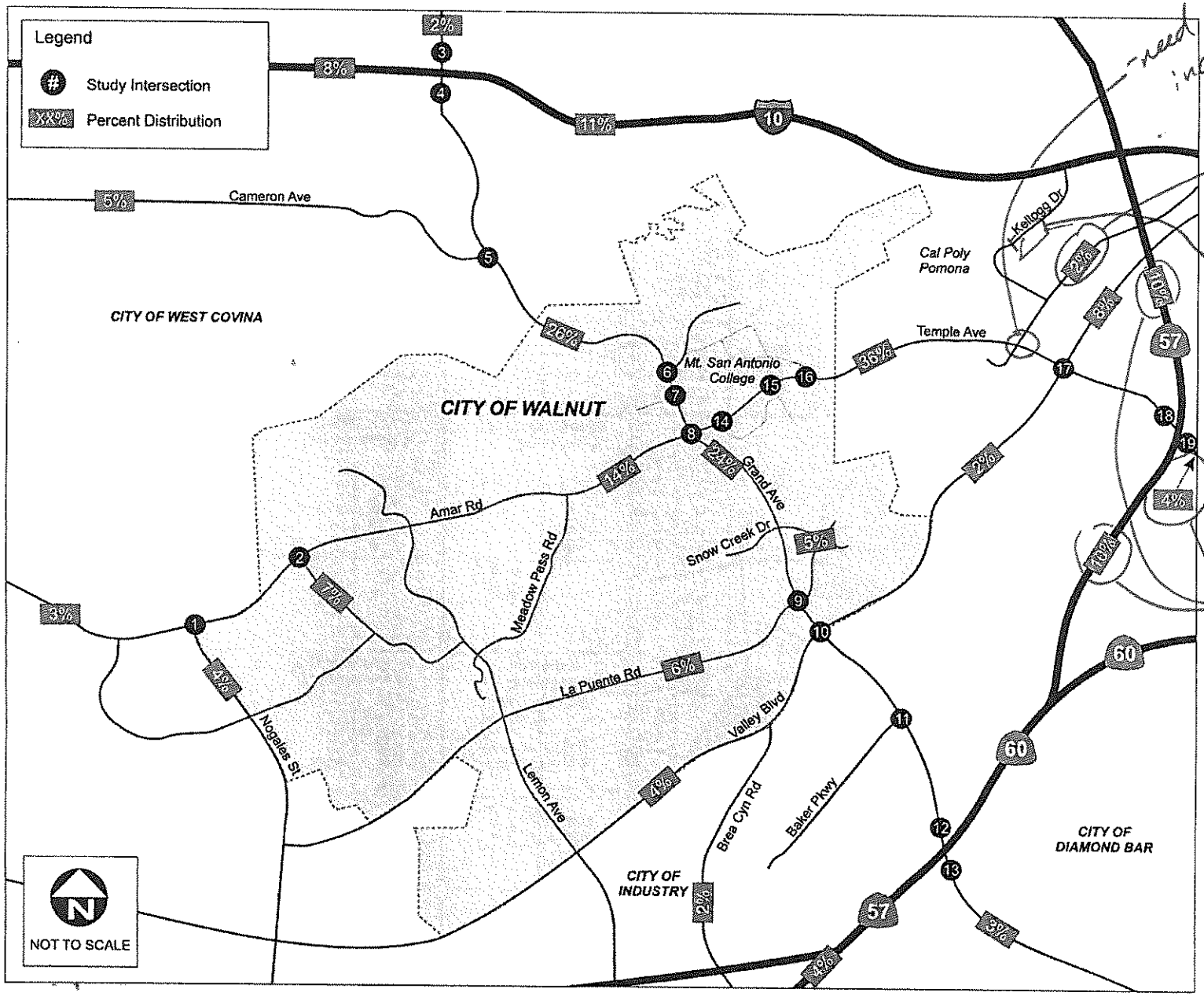
1) Should include the intersection of South Campus and Temple Avenue as a study intersection.
2) Include a percentage of traffic associated with Kellogg Drive as a high percentage of vehicles come exit 10 Fwy eastbound and continue to Kellogg Dr.
3) South Campus volume percentage distribution appears to be too low and not realistic.
4) Provide data or methodology to justify the percentage trip distribution along 57 Fwy of 10 percent northbound and 10 percent southbound.
5) Justify 4 percent distribution from Temple Ave east of 57 Fwy.

We appreciate the opportunity to review the Draft EIR for this project and look forward to discussing with the project traffic engineer the above requested information and how this will effect roadway impacts in the City of Pomona. Please call the Planning Division at (909) 620-2191 to discuss any further questions or issues related to this response to the Draft EIR.

Sincerely,

Brad Johnson
Planning Manager

CC: Rene Guerrero, City Engineer



need to include S. Campus

too low not realistic.

high & comes off 10-EB @ Kellogg

Questionable (too low) any data to support these %.

ITERIS

Mt San Antonio College
2015 Facilities Master Plan Update / Physical Education Projects
Traffic Impact Analysis

FIGURE 4
Project Trip Distribution

File Name: Mt SAC Community College - Vehicle Occupancy Count
Start Date: 5/25/2016
Start Time: 7:30:00 AM
Site Code: 00000053
Comment 1: City of Walnut
Comment 2: N/S:
Comment 3: E/W:
Comment 4: Weather: Clear

LOT B

Start Time	1 Person	2 People	3 People	4 People	5 People
07:30 AM	30	2	0	0	0
07:45 AM	85	3	0	0	0
08:00 AM	48	6	0	0	0
08:15 AM	28	4	1	0	0
TOTAL	191	15	1	0	0
		92.3%			

LOT D

Start Time	1 Person	2 People	3 People	4 People	5 People
08:30 AM	12	0	0	0	0
08:45 AM	12	2	0	0	0
09:00 AM	8	2	0	0	0
09:15 AM	18	5	0	0	0
TOTAL	50	9	0	0	0
		84.7%			

90.6%

COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294

DARYL L. OSBY
FIRE CHIEF
FORESTER & FIRE WARDEN

July 19, 2016

Mikaela Klein, Senior Facilities Planner
Mt. San Antonio College
Facilities Planning and Development
1100 North Grand Avenue
Walnut, CA 91789

Dear Ms. Klein:

NOTICE OF COMPLETION ENVIRONMENTAL IMPACT REPORT, "MT. SAN ANTONIO COLLEGE 2015 FACILITIES MASTER PLAN UPDATE AND PHYSICAL EDUCATION PROJECTS," SERVES SIXTEEN CITIES AND UNINCORPRATED AREAS IN THE EASTERN PART, THE INCREASED ENROLLMENT OF 3,745 STUDENTS WILL RESULT IN AN INCREASE OF 4,606 TRIPS IN 2020, UP TO 20 LOCATIONS WILL BE ANALYZED AND PARKING DEMAND AND SUPPLY PROJECTED, WALNUT, FFER 201600095

The Notice of Completion Environmental Impact Report has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department. The following are their comments:

PLANNING DIVISION:

1. We have no comments.

LAND DEVELOPMENT UNIT:

The Land Development Unit comments are only general requirements. Specific fire and life safety requirements will be addressed during the review for building and fire plan check phases. There may be additional requirements during this time.

The development of this project must comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows and fire hydrants.

Access Requirements

1. The proposed development will require multiple ingress/egress access for the circulation of traffic and emergency response issues.

2. All on-site Fire Department vehicular access roads shall be labeled as "Private Driveway and Fire Lane" on the site plan along with the widths clearly depicted on the plan. Labeling is necessary to assure the access availability for Fire Department use. The designation allows for appropriate signage prohibiting parking.

    a. The Fire Apparatus Access road shall be cross-hatch on the site plan with the width clearly noted on the plan.

3. Every building constructed shall be accessible to Fire Department's apparatus by way of access roadways, with an all-weather surface of not less than the prescribed width. The roadway shall be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building.

4. Fire Apparatus Access roads must be installed and maintained in a serviceable manner prior to and during the time of construction.

5. The edge of the Fire Apparatus Access road shall be located a minimum of five feet from the building or any projections there from.

6. The Fire Apparatus Access roads and designated fire lanes shall be measured from flow line to flow line.

7. The dimensions of the approved Fire Apparatus Access roads shall be maintained as originally approved by the fire code official.

8. Provide a minimum unobstructed width of 28 feet, exclusive of shoulders and an unobstructed vertical clearance "clear to sky" Fire Department vehicular access to within 150 feet of all portions of the exterior walls of the first story of the building, as measured by an approved route around the exterior of the building when the height of the building above the lowest level of the Fire Department vehicular access road is more than 30 feet high, or the building is more than three stories. The access roadway shall be located a minimum of 15 feet and a maximum of 30 feet from the building, and shall be positioned

parallel to one entire side of the building. The side of the building on which the aerial Fire Apparatus Access road is positioned shall be approved by the fire code official.

9. If the Fire Apparatus Access road is separated by island, provide a minimum unobstructed width of 20 feet, exclusive of shoulders and an unobstructed vertical clearance "clear to sky" Fire Department vehicular access to within 150 feet of all portions of the exterior walls of the first story of the building, as measured by an approved route around the exterior of the building.

10. Dead-end Fire Apparatus Access roads in excess of 150 feet in length shall be provided with an approved Fire Department turnaround. Include the dimensions of the turnaround with the orientation of the turnaround shall be properly placed in the direction of travel of the access roadway.

11. Fire Department Access roads shall be provided with a 32-foot centerline turning radius. Indicate the centerline inside and outside turning radii for each change in direction on the site plan

12. Fire Apparatus Access roads shall be designed and maintained to support the imposed load of fire apparatus weighing 75,000lbs, and shall be surfaced so as to provide all-weather driving capabilities. Fire Apparatus Access roads having a grade of 10 percent or greater shall have a paved or concrete surface.

13. Provide approved signs or other approved notices or markings that include the words "NO PARKING - FIRE LANE." Signs shall have a minimum dimension of 12 inches wide by 18 inches high and have red letters on a white reflective background. Signs shall be provided for Fire Apparatus Access roads to clearly indicate the entrance to such road or prohibit the obstruction thereof and at intervals, as required by the Fire Inspector.

14. A minimum five-foot wide approved firefighter access walkway leading from the Fire Department access road to all required openings in the building's exterior walls shall be provided for firefighting and rescue purposes. Clearly identify firefighter walkway access routes on the site plan. Indicate the slope and walking surface material. Clearly show the required width on the site plan.

15. Fire Apparatus Access roads shall not be obstructed in any manner, including by the parking of vehicles or the use of traffic calming devices, including but not limited to, speed bumps or speed humps. The minimum widths and

clearances established in Fire Code Section 503.2.1 shall be maintained at all times.

16. Traffic Calming Devices, including but not limited to, speed bumps and speed humps, shall be prohibited unless approved by the fire code official.

17. Security barriers, visual screen barriers, or other obstructions shall not be installed on the roof of any building in such a manner as to obstruct firefighter access or egress in the event of fire or other emergency. Parapets shall not exceed 48 inches from the top of the parapet to the roof surface on more than two sides. Clearly indicate the height of all parapets in a section view.

18. Approved building address numbers, building numbers, or approved building identification shall be provided and maintained so as to be plainly visible and legible from the street fronting the property. The numbers shall contrast with their background be Arabic numerals or alphabet letters and be a minimum of four inches high with a minimum stroke width of 0.5 inch.

19. Multiple residential and commercial buildings having entrances to individual units not visible from the street or road shall have unit numbers displayed in groups for all units within each structure. Such numbers may be grouped on the wall of the structure or mounted on a post independent of the structure and shall be positioned to be plainly visible from the street or road as required by Fire Code 505.3 and in accordance with Fire Code 505.1.

20. Gate Requirements: The method of gate control shall be subject to review by the Fire Department prior to approval. All gates to control vehicular access shall be in compliance with the following:

    a. Any single-gated opening used for ingress and egress shall be a minimum of 28 feet in-width clear-to-sky.

    b. Any divided gate opening (when each gate is used for a single direction of travel i.e., ingress or egress) shall be a minimum width of 20 feet clear-to-sky.

    c. Gates and/or control devices shall be positioned a minimum of 50 feet from a public right-of-way and shall be provided with a turnaround having a minimum of 32 feet of turning radius. If an intercom system is used, the 50 feet shall be measured from the right-of-way to the intercom control device.

a. Plans showing underground piping for private on-site fire hydrants shall be submitted to the Sprinkler Plan Check Unit for review and approval prior to installation.

6. An approved automatic fire sprinkler system is required for the proposed buildings within this development. Submit design plans to the Fire Department Sprinkler Plan Check Unit for review and approval prior to installation.

For any questions regarding the report, please contact either FPEA Claudia Soiza, Claudia.Soiza@fire.lacounty.gov, or Wally Collins, Wally.Collins@Fire.lacounty.gov, at (323) 890-4243.

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

1. The statutory responsibilities of the County of Los Angeles Fire Department's Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources, and the County Oak Tree Ordinance. Potential impacts in these areas should be addressed.

HEALTH HAZARDOUS MATERIALS DIVISION:

1. The Health Hazardous Materials Division (HHMD) of the Los Angeles County Fire Department has no comment regarding the project at this time.

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

KEVIN T. JOHNSON, ACTING CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

KTJ:cc

Enclosure

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

August 8, 2016

Mikaela Klein
Senior Facilities Planner
Mt. San Antonio Community College District
1100 North Grand Avenue
Walnut, California 91789-1399
Mikaela.klein@mtsac.edu

Subject: Mt. San Antonio College Master Plan Update (PROJECT)
DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT (DSEIR)
SCH# 2002041161

Dear Ms. Klein:

The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of a Draft Supplemental Environmental Impact Report (SEIR) from Mt. San Antonio Community (Mt. SAC) College District for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1] CDFW previously submitted comments in response to the Notice of Preparation of the SEIR.

CDFW ROLE

CDFW is California's **Trustee Agency** for state fish and wildlife resources, and holds those resources in trust by statute for all the people of the State. [Fish & Game Code, §§ 711.7, subdivision (a) & 1802; Public Resources Code, § 21070; CEQA Guidelines § 15386, subdivision (a)]) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Public Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 *et seq.*) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & Game Code, § 2050 *et seq.*), related authorization as provided by the Fish and Game Code will be required.

[1] CEQA is codified in the California Public Resources Code in § 21000 *et seq*. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with § 15000.

PROJECT DESCRIPTION

Mt. SAC has proposed a 2015 Facilities Master Plan Update (FMPU). Three proposed elements of the Mt. SAC 2012 Master Plan Update occur in areas that have not been previously developed. These elements, covering approximately 13-acres of the 420-acre campus, include an irrigation well site, a detention basin upgrade, and fire academy relocation.

Mt. SAC is located in the San Gabriel Valley in southeast Los Angeles County, California. The college is situated near the intersection of North Grand and Temple Avenues in the City of Walnut. It is within un-sectioned land of the Puente Land Grant, Township 2 South, Range 9 East on the U.S. Geological Survey (USGS) 7.5-minute San Dimas quadrangle map.

IMPACT ANALYSES: BIOLOGICAL RESOURCES

Wildlife (W)

Comment W-1:

The SEIR addresses the potential impacts on the state species of special concern Burrowing Owl (*Athene cunicularia*) but does not address the federally-listed (threatened) coastal California gnatcatcher (*Polioptila californica californica*)[2] or the state species of special concern coastal cactus wren *(Campylorhynchus Brunneicapillus sandiegensis)*, both of which are known to occur onsite and rely on coastal sage scrub and cactus scrub habitat that are present onsite. As indicated in the Biological Technical Report (Helix, 2016), the coastal California gnatcatcher was observed on coastal sage scrub on Mt. SAC Hill in May 2012 and 2015. Similarly, coastal cactus wrens have been heard vocalizing in the coastal sage scrub in May and June 2012. These observations are acknowledged by the study to "indicate that all of the Venturan coastal sage scrub in the study area is occupied by the species." Based on the information contained in the Biological Technical Report, CDFW recommends the final SEIR include a full analysis of the direct and indirect impacts to these species, and any mitigation required to offset potentially significant impacts.

Comment W-2:

The MMP, section BIO-03, currently provided as follows: "[p]rior to grading within areas of Venturan Coastal Sage Scrub, the college shall identify replacement 2:1 acreage." Based on documented use of the site by California gnatcatcher and coastal cactus wren, CDFW does not concur that a habitat mitigation ratio of 2:1 is sufficient offset Project and cumulative impacts to coastal sage scrub. Coastal sage scrub habitat, including "lower quality", supports dispersal, feeding, and refuge for both the California gnatcatcher and cactus wren during various life

[2] Coastal California Gnatcatcher (*Polioptila californica californica*). Coastal California gnatcatcher is an ESA-listed species and a California Species of Special Concern (SSC) that has been documented in the Project area and may occur on the Project site. Patches of coastal sage scrub in the Project area provide dispersal habitat and potential nesting habitat for coastal California gnatcatcher. Patches of coastal sage scrub also provide refugia from habitat loss resulting from wildfire, brush clearing fuel modification activities, and other disturbances resulting in habitat degradation.

stages (e.g., breeding, foraging, and dispersal) and refugia during wildfire events. The direct and indirect impacts to onsite and adjacent coastal sage scrub should be further evaluated in the final SEIR. The analysis should include use by California gnatcatcher and cactus wren based on appropriate surveys conducted during the appropriate time of year. For coastal sage scrub occupied by sensitive species, CDFW recommends a minimum mitigation ratio of 3:1. Additional mitigation may be required for impacts to occupied California gnatcatcher by the United State Fish and Wildlife Service (USFWS) pursuant to the federal Endangered Species Act. CDFW recommends that Mt. SAC contact the USFWS to discuss potential impacts to the California gnatcatcher from the proposed Project.

Comment W-3:

Mitigation Measure BIO-05 on Page 6 of the MMP states that "[t]he College shall adopt a Land Management Plan to minimize impacts on California Black Walnut trees on campus. Any walnut trees with a diameter of six inches four-feet above ground damaged or removed by construction activities shall be replaced according to the standards in Table 4 of the Mt. SAC California Black Walnut Management Plan (Helix Environmental Planning, September 2012). Replacement habitat shall be completed prior to project completion. The required mitigation acreage for replacement walnut trees is 2.02-acres. The replacement specimens shall be preserved, maintained and monitored for a period of five years to ensure viability."

Southern California black walnut (*Juglans californica*) trees found on the Project site should be considered as a locally and regional rare, unique and/or uncommon (and/or) regionally rare plant species; that is, species that are rare or uncommon in a local or regional context, as such, would meet the CEQA definition of a rare species (CEQA §Sec 15380). CEQA directs that a special emphasis be placed on "environmental resources" that are rare or unique to the region and would be affected by a proposed project [CEQA §15125 (c)] or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G). Public agencies have a duty under the CEQA to avoid or minimize environmental damage and to give major consideration to preventing environmental damage (CEQA §Section 15021). Southern California black walnuts are California Native Plant Society (CNPS) Rank 4.2 and are considered locally sensitive species. In addition, the southern California black walnut is designated S3, which is considered vulnerable in the state due to a restricted range with relative few populations. CDFW would consider loss of on-site populations of southern California black walnut to be potentially significant from a project and cumulative perspective under the CEQA. Accordingly, impacts to these locally rare resources and adequate mitigation measures that reduce the impacts to less than significant should be described and incorporated into the final SEIR.

CDFW acknowledges that the SEIR quantifies the impact acreage associated with southern California black walnut; however, the final EIR should quantify the actual number of tree impacted and size of each tree. For example, larger southern California black walnut trees may be over 100 years old and can be used by wildlife species (e.g., raptors) and are not readily replaced, which would be difficult to mitigate to a level of less than significant using only a habitat-based approach. CDFW recommends the final SEIR clarify total individual trees by size, anticipated to be permanently impacted; analyze the significance of impacts; and provide adequate mitigation, if necessary, to reduce Project and cumulative impacts to less than significant. Feasible mitigation could include long-term protection in place; on-site nuts/seed

collection for an on- or off-site mitigation enhancement/restoration area suitable to the species; and/or off-site land acquisition of similar or better habitat with corresponding number of trees (size and ages), all to be preserved with the necessary permanent land use protection (e.g., conservation easement), management and secured endowment funds.

CDFW also has concerns about the length of the proposed monitoring period for the planted southern California black walnut trees. The SEIR in BIO-03 of the MMP states that "these trees should be planted in the approved California Black Walnut Management Plan area and preserved, maintained and monitored for 2 years." In BIO-05 it states that "[t]he replacement specimens shall be preserved, maintained and monitored for a period of five years to ensure viability." The final SEIR should be revised to achieve consistency between BIO-03 and BIO-05. Moreover, for larger/older southern California black walnut trees that would be impacted, CDFW recommends that a minimum of 10 years of monitoring be provided for tree plantings and site restoration to ensure that impacts would be reduced to a level of less than significant under CEQA.

Wetland Habitat and Buffers (WHB)

Comment WHB-1

The SEIR includes a discussion of impacts to state and federal wetland resources (provide reference to discussion in the SEIR). However, the SEIR does not appear to adequately analyze the wetland buffer proposed at the edge of the wetland along Snow Creek and future construction areas. Wetland buffers are crucial for the current and long-term protection and function of riparian habitat, especially in urban areas. They provide numerous functions, including: (a) expansion of the habitat's biological values (e.g., buffers are an integral part of the complex riparian ecosystems that provide food and habitat for the fish and wildlife); (b) protection from direct disturbance by humans and domestic animals; and, (c) reduction of edge effects[3] from urbanized uses including artificial noise and light, line-of-sight disturbances, invasive species, and anthropogenic nutrients and sediments.

Mitigation Measure BIO-08 on Page 7 of the MMP states "[p]ermanent development adjacent to any future wetland mitigation areas shall incorporate a 25-foot buffer during final project design. If un-vegetated, the buffer shall be planted with non-invasive species that are compatible with the adjacent wetland mitigation area habitat. A qualified biologist shall review the final landscape plans for the buffer area to conform that no species on the California Invasive Council (Cal-IPC) list are present in the plan."

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[3] Edge effects are defined as undesirable anthropogenic disturbances beyond urban boundaries into potential reserve habitat (Kelly and Rotenberry 1993). Edge effects, such as disturbance by humans and non-native predators (pets), exotic ants, trampling, noise, and lighting, and decreases in avian productivity (Andren and Angelstam 1988), are all documented effects that have negative impacts on sensitive biological resources in southern California. Surrounding natural habitat could be permanently destroyed by human or domestic animal encroachment, trampling, bushwhacking, and frequent fires; therefore, development and open space configurations should minimize adverse edge effects (Soule 1991).

The Fish and Game Commission Policy on the *Retention of Wetland Acreage and Habitat Values* states, "[b]uffers should be of sufficient width and should be designed to eliminate potential disturbance of fish and wildlife resources from noise, human activity, feral animal intrusion, and any other potential sources of disturbance." The U.S. Corps of Engineers suggest that narrow strips of 100 feet may be adequate to provide many of the functions cited above (USACE 1991). Wetland buffers should be measured starting at the outside edge of the wetland habitat (rather than the watercourse/streambed centerline). Moreover, previous studies of upland buffers used to protect and maintain functions of wetlands have concluded that, "[b]uffers of less than 50-feet were [found to be] more susceptible to degradation by human disturbance. In fact, no buffers of 25-feet or less were functioning to reduce disturbance to the adjacent wetlands" (McElfish et al 2008). CDFW recommends that a minimum 100-foot buffer be provided for all on-site wetlands (including proposed mitigation areas) and that the buffer be measured from the outside edge of the wetland habitat to reduce direct and indirect wetland impacts to a level of less than significant. Appropriate passive uses (e.g., trails, fuel clearing) may be acceptable on the outer limits of the buffer (e.g., last 15-feet) if appropriately located/managed and no sensitive species are known to utilize the wetland areas.

Mitigation Measure BIO-11 on Page 8 of the MMP states "[a] 25-foot buffer shall be incorporated into the project design for the Fire Training Academy to protect future wetland mitigation areas along Snow Creek." As indicated above, the proposed 25-foot buffer would not be adequate to protect the current and long-term functions of the adjacent wetland habitat. Furthermore, it is unclear exactly what type of activities will take place at this academy, such as the use of water and fire retardant chemicals for related activities. For these reasons, CDFW recommends that a minimum 100-foot buffer be provided for the buffer adjacent to the Fire Training Academy and that the buffer be measured from the outside edge of the wetland habitat to reduce direct and indirect wetland impacts to a level of less than significant.

Comment WHB-2

The SEIR concludes that "the scrub does not qualify as jurisdictional wetland because it occurs within a constructed basin fed by pipes and a riprap drainage channel. It is a stormwater facility, not a lake or stream."

CDFW has regulatory authority with regard to activities occurring in streams and/or lakes that could adversely affect any fish or wildlife resource. For any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) or a river or stream or use material from a streambed, the Project applicant (or "entity") must provide written notification to CDFW pursuant to Section 1602 of the Fish and Game Code. Based on this notification and other information, CDFW then determines whether a Lake and Streambed Alteration (LSA) Agreement is required. CDFW's issuance of an LSA Agreement is a project subject to CEQA. To facilitate issuance of a LSA Agreement, the final SEIR should fully identify the potential impacts to the lake, stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the LSA Agreement. Early consultation is recommended, since modification of the Project may be required to avoid or reduce impacts to state fish and wildlife resources. Lack of such analysis in the final SEIR could preclude CDFW from relying on the Lead Agency's analysis to issue a LSA Agreement without CDFW first conducting its own, separate Lead Agency subsequent or supplemental analysis for the Project.

CDFW staff conducted a site visit with Mt. SAC and Helix Environmental Planning on August 5, 2016. Based on the inspection of the constructed basin, CDFW recommends the applicant notify CDFW prior to the final SEIR to ensure all Project impacts and mitigation measures are incorporated into the Mitigation Monitoring and Reporting Plan for the Project.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations [Public Resources Code, § 21003, subdivision (e)]. Accordingly, CDFW recommends that any special status species and natural communities detected during Project surveys be reported to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

FILING FEES

Based on the information contained in the SEIR, the Project, as currently proposed, would have an impact on state fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (California Code Regulations, Title 14, § 753.5; Fish & Game Code, § 711.4; Public Resources Code, § 21089.)

CONCLUSION

CDFW appreciates the opportunity to comment on the SEIR to assist the Mt. SAC Community College District in identifying, reducing and mitigating Project-related impacts on biological resources. For any questions regarding this letter or further coordination, please contact Andrew Valand, Environmental Scientist, at (562) 342-2142 or Andrew.Valand@wildlife.ca.gov.

Sincerely,

Betty J Courtney

Betty J. Courtney
Environmental Program Manager I

ec: Ms. Betty Courtney, CDFW, Santa Clarita
Ms. Erinn Wilson, CDFW, Los Alamitos
Ms. Victoria Chau, CDFW, Los Alamitos
Ms. Chris Medak, U.S. Fish and Wildlife, Ventura

cc: Office of Planning and Research, State Clearinghouse, Sacramento

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Edmund G. Brown Jr.
Governor

Ken Alex
Director

July 26, 2016

Mikaela Klein
Mt. San Antonio Community College District
1100 North Grand Avenue
Walnut, CA 91789-1399

Subject: Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects EIR
SCH#: 2002041161

Dear Mikaela Klein:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on July 25, 2016, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2002041161
Project Title Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects EIR
Lead Agency Mt. San Antonio Community College

Type EIR Draft EIR

Description The 2015 Facilities Master Plan Update will evaluate changes in land use, new projects and an enrollment increase of 3,745 from 2015-202. As an urban area, the potential impacts are traffic and traffic-related noise and air quality impacts. The project includes demolition of Hilmer Lodge Stadium and new development on the 32.2 acre site: including the Athletic Complex East (Phase) and Physical Education Complex (Phase 2). Together, the two projects are named the Physical Education Project. The existing stadium had 11,940 permanent seats. The new stadium will include a 9-lane 400-meter track, permanent bleachers for 10,912. The net increase at buildout for the FMP update is less than 500,000 gsf.

Lead Agency Contact

Name Mikaela Klein
Agency Mt. San Antonio Community College District
Phone 909-274-5720 **Fax** 909-468-3931
email
Address 1100 North Grand Avenue
City Walnut **State** CA **Zip** 91789-1399

Project Location

County Los Angeles
City Walnut
Region
Lat / Long 34° 44' 30" N / 117° 50' 45" W
Cross Streets N. Grande Avenue and Temple Avenue
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways Hwy 57, 60
Airports
Railways
Waterways
Schools Westhoff, Collegewood
Land Use City - School, RPD - 61,700 and 28,500
District - Primary Educational, Athletics and Ag and Open Space

Project Issues Vegetation; Landuse; Other Issues; Aesthetic/Visual; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Geologic/Seismic; Noise; Public Services; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Traffic/Circulation; Water Quality; Wetland/Riparian; Cumulative Effects

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 5; Office of Historic Preservation; Department of Parks and Recreation; Resources, Recycling and Recovery; California Highway Patrol; Caltrans, District 7; Regional Water Quality Control Board, Region 4; Air Resources Board, Transportation Projects; Native American Heritage Commission

Date Received 06/10/2016 **Start of Review** 06/10/2016 **End of Review** 07/25/2016

Note: Blanks in data fields result from insufficient information provided by lead agency.

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

GRACE ROBINSON HYDE
Chief Engineer and General Manager

July 26, 2016

Ref. Doc. No.: 3758607

Ms. Mikaela Klein
Senior Facilities Planner
Mt. San Antonio College
1100 North Grand Avenue
Walnut, CA 91789-1399

Dear Ms. Klein:

Comment Letter for the Mt. San Antonio College
2015 Facilities Master Plan Update and Physical Education Projects Draft Subsequent Projects

The County Sanitation Districts of Los Angeles County (Districts) received a Draft Environmental Impact Report for the subject project on June 10, 2016. The proposed project is located within the jurisdictional boundaries of District No. 21. We offer the following comments:

1. **Table 2.10 Responsible and Interested Agencies**, *page 81*, under Interested Agencies – The Districts are inaccurately identified as "Consolidated Sanitation Districts of Los Angeles County" and addressed as such throughout the majority of the document. The document should be amended to accurately name the County Sanitation Districts of Los Angeles County.

2. **3.7.1 2015 FMPU Existing Conditions**, *page 285*, paragraph 7 – The Districts' 15-inch Mt. San Antonio Trunk Sewer is located in Mt. SAC Way.

3. **3.7.2 2015 FMPU Project Impacts**, *page 306*, Wastewater paragraph 1 – The San Jose Creek Water Reclamation Plant currently processes an average flow of 65.7 million gallons per day.

4. All other information concerning Districts' facilities and sewerage service contained in the document is current.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Adriana Raza
Customer Service Specialist
Facilities Planning Department

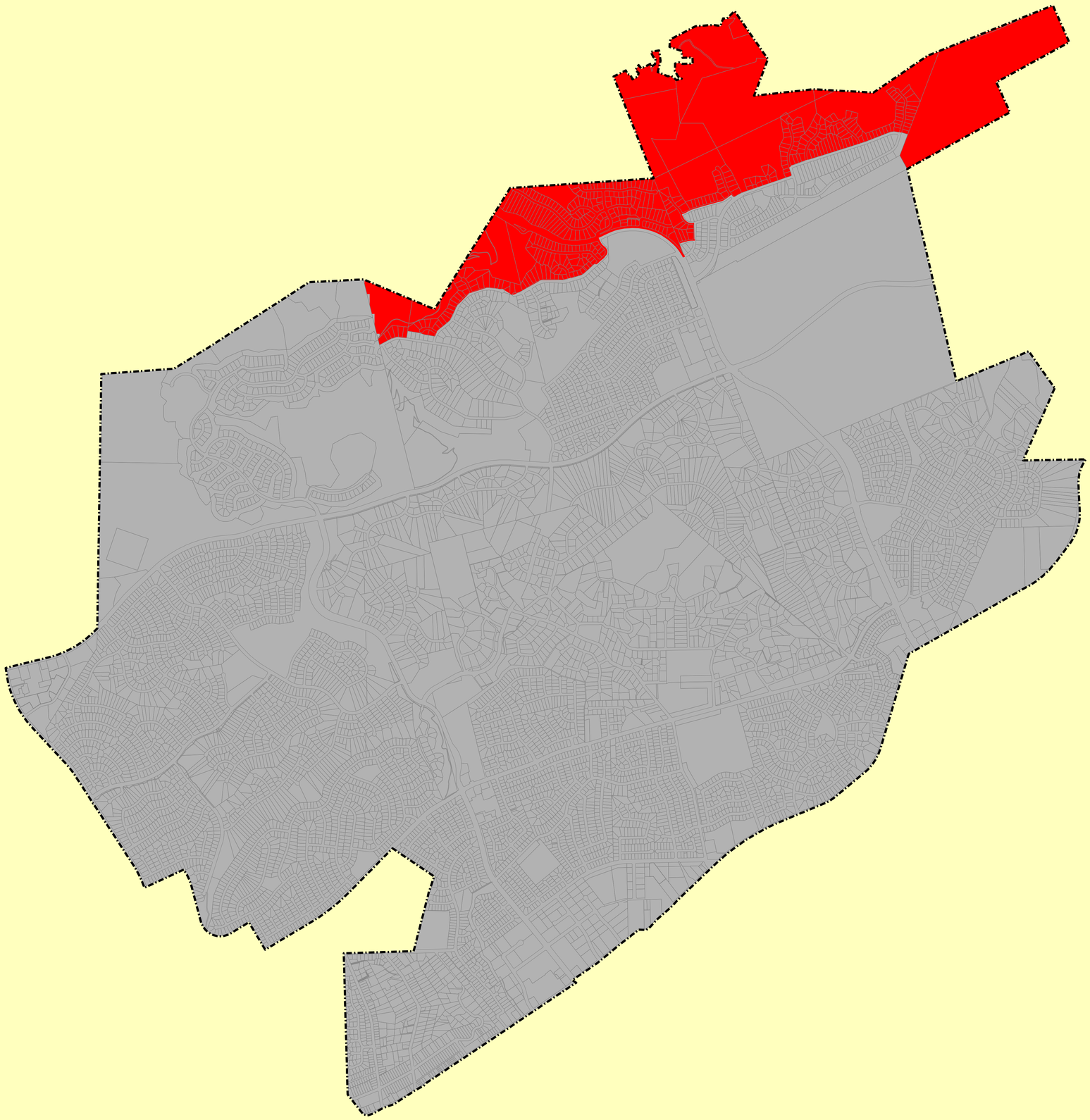
AR:ar

cc: M. Sullivan
M. Tatalovich

DOC: #3812421.D21

Walnut

Very High Fire Hazard Severity Zones in LRA
As Recommended by CAL FIRE



Fire Hazard Severity Zones

Local Responsibility Area	State or Federal Responsibility Areas
VHFHSZ	VHFHSZ
Non-VHFHSZ	Non-VHFHSZ

- City Boundary
- Parcels
- County Boundary

Government Code 51175-89 directs the California Department of Forestry and Fire Protection (CAL FIRE) to identify areas of very high fire hazard severity zones within Local Responsibility Areas (LRA). Mapping of the areas, referred to as Very High Fire Hazard Severity Zones (VHFHSZ), is based on data and models of, **potential** fuels over a 30-50 year time horizon and their associated expected fire behavior, and expected burn probabilities to quantify the likelihood and nature of vegetation fire exposure (including firebrands) to buildings. Details on the project and specific modeling methodology can be found at http://frap.cdf.ca.gov/projects/hazard/methods.htm. Local Responsibility Area VHFHSZ maps were initially developed in the mid-1990s and are now being updated based on improved science, mapping techniques, and data.

In late 2005 to be effective in 2008, the California Building Commission adopted California Building Code Chapter 7A requiring new buildings in VH FHSZs to use ignition resistant construction methods and materials. These new codes include provisions to improve the ignition resistance of buildings, especially from firebrands. The updated very high fire hazard severity zones will be used by building officials for new building permits in LRA. The updated zones will also be used to identify property whose owners must comply with natural hazards disclosure requirements at time of property sale and 100 foot defensible space clearance. It is likely that the fire hazard severity zones will be used for updates to the safety element of general plans.

This specific map is based on a geographic information system dataset that depicts final CAL FIRE recommendations for Very High FHSZs within the local jurisdiction. The process of finalizing these boundaries involved an extensive local review process, the details of which are available at http://frap.cdf.ca.gov/projects/hazard/btnet/ (click on "Continue as guest without logging in"). Local government has 120 days to designate, by ordinance, very high fire hazard severity zones within its jurisdiction after receiving the recommendation. Local government can add additional VHFHSZs. There is no requirement for local government to report their final action to CAL FIRE when the recommended zones are adopted. Consequently, users are directed to the appropriate local entity (county, city, fire department, or Fire Protection District) to determine the status of the local fire hazard severity zone ordinance.

This map was developed using data products such as parcel and city boundaries provided by local government agencies. In certain cases, this includes copyrighted geographic information. The maps are for display purposes only - questions and requests related to parcel or city boundary data should be directed to the appropriate local government entity.

N
W E
S

0 2 Miles

0 3 Kilometers

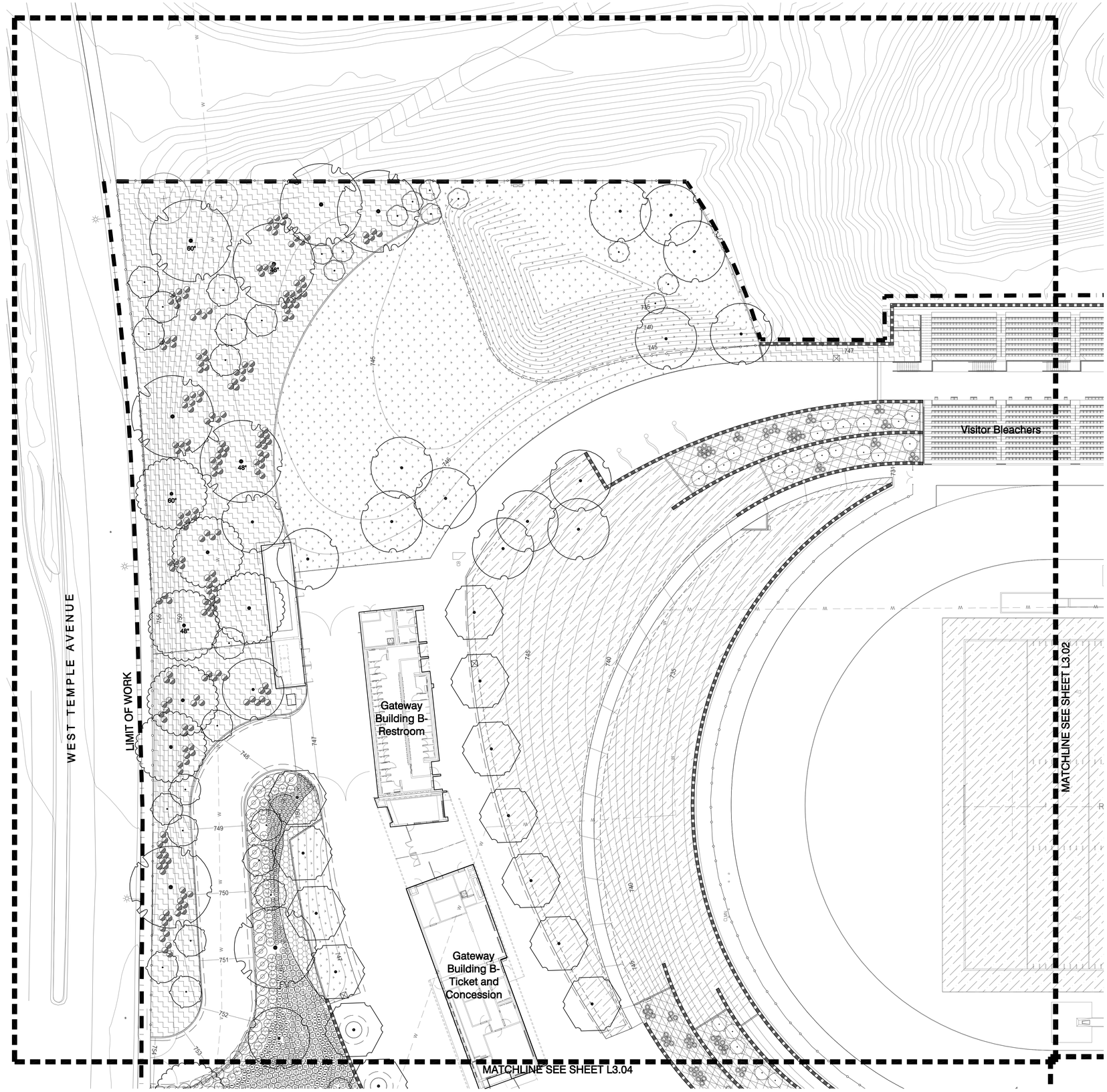
California Teale Albers, NAD 1983
Scale 1: 12,000
at 36" x 36"
September 2011

Obtain FRAP maps, data, metadata and publications on the Internet at http://frap.cdf.ca.gov
For more information, contact CAL FIRE-FRAP, PO Box 944246, Sacramento, CA 94244-2460, (916) 327-3939.

Jerry Brown, Governor,
State of California
John Laird, Secretary for Resources,
The Natural Resources Agency
Ken Pimlott, Director,
Department of Forestry and Fire Protection

MAP ID: Walnut

DATA SOURCES
CAL FIRE Fire Hazard Severity Zones (FHSZL06_1)
CAL FIRE Very High Fire Hazard Severity Zones in LRA - Los Angeles (c19fhszl06_5)



PLANTING LEGEND: Trees, See Details E, F/L3.10

SYMBOL	NAME	WATER REQ.	SIZE	QTY	FORM
	Alnus rhombifolia White Alder	High	48" Box	35	Standard
	Lyonothamnus flo. ssp. asplenifolius Catalina Ironwood	Medium	24" Box	42	Standard
	Cercis occidentalis Western Redbud	Medium	24" Box	167	Low Branching
	Platanus racemosa California sycamore	Medium	36" Box	129	50% Std. 50% Multi
	Quercus agrifolia Coast Live Oak 24" box unless otherwise noted	Low	24" Box 48" Box 60" Box	38 6 7	Standard
	Quercus douglasii Blue Oak 24" box unless otherwise noted	Low	24" Box 48" Box 60" Box	21 4 6	Standard
	Existing palm tree to remain. Protect in place per specifications	-	-	-	-
	Existing tree to remain. Protect in place per specifications	-	-	-	-
	Root Barrier	See Detail B/L3.10			

PLANTING LEGEND: Shrubs and Groundcover

SYMBOL	NAME	WATER REQ.	SIZE	QTY	DETAIL
	Acacia redolens 'Low Boy' Prostrate Acacia	Low	5 gal @ 4' o.c.	8,035	C,D,G/L3.10
	Agave americana American Century Plant	Low	5 gal	121	C,D,G/L3.10
	Agave attenuata Fox Tail Agave	Low	5 gal	2686	C,D,G/L3.10
	Agave weberi Weber's Agave	Low	15 gal	34	C,D,G/L3.10
	Arctostaphylos densiflora 'Howard Mcminn' Manzanita	Medium	15 gal	243	C,D,G/L3.10
	Arctostaphylos 'Pacific Mist' Manzanita	Low	1 gal	2836	C,D,G/L3.10
	Carex divulsa Berkeley Sedge	Low	1 gal @ 18"o.c.	4,704	C,D,G/L3.10
	Continus coggygria 'Royal Purple' Smoke Tree	Low	24" Box Low Branching	30	C,D,G/L3.10
	Dodonaea viscosa 'Purpurea' Purple-leafed Hop-bush	Low	15 gal	322	C,D,G/L3.10
	Eriogonum cinereum Ashy-leaf Buckwheat	Medium	5 gal	454	C,D,G/L3.10
	Elaegnus pungens 'Fruitlandii' Fruitland Silverberry	Low	15 gal	497	C,D,G/L3.10
	Muhlenbergia capillaris 'Lenca' Regal Mist Pink Muhly	Medium	1 gal @ 30" o.c.	5067	C,D,G/L3.10
	Muhlenbergia rigens Deer Grass	Low	1 gal	2931	C,D,G/L3.10
	Prunus ilicifolia Holly-Leafed Cherry	Low	15 gal	33	C,D,G/L3.10
	1.5" Pewter Gray Crushed Aggregate Southwest Boulder and Stone		-	2897 SF	I/L3.10

PLANTING LEGEND: Coastal Sage Hydroseed Mixture

SYMBOL	NAME	WATER REQ.	SIZE	QTY	DETAIL
	Hydroseed Mix	-	Per Planting Specifications		

PLANTING LEGEND: Turf

SYMBOL	NAME	WATER REQ.	SIZE/ QTY	DETAIL
	Turf #1: Sod	High	254,390 SF	-
	Turf #2: Hydroseed	High	117,281 SF	-

PLANTING LEGEND: Landscape Boulders

SYMBOL	NAME	SIZE	QTY	DETAIL
4'	Blasted Granite Boulders available through Southwest Boulder phone#=(877)792-7625	4'	3	A/L3.10
3'		3'	4	A/L3.10
2'		2'	4	A/L3.10

PLANTING NOTES

1. In all shrub and groundcover areas apply 2" layer of forest floor bark mulch per Aguinaga Fertilizer Company, Inc. Contractor shall submit sample to landscape architect for approval.
2. Plant quantities are for REFERENCE ONLY, Contractor to provide and install all plant material shown on drawings.
3. Furnish soil report through specifications once rough grading is completed.
4. Turn and fill all planting areas per specifications

0 5 10 20 40 Feet

HMC Architects
3546 Concours Street / Ontario, CA 91764
T 909 989 9979/ www.hmcarchitects.com

KEYNOTES

EPTDESIGN
landscape architecture | urban design | planning
844 East Green Street, Ste. 201
Pasadena, CA 91101
T | 626.795.2008 F | 626.795.2547
www.eptdesign.com

Key Plan

Consultant Seal

REGISTERED LANDSCAPE ARCHITECT KENNETH H. SNYDER NO. 5977 Signature 30/11/5 Expiration Date Date STATE OF CALIFORNIA

Agency Approval FILE NO.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL. ____
ACS_____ FLS _____ SSS _____
DATE _____

Project Title

MT. SAC
Mt. San Antonio College

MT SAN ANTONIO COLLEGE
Athletics Complex East
1100 North Grand Avenue
Walnut, CA 91789
(909) 274-7500
shothi@mtsac.edu

No.	Description	Date

Drawing Title:
PLANTING PLAN

Architect's Seal

LICENSED ARCHITECT KENNETH H. SNYDER NO. C-19082 REN. 11-30-15 STATE OF CALIFORNIA

Designed:	SC/BM	Project No.	5018008
Drawn:	JG/BO	Scale:	As indicated
QAQC	BM	Drawing No.	L3.01
Date:	01/15/2015		

C:\Revit Local Files\5018008-A13_central_dsharp.rvt

7/30/2014 3:49:03 PM

PLEASE RECYCLE

DSA SUBMITTAL - NOT FOR CONSTRUCTION

August 26, 2016

Mr. Mikaela Klein
City of Pomona
1100 North Grand Avenue
Walnut, CA 91789

RE: Responses to Comments on Mt. SAC 2015 Facilities Master Plan Update (FMPU) and Physical Education Projects Traffic Impact Study

Dear Ms. Klein:

I have reviewed the comments provided by the City of Pomona letter dated July 28, 2016. The responses are provided in the following table.

City of Pomona		
Comment		**Response**
6-3.1	Should include the intersection of South Campus and Temple Ave as a study intersection	It is not expected that a significant amount of traffic would use South Campus Drive to access Temple Avenue, as opposed to alternate routes. Mt. SAC campus bound traffic would more than likely use Grand Avenue from the west and Temple Avenue from the east. Both Grand Avenue and Temple Avenue have a higher speed limit (45 mph) than Campus Drive (35 mph). In addition, Grand Avenue and Temple Avenue have higher roadway capacities than Campus Drive. While some campus bound traffic may still use Campus Drive to access Mt SAC in both directions, it would likely not be a significant amount As a result, this intersection was not included in the analysis. In order to assess this intersection thoroughly, it is anticipated that traffic counts during the 2016 fall term school year would need to be collected at this intersection. It is understood that the new parking structure would be opening on September 15, 2016. Thus, new traffic counts at this intersection should not be collected until at least the third week of the fall term, in order to capture a typical school-related Cal Poly and Mt SAC traffic with the new structure in place. Also, as shown in Appendix A35 (Temple Avenue/South Campus Drive Improvements), an additional southbound right-turn lane

City of Pomona		
Comment		**Response**
		and eastbound left-turn lane have been incorporated into the intersection to enhance traffic flow and reduce delay resulting from the new parking structure. These two intersection improvements serve the critical movements that Mt SAC FMPU trips would hypothetically utilize. Thus, with these improvements in place, it is unlikely that this intersection would be impacted by the Mt SAC FMPU traffic if it were to be included in the report.
6-3.2	Include a percentage of traffic associated with Kellogg Drive as a high percentage of vehicles come exit 10 Fwy eastbound and continue to Kellogg Dr	In the eastbound direction from I-10, the use of the I-10 to Kellogg Drive to Campus Drive route to reach Temple Avenue is a slower speed route, as well as a longer distance, than the I-10 to Grand Avenue route. The assumption is campus trips are exiting eastbound on the 10 Freeway, continuing south on Kellogg Drive through Cal Poly Pomona and west to Mt. SAC. The magnitude of this am peak traffic is unknown. The Kellogg Drive exit is 3.6 miles east of the Grand Avenue exit from 10 Freeway. Thus, a route from I-10 Freeway at Citrus Avenue to Grand/Mountaineer compared to the Kellogg exit to Grand/Bonita is 3.9 miles shorter. Kellogg Drive and Campus Drive have a posted speed limit of 35 mph, include a stop-controlled intersection at University Drive, four signalized intersections, and the streets are adjacent to Cal Poly Pomona. Grand Avenue has a posted speed limit of 45 mph and does not include any stop-controlled intersections. Grand Avenue includes three signalized intersections (Holt Avenue, Cameron Avenue, Shady Mountain Road) before reaching the Mt SAC campus. Thus, our conclusion is that the I-10 to Grand Avenue route would be more attractive to drivers heading to Mt SAC. In the westbound direction from I-10, the use of the I-10 to Kellogg Drive to Campus Drive route to reach Temple Avenue is a slower speed route than the 57 Freeway to Temple Avenue route. Kellogg Drive and Campus Drive have a posted speed limit of 35 mph, consist of more roadway curvatures than Temple Avenue, include a stop-controlled intersection at University Drive, and are adjacent to Cal Poly Pomona. Temple Avenue has a posted speed limit of 45 mph and does not consist of any stop-controlled intersections. Thus, our conclusion is the 57 Fwy to Temple Avenue route would be more attractive to drivers heading to Mt SAC. While some campus bound traffic may still use the I-10/Kellogg Drive ramp to access Mt SAC in both directions, it would likely not be a significant amount. Also, as shown in Appendix A35 (Temple Avenue/South Campus Drive Improvements), an additional southbound right-turn lane and eastbound left-turn lane have been incorporated into the intersection to enhance traffic flow and reduce delay resulting

City of Pomona		
Comment		**Response**
		from the new parking structure. These two intersection improvements serve the critical movements that Mt SAC FMPU trips would hypothetically utilize. Thus, with these improvements in place, it is unlikely that this intersection would be impacted by the Mt SAC FMPU traffic if it were to be included in the report and include an altered trip distribution.
6-3.3	South Campus volume percentage distribution appears to be too low and not realistic	The volume percentage distribution in the traffic study was based on routes that were deemed to be generally most attractive to motorists. Temple Avenue has a posted speed limit of 45 mph versus Campus Drive that has a posted speed limit of 35 mph. In addition, westbound/southbound Kellogg Drive reduces to one lane west of Red Gunn Lane for approximately 1,800 feet. Conversely, Temple Avenue consists of three lanes in each direction, consistently, between SR-57 and Campus Drive. Our judgment is the distribution is appropriate and realistic. Also, as shown in Appendix A35 (Temple Avenue/South Campus Drive Improvements), an additional southbound right-turn lane and eastbound left-turn lane have been incorporated into the intersection to enhance traffic flow and reduce delay resulting from the new parking structure. These two intersection improvements serve the critical movements that Mt SAC FMPU trips would hypothetically utilize. Thus, with these improvements in place, it is unlikely that this intersection would be impacted by the Mt SAC FMPU traffic if it were to be included in the report and include an altered trip distribution.
6-3.4	Provide data or methodology to justify the percentage trip distribution along 57 Fwy of 10 percent northbound and 10 percent southbound	Detailed origin/destination data was not collected, nor is it appropriate for this level of planning analysis. However, information used in the 2008 DEIR was applied to this study which was based on existing campus traffic patterns associated with the general locations of student residences provided by Mt. SAC. Ultimately, a combination of the general student resident locations and engineering judgment, based on the surrounding circulation network, was used to determine project trip distribution.
6-3.5	Justify 4 percent distribution from Temple Ave east of 57 Fwy	Detailed origin/destination data was not collected, nor is it appropriate for this level of planning analysis. However, information used in the 2008 DEIR was applied to this study which was based on existing campus traffic patterns associated with the general locations of student residences provided by Mt. SAC. Ultimately, a combination of the general student resident locations and engineering judgment, based on the surrounding circulation network, was used to determine project trip distribution.

If any additional information is required, please feel free to contact me at 213.802.1715.

Sincerely,

Iteris, Inc.

Deepak Kaushik
Senior Transportation Engineer

Memorandum

Date: August 11, 2016

To: Sid Lindmark, Sid Lindmark and Associates
Mika Klein, Mt. San Antonio College

From: Fred Greve, Greve & Associates, LLC

Subject: Responses to Comments from SWAPE (Report #16-025)

6-2.57 We have reviewed the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects Draft Subsequent Program/Project EIR to Final Program EIR (DEIR); the April 15, 2016 Air Quality Assessment for the Mt. San Antonio College Facilities Master Plan Update and Physical Education Projects ("Air Quality Assessment"); and the April 15, 2016 Greenhouse Gas Assessment for the Mt. San Antonio College Facilities Master Plan Update and Physical Education Projects ("Greenhouse Gas Assessment") prepared for the proposed Mt. San Antonio College Project ("Project"). This subsequent DEIR was prepared because substantial changes have occurred in the Project since the 2012 Facilities Master Plan Final EIR was certified, one or more significant impacts may occur, and new information is available on prior projects that was not previously assessed.

Buildout of the 2015 Facilities Master Plan Update (2015 FMPU) in 2020 will result in a net increase of 238,098 assignable square feet (ASF) from existing conditions, and a net increase of approximately 4.5 percent ASF when compared to the 2012 Facilities Master Plan (2012 FMP) (DEIR, p. 59). The DEIR proposes development of the Physical Education Project (PEP) in two phases, the Athletic Complex East (Phase 1) and the Physical Education Complex (Phase 2) (DEIR, p. 78).

6.2.57 The comment simply provides a summary of the project. No response is needed.

6-2.58 Our review concludes that the subsequent DEIR fails to adequately assess the Project's health risk and air quality impacts. As a result, the Project's impact on regional and local air quality is underestimated. An updated DEIR should be prepared to adequately assess the

638 Camino de los Mares, Suite H130-153, San Clemente, CA 92673
Voice: 949•466•2967 Email: fred@greveandassociates.com

Project's health risk and air quality impacts, and additional mitigation measures should be implemented, where necessary.

6.2.58 As shown in the following responses, we disagree with SWAPE's conclusions. No additional health risk assessment is needed beyond what has already been provided in the Air Quality Assessment. Air quality impacts have been adequately addressed and additional analysis and mitigation measures are not needed.

6-2.59 Health Risk from Diesel Particulate Matter Emissions Inadequately Evaluated
The Air Quality Assessment concludes that the health risk posed to nearby sensitive receptors from exposure to diesel particulate matter (DPM) emissions released during Project construction and operation would be less than significant, yet fails to quantify the risk and compare it to applicable thresholds (p. 30). By failing to prepare a construction or an operational health risk assessment, the Air Quality Assessment is inconsistent with SCAQMD CEQA Guidelines, as well as with recommendations set forth by the Office of Environmental Health Hazard Assessment (OEHHA), the organization responsible for providing recommendations for health risk assessments in California.

6.2.59 Section 2.3.3 Diesel Particulate Matter Emissions During Construction addresses DPM and the potential cancer risk. The SCAQMD CEQA Guidelines were again reviewed and there is no requirement from the SCAQMD to prepare a health risk assessment (HRA) for school type operations or for construction projects of the type proposed (http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook and associated links). The comment ignores a basic understanding of what causes a health risk. Two factors need to occur to have a potential health risk. First, a significant source of DPM must be present. DPM, as the name implies, comes from large diesel engines such as those in trucks, trains, construction equipment, and some ships. For typical operations, the college does not and will not have large diesel engines in operation. The vehicular traffic associated with normal college operations has very few trucks. The majority of construction is relatively small and short term and usually consists of a building or a building complex. Almost no grading is involved for these projects which usually constitute the phase of construction with the highest level of DPM emissions. The PEP projects are slightly larger and would last less than 2-1/2 years. Again these are relatively small construction projects as indicated by the fact that the emissions are well below the SCAQMD thresholds (Tables 13 and 15 of the Air Quality Assessment), and relatively few pieces of large diesel construction equipment will be operating.

Second, there must long-term exposure of DPM. The impacts from toxic substances are assessed over a 30 or 70-year period. The construction projects, which are mostly small and relatively short-term, do not present a situation where long-term exposure will occur.

Finally, the need for a health risk assessment needs to be put into perspective. Typically, health risk assessments are needed for projects that will generate large quantities of diesel particulate emissions over a long time period. The typical example would be large warehousing projects where large diesel trucks are coming and going 24-hours a day. Another example, would be within 500 feet of a freeway with daily traffic of 100,000 or more which could have anywhere from 5,000 trucks to 25,000 trucks per day (California Air Resources Board, "Air Quality and Land Use Handbook: A Community Health Perspective," April 2005). The college operations, including construction projects, does not have anywhere near these levels of diesel vehicular activity. It is unreasonable to require a health risk assessment for this type of project. And as will be shown, the screening analysis provided by SWAPE is so conservative and flawed that it does not provide a convincing argument for additional analysis.

6-2.60 In an effort to demonstrate the potential risk posed by the Project to nearby sensitive receptors, we prepared a simple screening-level health risk assessment. The results of our assessment, as described below, demonstrate that construction-related and operational DPM emissions may result in a potentially significant health risk impact. As a result, a revised DEIR should be prepared to adequately assess the health risk impacts from construction and operation of the Project.

6.2.60 A step-by-step review of the SWAPE screening-level analysis is presented in the following responses. The SWAPE analysis is so conservative and flawed that it is not a good indicator or whether or not a health risk assessment is necessary. For reasons stated in the Air Quality Assessment, Response 3 above, and other responses we do not believe that a health risk assessment is warranted.

6-2.61 Failure to Quantify Risk from Project Construction
The Air Quality Assessment attempts to justify the omission of an actual construction-related health risk assessment (HRA) by stating the following:

> *"Impacts from toxic substances are related to cumulative exposure and are assessed over a 70-year period. Cancer risk is expressed as the maximum number of new cases of cancer projected to occur in a population of one million people due to exposure to the cancer causing substance over a 70-year lifetime (California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Guide to Health Risk Assessment.) Grading for the PEP Phase 1 and Phase 2, when the peak diesel exhaust emissions would occur, is expected to take less than 6 months total with all construction expected to be completed in less than 4 years. Because of the relatively short duration of construction compared to a 70-year lifespan, diesel emissions resulting from the construction of the project, including truck traffic associated with the project, are not expected to result in a significant impact" (p. 28).*

This justification, however, is incorrect. By failing to quantify the risk associated with Project construction, the Air Quality Assessment is inconsistent with the most recent guidance published by Office of Environmental Health Hazard Assessment (OEHHA), the organization responsible for providing recommendations and guidance on how to conduct health risk assessments in California. In February of 2015, OEHHA released its most recent Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments, which was formally adopted in March of 2015. This guidance document describes the types of projects that warrant the preparation of a health risk assessment. Construction of the entire Project will produce emissions of DPM, a human carcinogen, through the exhaust stacks of construction equipment over a construction period of at least five years (Air Quality Assessment, p. 13). The OEHHA document recommends that all short-term projects lasting at least two months be evaluated for cancer risks to nearby sensitive receptors. This recommendation reflects the most recent health risk policy, and as such, an assessment of health risks to nearby sensitive receptors from construction should be included in a revised DEIR for the Project.

6.2.61 The OEHHA document recommendation is taken out of context and misconstrued. First, the OEHHA document does not recommend as SWAPE has stated that "all short-term projects lasting at least two months be evaluated…" [emphasis added]. The OEHHA document states, "Due to the uncertainty in assessing cancer risk from very short-term exposures, we do not recommend assessing cancer risk for projects lasting less than two months…" (p 8-18 of OEHHA Guidelines). This clearly is not a requirement to evaluate all projects lasting more 2 months. While this quote is from Chapter 8, it is in Chapter 1, specifically Section 1.3 – Who Is Required to Conduct a Risk Assessment, where the need for a risk assessment is discussed. The very first sentence of the Section 1.3 states; "The Hot Spots Act requires that each local Air Pollution Control District or Air Quality Management District determine which facilities prepare an HRA." The SCAQMD CEQA Guidelines do not contain any requirement for college construction projects or the normal operation of a college to conduct a Health Risk Assessment (HRA). Finally, it should be noted that we have received comments from the SCAQMD on the Air Quality Assessment, and there is no mention of a lack of a HRA. In summary, projects of the type proposed do not need a HRA because of the very limited amount of DPM that will be generated.

6.2-62 *Failure to Quantify Risk from Project Operation*

Furthermore, instead of preparing a health risk assessment to determine the Project's operational impact, the Air Quality Assessment instead relies on the South Coast Air Quality Management District's (SCAQMD) Localized Significance Thresholds (LST) Methodology to determine whether or not operation of the Project would expose sensitive receptors to substantial air pollutants (p. 11-12). Using this method, the Air Quality Assessment concludes that the Project would not expose sensitive receptors to substantial air pollutants, thus resulting is a less than significant long term impact (p. 30). The use of this method, as well as the significance determination made using this method, is entirely incorrect. While the LST

method assesses the impacts of pollutants at a local level, it only evaluates impacts from criteria air pollutants. As a result, health impacts from exposure to toxic air contaminants (TACs), such as DPM, were not analyzed, thus leaving a gap within the Air Quality Assessment's analysis.

According to the Air Quality Assessment, the Final Localized Significance Threshold Methodology document prepared by the SCAQMD applies to projects that are less than 5 acres in size and are only applicable with NOx, CO, PM10, and PM2.5 emissions, which are collectively referred to as criteria air pollutants (p. 12). Because the LST method can only be applied to criteria air pollutants, this method cannot be used to determine whether operational emissions from diesel particulate matter (DPM), a known human carcinogen, will result in a significant health risk impact to nearby sensitive receptors. By failing to prepare a health risk assessment in addition to the LST analysis, the Air Quality Assessment fails to provide a comprehensive analysis of the sensitive receptor impacts that may occur as a result of exposure to substantial air pollutants. The SCAQMD provides a specific numerical threshold of 10 in one million for determining a project's health risk impact. Therefore, the Air Quality Assessment should have conducted an assessment that compares the Project's operational health risk to this threshold in order to determine the Project's health risk impact.

6.2.62 See Response to Comment 6.2.61. There is no requirement or need to prepare a HRA.

6-2.63 Modeling Parameters
As of 2011, the EPA recommends AERSCREEN as the leading air dispersion model, due to improvements in simulating local meteorological conditions based on simple input parameters. The model replaced SCREEN3, which is included in OEHHA and CAPCOA guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs"). A Level 2 HRSA utilizes a limited amount of site specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project.

6.2.63 We agree that AERSCREEN has replaced SCREEN3. However, it should be noted that AERSCREEN was originally intended to model smokestacks. As a result, the modeler must be very careful in applying this model correctly for the college projects which are are spread out over a large area and very substantially over time, unlike a smokestack.

6-2.64 We prepared a preliminary health risk screening assessment of the Project's construction and operational impact to sensitive receptors using the annual estimates from the Project's CalEEMod model, which can be found within the DEIR's Air Quality Assessment and Greenhouse Gas Assessment. According to the Air Quality Assessment, "construction

emissions will vary for different phases of construction, and from project to project" (p. 13). As a result of this variability, we conducted a construction-related health risk assessment for each component of the proposed Project using each component's emission estimates and construction durations. Specifically, we assessed the health risk impacts from construction of the following Project components: Building G, Building A, PEP Phase 1, and PEP Phase 2 (p. 13). Using the CalEEMod construction schedules for each component, and accounting for the overlap that will potentially occur between these phases, we estimate that construction of Building G, PEP Phase 1, and PEP Phase 2 would occur over the course of approximately four years with a total of 1,457 days (see table below).

Construction Phase	Start	End	Duration (Years)	Duration (Days)
PEP Phase 1	10/3/2016	1/31/2018	1.3	486
PEP Phase 1 & Phase 2	2/1/2018	8/16/2018	0.5	197
PEP Phase 2	8/17/2018	12/31/2018	0.4	137
Building G & PEP Phase 2	1/1/2019	2/24/2020	1.2	420
PEP Phase 2	2/25/2020	9/28/2020	0.6	217
Total Construction Duration			**4.0**	**1,457**

6.2.64 It should be noted that the construction timing for Building G is not known at this time, but the commenter used the timing in the Air Quality Assessment, which is a reasonable estimate. The commenter otherwise is quoting materials from the SEIR documents.

6-2.65 According to the Air Quality Assessment, construction of Building A is not anticipated to occur until 2025, which leaves a gap between the completion of PEP Phase 2 and the start of Building A construction (p. 15). However, OEHHA requires that continuous residential exposure duration of 30 years be used when assessing health risks, starting from the infantile stage of life. Therefore, to remain consistent with recommendations set forth by OEHHA, we assumed for the remaining 26 years of exposure, operation of Building G, PEP Phase 1, and PEP Phase 2 would occur right after construction of PEP Phase 2 was complete, and up until construction of Building A began. Then after construction of Building A was completed, we assumed that operation of the entire Project would occur, with no gaps between stages (see table below).

Phase	Start	End	Duration (Years)	Duration (Days)
FMPU 2020 - Operation	9/29/2020	12/31/2024	4.26	1,555
Building A	1/1/2025	12/11/2025	0.95	345
FMPU 2025 - Operation	12/12/2025	9/26/2046	20.8	7,593
Total Duration			**26.0**	**9,493**

6.2.65 The comment acknowledges that the OEHHA requires a continuous exposure of 30 years, and only 4 years have substantial construction. SWAPE incorrectly fills the missing 26

years with operational emissions from the FMPU which appears to include all of the college operating emissions. This is major mistake which causes the emissions to be grossly overestimated and the HRA impact to be overstated. First, most of the emissions for the operation of the FMPU are from vehicles traveling to and from campus. These emissions will be spread out over a large geographical area and the vast majority of these emissions will have no impact on areas local to the college, and should not be included in the modeling. Second, the HRA goal is to determine the increase in health risk exposure, and most of the operational FMPU emissions represent emissions from ongoing activities and are not new emissions caused by the project. As shown in Section 2.2.2 of the Air Quality Assessment, emissins associated with the college will be going down in future years. In summary, this approach to determining the health risk appears to vastly overestimate the exposure generated by the project.

6-2.66 The Air Quality Assessment assumes the closest sensitive receptors to the Project site are located about 978 feet north (p. 15, 16).

6.2.66 The SWAPE analysis takes a worst-case distance and uses it for all construction and operation. The distance of 978 feet was used for Buildings A and G in the Air Quality Assessment for the Localized Significance Threshold analysis. In that analysis, the distance is measured from the edge of the construction area. For a dispersion analysis, such as the SWAPE analysis, the distance should be measured from the center of the construction area, or in this case 1,294 feet. More importantly for the PEP1 and PEP2, SWAPE continued to use 978 feet, while the closest distance from the site to residences is 2,035 feet and from the center of the stadium is 2,910 feet. Using a closer than actual distance will over-estimate the concentrations at the receptor.

6-2.67 The AERSCREEN model relies on a continuous average emissions rate to simulate maximum downwind concentrations from point, area, and volume emissions sources. To account for the variability in construction equipment usage over the many phases of Project construction and operation, we calculated an average DPM emissions rate for construction by the following equation.

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{lbs\ of\ DPM}{days\ of\ Construction} \times \frac{453.6\ grams}{lb} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds}$$

Because the duration, start year, year of completion, and activity type vary between each phase of construction and operation, we calculated an emission rate specific to each of the Project phases (see table below).

Project Phase	Duration (Years)	Duration (Days)	DPM Emissions (Tons/Phase Duration)	DPM Emission Rate (g/s)
PEP Phase 1	1.33	486	0.3459	0.0075
PEP Phase 1 & Phase 2	0.54	197	0.7698	0.0410
PEP Phase 2	0.38	137	0.4239	0.0325
Building G & PEP Phase 2	1.15	420	0.6088	0.0152
PEP Phase 2	0.59	217	0.4239	0.0205
FMPU 2020 - Operation	4.26	1,555	4.4009	0.0297
Building A	0.95	345	0.0485	0.0015
FMPU 2025 - Operation	20.8	7,593	23.4946	0.0325
Total Exposure Duration	**30.0**	**10,950**	**-**	**-**

6.2.67 The equation for "Emission Rate" is correct, but SWAPE has not identified how they generated the most critical parameter which is pounds (lbs.) of DPM per days of construction or operation. We believe that their estimate of DPM Emission and the DPM Emission Rate is high by a factor of 10 to 100. DPM, diesel particulate matter, is just what the name implies; it is the particulate emissions from diesel exhaust. Motor vehicle emissions should not be included in this calculation because the vast majority of vehicular traffic is off-site and gasoline vehicles, not diesel. Energy emissions should not be included because natural gas, not diesel, is used for space and water heating at the college. Area emissions are mainly associated with landscaping equipment, most of which is gasoline powered, not diesel. SWAPE has not justified their DPM emissions and we believe that they may be over-estimated by a factor of 10 to 100 or more.

6-2.68 Using Google Earth, we measured the total area that each of the Project phases would encompass, as the location and total area of each construction and operational activity varies. Each Project phase was simulated as a rectangular area source in AERSCREEN, with dimensions that reflected these phase specific areas measured in Google Earth. A release height of three meters was selected to represent the height of exhaust stacks on construction equipment and on-road vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution.

6.2.68 This is a statement of some of the assumptions that SWAPE used in their modeling. Two of the assumptions are problematic. First, an "initial vertical dimension of one and half meters" (5 feet) was used. With construction equipment moving around the pollutants undergo an initial mixing which is referred to as a mixing cell. The modeling assumption that was used is relevant for modeling a smokestack, but isn't appropriate for a construction site. A mixing cell height of 4.6 meters (15 feet) would be more appropriate. The initial vertical dimension can have a significant effect on the final concentrations. In this case, the concentrations may be over-predicted by a factor of 3 just because of the selection of an overly conservation initial mixing height.

Second, using site relevant wind data is not always necessary for a screening analysis such as that performed by SWAPE. But for this situation it would have been highly desirable, and very appropriate. Exhibit 1 shows a wind rose for Ontario International Airport. Each bar shows the percent of time the wind is blowing from a direction. The residences lie northwest of the college, and therefore, a wind from the southeast would be the direction of most concern. The wind rose data shows that winds from this direction occur about 5% of the time or less. Because of the mountains just north of the residences, the winds are channeled parallel to the mountains and present a unique situation. Emissions from the college will usually blow away from the residences and not towards the residents. The SCAQMD provides meteorological data for 27 locations in the air basin that can be used in modeling (http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/data-for-aermod). The MAKEMET subroutine in the AERSCREEN model is designed to format meteorological data to be used in the model and would have provided a much more realistic projection of emission concentrations. Therefore, wind data is readily available and could have easily been incorporated into the SWAPE modeling. Since actual wind data was not used, the emission concentrations were significantly overestimated.

6-2.69 Modeling Results

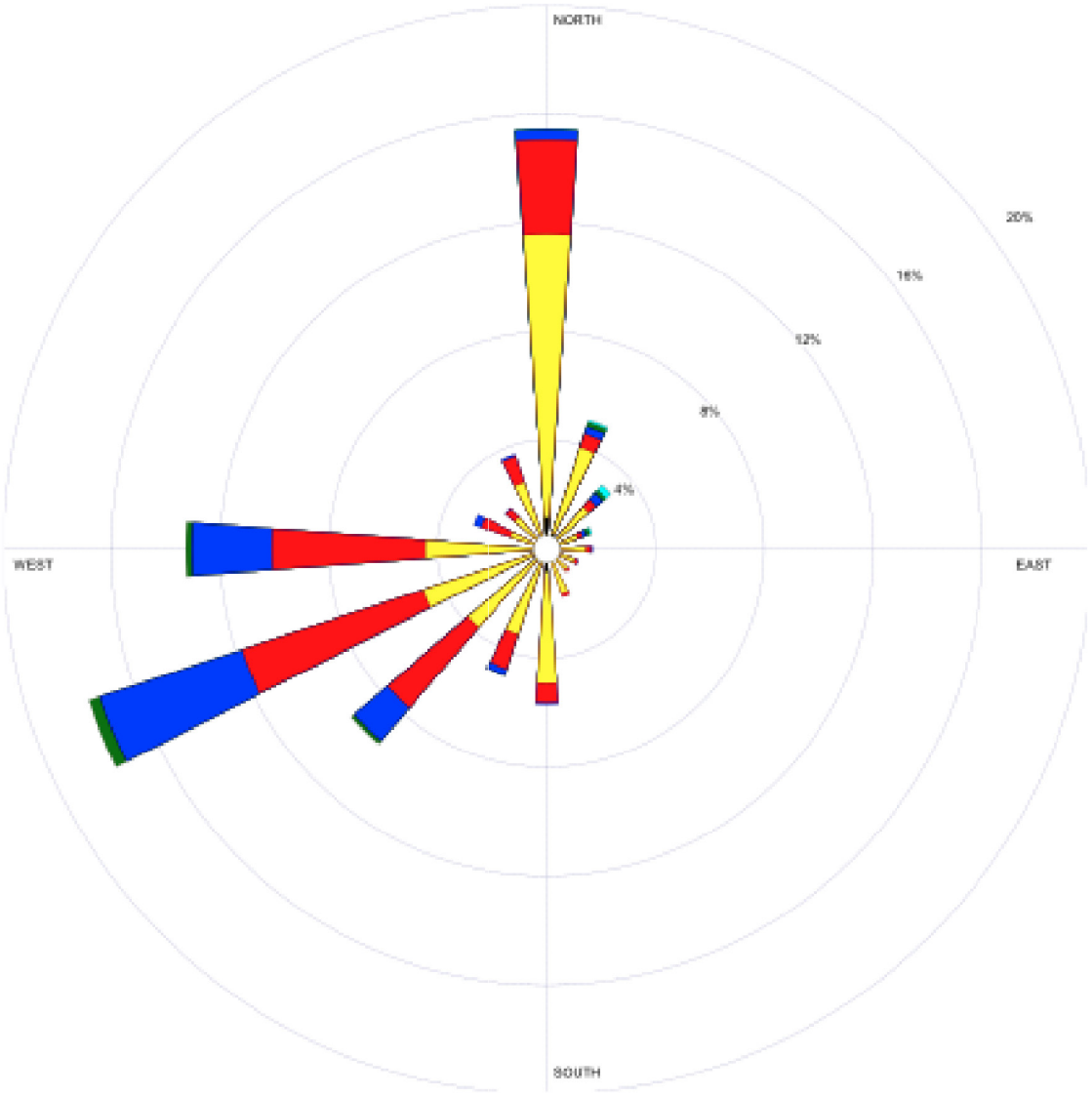
The AERSCREEN model generated maximum reasonable estimates of single hour downwind DPM concentrations from the Project site. EPA guidance suggests that in screening procedures, the annualized average concentration of an air pollutant may be estimated by multiplying the single-hour concentration by 10%. For example, the maximum single-hour downwind concentration in the AERSCREEN output for construction of PEP Phase I was approximately 1.95 µg/m3 DPM 298 meters (978 feet) downwind. Therefore, the annualized average concentration for the sensitive receptor located 298 meters away from the Project site during construction of PEP Phase I was estimated to be 0.195 µg/m3. We estimated the annualized average concentration for the remaining phases of the Project in this same fashion (see table below).

Project Phase	Maximum Single Hour DPM Concentration (µg/m^3)	Annualized Average DPM Concentration (µg/m^3)
PEP Phase 1	1.95	0.195
PEP Phase 1 & Phase 2	11.06	1.106
PEP Phase 2	11.92	1.192
Building G & PEP Phase 2	4.83	0.483
PEP Phase 2	7.52	0.752
FMPU 2020 - Operation	9.65	0.965
Building A	5.66	0.566
FMPU 2025 - Operation	10.17	1.017

Exhibit 1 - Wind Rose for Ontario Airport

WIND ROSE PLOT

Station #3102 - , 1972



Wind Speed (m/s)

- > 11.06
- 8.49 - 11.06
- 5.40 - 8.49
- 3.34 - 5.40
- 1.80 - 3.34
- 0.51 - 1.80

MODELER	DATE: **5/29/2003**	COMPANY NAME
DISPLAY: **Wind Speed**	UNIT: **m/s**	COMMENTS
AVG. WIND SPEED: **3.69 m/s**	CALM WINDS: **9.24%**	
ORIENTATION: **Direction (blowing from)**	PLOT YEAR-DATE-TIME: **1972 Jan 1 - Dec 31 Midnight - 11 PM**	PROJECT/PLOT NO.: **1972**

6.2.69 The use of a 10% factor to get from a one-hour concentration to an annual concentration is questionable. The EPA reference provided by SWAPE recommends 8%, not 10%. Second, the EPA reference is clear to point out that these values are for a point source such as a smokestack, not the area source that is modeled by SWAPE. And finally, the site with the nearby hills that direct airflow away from the receptors is a special case not accounted for in the SWAPE analysis.

As already discussed, we believe that the SWAPE assessment of DPM emissions and concentrations is seriously flawed to the point where the concentrations projections are not credible. The following points recap why we believe that the concentration estimates are flawed.

1. SWAPE has failed to identify what diesel equipment will be operating that is so excessive to warrant a HRA. The HRA is not required by the SCAQMD for the proposed project.
2. There will not be any long-term exposure from heavy-duty diesel construction. A 30-year exposure is needed and significant construction will be operating for roughly 4 years.
3. The OEHHA guidelines require a continuous exposure of 30 years, but this project only has 4 years have substantial construction.
4. SWAPE appears to have included emissions from motor vehicles and other sources which are not diesel.
5. SWAPE appears to have included emissions from motor vehicles where most of their travel is outside of the college area.
6. Total emissions from campus operations have been included in the projections. Only the increase in operational emissions should be included to determine the increase in health risk due to the project.
7. Incorrect distances have been used in the determination of concentrations.
8. The DPM emissions appear to be overestimated by a factor of 10 to 100 or more. If emissions were taken from the CalEEMod printouts in the Air Quality Assessment, it should be noted that the construction equipment levels represent an absolute daily maximum. The goal of the construction-related CalEEMod runs was to project peak daily emissions, and will overestimate significantly annual emissions.
9. The initial vertical dimension used is too small.
10. Real weather data should have been used to account for the unique orientation of the college campus, nearby residences, and mountains which channel the wind in a direction away from the residences.

6-2.70 Exposure Assumptions

We calculated the excess cancer risk for each sensitive receptor location, for adults, children, and/or infant receptors using applicable HRA methodologies prescribed by OEHHA. OEHHA recommends the use of Age Sensitivity Factors ("ASFs") to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution. According to the

revised guidance, quantified cancer risk should be multiplied by a factor of ten during the first two years of life (infant), and by a factor of three for the subsequent fourteen years of life (child aged two until sixteen). Furthermore, in accordance with guidance set forth by the SCAQMD and OEHHA, we used 95th percentile breathing rates for infants and 80th percentile breathing rates for children and adults. We used a cancer potency factor of 1.1 (mg/kgday) and an averaging time of 25,550 days.

6.2.70 The exposure assumptions appear to be consistent with the OEHHA recommendations. The averaging time of 25,550 days is an extreme worst case, and represents 70 years. The concern is that the college operates at a substantially reduced level for 3 months (25%) of each year and this has not been accounted for in the SWAPE modeling.

6-2.71 Health Risk Impact to Sensitive Receptor
As previously discussed, OEHHA recommends that a 30-year exposure duration be used as the basis for estimating cancer risk at the closest residential receptor. Health Risk Impact from Exposure to Construction and Operational Diesel Exhaust Emissions Consistent with OEHHA guidance, exposure to the receptor was assumed to begin in the infantile stage of life to provide the most conservative estimate of air quality hazards. The results of our calculations are shown below.

Health Risk Impact from Exposure to Construction and Operational Diesel Exhaust Emissions							
Project Phase	**Start Date**	**End Date**	**Duration (years)**	**Concentration ($\mu g/m^3$)**	**Breathing Rate (L/kg-day)**	**Age Sensitivity Factor**	**Cancer Risk**
PEP Phase 1	10/3/2016	1/31/2018	1.33	0.195	1090	10	4.3E-05
PEP Phase 1 & Phase 2	2/1/2018	8/16/2018	0.54	1.106	1090	10	9.8E-05
PEP Phase 2	8/17/2018	12/31/2018	0.38	1.192	1090	10	7.3E-05
	Infant Exposure Duration		***2.25***			***Infant Exposure***	***2.14E-04***
Building G & PEP Phase 2	1/1/2019	2/24/2020	1.15	0.48	572	3	1.4E-05
PEP Phase 2	2/25/2020	9/28/2020	0.59	0.75	572	3	1.2E-05
FMPU 2020 - Operation	9/29/2020	12/31/2024	4.26	0.96	572	3	1.1E-04
Building A	1/1/2025	12/11/2025	0.95	0.57	572	3	1.4E-05
FMPU 2025 - Operation	12/12/2025	9/27/2032	6.80	1.02	572	3	1.8E-04
	Child Exposure Duration		***13.75***			***Child Exposure***	***3.25E-04***
FMPU 2025 - Operation	9/28/2032	9/26/2046	14.0	1.02	233	1	5.0E-05
	Adult Exposure Duration		***14.0***			***Adult Exposure***	***5.00E-05***
	Lifetime Exposure Duration		**30.0**			**Lifetime Exposure**	**5.89E-04**

The excess cancer risk to adults, children, and infants at the sensitive receptor closest to the Project site are 50, 325, and 214 in one million, respectively. Furthermore, the excess cancer risk over the course of a residential lifetime (30 years) is approximately 589 in one million. The infantile, child, and lifetime cancer risk greatly exceed the SCAQMD threshold of 10 in one million. As a result, construction and operation of the Project could have a potentially significant health risk impact to sensitive receptors located nearby.

6.2.71 For all of the reasons stated in Response 13 and elsewhere, the 30 year exposures shown in the table are extremely overstated to the point that do not answer the question of what is the additional health risk generated by the project nor does it answer the question of whether a more detailed HRA is needed. Since this project, like most projects in California, do not generate significant levels of diesel particulate matter, and no adverse health risk would be expected. Finally, there is no requirement by SCAQMD or other over-sight agency to conduct a health risk assessment for this type of project because this type of project has an extremely low potential for adverse impact.

6-2.72 It should be noted that our health risk assessment summarized in the table above takes into account the DPM emissions from existing operations, as well as the DPM emissions from 2020 and 2025 FMPU buildout operations. Therefore, the values provided in the table above may overestimate the Project's health risk impact. In an effort to correct for this issue, we prepared an additional health risk assessment that only accounts for the Project's construction-related health risk. As you can see in the table below, even if we were to remove the operational risk and only calculate the construction health risk impact, we find that nearby sensitive receptors are subject to a potentially significant health risk impact (see table below).

Health Risk Impact from Exposure to Construction Diesel Exhaust Emissions Only							
Project Phase	**Start Date**	**End Date**	**Duration (years)**	**Concentration ($\mu g/m^3$)**	**Breathing Rate (L/kg-day)**	**Age Sensitivity Factor**	**Cancer Risk**
PEP Phase 1	10/3/2016	1/31/2018	1.33	0.195	1090	10	4.3E-05
PEP Phase 1 & Phase 2	2/1/2018	8/16/2018	0.54	1.106	1090	10	9.8E-05
PEP Phase 2	8/17/2018	12/31/2018	0.38	1.192	1090	10	7.3E-05
	Infant Exposure Duration		***2.25***			***Infant Exposure***	***2.14E-04***
Building G & PEP Phase 2	1/1/2019	2/24/2020	1.15	0.48	572	3	1.4E-05
PEP Phase 2	2/25/2020	9/28/2020	0.59	0.75	572	3	1.2E-05
FMPU 2020 - Operation	9/29/2020	12/31/2024	-	-	-	-	-
Building A	1/1/2025	12/11/2025	0.95	0.57	572	3	1.4E-05
FMPU 2025 - Operation	12/12/2025	9/27/2032	-	-	-	-	-
	Child Exposure Duration		***13.75***			***Child Exposure***	***3.97E-05***
FMPU 2025 - Operation	9/28/2032	9/26/2046	-	-	-	-	-
	Adult Exposure Duration		***14.0***			***Adult Exposure***	***-***
	Lifetime Exposure Duration		**30.0**			**Lifetime Exposure**	**2.54E-04**

As demonstrated in the table above, even when emissions from operation are excluded, the excess cancer risk to children and infants at the sensitive receptor closest to the Project site are 39.7 and 214 in one million, respectively. Furthermore, the excess cancer risk over the course of a residential lifetime (30 years) is approximately 254 in one million when operation is not included, which still greatly exceeds the SCAQMD threshold of 10 in one million. Our analysis demonstrates that the infantile, child, and lifetime cancer risk still greatly exceed the SCAQMD threshold of 10 in one million, even when emissions from operation are excluded. As a result, construction of the Project could have a potentially significant health risk impact to sensitive receptors located nearby.

6.2.72 For all of the reasons stated in Response 13 and elsewhere, the 30 year exposures shown in the table are extremely overstated to the point that do not answer the question of what is the additional health risk generated by the project nor does it answer the question of whether a more detailed HRA is needed. Since this project, like most projects in California, do not generate significant levels of diesel particulate matter, and no adverse health risk would be expected. Finally, there is no requirement by SCAQMD or other over-sight agency to conduct a health risk assessment for this type of project because this type of project has an extremely low potential for adverse impact.

6-2.73 Failure to Adequately Compare Project Emissions to Applicable Thresholds
According to the DEIR's Air Quality Assessment, since the Project's overall construction emissions are well below the significance thresholds established by the SCAQMD, construction will generally not impact regional air quality, resulting in a less than significant impact (p. 14, p. 30). This significance determination, however, is incorrect, as it compares averaged emissions, rather than maximum daily emissions, to the SCAQMD's maximum daily emission thresholds. As a result, the Air Quality Assessment's conclusion of a less than significant air quality impact from construction-related emissions is incorrect. An updated DEIR should be prepared to adequately assess the Project's construction-related impacts by comparing the correct emissions estimates to the appropriate significance thresholds, and additional mitigation should be incorporated, where necessary.

6.2.73 The comment is incorrect. The greatest potential for construction emissions to exceed the SCAQMD Thresholds would be during one of the larger construction projects. Therefore, the Air Quality Assessment analyzes peak daily construction emissions for Building G (p. 14), Building A (p. 15), PEP Phase 1 (p. 22) and PEP Phase 2 (p. 25). The potential for construction projects to exceed the SCAQMD Thresholds has been analyzed for the proposed major components of the project.

6-2.74 Since construction schedules have not been developed for most of the projects in the FMPU, the emissions potentially generated during construction of the FMPU are considered for various scenarios within the DEIR's Air Quality Assessment (p. 12). Overall construction emissions for the 2015 FMPU are first considered, and are summarized in Table 5 of the Air Quality Assessment (see excerpt below) (p. 12, 13).

Table 5 Construction Emissions for the 2015 FMPU

	ROG	NOx	CO	SOx	PM10	PM2.5
			Pollutant Emissions (lbs.)			
FMPU (Excluding PEP)	2,922	9,526	8,672	14	1,093	695
PEP Phase 1	12,130	23,763	32,064	63	4,438	1,942
PEP Phase 2	2,219	6,537	6,858	12	701	442
Total Construction	17,271	39,826	47,594	90	6,232	3,079
			Pollutant Emissions (lbs. per day)			
Average Over 5 Years	13.2	30.6	36.5	0.1	4.8	2.4
Average Over 10 Years	6.6	15.3	18.3	0.0	2.4	1.2
SCQAMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Exceed Threshold?	*No*	*No*	*No*	*No*	*No*	*No*

According to the Air Quality Assessment, "the first lines of the table present the total emissions generated by the buildout and associated demolition of the FMPU (excluding PEP), then the emissions for PEP Phases 1 and 2, and finally the total emissions for everything combined. The following two lines in Table 5 average the total emissions over a 5 year and 10 year period assuming a 5- day workweek" (p. 13). The Air Quality Assessment then takes these averaged overall construction emissions and compares them to the SCAQMD's significance thresholds. This method of determining Project significance, however, is incorrect, as the SCAQMD requires that the Project's maximum daily emissions be compared to the mass daily significance thresholds, not the Project's average daily emissions. By taking the average daily construction emissions and comparing them to the SCAQMD mass daily thresholds, the Air Quality Assessment greatly underestimates the Project's maximum daily impact.

As is common practice, significance determinations are based on the maximum daily emissions during a construction period, which provides a "worst-case" analysis of the construction emissions. Therefore, as is conducted in other CEQA evaluations, if the Project's peak daily construction emissions exceed the SCAQMD's mass daily thresholds, then the Project would have a potentially significant air quality impact. And while the Air Quality Assessment's claim that the 5-year averaging period represents the "worst-case approach for construction on campus" may be true, the emissions averaged over this period do not reflect a "worst-case" analysis of the construction emissions (p. 13). Rather, the maximum daily emissions that would occur during this 5-year construction period are representative of a "worst-case" analysis, and as such, these peak emissions should have been used.

6.2.74 The analysis presented in Table 5 of the Air Quality Assessment is not the sole assessment of construction emissions in the report. The comment fails to acknowledge the other construction emissions assessments in the report. The greatest potential for

construction emissions to exceed the SCAQMD Thresholds would be during one of the larger construction projects. Therefore, the Air Quality Assessment presents peak daily construction emissions for Building G (p. 14), Building A (p. 15), PEP Phase 1 (p. 22) and PEP Phase 2 (p. 25). The potential for construction projects to exceed the SCAQMD Thresholds has been analyzed for the proposed major components of the project.

6-2.75 In an effort to correctly determine the Project's short term regional impact, we took the maximum daily construction emissions for each of the phases included in Table 5, which can be found in the CalEEMod output files provided at the end of the Air Quality Assessment, and compared them to the SCAQMD's mass daily thresholds. When the Project's maximum daily construction emissions are correctly summarized and then compared to thresholds, we find that the Project's construction-related emissions, even after mitigation, would result in a significant impact (see table below).

Mitigated Construction Emissions for the 2015 FMPU (lbs/day)							
Activity	**Year**	**ROG**	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
FMPU (Excluding PEP)	2017	5	52	40	0	11	7
FMPU (Excluding PEP)	2018	**90**	27	27	0	3	2
PEP Phase 1	2016	11	**147**	107	0	33	12
PEP Phase 1	2017	11	**136**	102	0	14	7
PEP Phase 1	2018	10	44	72	0	10	4
PEP Phase 2	2018	4	46	37	0	11	7
PEP Phase 2	2019	3	24	25	0	3	2
PEP Phase 2	2020	10	81	81	0	31	7
SCAQMD Threshold	-	**75**	**100**	**550**	**150**	**150**	**55**
Exceed?		***Yes***	***Yes***	*No*	*No*	*No*	*No*

Specifically, we find that the peak daily ROG emissions of 90 lbs/day generated during construction of the FMPU would exceed the SCAQMD threshold of 75 lbs/day for ROG, and that the peak daily NOx emissions of 147 and 136 lbs/day generated during construction of PEP Phase 1 would exceed the SCAQMD threshold of 100 lbs/day for NOx. Our analysis demonstrates that when emissions are summarized correctly and compared to thresholds, the Project would result in a potentially significant impact, contrary to the conclusion made in the Air Quality Assessment. As a result, an updated DEIR should be prepared to include a revised air quality analysis that correctly determines the Project's overall construction-related regional air quality impact, and additional mitigation measures should be implemented, where necessary.

6.2.75 The SWAPE analysis shows two basic exceedances; ROG exceedance due to the buildout of the FMPU and NOx exceedances due to PEP Phase 1 construction. The ROG exceedance is due to painting emissions. The purpose of the CalEEMod run in the Air Quality Assessment was used to generate total emissions due to the construction of the FMPU (excluding PEP). The buildout of the FMPU will occur over a 10 to 15 year period [Sid, confirm this time period]. Since the construction schedule is not known for the FMPU

buildout, CalEEMod defaults were used. CalEEMod assumed that all painting would occur over a 1-month period. When all the painting is assumed to occur over a 1-month period for the entire FMPU (excluding PEP) the result is a 90 pounds per day forecast which is quoted by SWAPE and is clearly wrong. The painting will occur sporadically over a 10 to 15 year period. The painting emissions will be orders of magnitude lower than 90 pounds per day, and will be well below the SCAQMD Threshold of 75 pounds per day.

The NOx exceedances are already acknowledged in Table 13 and associated text of the Air Quality Assessment. Mitigation Measure AQ-1 is proposed on page 30 of the Air Quality Assessment to eliminate this impact. Therefore, the concern raised in the comment regarding NOx emissions is already addressed in the Air Quality Assessment.

6-2.76 Additional Mitigation Measures Available to Reduce Construction Emissions
Numerous additional, feasible mitigation measures are available to reduce ROG emissions, also referred to as VOC emissions (for the sake of this analysis, the terms ROG and VOC are used interchangeably), including the following which are routinely identified in other CEQA matters as feasible mitigation measures:

Use of Zero-VOC Emissions Paint
The Mitigation Monitoring Program only commits to using VOC coatings with VOC content of 80 g/L or less (p. 5 of 33). The use of zero-VOC emission paint has been required for numerous projects that have undergone CEQA review. Zero-VOC emission VOC paints are commercially available. Other low-VOC standards should be incorporated into mitigation including use of "supercompliant" paints, which have a VOC standard of less than 10 g/L.

Use of Material that do Not Require Paint
Using materials that do not require painting is a common mitigation measure where VOC emissions are a concern. Interior and exterior surfaces, such as concrete, can be left unpainted.

Use of Spray Equipment with Greater Transfer Efficiencies
Various coatings and adhesives are required to be applied by specified methods such as electrostatic spray, high-volume, low-pressure (HVLP) spray, roll coater, flow coater, dip coater, etc. in order to maximize the transfer efficiency. Transfer efficiency is typically defined as the ratio of the weight of coating solids adhering to an object to the total weight of coating solids used in the application process, expressed as a percentage. When it comes to spray applications, the rules typically require the use of either electrostatic spray equipment or HVLP spray equipment. The SCAQMD is now able to certify high volume low-pressure (HVLP) spray applicators and other application technologies at efficiency rates of 65 percent or greater.

When combined together, these measures offer a feasible way to effectively reduce the Project's construction-related VOC emissions to a less than significant level. As such, these mitigation measures should be considered in a DEIR to reduce these emissions to a less than significant level.

Furthermore, there are additional mitigation measures available to reduce the Project's construction-related NOx emissions. Additional mitigation measures can be found in CAPCOA's Quantifying Greenhouse Gas Mitigation Measures, which attempt to reduce Greenhouse Gas (GHG) levels, as well as reduce Criteria Air Pollutants such as NOx. NOx is a byproduct of fuel combustion, and is emitted by on-road vehicles and by off-road construction equipment. Mitigation for criteria pollutant emissions should include consideration of the following measures in an effort to reduce NOx construction emissions to below SCAQMD thresholds.

Limit Construction Equipment Idling Beyond Regulation Requirements
Heavy duty vehicles will idle during loading/unloading and during layovers or rest periods with the engine still on, which requires fuel use and results in emissions. The California Air Resources Board (CARB) Heavy-Duty Vehicle Idling Emissions Reduction Program limits idling of diesel-fueled commercial motor vehicles to five minutes. Reduction in idling time beyond the five minutes required under the regulation would further reduce fuel consumption and thus emissions. The Project applicant must develop an enforceable mechanism that monitors the idling time to ensure compliance with this mitigation measure.

Repower or Replace Older Construction Equipment Engines
The NEDC recognizes that availability of equipment that meets the EPA's newer standards is limited. Due to this limitation, the NEDC proposes actions that can be taken to reduce emissions from existing equipment in the Best Practices for Clean Diesel Construction report. These actions include but are not limited to:

- *Repowering equipment (i.e. replacing older engines with newer, cleaner engines and leaving the body of the equipment intact).*

Engine repower may be a cost-effective emissions reduction strategy when a vehicle or machine has a long useful life and the cost of the engine does not approach the cost of the entire vehicle or machine. Examples of good potential replacement candidates include marine vessels, locomotives, and large construction machines. Older diesel vehicles or machines can be repowered with newer diesel engines or in some cases with engines that operate on alternative fuels (see section "Use Alternative Fuels for Construction Equipment" for details). The original engine is taken out of service and a new engine with reduced emission characteristics is installed. Significant emission reductions can be achieved, depending on the newer engine and the vehicle or machine's ability to accept a more modern engine and emission control system. It should be noted, however, that newer

engines or higher tier engines are not necessarily cleaner engines, so it is important that the Project Applicant check the actual emission standard level of the current (existing) and new engines to ensure the repower product is reducing emissions for NOx.

- *Replacement of older equipment with equipment meeting the latest emission standards.*

Engine replacement can include substituting a cleaner highway engine for a nonroad engine. Diesel equipment may also be replaced with other technologies or fuels. Examples include hybrid switcher locomotives, electric cranes, LNG, CNG, LPG or propane yard tractors, forklifts or loaders. Replacements using natural gas may require changes to fueling infrastructure. Replacements often require some re-engineering work due to differences in size and configuration. Typically there are benefits in fuel efficiency, reliability, warranty, and maintenance costs.

Install Retrofit Devices on Existing Construction Equipment
PM and NOx emissions from alternatively-fueled construction equipment can be further reduced by installing retrofit devices on existing and/or new equipment. The most common retrofit technologies are retrofit devices for engine exhaust after-treatment. These devices are installed in the exhaust system to reduce emissions and should not impact engine or vehicle operation. Below is a table, prepared by the EPA, that summarizes the commonly used retrofit technologies and the typical cost and emission reductions associated with each technology. It should be noted that actual emissions reductions and costs will depend on specific manufacturers, technologies and applications.

Technology	**Typical Emissions Reductions (percent)**				**Typical Costs ($)**
	PM	**NOx**	**HC**	**CO**	
Diesel Oxidation Catalyst (DOC)	20-40	-	40-70	40-60	Material: $600-$4,000 Installation: 1-3 hours
Diesel Particulate Filter (DPF)	85-95	-	85-95	50-90	Material: $8,000-$50,000 Installation: 6-8 hours
Partial Diesel Particulate Filter (pDPF)	up to 60	-	40-75	10-60	Material: $4,000-$6,000 Installation: 6-8 hours
Selective Catalyst Reduction (SCR)	-	up to 75	-	-	$10,000-$20,000; Urea $0.80/gal
Closed Crankcase Ventilation (CCV)	varies	-	-	-	-
Exhaust Gas Recirculation (EGR)	-	25-40	-	-	-
Lean NOx Catalyst (LNC)	-	5-40	-	-	$6,500-$10,000

Use Electric and Hybrid Construction Equipment

CAPCOA's Quantifying Greenhouse Gas Mitigation Measures report also proposes the use of electric and/or hybrid construction equipment as a way to mitigate NOx emissions. When construction equipment is powered by grid electricity rather than fossil fuel, direct emissions from fuel combustion are replaced with indirect emissions associated with the electricity used to power the equipment. Furthermore, when construction equipment is powered by hybrid-electric drives, emissions from fuel combustion are also greatly reduced. Electric construction equipment is available commercially from companies such as Peterson Pacific Corporation, which specialize in the mechanical processing equipment like grinders and shredders. Construction equipment powered by hybrid-electric drives is also commercially available from companies such as Caterpillar. For example, Caterpillar reports that during an 8-hour shift, its D7E hybrid dozer burns 19.5 percent fewer gallons of fuel than a conventional dozer while achieving a 10.3 percent increase in productivity. The D7E model burns 6.2 gallons per hour compared to a conventional dozer which burns 7.7 gallons per hour. Fuel usage and savings are dependent on the make and model of the construction equipment used. The Project Applicant should calculate project-specific savings and provide manufacturer specifications indicating fuel burned per hour.

Furthermore, the contractor should submit to the developer's representative a monthly report that, for each onroad construction vehicle, nonroad construction equipment, or generator onsite, includes:

- *Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site*

date.

- *Any problems with the equipment or emission controls.*
- *Certified copies of fuel deliveries for the time period that identify:*
    - *o Source of supply*
    - *o Quantity of fuel*
    - *o Quality of fuel, including sulfur content (percent by weight).*

In addition to these measures, we also recommend the Applicant to implement the following NOx mitigation measures, called "Enhanced Exhaust Control Practices," that are recommended by the Sacramento Metropolitan Air Quality Management District (SMAQMD):

1. *The project representative shall submit to the lead agency a comprehensive inventory of all offroad construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project.*
    - *The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment.*

- *The project representative shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.*
- *This information shall be submitted at least 4 business days prior to the use of subject heavy-duty off-road equipment.*
- *The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs.*

2. *The project representative shall provide a plan for approval by the lead agency demonstrating that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NOx reduction and 45% particulate reduction compared to the most recent California Air Resources Board (ARB) fleet average.*
    - *This plan shall be submitted in conjunction with the equipment inventory.*
    - *Acceptable options for reducing emissions may include use of late model engines, low emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.*
    - *The District's Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction.*
3. *The project representative shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour.*
    - *Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. Non-compliant equipment will be documented and a summary provided to the lead agency monthly.*
    - *A visual survey of all in-operation equipment shall be made at least weekly.*
    - *A monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey.*
4. *The District and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other District, state or federal rules or regulations.*

These measures are more stringent and prescriptive than those measures identified in the DEIR, Mitigation Monitoring Plan, and Air Quality Assessment. When combined together, these measures offer a cost-effective, feasible way to incorporate lower-emitting equipment into the Project's construction fleet, which subsequently, reduces NOx emissions released during Project construction. A DEIR must be prepared to include additional mitigation

measures, as well as include an updated air quality assessment to ensure that the necessary mitigation measures are implemented to reduce construction emissions to below thresholds. Furthermore, the Project Applicant needs to demonstrate commitment to the implementation of these measures prior to Project approval, to ensure that the Project's construction-related emissions are reduced to the maximum extent possible.

6.2.76 The comment by SWAPE is a list of potential mitigation measures that could reduce ROG and NOx emissions. With the mitigation measures identified in the Air Quality Assessment, no additional mitigation measures are needed.

6-2.77 Incorrectly Presumed the Use of Tier 4 Final Engines
According to the 2016 Mitigation Monitoring Program (MMP) for the proposed Project, all off-road diesel-powered construction equipment greater than 50 HP will meet Tier 4 emission standards "where available" (AQ-05, p. 4 of 33). Furthermore, the MMP also states that all off-road diesel-powered construction equipment greater than 50 hp used during construction of PEP Phase 1 will also comply with EPA-Certified Tier 4 emission controls "where available" (AQ-09, p. 5 of 33). The MMP makes no mention, however, of an actual commitment to the implementation of these mitigation measures, nor does it discuss the feasibility of actually obtaining an entirely Tier 4 fleet. Although off-road Tier 4 equipment is available for purchase, it is not required that off-road construction fleets be comprised solely of Tier 4 Final engines. Furthermore, based on availability and cost, it is unrealistic to presume that all of the construction equipment utilized for the Project will have Tier 4 engines. As a result, this mitigation measure should not be relied upon to reduce the Project's construction emissions to below levels of significance. Rather, the Project should pursue additional mitigation measures that are more technically feasible to implement.

The United States Environmental Protection Agency's (USEPA) 1998 nonroad engine emission standards were structured as a three-tiered progression. Tier 1 standards were phased-in from 1996 to 2000 and Tier 2 emission standards were phased in from 2001 to 2006. Tier 3 standards, which applied to engines from 37-560 kilowatts (kW) only, were phased in from 2006 to 2008. The Tier 4 emission standards were introduced in 2004, and were phased in from 2008 – 2015. These tiered emission standards, however, are only applicable to newly manufactured nonroad equipment. According to the United States Environmental Protection Agency (USEPA) "if products were built before EPA emission standards started to apply, they are generally not affected by the standards or other regulatory requirements."

Therefore, pieces of equipment manufactured prior to 2000 are not required to adhere to Tier 2 emission standards, and pieces of equipment manufactured prior to 2008 are not required to adhere to Tier 4 emission standards. Construction equipment often lasts more than 30 years; as a result, Tier 1 equipment and non-certified equipment are currently still in

use. It is estimated that of the two million diesel engines currently used in construction, 31 percent were manufactured before the introduction of emissions regulations.

Furthermore, in a 2010 white paper, the California Industry Air Quality Coalition estimated that approximately 7% and less than 1% of all off-road heavy duty diesel equipment in California was equipped with Tier 2 and Tier 3 engines, respectively. It goes on to explain that "cleaner burning Tier 4 engines…are not expected to come online in significant numbers until 2014." Given that significant production activities have only just begun within the last couple of years, it can be presumed that there is limited availability of Tier 4 equipment. Furthermore, due to the complexity of Tier 4 engines, it is very difficult if not nearly impossible, to retrofit older model machinery with this technology. Therefore, available off-road machinery equipped with Tier 4 engines are most likely new. According to a September 20, 2013 EPA Federal Register document, a new Tier 4 scraper or bulldozer would cost over $1,000,000 to purchase. Utilizing the construction equipment list from the CalEEMod output file, it would be completely unrealistic to assume that all 18 pieces of equipment would be purchased at this price Appendix E, pp. 144). It is also relatively expensive to retrofit a piece of old machinery with a Tier 3 engine. For example, replacing a Tier 0 engine with a Tier 3 engine would cost roughly $150,000 or more.

It should be noted that there are regulations, currently enforced by the California Air Resources Board (CARB), with regards to construction fleets. According to CARB, large and medium fleets (fleets with over 2,500 horsepower) will not be allowed to add a vehicle with a Tier 1 engine to its fleet starting on January 1, 2014. The engine tier must be Tier 2 or higher. Therefore, it is more realistic to assume that the fleet will include a mix of Tier 2, 3, and 4 engines, rather than just Tier 4 Final equipment exclusively.

Unless the Project applicant can demonstrate to the public, either through budget or through a preliminary agreement with a contractor or supplier, that they will purchase/rent exclusively Tier 4 construction equipment, the use of Tier 2 equipment should be conservatively assumed, and an updated air quality analysis should be conducted to reflect this more realistic scenario.

6.2.77 The comment provides a good history of the phase in of Tier 4 construction equipment. However, it fails to note that Tier 4 equipment has been available for several years and that there has been a big push in California to get more Tier 4 equipment available. Now many major projects, which are substantially bigger than any of the college projects, are requiring the use of Tier 4 equipment (e.g., Berths 136-147 (TraPac) Container Terminal Project FEIS/FEIR, Port of Los Angeles, Mitigation Measure AQ-3).

The use of Tier 4 equipment for MtSAC construction projects has been required for several years. The requirement comes from the 2013 Mitigation Monitoring Program Measure 3f.

Finally, a quick check was made using CalEEMod on what would happen if only Tier 3 equipment was available and no Tier 4 equipment was available during the grading of PEP Phase 1. The results are that NOx emissions for 2016 would peak at 102 pounds per day and for 2017 the peak emissions would be 96 pounds per day. (CalEEMod printout is attached.) The corresponding SCAQMD threshold is 100 pounds per day. Therefore, even if not all of the construction equipment during the grading phase of PEP Phase could be Tier 4, and Tier 3 equipment had to be used for a portion of the construction equipment, the threshold would not be exceeded.

In summary, Tier 4 equipment is available for major construction projects. If for some reason all Tier 4 equipment could not be rented, and some had to be substituted by Tier 3 equipment, no construction impact would occur.

6-2.78 Incorrect Evaluation of Operational Criteria Air Pollutant Emissions
The DEIR's Air Quality Assessment uses the change between the Project's 2020 and 2025 operational emissions and the existing 2015 baseline emissions to determine Project significance (p. 17). Using this method, the Air Quality Assessment makes the following conclusion:

> *"The analysis indicates that the emissions of ROG, NOx, and CO will decrease in future years even though the headcount will increase. The vehicular emission rates will continue to decrease in future for these emissions, and will more than offset the increase in headcount. Emissions of SOx, PM10, and PM2.5 will increase slightly in future years. Again the emission rates for these pollutants will go down in future years, offsetting a portion of the increase in emissions caused by increasing headcount. Most importantly, all emission changes are less than the SCAQMD thresholds and no impact on regional air quality is projected" (p. 17-18).*

This method of determining Project significance, however, is incorrect and is inconsistent with recommendations set forth by the SCAQMD. Per SCAQMD recommendations, when measuring Project emissions, it is appropriate to include regulatory requirements, such as the federal and state regulations that require vehicles to be more efficient and lower-emitting. However, "the proposed Project's emissions themselves should not be masked by comparing it to an existing condition baseline where air quality is worse than what it will be when the proposed Project is operational". It is appropriate to assume that vehicles will comply with existing regulatory requirements; however their increase in activity needs to be accounted for and shouldn't be masked by improvements brought on by those regulations.

According to a comment letter prepared by the SCAQMD for the Recirculated Draft Environmental Impact Report (RDEIR) for the Proposed General Plan Amendment No. 960: General Plan Update Project,

"By comparing project impacts to a baseline of actual 2008 conditions, the RDEIR fails as an information document because it does not disclose true air quality impacts from the project. This is exactly the type of situation which led the California Supreme Court to state that, '[t]o the extent a departure from the 'norm[ ]' of an existing conditions baseline (Guidelines, § 15125(a)) promotes public participation and more informed decision making by providing a more accurate picture of a proposed project's likely impacts, CEQA permits the departure.' (Neighbors for Smart Rail v. Exposition Metro Line Const. Authority (2013) 57 Cal. 4th 439, 453.)."

Similar to the proposed Project, the RDEIR for the Proposed General Plan Amendment No. 960: General Plan Update Project compared future 2040 emissions to the existing 2008 baseline emissions, and found that the emissions between these two scenarios would result in a negative net increase. Consistent with the proposed Project, these negative net emissions were due to the substantial decrease in anticipated vehicle emissions from vehicles mandated by increased efficiency requirements in current Federal and State law that have been implemented and will continue to affect the motor vehicle fleet between the existing year and 2040.

In response to the conclusions made regarding this project's air quality impacts, the SCAQMD staff concludes that "although existing regulatory and other requirements have shown an improvement in the region's air quality and is expected to continue to improve over time, the decrease in emissions from compliance from such requirements should not be considered mitigation since the reduced emissions are not a result of additional actions incorporated in the project to reduce the unmitigated emissions from mobile source vehicle emission activities." In order to ensure that the project's air quality impacts are accurately represented, the SCAQMD staff recommends that if a baseline analysis is being conducted to evaluate emissions impacts, it is more appropriate to compare baseline emission activities with future vehicle activity using the same baseline emission factors to show the situation if no changes are made.

Therefore, to remain consistent with SCAQMD recommendations, the Air Quality Assessment should remodel the future 2020 and 2025 FMPU Buildout emissions utilizing the same vehicle emission factors as the 2015 existing model. An updated DEIR should be prepared to include an updated air quality assessment that correctly analyzes the future operational emissions to the baseline existing emissions following SCAQMD recommendations.

6.2.78 [Sid- You and Sean should probably take a look at this and add to the response. It is in large part a CEQA issue.] The comment is based on a letter sent by the SCAQMD ("Recirculated Draft Environmental Impact Report (RDEIR) for the Proposed General Plan Amendment No. 960: General Plan Update Project (EIR No. 521/SCH 2009041065)," dated April 3, 2015) to Ms. Kristi Lovelady, Riverside County. The letter simply states an opinion of the SCAQMD on how a particular analysis should be conducted, and is not necessarily

supported by CEQA law. The situation faced by Riverside County may not be analogous to the proposed FMPU. In the letter the SCAQMD states "…the decrease in emissions from such requirements should not be considered mitigation…" The FMPU analysis under scrutiny does not count vehicular emission rate decreases as mitigation in the analysis.

The analysis presented on pages 17-18 of the Air Quality Assessment answers the question for the decision-makers of "Will college generated emissions increase or decrease in future years as the student population increases?" To artificially hold vehicular emission rates at year 2015 while the student population increases in future years, does not represent a situation that would occur, and therefore, does not provide useful information to the decision-makers.

6-2.79 Updated Analysis Demonstrates a Potentially Significant Impact
In an effort to more accurately estimate the Project's emissions, we prepared an updated model for the 2025 FMPU operations using CalEEMod. It should be noted that we did not remodel 2020 FMPU operational emissions and only remodeled 2025 FMPU emissions, as the 2025 scenario represents the emissions that would occur at full Project buildout. An operational year of 2015 was inputted so that the same 2015 emission factors as the existing model were utilized, consistent with SCAQMD recommendations. All other parameters remained the same.

When correct input parameters are used to model emissions, we find that the net emissions between the 2025 FMPU buildout and existing conditions increase when compared to what is estimated in the Air Quality Assessment. Furthermore, we find that the difference in NO_x emissions exceed the SCAQMD threshold of 55 pounds per day (see table below).

Campus Emissions for Future Years (pounds per day)						
	ROG	**NO_x**	**CO**	**SO_x**	**PM10**	**PM2.5**
Existing	221	507	1,932	4	284	81
Year 2025	265	608	2,351	5	341	97
Net Increase	**44**	**101**	**419**	**1**	**57**	**16**
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Thresholds?	No	***Yes***	No	No	No	No

As demonstrated in the table above, the net change between the future and baseline NO_x emissions, when estimated correctly, greatly exceed the SCAQMD threshold of 55 lbs/day. Our analysis demonstrates that a potentially significant impact may occur as a result of Project operation, which was not previously identified. As such, a DEIR should be prepared that includes an updated air quality analysis to correctly evaluate the Project's air quality impacts, and should include additional mitigation measures where necessary.

6.2.79 [Sid- this is really a continuation of the previous comment. Take a look at it and add stuff as necessary.] This comment shows the emissions for the existing college operations and then shows the college emissions that would occur for the college in 2025 but using 2015 vehicle emission rates. This analysis presents a situation that could not occur, and therefore, provides no useful information to the decision-makers. See also Response to Comment 6.2.78.

Appendix

Physical Education Projects-- Phase 1 -- Construction Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	91.73	1000sqft	2.11	91,730.00	0
General Light Industry	79.40	1000sqft	1.82	79,400.00	0
Other Non-Asphalt Surfaces	174.43	1000sqft	4.00	174,430.00	0
Parking Lot	107.57	1000sqft	2.47	107,570.00	0
City Park	21.80	Acre	21.80	949,608.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - This has updated painting information from Matt Breyer dated March 3, 2016.

Land Use -

Construction Phase - Demolition duration based on Tilden Coil schedule
Site Prep plus Grading equals 45 days based on Tilden Coil schedule

Trips and VMT - Demolition is 9800 cy, total export of dirt during grading 81429 cy, and concrete import is 15,800 cy

Demolition -

Grading - Entire site will essentially be re-graded

Architectural Coating - Default values based on requirements of Mitigation Monitoring Program and paint info dated March 3, 2016.

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Construction Off-road Equipment Mitigation - Tier 4 required for grading mitigation for NOx control

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	649,198.00	9,000.00

tblArchitecturalCoating	ConstArea_Nonresidential_Interior	1,947,593.00	151,650.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	75.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	75.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	35.00	58.00
tblConstructionPhase	NumDays	500.00	381.00
tblConstructionPhase	NumDays	30.00	56.00
tblConstructionPhase	NumDays	45.00	40.00
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	PhaseEndDate	12/12/2016	12/24/2016
tblConstructionPhase	PhaseStartDate	12/25/2016	12/26/2016
tblConstructionPhase	PhaseStartDate	12/7/2016	12/20/2016
tblGrading	AcresOfGrading	100.00	112.50
tblGrading	MaterialImported	0.00	81,429.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	HaulingTripNumber	0.00	1,580.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	11.1635	147.2165	106.8954	0.2517	32.9577	4.6960	37.6537	9.9840	4.3202	13.9404	0.0000	25,504.5115	25,504.5115	2.0834	0.0000	25,548.2623
2017	10.5035	135.9483	102.4764	0.2514	14.4870	4.3333	18.8202	5.0866	3.9865	9.0731	0.0000	25,084.5826	25,084.5826	2.0791	0.0000	25,128.2432
2018	10.3331	44.0146	72.2222	0.1575	8.2418	1.8399	10.0817	2.2117	1.7229	3.9346	0.0000	13,800.3014	13,800.3014	0.9842	0.0000	13,820.9698
Total	**32.0001**	**327.1794**	**281.5940**	**0.6606**	**55.6864**	**10.8692**	**66.5556**	**17.2823**	**10.0296**	**26.9482**	**0.0000**	**64,389.3955**	**64,389.3955**	**5.1467**	**0.0000**	**64,497.4753**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.1969	102.1825	95.7012	0.2517	27.8784	2.4352	30.3136	7.6033	2.3461	9.9494	0.0000	25,504.5115	25,504.5115	2.0834	0.0000	25,548.2623
2017	6.7103	96.1361	93.6146	0.2514	9.4077	2.3395	11.7472	3.0697	2.2581	5.3277	0.0000	25,084.5826	25,084.5826	2.0791	0.0000	25,128.2432
2018	10.3331	41.6644	72.2363	0.1575	8.2418	1.6698	9.9117	2.2117	1.5921	3.8037	0.0000	13,800.3014	13,800.3014	0.9842	0.0000	13,820.9698
Total	**23.2402**	**239.9830**	**261.5521**	**0.6606**	**45.5280**	**6.4445**	**51.9725**	**12.8847**	**6.1962**	**19.0809**	**0.0000**	**64,389.3955**	**64,389.3955**	**5.1467**	**0.0000**	**64,497.4753**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**27.37**	**26.65**	**7.12**	**0.00**	**18.24**	**40.71**	**21.91**	**25.45**	**38.22**	**29.19**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	36.0228	4.5000e-004	0.0490	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		0.1039	0.1039	2.8000e-004		0.1099

Energy	0.1213	1.1026	0.9262	6.6200e-003		0.0838	0.0838		0.0838	0.0838		1,323.1481	1,323.1481	0.0254	0.0243	1,331.2006
Mobile	9.7596	28.3936	107.1520	0.3069	21.5663	0.4385	22.0048	5.7627	0.4043	6.1670		24,633.8959	24,633.8959	0.9075		24,652.9542
Total	**45.9036**	**29.4967**	**108.1272**	**0.3135**	**21.5663**	**0.5225**	**22.0888**	**5.7627**	**0.4883**	**6.2509**		**25,957.1480**	**25,957.1480**	**0.9332**	**0.0243**	**25,984.2647**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	36.0228	4.5000e-004	0.0490	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		0.1039	0.1039	2.8000e-004		0.1099
Energy	0.1213	1.1026	0.9262	6.6200e-003		0.0838	0.0838		0.0838	0.0838		1,323.1481	1,323.1481	0.0254	0.0243	1,331.2006
Mobile	9.7596	28.3936	107.1520	0.3069	21.5663	0.4385	22.0048	5.7627	0.4043	6.1670		24,633.8959	24,633.8959	0.9075		24,652.9542
Total	**45.9036**	**29.4967**	**108.1272**	**0.3135**	**21.5663**	**0.5225**	**22.0888**	**5.7627**	**0.4883**	**6.2509**		**25,957.1480**	**25,957.1480**	**0.9332**	**0.0243**	**25,984.2647**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/3/2016	12/6/2016	6	56	
2	Site Preparation	Site Preparation	12/20/2016	12/24/2016	6	5	
3	Grading	Grading	12/26/2016	2/9/2017	6	40	
4	Building Construction	Building Construction	2/10/2017	4/30/2018	6	381	
5	Paving	Paving	5/1/2018	6/9/2018	6	35	
6	Architectural Coating	Architectural Coating	6/10/2018	8/16/2018	6	58	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 151,650; Non-Residential Outdoor: 9,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,962.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	10,179.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	589.00	230.00	1,580.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	118.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.5833	0.0000	7.5833	1.1482	0.0000	1.1482			0.0000			0.0000
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365		4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**	**7.5833**	**2.2921**	**9.8754**	**1.1482**	**2.1365**	**3.2847**		**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6332	9.9525	7.7871	0.0258	0.6105	0.1528	0.7633	0.1672	0.1406	0.3077		2,597.4943	2,597.4943	0.0188		2,597.8881
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0640	0.0860	0.8984	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3573	167.3573	9.1500e-003		167.5495
Total	**0.6971**	**10.0385**	**8.6855**	**0.0278**	**0.7781**	**0.1542**	**0.9323**	**0.2116**	**0.1419**	**0.3535**		**2,764.8516**	**2,764.8516**	**0.0279**		**2,765.4376**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.4125	0.0000	3.4125	0.5167	0.0000	0.5167			0.0000			0.0000
Off-Road	1.4692	20.5260	25.1815	0.0399		1.0287	1.0287		1.0287	1.0287	0.0000	4,089.2841	4,089.2841	1.1121		4,112.6374

Total	**1.4692**	**20.5260**	**25.1815**	**0.0399**	**3.4125**	**1.0287**	**4.4412**	**0.5167**	**1.0287**	**1.5454**	**0.0000**	**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6332	9.9525	7.7871	0.0258	0.6105	0.1528	0.7633	0.1672	0.1406	0.3077		2,597.4943	2,597.4943	0.0188		2,597.8881
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0640	0.0860	0.8984	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3573	167.3573	9.1500e-003		167.5495
Total	**0.6971**	**10.0385**	**8.6855**	**0.0278**	**0.7781**	**0.1542**	**0.9323**	**0.2116**	**0.1419**	**0.3535**		**2,764.8516**	**2,764.8516**	**0.0279**		**2,765.4376**

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036		4,065.0053	4,065.0053	1.2262		4,090.7544
Total	**5.0771**	**54.6323**	**41.1053**	**0.0391**	**18.0663**	**2.9387**	**21.0049**	**9.9307**	**2.7036**	**12.6343**		**4,065.0053**	**4,065.0053**	**1.2262**		**4,090.7544**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Worker	0.0768	0.1032	1.0780	2.3900e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		200.8288	200.8288	0.0110		201.0594
Total	**0.0768**	**0.1032**	**1.0780**	**2.3900e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**200.8288**	**200.8288**	**0.0110**		**201.0594**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	0.9515	19.4584	23.4003	0.0391		0.9611	0.9611		0.9611	0.9611	0.0000	4,065.0053	4,065.0053	1.2262		4,090.7544
Total	**0.9515**	**19.4584**	**23.4003**	**0.0391**	**8.1298**	**0.9611**	**9.0909**	**4.4688**	**0.9611**	**5.4299**	**0.0000**	**4,065.0053**	**4,065.0053**	**1.2262**		**4,090.7544**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0768	0.1032	1.0780	2.3900e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		200.8288	200.8288	0.0110		201.0594
Total	**0.0768**	**0.1032**	**1.0780**	**2.3900e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**200.8288**	**200.8288**	**0.0110**		**201.0594**

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2350	0.0000	9.2350	3.6672	0.0000	3.6672			0.0000			0.0000

Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975		6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**9.2350**	**3.5842**	**12.8192**	**3.6672**	**3.2975**	**6.9647**		**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.5988	72.2881	56.5602	0.1873	23.4991	1.1099	24.6091	5.8938	1.0210	6.9148		18,866.3877	18,866.3877	0.1362		18,869.2475
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0853	0.1147	1.1978	2.6500e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		223.1431	223.1431	0.0122		223.3994
Total	**4.6841**	**72.4028**	**57.7580**	**0.1899**	**23.7227**	**1.1118**	**24.8345**	**5.9531**	**1.0227**	**6.9758**		**19,089.5308**	**19,089.5308**	**0.1484**		**19,092.6469**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1557	0.0000	4.1557	1.6502	0.0000	1.6502			0.0000			0.0000
Off-Road	1.5128	29.7798	37.9432	0.0617		1.3234	1.3234		1.3234	1.3234	0.0000	6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**1.5128**	**29.7798**	**37.9432**	**0.0617**	**4.1557**	**1.3234**	**5.4791**	**1.6502**	**1.3234**	**2.9736**	**0.0000**	**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

102.1826

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.5988	72.2881	56.5602	0.1873	23.4991	1.1099	24.6091	5.8938	1.0210	6.9148		18,866.3877	18,866.3877	0.1362		18,869.2475

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0853	0.1147	1.1978	2.6500e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		223.1431	223.1431	0.0122		223.3994
Total	**4.6841**	**72.4028**	**57.7580**	**0.1899**	**23.7227**	**1.1118**	**24.8345**	**5.9531**	**1.0227**	**6.9758**		**19,089.5308**	**19,089.5308**	**0.1484**		**19,092.6469**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2350	0.0000	9.2350	3.6672	0.0000	3.6672			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518		6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**9.2350**	**3.3172**	**12.5522**	**3.6672**	**3.0518**	**6.7190**		**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.3279	66.2528	54.5918	0.1871	5.0284	1.0143	6.0427	1.3602	0.9330	2.2932		18,556.6415	18,556.6415	0.1334		18,559.4430
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0765	0.1035	1.0796	2.6500e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		214.5722	214.5722	0.0113		214.8087
Total	**4.4044**	**66.3563**	**55.6714**	**0.1897**	**5.2520**	**1.0161**	**6.2681**	**1.4195**	**0.9347**	**2.3542**		**18,771.2136**	**18,771.2136**	**0.1447**		**18,774.2517**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					4.1557	0.0000	4.1557	1.6502	0.0000	1.6502			0.0000			0.0000
Off-Road	1.5128	29.7798	37.9432	0.0617		1.3234	1.3234		1.3234	1.3234	0.0000	6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**1.5128**	**29.7798**	**37.9432**	**0.0617**	**4.1557**	**1.3234**	**5.4791**	**1.6502**	**1.3234**	**2.9736**	**0.0000**	**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

96.1361

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.3279	66.2528	54.5918	0.1871	5.0284	1.0143	6.0427	1.3602	0.9330	2.2932		18,556.6415	18,556.6415	0.1334		18,559.4430
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0765	0.1035	1.0796	2.6500e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		214.5722	214.5722	0.0113		214.8087
Total	**4.4044**	**66.3563**	**55.6714**	**0.1897**	**5.2520**	**1.0161**	**6.2681**	**1.4195**	**0.9347**	**2.3542**		**18,771.2136**	**18,771.2136**	**0.1447**		**18,774.2517**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0705	1.0797	0.8896	3.0500e-003	0.0926	0.0165	0.1091	0.0248	0.0152	0.0400		302.4032	302.4032	2.1700e-003		302.4488
Vendor	1.9171	18.5201	26.1046	0.0496	1.4379	0.2946	1.7325	0.4096	0.2709	0.6805		4,891.9658	4,891.9658	0.0357		4,892.7149
Worker	2.2525	3.0478	31.7942	0.0781	6.5836	0.0529	6.6366	1.7460	0.0488	1.7948		6,319.1504	6,319.1504	0.3317		6,326.1157
Total	**4.2401**	**22.6476**	**58.7884**	**0.1308**	**8.1141**	**0.3640**	**8.4782**	**2.1803**	**0.3349**	**2.5153**		**11,513.5193**	**11,513.5193**	**0.3695**		**11,521.2794**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.4702	22.9683	17.9932	0.0268		1.4993	1.4993		1.4392	1.4392	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**2.4702**	**22.9683**	**17.9932**	**0.0268**		**1.4993**	**1.4993**		**1.4392**	**1.4392**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0705	1.0797	0.8896	3.0500e-003	0.0926	0.0165	0.1091	0.0248	0.0152	0.0400		302.4032	302.4032	2.1700e-003		302.4488
Vendor	1.9171	18.5201	26.1046	0.0496	1.4379	0.2946	1.7325	0.4096	0.2709	0.6805		4,891.9658	4,891.9658	0.0357		4,892.7149
Worker	2.2525	3.0478	31.7942	0.0781	6.5836	0.0529	6.6366	1.7460	0.0488	1.7948		6,319.1504	6,319.1504	0.3317		6,326.1157
Total	**4.2401**	**22.6476**	**58.7884**	**0.1308**	**8.1141**	**0.3640**	**8.4782**	**2.1803**	**0.3349**	**2.5153**		**11,513.5193**	**11,513.5193**	**0.3695**		**11,521.2794**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Off-Road	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0687	1.0013	0.8718	3.0500e-003	0.2203	0.0165	0.2368	0.0561	0.0152	0.0713		297.3784	297.3784	2.2000e-003		297.4247
Vendor	1.7917	16.9886	25.0489	0.0495	1.4379	0.2775	1.7155	0.4096	0.2553	0.6649		4,809.7893	4,809.7893	0.0355		4,810.5344
Worker	2.0256	2.7639	28.7688	0.0781	6.5836	0.0515	6.6352	1.7460	0.0477	1.7937		6,083.1947	6,083.1947	0.3078		6,089.6590
Total	**3.8860**	**20.7537**	**54.6896**	**0.1307**	**8.2418**	**0.3456**	**8.5874**	**2.2117**	**0.3182**	**2.5298**		**11,190.3624**	**11,190.3624**	**0.3455**		**11,197.6181**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1696	20.9106	17.5467	0.0268		1.3243	1.3243		1.2739	1.2739	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.1696**	**20.9106**	**17.5467**	**0.0268**		**1.3243**	**1.3243**		**1.2739**	**1.2739**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0687	1.0013	0.8718	3.0500e-003	0.2203	0.0165	0.2368	0.0561	0.0152	0.0713		297.3784	297.3784	2.2000e-003		297.4247
Vendor	1.7917	16.9886	25.0489	0.0495	1.4379	0.2775	1.7155	0.4096	0.2553	0.6649		4,809.7893	4,809.7893	0.0355		4,810.5344
Worker	2.0256	2.7639	28.7688	0.0781	6.5836	0.0515	6.6352	1.7460	0.0477	1.7937		6,083.1947	6,083.1947	0.3078		6,089.6590
Total	**3.8860**	**20.7537**	**54.6896**	**0.1307**	**8.2418**	**0.3456**	**8.5874**	**2.2117**	**0.3182**	**2.5298**		**11,190.3624**	**11,190.3624**	**0.3455**		**11,197.6181**

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635		2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.1849					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7963**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**		**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635	0.0000	2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.1849					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7963**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**	**0.0000**	**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

3.7 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.6286					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**9.9272**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4058	0.5537	5.7635	0.0156	1.3190	0.0103	1.3293	0.3498	9.5500e-003	0.3594		1,218.7045	1,218.7045	0.0617		1,219.9996
Total	**0.4058**	**0.5537**	**5.7635**	**0.0156**	**1.3190**	**0.0103**	**1.3293**	**0.3498**	**9.5500e-003**	**0.3594**		**1,218.7045**	**1,218.7045**	**0.0617**		**1,219.9996**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.6286					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**9.9272**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4058	0.5537	5.7635	0.0156	1.3190	0.0103	1.3293	0.3498	9.5500e-003	0.3594		1,218.7045	1,218.7045	0.0617		1,219.9996
Total	**0.4058**	**0.5537**	**5.7635**	**0.0156**	**1.3190**	**0.0103**	**1.3293**	**0.3498**	**9.5500e-003**	**0.3594**		**1,218.7045**	**1,218.7045**	**0.0617**		**1,219.9996**

From: Ben Peralta <bperalta@tvmwd.com>
To: "mikaela.klein@mtsac.edu" <mikaela.klein@mtsac.edu>
Date: 08/09/2016 02:36 PM
Subject: 2105 Facility Master Plan Update & PEP

Hi Mikaela:

TVMWD only provides drinking (potable) water to Mt. SAC. The letter you sent us also includes questions about wastewater, storm water, and landfill/solid waste. The questions related to these items are not applicable to TVMWD.

b) Can you provide an estimate of how much you anticipate your potable water demands to increase after construction of the new facilities mentioned in the letter? If new facilities or expansion of existing water facilities are required to be constructed, this will not cause significant environmental effects.

d) Sufficient water supplies are available to serve the project from existing entitlements and resources.

Best Regards,

Ben Peralta Jr., P.E.
Project Manager
Three Valleys Municipal Water District
(909) 621-5568

STATE WATER RESOURCES CONTROL BOARD (SWRCB)
WATER QUALITY ORDER NO. 2003 – 0005 – DWQ

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT NO. CAS000004

WASTE DISCHARGE REQUIRMENTS (WDRS)
FOR
STORM WATER DISCHARGES FROM
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (GENERAL PERMIT)

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FACT SHEET
FOR
STATE WATER RESOURCES CONTROL BOARD (SWRCB)
WATER QUALITY ORDER NO. 2003 – 0005 – DWQ

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT NO. CAS000004

WASTE DISCHARGE REQUIREMENTS (WDRS)
FOR
STORM WATER DISCHARGES FROM
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (GENERAL PERMIT)

BACKGROUND

In 1972, the federal Water Pollution Control Act (also referred to as the Clean Water Act [CWA]) was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a NPDES permit. The 1987 amendments to CWA added section 402(p), which established a framework for regulating storm water discharges under the NPDES Program. Subsequently, in 1990, the U.S. Environmental Protection Agency (U.S. EPA) promulgated regulations for permitting storm water discharges from industrial sites (including construction sites that disturb five acres or more) and from municipal separate storm sewer systems (MS4s) serving a population of 100,000 people or more. These regulations, known as the Phase I regulations, require operators of medium and large MS4s to obtain storm water permits. On December 8, 1999, U.S. EPA promulgated regulations, known as Phase II, requiring permits for storm water discharges from Small MS4s and from construction sites disturbing between one and five acres of land. This General Permit regulates storm water discharges from Small MS4s.

An "MS4" is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) designed or used for collecting or conveying storm water; (ii) which is not a combined sewer; and (iii) which is not part of a Publicly Owned Treatment Works (POTW). [See Title 40, Code of Federal Regulations (40 CFR) §122.26(b)(8).]

A "Small MS4" is an MS4 that is not permitted under the municipal Phase I regulations, and which is "owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity…." (40 CFR §122.26(b)(16)). Small MS4s *include systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares, but do not include separate storm sewers in*

very discrete areas, such as individual buildings. This permit refers to MS4s that operate throughout a community as "traditional MS4s" and MS4s that are similar to traditional MS4s but operated at a separate campus or facility as "non-traditional MS4s."

Federal regulations allow two permitting options for storm water discharges (individual permits and general permits). SWRCB elected to adopt a statewide general permit for Small MS4s in order to efficiently regulate numerous storm water discharges under a single permit. In certain situations a storm water discharge may be more appropriately and effectively regulated by an individual permit, a region-specific general permit, or by inclusion in an existing Phase I permit. In these situations, the Regional Water Quality Control Board (RWQCB) Executive Officer will direct the Small MS4 operator to submit the appropriate application, in lieu of a Notice of Intent (NOI) to comply with the terms of this General Permit. In these situations, the individual or regional permits will govern, rather than this General Permit.

NINTH CIRCUIT COURT RULING

On January 14, 2003, the Ninth Circuit Court issued its decision in *Environmental Defense Center v. EPA*. This ruling upheld the Phase II regulations on all but three of the 20 issues contested. In summary, the court determined that applications for general permit coverage (including the NOI and Storm Water Management Program [SWMP]) must be made available to the public, the applications must be reviewed and determined to meet the Maximum Extent Practicable standard by the permitting authority before coverage commences, and there must be a process to accommodate public hearings. This General Permit is consistent with the ruling. Should the ruling be revised or vacated in the future, SWRCB may modify the General Permit.

ENTITIES SUBJECT TO THIS GENERAL PERMIT

This General Permit regulates discharges of storm water from "regulated Small MS4s." A "regulated Small MS4" is defined as a Small MS4 that discharges to a water of the United States (U.S.) or to another MS4 regulated by an NPDES permit, and which is designated in one of the following ways:

1. Automatically designated by U.S. EPA pursuant to 40 CFR section 122.32(a)(1) because it is located within an urbanized area defined by the Bureau of the Census (see Attachment 1); or

2. Traditional Small MS4s that serve cities, counties, and unincorporated areas that are designated by SWRCB or RWQCB after consideration of the following factors:

    a. High population density – High population density means an area with greater than 1,000 residents per square mile. Also to be considered in this definition is a high density created by a non-residential population, such as tourists or commuters.

    b. High growth or growth potential – If an area grew by more than 25 percent between 1990 and 2000, it is a high growth area. If an area anticipates a growth rate of more than 25 percent over a 10-year period ending prior to the end of the first permit term, it has high growth potential.

c. Significant contributor of pollutants to an interconnected permitted MS4 – A Small MS4 is interconnected with a separately permitted MS4 if storm water that has entered the Small MS4 is allowed to flow directly into a permitted MS4. In general, if the Small MS4 discharges more than 10 percent of its storm water to the permitted MS4, or its discharge makes up more than 10 percent of the other permitted MS4's total storm water volume, it is a significant contributor of pollutants to the permitted MS4. In specific cases, the MS4s involved or third parties may show that the 10 percent threshold is inappropriate for the MS4 in question.

d. Discharge to sensitive water bodies – Sensitive water bodies are receiving waters, which are a priority to protect. They include the following:

- those listed as providing or known to provide habitat for threatened or endangered species;
- those used for recreation that are subject to beach closings or health warnings; or
- those listed as impaired pursuant to CWA section 303(d) due to constituents of concern in urban runoff (these include biochemical oxygen demand [BOD], sediment, pathogens, petroleum hydrocarbons, heavy metals, floatables, polycyclic aromatic hydrocarbons [PAHs], trash, and other constituents that are found in the MS4 discharge).

Additional criteria to qualify as a sensitive water body may exist and may be determined by SWRCB or RWQCB on a case-by-case basis.

e. Significant contributor of pollutants to waters of the U.S. – Specific conditions presented by the MS4 may lead to significant pollutant loading to waters of the U.S. that are otherwise unregulated or inadequately regulated. An example of such a condition may be the presence of a large transportation industry.

These factors are to be considered when evaluating whether a Small MS4 should be regulated pursuant to this General Permit. An MS4 and the population that it serves need not meet all of the factors to be designated. SWRCB designates a number of Small MS4s according to these criteria through this General Permit (see Attachment 2).

Non-traditional Small MS4s may also be designated to seek permit coverage. These include non-traditional MS4s that are located within or discharge to a permitted MS4 and those that pose significant water quality threats. In general, these are storm water systems serving public campuses (including universities, community colleges, primary schools, and other publicly owned learning institutions with campuses), military bases, and prison and hospital complexes within or adjacent to other regulated MS4s, or which pose significant water quality threats. SWRCB considered designating non-traditional Small MS4s when adopting this General Permit. However, the *Environmental Defense Center* ruling requires that SWRCB and RWQCBs change their procedures for implementing this General Permit. In compliance with that decision, each

NOI and SWMP must be reviewed and approved, and in some cases considered in a public hearing, prior to the Small MS4 obtaining coverage under the General Permit. Therefore, SWRCB is delaying making these designations and the General Permit does not designate any non-traditional MS4s. A list of non-traditional MS4s that are anticipated to be designated within this permit term is included in Attachment 3 of this General Permit. These or other non-traditional MS4s may be designated by SWRCB or RWQCB at any time subsequent to the adoption of this General Permit.

The criteria selected to designate Small MS4s to be regulated are based on the potential to impact water quality due to conditions influencing discharges into their system or due to where they discharge. Some of the definitions provide "cut-off numbers." Although there is no regulatory standard that mandates which numbers to use, dividing lines must be established in order to effectively use them as criteria.

Specifically, the high growth factor uses 25 percent growth over ten years. The average growth (based on county data from the Census) in California between 1990 and 2000 was 15.8 percent. The standard deviation was 9.9. Growth rates outside one standard deviation are more than 25.7 percent. The standard deviation is generally an indication of the spread of data. In defining the high growth factor, the standard deviation was used because it sets the limits within which most areas of California fall. County data was used because it was consistently available, whereas 1990 populations for several of the cities and places were not readily available. Additionally, county data gives a broader picture of the growth dynamics in California. Because the data is not normally distributed, 68 percent of the data points do not necessarily fall within one standard deviation of the mean. It does, however, provide a number in which to compare city and place growth rates to the average growth rate of California. The number was rounded to 25 percent for ease of application and with the understanding that it is an approximation.

The significant contributor of pollutants to an interconnected permitted MS4 definition uses a volume value of 10 percent, with the assumption that storm water contains pollutants. This is meant to capture flows that may affect water quality or the permit compliance status of another MS4, but exclude incidental flows between communities.

APPLICATION REQUIREMENTS

Regulated Small MS4s, automatically designated because they are within an urbanized area (Attachment 1), must submit to the appropriate RWQCB by August 8, 2003 a complete application package. A complete package includes an NOI (Attachment 7), a complete SWMP (one hard copy and one electronic copy in Word or PDF format), and an appropriate fee.

The August 8, 2003 deadline is an administrative deadline to comply with the General Permit. Section 122.33(c)(1) of 40 CFR required automatically designated Small MS4s to submit an application by March 10, 2003. Those applications received from Small MS4s that submitted applications to comply with the federal deadline will be considered as an application to meet the requirements of this General Permit. If the application package is deemed complete by the RWQCB staff, it will be posted on the internet and made available for public review and public hearing if requested subsequent to permit adoption.

Regulated Small MS4s that are traditional MS4s designated by the SWRCB or RWQCB must submit to the appropriate RWQCB, within 180 days of notification of designation (or at a later

date stated by SWRCB or RWQCB), an NOI (Attachment 7), a complete SWMP (one hard copy and one electronic copy in Word or PDF format), and an appropriate fee. Those traditional MS4s identified in Attachment 2 of this General Permit are being notified of their designation by SWRCB upon adoption of this General Permit. They must, therefore, submit their NOI and SWMP by October 27, 2003.

Regulated Small MS4s that are non-traditional MS4s designated by SWRCB or RWQCB, including those in Attachment 3, must submit to the appropriate RWQCB, within 180 days of notification of designation (or at a later date stated by SWRCB or RWQCB), an NOI (Attachment 7), a complete SWMP (one hard copy and one electronic copy in Word or PDF format), and an appropriate fee.

Regulated Small MS4s relying entirely on Separate Implementing Entities (SIEs) that are also permitted, to implement their entire storm water programs are not required to submit a SWMP if the SIE being relied on has an approved SWMP. Proof of SWMP approval, such as a copy of the RWQCB letter, must be submitted to the RWQCB by the applying Small MS4, along with the NOI and an appropriate fee.

Regulated Small MS4s that fail to obtain coverage under this General Permit or another NPDES permit for storm water discharges will be in violation of the CWA and the Porter-Cologne Water Quality Control Act.

Receipt of applications deemed complete by RWQCB staff will be acknowledged on SWRCB's website at http://www.swrcb.ca.gov/stormwtr/index.html for a minimum of 60 days. When a SWMP is received by an RWQCB, those members of the public that have indicated they would like to receive notice, will receive an email from RWQCB staff that a SWMP has been received. During this 60-day public review period, a member of the public may request a copy of the SWMP and request that a public hearing be held by RWQCB. If a public hearing is requested, the hearing itself will be public noticed for a minimum of 30 days. If no hearing is requested, the RWQCB Executive Officer will notify the regulated MS4 that it has obtained permit coverage only after RWQCB staff has reviewed the SWMP and has determined that the SWMP meets the MEP standard established in this permit.

Attachment 8 lists RWQCB contact information for questions and submittals.

GENERAL PERMIT REQUIREMENTS

Prohibitions

This General Permit effectively prohibits the discharge of materials other than storm water that are not "authorized non-storm water discharges" (see General Permit § D.2.c) or authorized by a separate NPDES permit. This General Permit also incorporates discharge prohibitions contained in Statewide Water Quality Control Plans and Regional Water Quality Control Plans (Basin Plans).

Effluent Limitations

Permittees must implement Best Management Practices (BMPs) that reduce pollutants in storm water runoff to the technology-based standard of Maximum Extent Practicable (MEP) to protect water quality. In accordance with 40 CFR section 122.44(k)(2), the inclusion of BMPs in lieu of numeric effluent limitations is appropriate in storm water permits.

Discharges shall not contain reportable quantities of hazardous substance as established at 40 CFR section 117.3 or 40 CFR section 302.4.

Preparation of SWMP

This General Permit requires regulated Small MS4s to:

1. Develop and implement a SWMP that describes BMPs, measurable goals, and timetables for implementation in the following six program areas (Minimum Control Measures):

   Public Education

   The Permittee must educate the public in its permitted jurisdiction about the importance of the storm water program and the public's role in the program.

   Public Participation

   The Permittee must comply with all State and local notice requirements when implementing a public involvement/participation program.

   Illicit Discharge Detection and Elimination

   The Permittee must adopt and enforce ordinances or take equivalent measures that prohibit illicit discharges. The Permittee must also implement a program to detect illicit discharges.

   Construction Site Storm Water Runoff Control

   The Permittee must develop a program to control the discharge of pollutants from construction sites greater than or equal to one acre in size within its permitted jurisdiction. The program must include inspections of construction sites and enforcement actions against violators.

   Post Construction Storm Water Management

   The Permittee must require long-term post-construction BMPs that protect water quality and control runoff flow, to be incorporated into development and significant redevelopment projects. Post-construction programs are most efficient when they stress (i) low impact design; (ii) source controls; and (iii) treatment controls.

   For non-traditional MS4s that seek coverage under this Permit, implementation of this

control measure will not require redesign of projects under active construction at the time of designation or for K-12 school or community college facilities that have been submitted to the Department of General Services, Division of the State Architect before adoption of the permit, and which receive final approval from the State Allocation Board or the Public Works Board, as appropriate on or before December 31, 2004. SWMP must, however, specify how the control measure will be implemented within five years of designation.

Pollution Prevention/Good Housekeeping for Municipal Operations

The Permittee must examine its own activities and develop a program to prevent the discharge of pollutants from these activities. At a minimum, the program must educate staff on pollution prevention, and minimize pollutant sources.

2. Reduce its discharge of pollutants to the MEP.

3. Annually report on the progress of SWMP implementation.

Development and Implementation of SWMP

SWMP must describe how pollutants in storm water runoff will be controlled and describe BMPs that address the six Minimum Control Measures. Each BMP must have accompanying measurable goals that will be achieved during the permit term, or within five years of designation if designated subsequent to permit adoption, as a means of determining program compliance and accomplishments and as an indicator of potential program effectiveness. The measurable goals should be definable tasks such as number of outreach presentations to make, number of radio spots to purchase, or percentage of pollutant loading to reduce (other examples of measurable goals can be found on U.S. EPA's web-site at http://cfpub.epa.gov/npdes/stormwater/measurablegoals/index.cfm). This approach provides the flexibility to target an MS4's problem areas while working within the existing organization.

It is not anticipated that the SWMP be fully implemented upon submittal with the NOI. It is the intent of this General Permit that SWMPs submitted with the NOI contain sufficient information such that RWQCB staff and interested parties understand the BMPs that will be implemented or will be developed and implemented over the course of the General Permit term or, for Small MS4s designated subsequent to permit adoption, over a five–year period from designation. It is also expected that SWMPs will protect water quality, contain measurable goals and schedules, and assign responsible parties for each BMP. It is anticipated that the SWMP initially submitted may be revised or modified based on review of RWQCB staff or on comments provided by interested parties in accordance with Provisions G and H.19 of the General Permit.

For example, it may be proposed that a storm water logo be developed (or an existing one modified) by the end of the first year; an ordinance prohibiting non-storm water discharges be adopted by the end of the second year; a survey of non-storm water discharges throughout the city be completed by the end of the second year; a brochure targeting the restaurant community regarding proper practices to eliminate non-storm water discharges be developed or obtained by the end of the fourth year; and the brochure be distributed to 25 percent of the restaurants

within the city during health department inspections by the end of the fifth year. (This example mentions only one activity each year. In fact, numerous activities will occur throughout the permit term that ensure that a SWMP addressing all six Minimum Control Measures is implemented by the end of the permit term, or within five years of designation for Small MS4s designated subsequent to adoption of the Permit.)

The main goal of this General Permit is to protect water quality from the impacts of storm water runoff from Small MS4s. The intent is that storm water quality impacts will be considered in all aspects of a municipality's activities and that multiple departments within the municipality will work together to implement storm water BMPs. For instance, the planning department may work with the public works department when considering projects and their potential storm water impacts. Also, the health department can work with public works in a complementary manner to spread a consistent message about illicit discharges.

Many of the activities that a municipality already does can be recognized as a benefit to storm water or can be modified to add a storm water quality twist. A critical element of SWMP development is an assessment of activities already being conducted. For example, many communities already have a household hazardous waste program, which can be assumed to reduce illicit discharges to the MS4. Likewise, they examine potential flooding impacts of new development. This process can be modified to also examine water quality impacts as well as quantity.

Similarly, the Minimum Control Measures emphasize working with the public to prevent pollution during their everyday activities as well as to gain support for program funding. The MS4 has the flexibility to target specific segments of its residential or employee population in ways that are most appropriate for that particular segment. Taken together, the suite of public education approaches an MS4 takes can create a robust multimedia campaign that has a single message, which is threaded throughout the community through implementation of BMPs in the six program areas.

For links to information on how to implement each of the Minimum Control Measures, including sample ordinances that address the respective Minimum Control Measures, please see SWRCB's internet site at http://www.swrcb.ca.gov/stormwtr/municipal.html. Additionally, in accordance with 40 CFR section 122.34(d)(2), SWRCB provides U.S. EPA's menu of BMPs to consider when developing a SWMP. This menu is available on U.S. EPA's internet site at http://cfpub1.epa.gov/npdes/stormwater/swphase2.cfm?program_id=6. The menu provides examples of BMPs and associated measurable goals; however, other BMPs and measurable goals may be used.

MEP

MEP is the technology-based standard established by Congress in CWA section 402(p)(3)(B)(iii) that municipal dischargers of storm water must meet. Technology-based standards establish the level of pollutant reductions that dischargers must achieve. MEP is generally a result of emphasizing pollution prevention and source control BMPs as the first lines of defense in

combination with structural and treatment methods where appropriate serving as additional lines of defense. The MEP approach is an ever evolving, flexible, and advancing concept, which considers technical and economic feasibility. As knowledge about controlling urban runoff continues to evolve, so does that which constitutes MEP. The individual and collective activities elucidated in the MS4's SWMP become its proposal for reducing or eliminating pollutants in storm water to the MEP. The way in which MEP is met may vary between communities.

The MEP standard applies to all regulated MS4s, including those in Phase I and Small MS4s regulated by this General Permit. Consistent with U.S. EPA guidance, the MEP standard in California is applied so that a first-round storm water permit requires BMPs that will be expanded or better-tailored in subsequent permits. In choosing BMPs, the major focus is on technical feasibility, but cost, effectiveness, and public acceptance are also relevant. If a Permittee chooses only the most inexpensive BMPs, it is likely that MEP has not been met. If a Permittee employs all applicable BMPs except those that are not technically feasible in the locality, or whose cost exceeds any benefit to be derived, it would meet the MEP standard. MEP requires Permittees to choose effective BMPs, and to reject applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs are not technically feasible, or the cost is prohibitive. (See SWRCB Order WQ 2000-11, http://www.swrcb.ca.gov/resdec/wqorders/2000/00wqo.html.)

Generally, in order to meet MEP, communities that have greater water quality impacts must put forth a greater level of effort. Alternatively, for similar water quality conditions, communities should put forth an equivalent level of effort. However, because larger communities have greater resources (both financial resources as well as existing related programs that can help in implementing storm water quality programs), it may appear that they have more robust storm water programs. Additionally, because storm water programs are locally driven and local conditions vary, some BMPs may be more effective in one community than in another. A community that has a high growth rate would derive more benefit on focusing on construction and post-construction programs than on an illicit connection program because illicit connections are more prevalent in older communities.

In accordance with the Ninth Circuit Court ruling, prior to obtaining permit coverage, SWMPs will be evaluated for compliance with the MEP standard by the RWQCB Executive Officer or, if requested, considered for approval in a public hearing conducted by RWQCB.

Many Phase I MS4s have been permitted under storm water regulations for more than ten years and have had that time to develop programs intended to reduce pollutants in their storm water discharge to MEP. It is understood that storm water quality programs and regulations are new to the entities that will be regulated under this General Permit. Therefore, it is anticipated that this General Permit term will serve as a "ramping-up" period and that programs implemented by Phase II communities will not necessarily conform to programs implemented by Phase I communities. Despite this understanding, however, many of the lessons learned and information developed by Phase I communities is available to smaller communities as a guide and may be used by Phase II communities.

By the expiration date of this General Permit, traditional and non-traditional Small MS4s serving a population of 50,000 people or more, or that are subject to high growth, must require specific design standards as part of their post-construction program (as outlined in Attachment 4 of this General Permit, or a functionally equivalent program that is acceptable to the appropriate RWQCB), and they must comply with water quality standards through implementing better-tailored BMPs in an iterative process. These more stringent requirements are applied to communities that are larger and, therefore, capable of a more extensive storm water program, and to communities that are fast growing, and therefore may have greater impacts on storm water runoff associated with construction and the loss of pervious lands. Studies have found the amount of impervious surface in a community is strongly correlated with the community's water quality. New development and redevelopment result in increased impervious surfaces in a community. The design standards in Attachment 4 focus on mitigating the impacts caused by increased impervious surfaces through establishing minimum BMP requirements that stress (i) low impact design; (ii) source controls; and (iii) treatment controls. The design standards include minimum sizing criteria for treatment controls and establish maintenance requirements.

BMPs that may be used to comply with the design standards can be found in U.S. EPA's Toolbox of BMPs at http://cfpub1.epa.gov/npdes/stormwater/swphase2.cfm?program_id=6. Additionally, some RWQCBs may have lists of approved references and resources.

Small MS4s designated subsequent to permit adoption have five years from designation to achieve compliance with the Supplemental Provisions. Attachment 5 provides a list of communities that SWRCB anticipates being subject to the provisions in Attachment 4.

Receiving Water Limitations

Attachment 4 establishes receiving water limitations that apply to larger and fast-growing regulated Small MS4s that are required to comply with Supplemental Provisions of this General Permit. This permit allows regulated Small MS4s up to five years to fully implement their SWMPs. Therefore, regulated Small MS4s must begin to comply with the receiving water limitations iterative process once their plans are fully implemented. The receiving water limitation language provided in this General Permit is identical to the language established in SWRCB Water Quality Order WQ-99-05 adopted by SWRCB on June 17, 1999. As interpreted in SWRCB Water Quality Order WQ-2001-15, adopted by SWRCB on November 15, 2001, the receiving water limitations in this General Permit do not require strict compliance with water quality standards. SWRCB language requires that SWMPs be designed to achieve compliance with water quality standards over time, through an iterative approach requiring improved BMPs. Upon full implementation of the SWMP, exceedances of water quality standards must be addressed through the iterative process.

Reporting Requirements

The Permittee must track and assess its program to ensure BMP effectiveness and must conform to other monitoring requirements that may be imposed by RWQCB.

The Permittee is required to submit annual reports to the appropriate RWQCB by September 15th of each year (for Small MS4s designated with the adoption of this permit, the first annual report is to be submitted in 2004), or as otherwise required by the RWQCB Executive Officer. Among other things, the Permittee shall evaluate its compliance with permit conditions, evaluate and assess the effectiveness of its BMPs, summarize the results of any monitoring performed, summarize the activities planned for the next reporting cycle, and, if necessary, propose changes to SWMP.

Monitoring

Inspections, as a form of visual monitoring, are important to a storm water program. Inspections of storm water runoff and infrastructure (such as drop inlets, basins, and gutters) can say a lot about the effectiveness and needs of a storm water program. Through inspections, non-storm water discharges can be discovered and subsequently stopped, maintenance needs can be identified, and visual pollutants and erosion problems can be detected. Inspections of facilities are also important for public education and outreach, to ensure proper BMP implementation and maintenance, and to detect non-storm water discharges. Additionally, chemical monitoring can be used to involve the public through citizen monitoring groups, detect pollutants, identify and target pollutants of concern, illustrate water quality improvements and permit compliance, and participate in total maximum daily load (TMDL) development and implementation.

Monitoring environmental indicators through bio-assessments or other less technical methods may also be a key component of a program. Although it may be more challenging, it is also very valuable because it is the "final product," not just for a storm water program but for the broader environmental health of a community.

More specifically, the objectives of a monitoring program may include:

- Assessing compliance with this General Permit;
- Measuring and improving the effectiveness of SWMP;
- Assessing the chemical, physical, and biological impacts on receiving waters resulting from urban runoff;
- Characterizing storm water discharges;
- Identifying sources of pollutants; and
- Assessing the overall health and evaluating long-term trends in receiving water quality.

While only inspections of construction sites, as part of the Construction Site Storm Water Runoff Control Minimum Control Measure, are specifically required, as elucidated above, other monitoring tasks may be appropriate in a storm water program. Also, the RWQCB can require additional monitoring.

Termination of Coverage

A Permittee may terminate coverage if: a new operator has assumed responsibility for the regulated Small MS4; the Permittee has ceased operation of its MS4; or all discharge of runoff from the Small MS4 has been eliminated. To terminate coverage, the Permittee must submit to RWQCB a written request for permit termination.

Reliance on a SIE

A Permittee may rely on a separate entity to implement one or more of the six Minimum Control Measures, if the separate entity can appropriately and adequately address the storm water issues of the Permittee. To do this, both entities must agree to the arrangement, and the Permittee must comply with the applicable parts of the SIE's program. The arrangement is subject to the approval of the RWQCB Executive Officer.

In accordance with section 122.35(a)(3), the Permittee remains responsible for compliance with its permit obligations if SIE fails to implement the control measure(s) (or component thereof). Therefore, the entities are encouraged to enter into a legally binding agreement to minimize any uncertainty about compliance with the permit.

If the Permittee relies on an SIE to implement all six Minimum Control Measures and SIE also has a storm water permit, the Permittee relying on SIE must still submit an NOI, appropriate fee, proof that SIE's SWMP has been approved by RWQCB or its staff, and certification of the arrangement. However, the Permittee is not required to develop or submit a SWMP or annual reports, unless requested to do so by the RWQCB Executive Officer. The arrangement is subject to the approval of the RWQCB Executive Officer.

School districts present an example of where an SIE arrangement may be appropriate, either by forming an agreement with a city or with an umbrella agency, such as the County Office of Education. Because schools provide a large audience for storm water education, as part of the agreement, the two entities may coordinate an education program. An individual school or a school district may agree to provide a one-hour slot for all the second and fifth grade classes during which the city would bring in its own storm water presentation. Alternatively, the school could agree to teach a lesson in conjunction with an outdoor education science project, which may also incorporate a public involvement component. Additionally, the school and the city or Office of Education may arrange to have the school's maintenance staff attend the other entity's training sessions.

Retention of Records

The Permittee is required to retain records of all monitoring information and copies of all reports required by this General Permit for a period of at least five years from the date generated. This period may be extended by request of SWRCB or RWQCB.

Role of RWQCBs

RWQCBs and their staff will review and decide whether to approve SWMPs and, where requested, conduct public hearings on NOIs and SWMPs. Upon approval, they will notify Permittees that they have obtained permit coverage. They will also oversee implementation and compliance with this General Permit. As appropriate, they will review reports, require modification to SWMPs and other submissions, impose region-specific monitoring requirements, conduct inspections, take enforcement actions against violators of this General Permit, and make additional designations of regulated Small MS4s pursuant to this General Permit. They may also issue individual permits to regulated Small MS4s, and alternative general permits to categories of regulated Small MS4s. Upon issuance of such permits by an RWQCB, this General Permit shall no longer regulate the affected Small MS4s.

The Permittee and RWQCB are encouraged to work together to accomplish the goals of the storm water program. Specifically, they can coordinate the oversight of construction and industrial sites. For example, Permittees are required to implement a construction program. This program must include procedures for construction site inspection and enforcement. Construction sites disturbing an acre of land or more are also subject to inspections by RWQCB under the Statewide General Permit for Discharges of Storm Water Associated with Construction Activity. U.S. EPA intended to provide a structure that requires permitting through the federal CWA while at the same time achieving local oversight of construction projects. A structured plan review process and field enforcement at the local level, which is also required by this General Permit, were cited in the preamble to the Phase II regulations as the most effective components of a construction program.

Similarly, as part of the illicit discharge detection and elimination program, the Permittee may inspect facilities that are permitted by the Statewide General Permit for Discharges of Storm Water Associated with Industrial Activity and subject to RWQCB inspections.

The Small MS4 and RWQCB are encouraged to coordinate efforts and use each of their enforcement tools in the most effective manner. For instance, the Small MS4 may identify a construction site operator that is not in compliance with the local requirements and the Construction General Permit. The Small MS4 may establish a fee for re-inspection if a site is out of compliance. If education efforts and the inspection fee fail to bring the site into compliance, the Small MS4 may contact RWQCB and arrange a dual inspection and start enforcement procedures under the CWA if compliance is not achieved.

Relationship Between the Small MS4 Permit and the General Permit for Discharges of Storm Water Associated with Industrial Activity (Industrial Permit)

Some MS4 operators may also have facilities that are subject to the Industrial Permit. While the intent of both of these permits is to reduce pollutants in storm water, neither permit's requirements totally encompass the other. This General Permit requires that MS4 operators address six Minimum Control Measures, while the Industrial Permit requires the development and implementation of Storm Water Pollution Prevention Plans (SWPPP) for certain "industrial" activities as well as requiring specific visual and chemical monitoring. In the Preamble to the Phase II regulations, U.S. EPA notes that for a combination permit to be acceptable, it must contain all of the requirements for each permit. Further, "when viewed in its entirety, a

combination permit, which by necessity would need to contain all elements of otherwise separate industrial and MS4 permit requirements, and require NOI information for each separate industrial activity, may have few advantages when compared to obtaining separate MS4 and industrial general permit coverage."

Where the permits do overlap, one program may reference the other. More specifically, the Good Housekeeping for Municipal Operations Minimum Control Measure requires evaluation of municipal operations, some of which may be covered under the Industrial Permit. The development and implementation of SWPPP under the Industrial Permit will likely satisfy the Good Housekeeping requirements for those industrial activities. SWMP may incorporate by reference the appropriate SWPPP.

There may be instances where a non-traditional MS4 has, under the Industrial Permit, obtained coverage for the entire facility (rather than only those areas where industrial activities occur) and has developed a SWPPP that addresses the six Minimum Control Measures required by this General Permit. In these instances, the non-traditional Small MS4 is not required to obtain coverage under this General Permit. The entity should, in such cases, provide to the appropriate RWQCB documentation that its SWPPP addresses the six Minimum Control Measures.

STATE WATER RESOURCES CONTROL BOARD (SWRCB)
WATER QUALITY ORDER NO. 2003 - 0005 – DWQ

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT NO. CAS00000X

WASTE DISCHARGE REQUIREMENTS (WDRs) FOR STORM WATER DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s) (GENERAL PERMIT)

SWRCB finds that:

1. Urban runoff is a leading cause of pollution throughout California.

2. Pollutants of concern found in urban runoff include sediments, non-sediment solids, nutrients, pathogens, oxygen-demanding substances, petroleum hydrocarbons, heavy metals, floatables, polycyclic aromatic hydrocarbons (PAHs), trash, and pesticides and herbicides.

3. During urban development, two important changes occur. First, where no urban development has previously occurred, natural vegetated pervious ground cover is converted to impervious surfaces such as paved highways, streets, rooftops, and parking lots. Natural vegetated soil can both absorb rainwater and remove pollutants providing a very effective purification process. Because pavement and concrete can neither absorb water nor remove pollutants, the natural purification characteristics of the land are lost. Second, urban development creates new pollutant sources as human population density increases and brings with it proportionately higher levels of vehicle emissions, vehicle maintenance wastes, municipal sewage, pesticides, household hazardous wastes, pet wastes, trash, etc., which can be washed into the MS4. As a result of these two changes, the runoff leaving a developed urban area may be significantly greater in volume, velocity, and/or pollutant load than pre-development runoff from the same area.

4. A higher percentage of impervious area correlates to a greater pollutant loading, resulting in turbid water, nutrient enrichment, bacterial contamination, organic matter loads, toxic compounds, temperature increases, and increases of trash or debris.

5. Pollutants present in storm water can have damaging effects on both human health and aquatic ecosystems. In addition, the increased flows and volumes of storm water discharged from impervious surfaces resulting from development can significantly impact beneficial uses of aquatic ecosystems due to physical modifications of watercourses, such as bank erosion and widening of channels.

6. When water quality impacts are considered during the planning stages of a project, new development and many redevelopment projects can more efficiently incorporate measures to protect water quality.

7. On December 8, 1999, the U.S. Environmental Protection Agency (EPA) promulgated regulations under authority of the Clean Water Act (CWA) section 402(p)(6). These regulations require SWRCB to issue NPDES storm water permits to operators of small municipal separate storm sewer systems (Small MS4s) that discharge to waters of the U.S.

8. Of the Small MS4s defined by federal regulations, only "regulated Small MS4s" must obtain a permit. Title 40 of the Code of Federal Regulations (40 CFR) section 122.32(a) describes regulated Small MS4s as those traditional Small MS4s located within an urbanized area as determined by the latest Decennial Census by the Bureau of the Census and other Small MS4s that are designated by the permitting authority in accordance with designation criteria in Findings 10 and 11 below. Traditional Small MS4s within urbanized areas (Attachment 1) are automatically designated and are not subject to the designation criteria provided in Finding 10.

9. Section 123.35(b) of 40 CFR requires SWRCB to develop a process, as well as criteria, to designate Small MS4s as regulated Small MS4s.

10. In developing the designation criteria, factors were chosen to include parameters that may affect water quality. The following criteria will be considered in designating Small MS4s operated within a city or county as regulated Small MS4s.

    a. <u>High population density</u> – High population density means an area with greater than 1,000 residents per square mile. Also to be considered in this definition is a high density created by a non-residential population, such as tourists or commuters.

    b. <u>High growth or growth potential</u> – If an area grew by more than 25 percent between 1990 and 2000, it is a high growth area. If an area anticipates a growth rate of more than 25 percent over a 10-year period ending prior to the end of the first permit term, it has high growth potential.

    c. <u>Significant contributor of pollutants to an interconnected permitted MS4</u> – A Small MS4 is interconnected with a separately permitted MS4 if storm water that has entered the Small MS4 is allowed to flow directly into a permitted MS4. In general, if the Small MS4 discharges more than 10 percent of its storm water to the permitted MS4, or its discharge makes up more than 10 percent of the other permitted MS4's total storm water volume, it is a significant contributor of pollutants to the permitted MS4. In specific cases, the MS4s involved or third parties may show that the 10 percent threshold is inappropriate for the MS4 in question.

    d. <u>Discharge to sensitive water bodies</u> – Sensitive water bodies are receiving waters, which are a priority to protect. They include the following:

- those listed as providing or known to provide habitat for threatened or endangered species;

- those used for recreation that are subject to beach closings or health warnings; or

- those listed as impaired pursuant to CWA section 303(d) due to constituents of concern in urban runoff (these include biochemical oxygen demand (BOD), sediment, pathogens, oil and grease, and other constituents that are found in the MS4 discharge).

Additional criteria to qualify as a sensitive water body may exist and may be used by SWRCB or RWQCB on a case-by-case basis.

e. Significant contributor of pollutants to waters of the United States (U.S.) – Specific conditions presented by the MS4 may lead to significant pollutant loading to waters of the U.S. that are otherwise unregulated or inadequately regulated. An example of such a condition may be the presence of a large transportation industry.

This General Permit serves as notice to those Small MS4s on Attachment 2 that they are designated as regulated Small MS4s by the SWRCB at the time of permit adoption.

11. Section 122.26(b)(16)(iii) of 40 CFR defines systems that are similar to separate storm sewer systems in cities and counties, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares as Small MS4s. In this General Permit these types of Small MS4s are referred to as non-traditional MS4s that may be designated as regulated Small MS4s and required to seek coverage under this General Permit or coverage under a separate permit. Non-traditional MS4s often operate storm sewers that are similar to traditional MS4s operated by cities or counties and discharge the same types of pollutants that are typically associated with urban runoff.

12. This permit does not designate any non-traditional MS4s. SWRCB or RWQCB may designate non-traditional MS4s at any time subsequent to the adoption of this General Permit. Non-traditional MS4s that may be designated at a future date include, but are not limited to, those listed in Attachment 3 of this General Permit.

13. Non-traditional Small MS4 entities that are designated, but whose entire facilities are subject to the NPDES General Permit for the Discharge of Storm Water Associated with Industrial Activities and whose Storm Water Pollution Prevention Plan (SWPPP) addresses all six Minimum Control Measures described in this General Permit, are not required to obtain coverage under this General Permit. Such entities must present documentation to the appropriate RWQCB, showing that they meet the requirements for exclusion from coverage.

14. This General Permit requires regulated Small MS4s (Permittees) to develop a Storm Water Management Program (SWMP) designed to reduce the discharge of pollutants to the Maximum Extent Practicable (MEP) and to protect water quality. Upon approval of SWMP by the Regional Water Quality Control Board (RWQCB) or its Executive Officer,

the Permittees obtain coverage under this General Permit. This General Permit requires implementation of SWMP.

15. SWMP will be available for public review and comment and may be subject to a public hearing if requested prior to approval.

16. Permittees can satisfy the requirements through effective implementation of a SWMP, which must contain Best Management Practices (BMPs) that address six Minimum Control Measures. SWMP must incorporate measurable goals and time schedules of implementation.

17. The MEP standard is an ever-evolving, flexible, and advancing concept, which considers technical and economic feasibility. As knowledge about controlling urban runoff continues to evolve, so does that which constitutes MEP. Reducing the discharge of storm water pollutants to MEP in order to protect beneficial uses requires review and improvement, which includes seeking new opportunities. To do this, the Permittee must conduct and document evaluation and assessment of each relevant element of its program and revise activities, control measures, BMPs, and measurable goals, as necessary to meet MEP.

18. This General Permit includes Supplemental Provisions that apply to traditional and non-traditional Small MS4s serving a population of 50,000 people or more, or that are subject to high growth. These requirements address post-construction requirements and compliance with water quality standards. These Supplemental Provisions are similar to requirements for Medium and Large MS4s (Phase I), and are appropriate because larger Small MS4s are able to have more robust storm water programs and fast-growing Small MS4s may cause greater impacts to water quality.

19. The Receiving Water Limitations language contained in Attachment 4 is identical to the language established in SWRCB Water Quality Order WQ-99-05 adopted by the SWRCB on June 17, 1999. As interpreted in SWRCB Water Quality Order WQ-2001-15, adopted by the SWRCB on November 15, 2001, the receiving water limitations in this General Permit do not require strict compliance with water quality standards, but instead require compliance with water quality standards over time, through an iterative approach requiring improved BMPs.

20. The post-construction requirements, or Design Standards, contained in Attachment 4 are consistent with Order WQ-2000-11 adopted by SWRCB on October 5, 2000.

21. The purpose of the annual performance review is to evaluate (1) SWMP's effectiveness; (2) the implementation of SWMP (3) status of measurable goals; (4) effectiveness of BMPs; and (5) improvement opportunities to achieve MEP.

22. To apply for permit coverage authorizing storm water discharges to surface waters pursuant to this General Permit, the Permittees must submit a complete application package to the appropriate RWQCB. An application package includes a Notice of Intent

(NOI) to comply with the terms of this General Permit, appropriate fee (in accordance with the most recent fee schedule[1]), and SWMP. Permittees relying entirely on separately permitted Separate Implementing Entities (SIEs) to implement their entire programs are not required to submit a SWMP if the SIE being relied on has an approved SWMP. Attachment 8 gives contact information for each RWQCB.

23. Upon receipt of a complete permit application, the application will be public noticed for thirty days on SWRCB's website. During the public notice period, a member of the public may request that a public hearing be conducted by RWQCB. If no public hearing is requested, the application may be approved by the RWQCB Executive Officer. Permittees obtain coverage under the General Permit only after the SWMP has been approved.

24. Each Permittee is individually responsible for adoption and enforcement of ordinances and/or policies, implementation of identified control measures/BMPs needed to prevent or reduce pollutants in storm water, and for allocation of funds for the capital, operation and maintenance, and enforcement expenditures necessary to implement and enforce such control measures/BMPs within its jurisdiction. Enforcement actions concerning this General Permit will be pursued only against the individual Permittee responsible for specific violations of this General Permit.

25. In accordance with 40 CFR section 122.28(b)(3), a RWQCB may issue an individual MS4 NPDES Permit to a Permittee otherwise subject to this General Permit, or adopt an alternative general permit that covers storm water discharges regulated by this General Permit. The applicability of this General Permit is automatically terminated on the effective date of the individual permit or the date of approval for coverage under the alternative general permit.

26. Certain BMPs implemented or required by Permittees for urban runoff management may create a habitat for vectors (e.g., mosquitoes and rodents) if not properly designed or maintained. Close collaboration and cooperative effort between the Permittees, local vector control agencies, RWQCB staff, and the State Department of Health Services is necessary to identify and implement appropriate vector control measures that minimize potential nuisances and public health impacts resulting from vector breeding.

27. This General Permit may be reopened and modified if the decision *in Environmental Defense Center v. EPA* is revised or vacated.

28. This NPDES Permit is consistent with the antidegradation policies of 40 CFR section 131.12, SWRCB Resolution 68-16, and RWQCBs' individual Basin Plans. Implementing storm water quality programs that address the six Minimum Control Measures in previously unregulated areas will decrease the pollutant loading to the receiving waters and improve water quality.

[1] California Code of Regulations. Title 23. Division 3. Chapter 9 Waste Discharge Reports and Requirements. Article 1 Fees.

29. Following public notice in accordance with State and federal laws and regulations, SWRCB, in public hearings on December 2, 2002 and April 30, 2003, heard and considered all comments. SWRCB has prepared written responses to all significant comments.

30. This action to adopt an NPDES Permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code § 21100, et seq.) in accordance with section 13389 of the Porter-Cologne Water Quality Control Act (Porter-Cologne) (Division 7 of the California Water Code).

31. This NPDES Permit is in compliance with Part 402 of CWA and shall take effect 100 days after adoption by SWRCB. Once in effect, RWQCBs shall enforce the provisions herein.

IT IS HEREBY ORDERED that operators of Small MS4s subject to this General Permit shall comply with the following:

A. APPLICATION REQUIREMENTS

1. Deadlines for Application

a. By August 8, 2003, all Permittees automatically designated (see Attachment 1) must either apply for coverage under this General Permit (either individually or as a co-permittee), submit an application for an individual or alternative general Small MS4 permit (if applicable), or submit a joint application for modification of an existing large or medium MS4 permit (40 CFR §122.33(c)(1)).

Permittees that submitted complete application packages prior to the adoption of this General Permit to meet the federal regulation March 10, 2003 deadline have complied with this requirement and are not required to submit a duplicate application package.

b. By October 27, 2003, traditional Small MS4s designated according to Finding 10 (see Attachment 2), must either apply for coverage under this General Permit (either individually or as a co-permittee), submit an application for an individual or alternative general Small MS4 permit, or submit a joint application for modification of an existing large or medium MS4 permit (40 CFR §122.33(c)(2)). Written notices will be sent to designated parties subsequent to adoption of this General Permit.

c. Non-traditional Small MS4s, or other Small MS4s, which are designated by RWQCB or SWRCB after adoption of this General Permit must apply for coverage under this General Permit (either individually or as a co-

permittee), submit a complete application for an individual or alternative general Small MS4 permit, or submit a joint application for modification of an existing large or medium MS4 permit (40 CFR §122.33(c)(2)). Applications must be submitted within 180 days of designation unless a later date is provided in the designation letter.

2. General Permit Application

To obtain coverage under this General Permit, submit to the appropriate RWQCB a completed NOI (Attachment 7), a complete SWMP (one hard copy and one electronic copy in Word or PDF format), and appropriate fee. SWMP shall meet all the requirements of Section D of this General Permit. Permittees relying entirely on SIEs pursuant to Provision D.6 and permitted under the NPDES program are not required to submit a SWMP.

3. General Permit Coverage

Permit coverage will be in effect upon the completion of the following:

a. The Permittee has submitted a complete permit application to the appropriate RWQCB,

b. Receipt of a complete application is noticed for a minimum of 60 days and copies provided to the public for review and comment upon request,

c. The proposed SWMP has been reviewed by RWQCB staff, and

d. SWMP has been approved by the RWQCB Executive Officer, or approved by RWQCB in a public hearing, if requested.

B. DISCHARGE PROHIBITIONS

1. Discharges of waste that are prohibited by Statewide Water Quality Control Plans or applicable Regional Water Quality Control Plans (Basin Plans) are prohibited.

2. Discharges from the MS4s regulated under this General Permit that cause or threaten to cause nuisance are prohibited.

3. Discharges of material other than storm water to waters of the U.S. or another permitted MS4 must be effectively prohibited, except as allowed under Provision D.2.c, or as otherwise authorized by a separate NPDES permit.

C. EFFLUENT LIMITATIONS

1. Permittees must implement BMPs that reduce pollutants in storm water to the technology-based standard of MEP.

2. Storm water discharges regulated by this General Permit shall not contain a hazardous substance in amounts equal to or in excess of a reportable quantity listed in 40 CFR Part 117 or 40 CFR Part 302.

D. STORM WATER MANAGEMENT PROGRAM REQUIREMENTS

The Permittee shall maintain, implement, and enforce an effective SWMP, and develop adequate legal authority to implement and enforce the SWMP, designed to reduce the discharge of pollutants from the permitted MS4 to MEP and to protect water quality. SWMP shall serve as the framework for identification, assignment, and implementation of control measures/BMPs. The Permittee shall implement SWMP and shall subsequently demonstrate its effectiveness and provide for necessary and appropriate revisions, modifications, and improvements to reduce pollutants in storm water discharges to the MEP. SWMP shall be fully implemented by the expiration of this General Permit, or within five years of designation for Small MS4s designated subsequent to Permit adoption, with reasonable progress made towards implementation throughout the term of the General Permit. Existing programs that have storm water quality benefits can be identified in the SWMP and be a part of a Permittee's storm water program.

SWMP shall be revised to incorporate any new or modified BMPs or measurable goals developed through the Permittee's annual reporting process. The Permittee shall incorporate changes required by or acceptable to the RWQCB Executive Officer into applicable annual revisions to SWMP and adhere to its implementation.

1. The Permittee shall maintain, implement, and enforce an effective SWMP designed to reduce the discharge of pollutants from the regulated Small MS4 to the MEP and to protect water quality.

2. SWMP must describe BMPs, and associated measurable goals, that will fulfill the requirements of the following six Minimum Control Measures.

   a. **Public Education and Outreach on Storm Water Impacts**
   The Permittee must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff. For non-traditional Permittees, the employee/user population may serve as "the public" to target for outreach and involvement.

Non-traditional Small MS4s that discharge into medium and large MS4 may integrate public education and outreach program with the existing MS4 public education and outreach programs.

b. **Public Involvement/Participation**
The Permittee must at a minimum comply with State and local public notice requirements when implementing a public involvement/participation program.

c. **Illicit Discharge Detection and Elimination**
The Permittee must:

1) Develop, implement, and enforce a program to detect and eliminate illicit discharges (as defined at 40 CFR §122.26(b)(2)) into the regulated Small MS4;

2) Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and locations of all waters of the U.S. that receive discharges from those outfalls;

3) To the extent allowable under State or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into the MS4 and implement appropriate enforcement procedures and actions;

4) Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to the system that are not authorized by a separate NPDES permit;

5) Inform public employees, businesses, and the general public of the hazards that are generally associated with illegal discharges and improper disposal of waste; and

6) Address the following categories of non-storm water discharges or flows (i.e., authorized non-storm water discharges) only where they are identified as significant contributors of pollutants to the Small MS4:

1. water line flushing;
2. landscape irrigation;
3. diverted stream flows;
4. rising ground waters;
5. uncontaminated ground water infiltration (as defined at 40 CFR §35.2005(20)) to separate storm sewers;
6. uncontaminated pumped ground water;
7. discharges from potable water sources;
8. foundation drains;
9. air conditioning condensation;
10. irrigation water;
11. springs;
12. water from crawl space pumps;
13. footing drains;
14. lawn watering;
15. individual residential car washing;
16. flows from riparian habitats and wetlands; and
17. dechlorinated swimming pool discharges.

Discharges or flows from fire fighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the U.S.

If a RWQCB Executive Officer determines that any individual or class of non-storm water discharge(s) listed above may be a significant source of pollutants to waters of the U.S. or physically interconnected MS4, or poses a threat to water quality standards (beneficial uses), the RWQCB Executive Officer may require the appropriate Permittee(s) to monitor and submit a report and to implement BMPs on the discharge.

d. **Construction Site Storm Water Runoff Control**

The Permittee must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the Small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. The program must include the development and implementation of, at a minimum:

1) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions, or other effective mechanisms, to ensure compliance, to the extent allowable under State, or local law;

2) Requirements for construction site operators to implement appropriate erosion and sediment control BMPs;

3) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;

4) Procedures for site plan review which incorporate consideration of potential water quality impacts;

5) Procedures for receipt and consideration of information submitted by the public; and

6) Procedures for site inspection and enforcement of control measures.

e. **Post-Construction Storm Water Management in New Development and Redevelopment**

The Permittee must:

1) Develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the Small MS4 by ensuring that controls are in place that would prevent or minimize water quality impacts;

2) Develop and implement strategies, which include a combination of structural and/or non-structural BMPs appropriate for your community;

3) Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law For those Small MS4s described in Supplemental Provision E below, the requirements must at least include the design standards contained in Attachment 4 of this General Permit or a functionally equivalent program that is acceptable to the appropriate RWQCB; and

4) Ensure adequate long-term operation and maintenance of BMPs.

The General Permit does not require redesign of K-12 school or community college facilities that have been submitted to the Department of General Services, Division of the State Architect before adoption of the permit, and which receive final approval from the State Allocation Board or the Public Works Board, as appropriate, on or before December 31, 2004.

f. **Pollution Prevention/Good Housekeeping for Municipal Operations**
The Permittee must:

1) Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations; and

2) Using training materials that are available from U.S. EPA, the State, or other organizations, the program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet building maintenance, new construction and land disturbances, and storm water system maintenance.

3. SWMP must identify the measurable goals for each of the BMPs, including, as appropriate, the months and years for scheduled actions, including interim milestones and the frequency of the action.

4. SWMP must identify the person or persons who will implement or coordinate SWMP, as well as each Minimum Control Measure.

5. Termination of coverage

A Permittee may terminate coverage if a new operator has assumed responsibility for the MS4, the Permittee has ceased operation of the MS4, or the Permittees has eliminated discharges from the MS4. To terminate coverage, the Permittee must submit a written request to the RWQCB.

6. Reliance on a SIE

The Permittee may rely on a SIE to satisfy one or more of the permit obligations, if the separate entity can appropriately and adequately address the storm water issues of the Permittee. The Permittee must describe the arrangement in the SWMP and the arrangement is subject to the approval of the RWQCB Executive Officer. The other entity must agree to implement the control measure(s), or components thereof, to achieve compliance with the General Permit. The Permittee remains responsible for compliance with this General Permit if the SIE fails to implement the control measure(s).

If the Permittee relies on an SIE to implement all six Minimum Control Measures and the SIE also has a storm water permit issued by SWRCB or RWQCB, the Permittee relying on the SIE must still submit an NOI, appropriate fee, and certification of the arrangement. The Permittee must note this fact in the NOI and provide proof that the SIE has an approved SWMP, but is not required to maintain a SWMP nor submit annual reports.

7. Outfalls not identified in the storm sewer system map required by Provision D.2.c.2), but constructed within the permitted area during the term of this General Permit to receiving waters identified in the NOI, shall not be considered a material change in character, location, or volume of the permitted discharge, and shall be allowed under the terms of this General Permit without permit application or permit modification, provided that the following information be provided in the subsequent annual report:

   a. Receiving water name;

   b. Storm sewer system map of added area;

   c. Certification that SWMP shall be amended to include the drainage area.

E. SUPPLEMENTAL PROVISIONS

Those regulated traditional and non-traditional Small MS4s serving a population over 50,000 or that are subject to high growth (at least 25 percent over ten years) must comply with the requirements in Attachment 4 of this General Permit. Compliance is required upon full implementation of the Small MS4s' storm water management plan.

Attachment 5 provides a list of communities that SWRCB anticipates being subject to the provisions in Attachment 4.

F. REPORTING REQUIREMENTS AND MONITORING

1. Reporting

   The Permittee must submit annual reports to the appropriate RWQCB by September 15th of each year (for Small MS4s designated with the adoption of this permit, the first annual report is to be submitted in 2004), or as otherwise required by the RWQCB Executive Officer, unless exempted under Provision D.6. The report shall summarize the activities performed throughout the reporting period (July 1 through June 30) and must include:

   a. The status of compliance with permit conditions;

   b. An assessment of the appropriateness and effectiveness of the identified BMPs;

   c. Status of the identified measurable goals;

   d. Results of information collected and analyzed, including monitoring data, if any, during the reporting period;

e. A summary of the storm water activities the Permittee plans to undertake during the next reporting cycle;

f. Any proposed change(s) to SWMP along with a justification of why the change(s) are necessary; and

g. A change in the person or persons implementing and coordinating SWMP.

2. RWQCB may impose additional monitoring requirements, which may include a reporting component. RWQCBs may adopt such requirements on an individual or group basis.

3. Recordkeeping

The Permittee must keep records required by this General Permit for at least five years or the duration of the General Permit if continued. The RWQCB Executive Officer may specify a longer time for record retention. The Permittee must submit the records to the RWQCB Executive Officer upon request. The Permittee must make the records, including the permit and SWMP, available to the public during regular business hours.

G. RWQCB AUTHORITIES

RWQCBs will review and approve SWMPs prior to permit coverage being in effect and will conduct public hearings of individual permit applications upon request. Where there is no hearing, the Executive Officer may approve the SWMP. RWQCBs will also oversee compliance with this General Permit. Oversight may include, but is not limited to, reviewing reports, requiring modification to SWMPs and other submissions, imposing region-specific monitoring requirements, conducting inspections, taking enforcement actions against violators of this General Permit, and making additional designations of Permittees pursuant with the criteria described in this General Permit and Fact Sheet. The RWQCBs may also issue individual permits to regulated Small MS4s, and alternative general permits to categories of regulated Small MS4s. Upon issuance of such permits by an RWQCB, this General Permit shall no longer regulate the affected Small MS4(s).

H. STANDARD PROVISIONS

1. General Authority

Three of the minimum control measures (illicit discharge detection and elimination, and the two construction-related measures) require enforceable controls on third party activities to ensure successful implementation of the measure. Some non-traditional operators, however, may not have the necessary legal regulatory authority to adopt these enforceable controls. As in the case of

local governments that lack such authority, non-traditional MS4s are expected to utilize the authority they do possess and to seek cooperative arrangements.

2. Duty to Comply

   The Permittee must comply with all of the conditions of this General Permit. Any permit noncompliance constitutes a violation of CWA and the Porter-Cologne and is grounds for enforcement action and/or removal from General Permit coverage. In the event that the Permittee is removed from coverage under the General Permit, the Permittee will be required to seek coverage under an individual or alternative general permit.

3. General Permit Actions

   This General Permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a General Permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not nullify any General Permit condition.

   If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of CWA for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this General Permit, this General Permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and Permittee so notified.

4. Noncompliance Reporting

   Permittees who cannot certify compliance and/or who have had other instances of noncompliance shall notify the appropriate RWQCB within 30 days. Instances of noncompliance resulting in emergencies (i.e., that endanger human health or the environment) shall be reported orally to the RWQCB within 24 hours from the time the discharger becomes aware of the circumstance and in writing to the RWQCB within five days of the occurrence. The notification shall identify the noncompliance event and an initial assessment of any impact caused by the event, describe the actions necessary to achieve compliance, and include a time schedule indicating when compliance will be achieved. The time schedule and corrective measures are subject to modification by the RWQCB Executive Officer.

5. Need to Halt or Reduce Activity Not a Defense

   It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this General Permit.

6. Duty to Mitigate

   The Permittee shall take all responsible steps to minimize or prevent any discharge in violation of this General Permit that has a reasonable likelihood of adversely affecting human health or the environment.

7. Proper Operation and Maintenance

   The Permittee shall at all times properly operate and maintain any facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this General Permit and with the requirements of SWMP. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance may require the operation of backup or auxiliary facilities or similar systems installed by the Permittee when necessary to achieve compliance with the conditions of this General Permit.

8. Property Rights

   This General Permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor does it authorize any infringement of federal, State, or local laws or regulations.

9. Duty to Provide Information

   The Permittee shall furnish RWQCB, SWRCB, or U.S. EPA, during normal business hours, any requested information to determine compliance with this General Permit. The Permittee shall also furnish, upon request, copies of records required to be kept by this General Permit.

10. Inspection and Entry

    The Permittee shall allow RWQCB, SWRCB, U.S. EPA, or an authorized representative of RWQCB, SWRCB, or U.S. EPA, upon the presentation of credentials and other documents as may be required by law, to:

    a. Enter upon the Permittee's premises during normal business hours where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this General Permit;

    b. Access and copy, during normal business hours, any records that must be kept under the conditions of this General Permit within a reasonable time from notification;

c. Inspect during normal business hours any municipal facilities; and

d. Sample or monitor at reasonable times for the purpose of assuring General Permit compliance.

11. Signatory Requirements

All NOIs, SWMPs, certifications, reports, or other information prepared in accordance with this General Permit submitted to SWRCB or RWQCB shall be signed by either a principal executive officer, ranking elected official, or duly authorized representative. The principal executive officer of a Federal agency includes the chief executive officer of the agency or the senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of U.S. EPA).

12. Certification

Any person signing documents under Section H.11 above shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

13. Anticipated Noncompliance

The Permittee will give advance notice to the RWQCB and local storm water management agency of any planned changes in the regulated Small MS4 activity that may result in noncompliance with General Permit requirements.

14. Penalties for Falsification of Reports

Section 309(c)(4) of CWA provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this General Permit, including reports of compliance or noncompliance, shall upon conviction, be punished by a fine of not more than $10,000 or by imprisonment for not more than two years or by both.

15. Penalties for Violations of Permit Conditions

    a. Part 309 of CWA provides significant penalties for any person who violates a permit condition implementing Parts 301, 302, 306, 307, 308, 318, or 405 of CWA or any permit condition or limitation implementing any such section in a permit issued under Part 402. Any person who violates any permit condition of this General Permit is subject to a civil penalty not to exceed $27,500 per calendar day of such violation, as well as any other appropriate sanction provided by Part 309 of CWA.

    b. Porter-Cologne also provides for administrative, civil, and criminal penalties, which in some cases are greater than those under CWA.

16. Oil and Hazardous Substance Liability

    Nothing in this General Permit shall be construed to preclude the institution of any legal action against the Permittee or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject to under Part 311 of CWA.

17. Severability

    The provisions of this General Permit are severable; and, if any provision of this General Permit or the application of any provision of this General Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this General Permit shall not be affected thereby.

18. Reopener Clause

    This General Permit may be modified, revoked and reissued, or terminated for cause due to promulgation of amended regulations, or otherwise in accordance with 40 CFR sections 122.62, 122.63, 122.64, and 124.5.

19. Availability

    A copy of this General Permit and SWMP shall be made available for public review.

20. Transfers

    This General Permit is not transferable. A Permittee must submit written notification to the appropriate RWQCB to terminate coverage of this General Permit.

21. Continuation of Expired Permit

This General Permit expires five years from the date of adoption. This General Permit continues in force and in effect until a new General Permit is issued or the SWRCB rescinds this General Permit. Only those Small MS4s authorized to discharge under the expiring General Permit are covered by the continued General Permit.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of SWRCB held on April 30, 2003.

AYE: Arthur G. Baggett, Jr.
Peter S. Silva
Richard Katz
Gary M. Carlton

NO: None

ABSENT: None

ABSTAIN: None

Maureen Marché
Clerk to the Board

Operators of Municipal Separate Storm Sewer Systems that serve areas within urbanized areas are automatically designated as regulated Small MS4s. These include the following areas. (For cities, the permit area boundary is the city boundary. For counties, permit boundaries must at least be inclusive of urbanized areas. The boundaries must be proposed in the permit application and may be developed in conjunction with the applicable regional water quality control board.)

Region 1
City of Cotati
Graton, County of Sonoma
City of Healdsburg
City of Rohnert Park
City of Sebastapool
Town of Windsor
County of Sonoma

Region 2
City of Belvedere
City of Benicia
Black Point-Green Point, County of Marin
Town of Corte Madera
Town of Fairfax
City of Larkspur
Lucas Valley-Marinwood, County of Marin
City of Mill Valley
City of Napa
City of Novato
City of Petaluma
Town of Ross
Town of San Anselmo
City of San Francisco (those areas not served by a CSO)
City of San Rafael
City of Sausalito
City of Tamalpais-Homestead Valley
City of Tiburon
Woodacre, County of Marin
County of Napa
County of Marin
County of Solano
County of Sonoma
County of San Francisco (those areas not served by a CSO)

Region 3
Aptos, County of Santa Cruz
City of Atascadero
Ben Lomand, County of Santa Cruz
Boulder Creek, County of Santa Cruz

City of Capitola
City of Carmel-by-the-Sea
Carmel Valley Village, County of Monterey
City of Carpinteria
Castroville, County of Monterey
Coralitos, County of Santa Cruz
City of Del Ray Oaks
Felton, County of Santa Cruz
City of Gilroy
Goleta, County of Santa Barbara
Isla Vista, County of Santa Barbara
Las Lomas, County of Santa Cruz
Live Oak, County of Santa Cruz
City of Lompoc
City of Marina
Montecito, County of Santa Barbara
City of Monterey
City of Morgan Hill
Nipomo, County of San Luis Obispo
Orcutt, County of Santa Barbara
City of Pacific Grove
Pajaro, County of Monterey
City of Paso Robles
Pebble Beach, County of Monterey
Prunedale, Count of Monterey
City of San Luis Obispo
City of Sand City
San Martin, County of Santa Clara
City of Santa Barbara
City of Santa Cruz
City of Santa Maria
City of Scotts Valley
City of Seaside
Soquel, County of Santa Cruz
Summerland, County of Santa Cruz
City of Watsonville
Templeton, County of San Luis Obispo
Vandenberg Village, County of Santa Barbara
County of Monterey
County of San Luis Obispo
County of Santa Barbara
County of Santa Clara
County of Santa Cruz

Region 5
City of Anderson
City of Atwater
City of Auburn

Bondelle Ranchos, County of Madera
City of Ceres
City of Chico
City of Davis
City of Delhi
El Dorado Hills, County of El Dorado
Empire, County of Stanislaus
City of Exeter
City of Farmersville
French Camp, County of San Joaquin
Goshen, County of Tulare
Granite Bay, County of Placer
City of Hughson
Kennedy, County of San Joaquin
Keyes, County of Stanislaus
City of Lathrop
Linda, County of Yuba
City of Lodi
Town of Loomis
City of Madera
Madera Acres, County of Madera
City of Manteca
City of Marysville
City of Merced
Morada, County of San Joaquin
North Auburn, County of Placer
North Woodbridge, County of San Joaquin
Olivehurst, County of Yuba
City of Porterville
City of Redding
City of Ripon
City of Riverbank
City of Rocklin
City of Roseville
Salida, County of Stanislaus
City of Shasta Lake
Strathmore, County of Tulare
South Yuba City, County of Sutter
City of Tracy
City of Turlock
City of Vacaville
City of Visalia
City of West Sacramento
City of Winton
City of Yuba City
County of Butte
County of Madera
County of Merced

County of Placer
County of San Joaquin
County of Shasta
County of Solano
County of Stanislaus
County of Sutter
County of Tulare
County of Yolo
County of Yuba

Region 6
City of Apple Valley
City of Hesperia
City of Lancaster
City of Palmdale
City of Victorville
County of San Bernadino
County of Los Angeles

Region 7
City of El Centro
Heber, County of Imperial
City of Imperial
County of Imperial

Operators of Municipal Separate Storm Sewer Systems that serve areas that are designated by the State Water Resources Control Board or Regional Water Quality Control Board in accordance with the designation criteria contained in the General Permit are regulated Small MS4s. These include, but are not limited to, the following areas. (For cities, the permit area boundary is the city boundary. For counties, permit boundaries must at least be inclusive of urbanized areas. The boundaries must be proposed in the permit application and may be developed in conjunction with the applicable regional water quality control board.)

Region 1

Area	Justification	Details
City of Arcata	• Discharge Into A Sensitive Water Body • High Population Density	• Mad River which is on the 303(d) list for sediment/turbidity • Urban cluster
City of Eureka	• Discharge Into A Sensitive Water Body • High Population Density	• Elk River and Freshwater Creek which are listed on the 303(d) list for sedimentation/siltation • Urban cluster
City of Fort Bragg	• Discharge Into A Sensitive Water Body • High Population Density	• Noyo River which is listed for sedimentation/siltation • Urban cluster
City of Fortuna	• Discharge Into A Sensitive Water Body • High Population Density	• Eel River which is on the 303(d) list for sedimentation/siltation and temperature • Urban cluster
McKinleyville, County of Humboldt	• Discharge Into A Sensitive Water Body • High Population Density	• Mad River which is on the 303(d) list for sedimentation/siltation and turbidity • Urban cluster
City of Ukiah	• Discharge Into A Sensitive Water Body • High Population Density	• Russian River which is listed for sedimentation/siltation • Urban cluster
County of Mendocino	• Discharge Into A Sensitive Water Body • High Population Density	• Russian River which is listed for sedimentation/siltation • Urban cluster •

Region 2

Area	Justification	Details
City of Calistoga	• Discharge Into A Sensitive Water Body • High Population Density	• Napa River, which is on the 303(d) list for sediment, nutrients, and pathogens • Urban cluster
City of St. Helena	• Discharge Into A Sensitive Water Body • High Population Density	• Napa River, which is on the 303(d) list for sediment, nutrients, and pathogens • Urban cluster
City of Sonoma	• Discharge Into A Sensitive Water Body • High Population Density	• Sonoma Creek, which is on the 303(d) list for sediment, nutrients, and pathogens • Urban cluster
Town of Yountville	• Discharge Into A Sensitive Water Body • High Population Density	• Napa River, which is on the 303(d) list for sediment, nutrients, and pathogens • Urban cluster

Region 3

Area	Justification	Details
City of Arroyo Grande	• High Population Density	• Tourism, Urban cluster
Baywood-Los Osos, County of San Luis Obispo	• Discharge Into A Sensitive Water Body • High Population Density	• Morro Bay which is on the 303(d) list for sediments • Urban cluster
City of Buellton	• Discharge Into A Sensitive Water Body • High Population Density	• Santa Ynez River, which is on the 303(d) list for nutrients and sediment • Urban cluster
Cambria, County of San Luis Obispo	• Discharge Into A Sensitive Water Body • High Population Density	• Marine Sanctuary • Urban cluster
City of Greenfield	• Discharge Into A Sensitive Water Body • High Growth Rate • High Population Density	• Salinas River, which is listed for sediment and salinity/TDS/chlorides • 68.6% over 10 years • Urban cluster
City of Grover Beach	• High Population Density	• Tourism, Urban cluster
City of Hollister	• Discharge Into A Sensitive Water Body • High Growth Rate • High Population Density	• San Benito River, which is listed for sediment • 79.1% over 10 years • Urban cluster
City of King City	• Discharge Into A Sensitive	• Salinas River, which is listed

	Water Body • High Growth Rate • High Population Density	for sediment and salinity/TDS/chlorides • 45.3% over 10 years • Urban cluster
	•	•
Los Olivos, County of Santa Barbara	• Discharge Into A Sensitive Water Body • High Population Density	• Santa Ynez River, which is on the 303(d) list for nutrients and sediment • Urban Cluster
City of Morro Bay	• Discharge Into A Sensitive Water Body • High Population Density	• Morro Bay, which is on the 303(d) list for sediments • Urban cluster
Oceano, County of San Luis Obispo	• High Population Density	• Tourism, Urban cluster
City of Pismo Beach	• High Population Density	• Tourism, Urban cluster
Santa Ynez, County of Santa Barbara	• Discharge Into A Sensitive Water Body • High Population Density	• Santa Ynez River, which is on the 303(d) list for nutrients and sediment • Urban cluster
Shell Beach, County of San Luis Obispo	• High Population Density	• Tourism
City of Soledad	• Discharge Into A Sensitive Water Body • High Growth Rate • High Population Density	• Salinas River, which is listed for sediment and salinity/TDS/chlorides • 57.6% over 10 years • Urban cluster
City of Solvang	• Discharge Into A Sensitive Water Body • High Population Density	• Santa Ynez River, which is on the 303(d) list for nutrients and sediment • Urban cluster • Tourism

Region 5

Area	Justification	Details
City of Clearlake	• Discharge Into A Sensitive Water Body • High Population Density	• Clear Lake which is on the 303(d) list for mercury and nutrients • Urbanized cluster
City of Dixon	• High Growth Or Growth Potential • High Population Density	• 54.8% over 10 years • Urban cluster
City of Grass Valley	• Discharge To Sensitive Water Bodies • High Growth Potential	• Receiving waters support threatened and endangered species

	• High Population Density	• Urban cluster
City of Hanford	• Urbanized Area in corrected census data	• Urbanized Area in corrected census data
City of Kingsburg	• Discharge To Sensitive Water Bodies • High Population Density	• Kings River, used for recreation and agriculture supply • Urban cluster
City of Lakeport	• Discharge To Sensitive Water Bodies • High Population Density	• Clear Lake which is on the 303(d) list for mercury and nutrients • Urban cluster
City of Lemoore	• Urbanized Area in corrected census data	• Urbanized Area in corrected census data
City of Lincoln	• Discharge To Sensitive Water Bodies • High Growth And Growth Potential • High Population Density	• Receiving waters support threatened and endangered species • 54.6% over 10 years and continuing at 15% per year • Urban cluster
City of Los Baños	• Discharge Into A Sensitive Water Body • High Growth • High Population Density	• Los Baños Canal which is used for agriculture supply and flows into a water of the U.S. • 78.2% growth over 10 years • Urban cluster
City of Oakdale	• Discharge To Sensitive Water Body • High Growth • High Population Density	• Stanislaus River which is on the 303(d) list for pesticides and unknown toxicity • 29.6% over 10 years • Urban cluster
City of Patterson	• Discharge To Sensitive Water Body • High Growth • High Population Density	• San Joaquin river which is on the 303(d) list for pesticides, and unknown toxicity • 34.5% over 10 years • Urban cluster
City of Placerville	• Discharge To Sensitive Water Body • High Population Density	• Receiving waters support threatened and endangered species • Urban cluster
City of Reedley	• Discharge Into Sensitive Water Body • High Population Density	• Kings River, used for recreation and agriculture supply • Urban cluster
City of Rio Vista	• Discharge To Sensitive Water Body	• Sacramento River, Delta, which is on the 303(d) list

	• High Population Growth Potential • High Population Density	for pesticides, mercury, and unknown toxicity • 210% projected growth between 2000 and 2010 • Urban cluster
City of Selma	• Discharge To Sensitive Water Bodies • High Population Density	• Discharge to Consolidated Irrigation Canal, which is tributary to Kings River, used for recreation and agriculture supply • Urban cluster
City of Tulare	• High Growth • Contributor Of Pollutants To Waters Of The U.S. • High Population Density	• 32.3% growth over 10 years • High population, approaching "urbanized area" • Urban cluster
City of Woodland	• Significant Contributor Of Pollutants To Waters Of The U.S. • High Population Density • Discharge To Sensitive Water Bodies	• 49,151 people at the time of the census, essentially the same threat as an urbanized area • Urban cluster • Contact recreation
County of Kings	• Urbanized Area in corrected census data	• Urbanized Area in corrected census data
County of Lake	• Discharge To Sensitive Water Bodies • High Population Density	• Clear Lake which is on the 303(d) list for mercury and nutrients • Urban cluster

Region 7

Area	Justification	Details
City of Brawley	• Discharge To Sensitive Water Body • High Population Density	• New River which is on the 303(d) list for bacteria, nutrients, pesticides, and sedimentation • Urban cluster
City of Calexico	• Discharge To Sensitive Water Body • High Population Density	• New River which is on the 303(d) list for bacteria, nutrients, pesticides, and sedimentation • Urban cluster

Non-Traditional Small MS4s

Attachment 3
WQO# 2003 – 0005 – DWQ

Non-traditional Small MS4s anticipated to be designated in the future will include the following entities.

Region	Agency	Facility	Address	City, State, ZIP
1	California Community Colleges	College of the Redwoods	7351 Tompkins Hill Road	Eureka, CA 95501-9301
1	California Community Colleges	Mendocino College	1000 Hensley Creek Rd. PO Box 3000	Ukiah, CA 95482-0300
1	California Community Colleges	Santa Rosa Junior College - Santa Rosa Campus	1501 Mendocino Avenue	Santa Rosa, CA 95401-4395
1	California State University	Humboldt State University	1 Harpst Street	Arcata, CA 95521-8299
1	California State University	Sonoma State University	1801 East Cotati Ave.	Rohnert Park, CA 94928-3609
1	District Agricultural Association	Humboldt County Fairgrounds	3750 Harris Street	Eureka, CA
1	District Agricultural Association	Mendocino County Fairgrounds	1055 North State Street	Ukiah, CA
1	School District, Alexander Valley Union Elementary		8511 Hwy. 128	Healdsburg, CA 95448-9020
1	School District, Arcata Elementary		1435 Buttermilk Lane	Arcata, CA 95521-
1	School District, Bellevue Union Elementary		3223 Primrose Ave.	Santa Rosa, CA 95407-7723
1	School District, Bennett Valley Union Elementary		2250 Mesquite Dr.	Santa Rosa, CA 95405-8310
1	School District, Cotati-Rohnert Park Unified		1601 E Cotati Ave.	Rohnert Park, CA 94928-3606
1	School District, Eureka City Unified		3200 Walford Ave.	Eureka, CA 95503-4887
1	School District, Fieldbrook Elementary		4070 Fieldbrook Road	Arcata, CA 95521-9709
1	School District, Fort Bragg Unified		312 S. Lincoln St.	Fort Bragg, CA 95437-4416
1	School District, Fortuna Union Elementary		843 L St.	Fortuna, CA 95540-1921
1	School District, Fortuna Union High		379 12th St.	Fortuna, CA 95540-2357
1	School District, Freshwater Elementary		75 Greenwood Heights Dr.	Eureka, CA 95503-9569
1	School District, Garfield Elementary		2200 Freshwater Road	Eureka, CA 95503-9562
1	School District, Gravenstein Union Elementary		3840 Twig Ave.	Sebastopol, CA 95472-5750
1	School District, Healdsburg Unified		925 University St.	Healdsburg, CA 95448-3528
1	School District, Mark West Union Elementary		305 Mark West Springs Road	Santa Rosa, CA 95404-1101
1	School District, McKinleyville Union Elementary		2275 Central Ave.	McKinleyville, CA 95519-3611
1	School District, Oak Grove Union Elementary		5285 Hall Road	Santa Rosa, CA 95401-5566
1	School District, Pacific Union Elementary		3001 Janes Road	Arcata, CA 95521-4701
1	School District, Piner-Olivet Union Elementary		3450 Coffey Lane	Santa Rosa, CA 95403-1919
1	School District, Rincon Valley Union Elementary		1000 Yulupa Ave.	Santa Rosa, CA 95405-7020
1	School District, Rohnerville Elementary		3850 Rohnerville Road	Fortuna, CA 95540-3122
1	School District, Roseland Elementary		950 Sebastopol Road	Santa Rosa, CA 95407-6829
1	School District, Santa Rosa Elementary		211 Ridgway Ave.	Santa Rosa, CA 95401-4320
1	School District, Santa Rosa High		211 Ridgway Ave.	Santa Rosa, CA 95401-4320
1	School District, Sebastopol Union Elementary		7905 Valentine Ave.	Sebastopol, CA 95472-3214
1	School District, South Bay Union Elementary		5248 Vance Ave.	Eureka, CA 95503-6351
1	School District, Twin Hills Union Elementary		700 Water Trough Road	Sebastopol, CA 95472-3917
1	School District, Ukiah Unified		925 N. State St.	Ukiah, CA 95482-3411
1	School District, West Side Union Elementary		1201 Felta Road	Healdsburg, CA 95448-9476
1	School District, West Sonoma County Union High		462 Johnson St.	Sebastopol, CA 95472-

Region	Agency	Facility	Address	City, State, ZIP
1	School District, Windsor Unified		9291 Old Redwood Hwy. #300 C	Windsor, CA 95492-9217
1	School District, Wright Elementary		4385 Price Ave.	Santa Rosa, CA 95407-6550
2	Bureau of Prisons	FCI Dublin	5701 8th Street - Camp Parks	Dublin, CA 94568
2	California Air National Guard	129th Rescue Wing	PO Box 103	Moffett Airfield, CA 94035-5006
2	California Community Colleges	Canada College	4200 Farm Hill Boulevard	Redwood City, CA 94061-1099
2	California Community Colleges	Chabot College	25555 Hesperian Blvd PO Box 5001	Hayward, CA 94545-5001
2	California Community Colleges	City College of San Francisco	50 Phelan Avenue, E200	San Francisco, CA 94112-1898
2	California Community Colleges	College of Alameda	555 Atlantic Avenue	Alameda, CA 94501-2109
2	California Community Colleges	College of San Mateo	1700 West Hillsdale Boulevard	San Mateo, CA 94402-3784
2	California Community Colleges	Contra Costa College	2600 Mission Bell Drive	San Pablo, CA 94806-3195
2	California Community Colleges	DeAnza College	21250 Stevens Creek Boulevard	Cupertino, CA 95014-5797
2	California Community Colleges	Diablo Valley College	321 Golf Club Road	Pleasant Hill, CA 94523-1544
2	California Community Colleges	Evergreen Valley College	3095 Yerba Buena Road	San Jose, CA 95135-1598
2	California Community Colleges	Foothill College	12345 El Monte Road	Los Altos Hills, CA 94022-4599
2	California Community Colleges	Laney College	900 Fallon Street	Oakland, CA 94607-4893
2	California Community Colleges	Las Positas College	3033 Collier Canyon Road	Livermore, CA 94550-7650
2	California Community Colleges	Los Medanos College	2700 East Leland Road	Pittsburg, CA 94565-5197
2	California Community Colleges	Merritt College	12500 Campus Drive	Oakland, CA 94619-3196
2	California Community Colleges	Mission College	3000 Mission College Boulevard	Santa Clara, CA 95054-1897
2	California Community Colleges	Napa Valley College	2277 Napa Vallejo Highway	Napa, CA 94558-6236
2	California Community Colleges	Ohlone College	43600 Mission Boulevard	Fremont, CA 94539-0911
2	California Community Colleges	San Jose City College	2100 Moorpark Avenue	San Jose, CA 95128-2799
2	California Community Colleges	Santa Rosa Junior College - Petaluma Campus	680 Sonoma Mountain Parkway	Petaluma, CA 94952
2	California Community Colleges	Skyline College	3300 College Drive	San Bruno, CA 94066-1662
2	California Community Colleges	Solano Community College	4000 Suisun Valley Road	Suisun City, CA 94585-3197
2	California Community Colleges	Vista College	2020 Milvia Street	Berkeley, CA 94704-1183
2	California Community Colleges	West Valley College	14000 Fruitvale Avenue	Saratoga, CA 95070-5699
2	California State University	California State University Hayward	25800 Carlos Bee Blvd	Hayward, CA 94542
2	California State University	California State University Maritime	200 Maritime Academy Drive	Vallejo, CA 94590
2	California State University	CSU Maritime Academy	200 MARITIME	Vallejo, CA
2	California State University	SF State University	1600 Holloway Avenue	San Francisco, CA 94132
2	Corrections, Dept of	San Quentin State Prison		San Quentin, CA 94964
2	Defense, Department of	Camp Parks	Bldg 790 Reserve Forces Training Area	Dublin, CA 94568-5201
2	Defense, Department of	Concord Naval Weapons Station	10 Delta St	Concord, CA 94520-5100
2	Defense, Department of	Oakland Army Base		, CA
2	Defense, Department of	Onizuka Air Station	1080 Lockheed Martin Way Box 41	Sunnyvale, CA 94089-1237
2	Defense, Department of	San Bruno Naval Facility	900 Commodore Drive	San Bruno, CA 94066-5006
2	Defense, Department of	Santa Clara Naval Reserve Center	500 Shenandoah Plaza, P.O. Box 128, M	Mountain View, CA 94035-0128
2	Defense, Department of	Travis Air Force Base	60 Support Group	Travis AFB, CA 94535-5049
2	Developmental Services, Dept of	Agnews Devolopmental Center East & West	3500 Zanker Road	San Jose, CA
2	District Agricultural Association	Napa County Fairgrounds	575 Third Street	Napa, CA
2	District Agricultural Association	Sonoma-Marin Fair	Fairgrounds Dr	Petaluma, CA

Region	Agency	Facility	Address	City, State, ZIP
2	Education, Dept of	Calif. School for the Blind	500 Walnut Ave.	Fremont, CA 94536-4365
2	Education, Dept of	Calif. School for the Deaf	39350 Gallaudet Dr.	Fremont, CA 94538-2308
2	Energy, Dept of	Sandia National Labs., CA Pgms.	P.O. Box 969, MS-9221	Livermore, CA 94550
2	Health Services, Dept of	Fairfield Animal Facility	6250 Lambie Road	Suisun City, CA
2	Menatl Health, Dept of	Napa State Hospital	2100 Napa-Vallejo Hwy	Napa, CA
2	NASA	Moffett Federal Air Field	NASA - AMES, MS 218-1	Moffett Airfield, CA 94035
2	Port of Oakland		530 Water Street	Oakland, CA 94607
2	Presido Trust		34 Graham Street PO Box 29052	San Franciso, CA 94129-0052
2	Rehabilitation, Dept of	Center for the Blind	400 Adams Street	Albany, CA
2	San Mateo Union High School District		650 N. Delaware St.	San Mateo, CA 94401-1795
2	School District, Acalanes Union High		1212 Pleasant Hill Road	Lafayette, CA 94549-2623
2	School District, Alameda City Unified		2200 Central Ave.	Alameda, CA 94501-4450
2	School District, Albany City Unified		904 Talbot Ave.	Albany, CA 94706-2020
2	School District, Alum Rock Union Elementary		2930 Gay Ave.	San Jose, CA 95127-2322
2	School District, Bayshore Elementary		1 Martin St.	Daly City, CA 94014-1603
2	School District, Belmont-Redwood Shores Elementary		2960 Hallmark Dr.	Belmont, CA 94002-2943
2	School District, Benicia Unified		350 East K St.	Benicia, CA 94510-3437
2	School District, Berkeley Unified		2134 Martin Luther King, Jr. W	Berkeley, CA 94704-1109
2	School District, Berryessa Union Elementary		1376 Piedmont Road	San Jose, CA 95132-2427
2	School District, Brisbane Elementary		1 Solano St.	Brisbane, CA 94005-1342
2	School District, Burlingame Elementary		1825 Trousdale Dr	Burlingame, CA 94010-4509
2	School District, Cabrillo Unified		498 Kelly Ave.	Half Moon Bay, CA 94019-1636
2	School District, Calistoga Joint Unified		1520 Lake St.	Calistoga, CA 94515-1605
2	School District, Cambrian Elementary		4115 Jacksol Dr.	San Jose, CA 95124-3312
2	School District, Campbell Union Elementary		155 N. Third St.	Campbell, CA 95008-2044
2	School District, Campbell Union High		3235 Union Ave.	San Jose, CA 95124-2009
2	School District, Canyon Elementary		187 Pinehurst Road	Canyon, CA 94516-0187
2	School District, Castro Valley Unified		4430 Alma Ave.	Castro Valley, CA 94546-0146
2	School District, Cinnabar Elementary		286 Skillman Lane	Petaluma, CA 94975-0399
2	School District, Cupertino Union Elementary		10301 Vista Dr.	Cupertino, CA 95014-2040
2	School District, Dixie Elementary		380 Nova Albion Way	San Rafael, CA 94903-3523
2	School District, Dublin Unified		7471 Larkdale Ave.	Dublin, CA 94568-1500
2	School District, Dunham Elementary		4111 Roblar Road	Petaluma, CA 94952-9202
2	School District, East Side Union High		830 N. Capitol Ave.	San Jose, CA 95133-1316
2	School District, Emery Unified		4727 San Pablo Ave.	Emeryville, CA 94608-3035
2	School District, Evergreen Elementary		3188 Quimby Road	San Jose, CA 95148-3022
2	School District, Fairfield-Suisun Unified		1975 Pennsylvania Ave.	Fairfield, CA 94533-
2	School District, Franklin-McKinley Elementary		645 Wool Creek Dr.	San Jose, CA 95112-2617
2	School District, Fremont Unified		4210 Technology Dr.	Fremont, CA 94537-5008
2	School District, Fremont Union High		589 W. Fremont Ave.	Sunnyvale, CA 94087-
2	School District, Hayward Unified		24411 Amador St.	Hayward, CA 94540-0001
2	School District, Hillsborough City Elementary		300 El Cerrito Ave.	Hillsborough, CA 94010-6818

Region	Agency	Facility	Address	City, State, ZIP
2	School District, Jefferson Elementary		101 Lincoln Ave.	Daly City, CA 94015-3934
2	School District, Jefferson Union High		699 Serramonte Blvd.,Suite 100	Daly City, CA 94015-4132
2	School District, John Swett Unified		341 #B (Selby)	Crockett, CA 94525-
2	School District, La Honda-Pescadero Unified		620 North St	Pescadero, CA 94060-0189
2	School District, Lafayette Elementary		3477 School St.	Lafayette, CA 94549-1029
2	School District, Laguna Joint Elementary		3286 Chileno Valley Road	Petaluma, CA 94952-9428
2	School District, Laguna Salada Union Elementary		375 Reina del Mar	Pacifica, CA 94044-3052
2	School District, Lakeside Joint Elementary		19621 Black Road	Los Gatos, CA 95030-9522
2	School District, Larkspur Elementary		230 Doherty Dr.	Larkspur, CA 94939-
2	School District, Las Lomitas Elementary		1011 Altschul Ave.	Menlo Park, CA 94025-6706
2	School District, Liberty Elementary		170 Liberty Road	Petaluma, CA 94952-1074
2	School District, Lincoln Elementary		1300 Hicks Valley Road	Petaluma, CA 94952-9407
2	School District, Livermore Valley Joint Unified		685 E. Jack London Blvd.	Livermore, CA 94550-1800
2	School District, Loma Prieta Joint Union Elementary		23800 Summit Road	Los Gatos, CA 95033-4054
2	School District, Los Altos Elementary		201 Covington Road	Los Altos, CA 94024-4030
2	School District, Los Gatos Union Elementary		15766 Poppy Lane	Los Gatos, CA 95030-3228
2	School District, Los Gatos-Saratoga Joint Union High		17421 Farley Road West	Los Gatos, CA 95030-3308
2	School District, Luther Burbank Elementary		4 Wabash Ave.	San Jose, CA 95128-1931
2	School District, Martinez Unified		921 Susana St.	Martinez, CA 94553-1848
2	School District, Menlo Park City Elementary		181 Encinal Ave.	Atherton, CA 94027-3102
2	School District, Mill Valley Elementary		411 Sycamore Ave.	Mill Valley, CA 94941-2231
2	School District, Millbrae Elementary		555 Richmond Dr.	Millbrae, CA 94030-1600
2	School District, Milpitas Unified		1331 E. Calaveras Blvd.	Milpitas, CA 95035-5707
2	School District, Montebello Elementary		15101 Montebello Road	Cupertino, CA 95014-5431
2	School District, Moraga Elementary		1540 School St.	Moraga, CA 94556-0158
2	School District, Moreland Elementary		4710 Campbell Ave.	San Jose, CA 95130-1709
2	School District, Mountain View-Los Altos Union High		1299 Bryant Ave.	Mountain View, CA 94040-4527
2	School District, Mountain View-Whisman Elementary		750 A San Pierre Way	Mountain View, CA 94043-
2	School District, Mt. Diablo Unified		1936 Carlotta Dr.	Concord, CA 94519-1358
2	School District, Mt. Pleasant Elementary		3434 Marten Ave.	San Jose, CA 95148-
2	School District, Napa Valley Unified		2425 Jefferson St.	Napa, CA 94558-4931
2	School District, New Haven Unified		34200 Alvarado-Niles Road	Union City, CA 94587-4402
2	School District, Newark Unified		5715 Musick Ave.	Newark, CA 94560-0385
2	School District, Novato Unified		1015 Seventh St.	Novato, CA 94945-2205
2	School District, Oak Grove Elementary		6578 Santa Teresa Blvd.	San Jose, CA 95119-1204
2	School District, Oakland Unified		1025 Second Ave.	Oakland, CA 94606-2212
2	School District, Old Adobe Union Elementary		845 Crinella Dr.	Petaluma, CA 94954-4450
2	School District, Orchard Elementary		921 Fox Lane	San Jose, CA 95131-
2	School District, Orinda Union Elementary		8 Altarinda Road	Orinda, CA 94563-2603
2	School District, Palo Alto Unified		25 Churchill Ave.	Palo Alto, CA 94306-1005
2	School District, Petaluma City Elementary		200 Douglas St.	Petaluma, CA 94952-2575
2	School District, Petaluma Joint Union High		200 Douglas St.	Petaluma, CA 94952-2575

Region	Agency	Facility	Address	City, State, ZIP
2	School District, Piedmont City Unified		760 Magnolia Ave.	Piedmont, CA 94611-4047
2	School District, Pittsburg Unified		2000 Railroad Ave.	Pittsburg, CA 94565-3830
2	School District, Pleasanton Unified		4665 Bernal Ave.	Pleasanton, CA 94566-7449
2	School District, Portola Valley Elementary		4575 Alpine Road	Portola Valley, CA 94028-8040
2	School District, Ravenswood City Elementary		2160 Euclid Ave.	East Palo Alto, CA 94303-1703
2	School District, Redwood City Elementary		750 Bradford St.	Redwood City, CA 94063-1727
2	School District, Reed Union Elementary		105A Avenida Miraflores	Tiburon, CA 94920-
2	School District, Ross Elementary		Lagunitas and Allen Aves.	Ross, CA 94957-1058
2	School District, Ross Valley Elementary		46 Green Valley Court	San Anselmo, CA 94960-1112
2	School District, San Bruno Park Elementary		500 Acacia Ave.	San Bruno, CA 94066-4298
2	School District, San Carlos Elementary		826 Chestnut St.	San Carlos, CA 94070-3802
2	School District, San Francisco Unified		135 Van Ness Ave.	San Francisco, CA 94102-5207
2	School District, San Jose Unified		855 Lenzen Ave.	San Jose, CA 95126-2736
2	School District, San Leandro Unified		14735 Juniper St.	San Leandro, CA 94579-1222
2	School District, San Lorenzo Unified		15510 Usher St.	San Lorenzo, CA 94580-
2	School District, San Mateo-Foster City Elementary		300 28th Ave.	San Mateo, CA 94402-0058
2	School District, San Rafael City Elementary		310 Nova Albion Way	San Rafael, CA 94903-
2	School District, San Rafael City High		310 Nova Albione	San Rafael, CA 94903-3500
2	School District, San Ramon Valley Unified		699 Old Orchard Dr.	Danville, CA 94526-4331
2	School District, Santa Clara Unified		1889 Lawrence Road	Santa Clara, CA 95052-0397
2	School District, Saratoga Union Elementary		20460 Forrest Hills Dr.	Saratoga, CA 95070-6020
2	School District, Sausalito Elementary		630 Nevada St.	Sausalito, CA 94965-1654
2	School District, Sequoia Union High		480 James Ave.	Redwood City, CA 94062-1041
2	School District, Sonoma Valley Unified		721 W. Napa St.	Sonoma, CA 95476-6412
2	School District, St. Helena Unified		465 Main St.	St. Helena, CA 94574-2159
2	School District, Sunnyvale Elementary		819 W. Iowa Ave.	Sunnyvale, CA 94088-3217
2	School District, Sunol Glen Unified		Main & Bond Sts.	Sunol, CA 94586-0569
2	School District, Tamalpais Union High		395 Doherty Dr.	Larkspur, CA 94977-0605
2	School District, Two Rock Union Elementary		5001 Spring Hill Road	Petaluma, CA 94952-9639
2	School District, Union Elementary		5175 Union Ave.	San Jose, CA 95124-5434
2	School District, Union Joint Elementary		5300 Red Hill Road	Petaluma, CA 94952-
2	School District, Vallejo City Unified		211 Valle Vista	Vallejo, CA 94590-3256
2	School District, Walnut Creek Elementary		960 Ygnacio Valley Road	Walnut Creek, CA 94596-3892
2	School District, Waugh Elementary		880 Maria Dr.	Petaluma, CA 94954-6837
2	School District, West Contra Costa Unified		1108 Bissell Ave.	Richmond, CA 94801-3135
2	School District, Wilmar Union Elementary		3775 Bodega Ave.	Petaluma, CA 94952-8023
2	School District, Woodside Elementary		3195 Woodside Road	Woodside, CA 94062-2552
2	Transportation, Department of	Alameda Coast Guard Integrated Support Command	MLCP "VS" Bldg 50-8, Coast Guard Isla	Alameda, CA 94501
2	Transportation, Department of	Petaluma Coast Guard Training Center	599 Tomales Rd	Petaluma, CA 94952-5000
2	University of California	Berkeley Laboratory	1 Cyclotron Road MS-65	Berkeley, CA 94720
2	University of California	Lawrence Livermore National Laboratory	7000 East Ave.	Livermore, CA 94550-9234
2	University of California	The University of California, San Francisco		San Francisco, CA 94143

Region	Agency	Facility	Address	City, State, ZIP
2	University of California	University of California Berkeley	Department/Office Name	Berkeley, CA 94720
2	Veteran Affairs	Martinez Center for Rehab & Extended Care	150 Muir Rd.	Martinez, CA 94553
2	Veteran Affairs	San Francisco VA Medical Center	4150 Clement Street	San Francisco, CA 94121-1598
2	Veteran Affairs	VA Northern California Health Care System	150 Muir Rd.	Martinez, CA 94553
2	Veteran Affairs	VA Palo Alto Health Care System	3801 Miranda Avenue	Palo Alto, CA 94304-290
3	Bureau of Prisons	FCI Lompoc	3600 Guard Road	Lompoc, CA 93436
3	Bureau of Prisons	USP Lompoc	3901 Klein Boulevard	Lompoc, CA 93436
3	California Army National Guard	Camp Roberts	ATTN: CACR-DIS	Camp Roberts, CA 93451-5000
3	California Army National Guard	Camp San Luis Obispo	PO Box 4360	San Luis Obispo, CA 93403-4360
3	California Community Colleges	Allan Hancock College	800 South College Drive	Santa Maria, CA 93454-6368
3	California Community Colleges	Cabrillo College	6500 Soquel Drive	Aptos, CA 95003-3119
3	California Community Colleges	Cuesta College	PO Box 8106	San Luis Obispo, CA 93403-8106
3	California Community Colleges	Gavilan College	5055 Santa Teresa Blvd.	Gilroy, CA 95020-9599
3	California Community Colleges	Hartnell College	156 Homestead Avenue	Salinas, CA 93901-1697
3	California Community Colleges	Monterey Peninsula College	980 Fremont Street	Monterey, CA 93940-4799
3	California Community Colleges	Santa Barbara City College	721 Cliff Drive	Santa Barbara, CA 93109-2394
3	California State University	California Polytechnic State University	1 Grand Ave.	San Luis Obispo, CA 93407
3	California State University	California State Monerey Bay	100 Canpus Center	Seaside, CA 93955
3	California Youth Authority	Ben Lomond Youth Conservation Camp	13575 Empire Grade	Santa Cruz, CA
3	California Youth Authority	El Paso de Robles Youth Correctional Facility	Airport Road	Paso Robles, CA
3	Corrections, Dept of	California Men's Colony	Highway 1	San Luis Obispo, CA 93409-8101
3	Corrections, Dept of	Correctional Training Facility	Highway 101 North	Soledad, CA 93960-0686
3	Corrections, Dept of	Salinas Valley State Prison	PO Box 1020	Soledad, CA 93960-1020
3	Defense, Department of	Camp San Luis Obispo	PO Box 4360	San Luis Obispo, CA 93403-4360
3	Defense, Department of	Defense Language Institute Foreign Language Center and	Bldg 4463 Giggling Rd.	Presido of Monterey, CA 93941-5777
3	Defense, Department of	Fort Hunter Liggett	AFRC-FMH-CDR	Fort Hunter Liggett, CA 93928-7000
3	Defense, Department of	Naval Postgraduate School Monterey Bay	1 University Circle	Monterey, CA 93943-5001
3	Defense, Department of	Vandenberg Air Force Base	30 CES/CEZ, 806 13th St. Suite 116	Vandenberg Air Force Base, CA 93437-5242
3	District Agricultural Association	Earl Warren Showgrounds (National Horse Show)	3400 Calle Real	Santa Barbara, CA
3	District Agricultural Association	Monterey County Fairgrounds	2004 Fairground Road	Monterey, CA
3	District Agricultural Association	San Luis Obispo County Fairgrounds	2198 Riverside Avenue	Paso Robles, CA
3	District Agricultural Association	Santa Cruz County Fairgounds	2601 Eest Lake Avenue	Watsonville, CA
3	District Agricultural Association	Santa Maria Fairpark	937 S Thornburg Street	Santa Maria, CA
3	Mental Health, Dept of	Atascadero State Hospital	10333 El Camino Real	Atascadero, CA
3	School District, Alisal Union Elementary		1205 E. Market St.	Salinas, CA 93905-2831
3	School District, Atascadero Unified		5601 West Mall	Atascadero, CA 93422-4234
3	School District, Ballard Elementary		2425 School St.	Solvang, CA 93463-9709
3	School District, Bitterwater-Tully Union Elementary		Lonoak Rt.	King City, CA 93930-
3	School District, Blochman Union Elementary		4949 Foxen Canyon Road	Santa Maria, CA 93454-9666
3	School District, Bonny Doon Union Elementary		1492 Pine Flat Road	Santa Cruz, CA 95060-9711

Region	Agency	Facility	Address	City, State, ZIP
3	School District, Buellton Union Elementary		301 Second St.	Buellton, CA 93427-0075
3	School District, Carmel Unified		4380 Carmel Valley Road	Carmel, CA 93922-2700
3	School District, Carpinteria Unified		1400 Lindon Ave.	Carpinteria, CA 93013-1414
3	School District, Cayucos Elementary		2950 Santa Rosa Creek Road	Cambria, CA 93428-3506
3	School District, Cienega Union Elementary		11936 Cienega Road	Hollister, CA 95023-9697
3	School District, Coast Unified		2950 Santa Rosa Creek Road	Cambria, CA 93428-3506
3	School District, Cold Spring Elementary		2243 Sycamore Canyon Road	Santa Barbara, CA 93108-1909
3	School District, College Elementary		3325 Pine St.	Santa Ynez, CA 93460-0188
3	School District, Gilroy Unified		7810 Arroyo Circle	Gilroy, CA 95020-7313
3	School District, Goleta Union Elementary		401 N. Fairview Ave.	Goleta, CA 93117-1732
3	School District, Graves Elementary		15 McFadden Road	Salinas, CA 93908-
3	School District, Greenfield Union Elementary		493 El Camino Real	Greenfield, CA 93927-
3	School District, Happy Valley Elementary		3125 Branciforte Dr.	Santa Cruz, CA 95065-9775
3	School District, Hollister School District		2690 Cienega Rd	Hollister, CA 95023-
3	School District, Hope Elementary		3970 la Colina Road	Santa Barbara, CA 93110-1563
3	School District, King City Joint Union High		800 Broadway	King City, CA 93930-3326
3	School District, King City Union Elementary		800 Broadway	King City, CA 93930-2984
3	School District, Lagunita Elementary		975 San Juan Grade Road	Salinas, CA 93907-8438
3	School District, Live Oak Elementary		984-1 Bostwick Lane	Santa Cruz, CA 95062-1756
3	School District, Live Oak Unified		2201 Pennington Road	Live Oak, CA 95953-2469
3	School District, Lompoc Unified		1301 North A St.	Lompoc, CA 93438-8000
3	School District, Los Olivos Elementary		2540 Alamo Pintado Ave.	Los Olivos, CA 93441-0208
3	School District, Lucia Mar Unified		602 Orchard St.	Arroyo Grande, CA 93420-4000
3	School District, Mission Union Elementary		36825 Foothill Road	Soledad, CA 93960-9656
3	School District, Montecito Union Elementary		385 San Ysidro Road	Santa Barbara, CA 93108-2131
3	School District, Monterey Peninsula Unified		700 Pacific St.	Monterey, CA 93942-1031
3	School District, Morgan Hill Unified		15600 Concord Circle	Morgan Hill, CA 95037-7110
3	School District, Mountain Elementary		3042 Old San Jose Road	Soquel, CA 95073-9752
3	School District, North County Joint Union Elementary		500 Spring Grove Road	Hollister, CA 95023-9366
3	School District, Nuestro Elementary		3934 Broadway Road	Live Oak, CA 95953-9401
3	School District, Orcutt Union Elementary		Soares & Dyer Sts.	Orcutt, CA 93457-2310
3	School District, Pacific Grove Unified		555 Sinex Ave.	Pacific Grove, CA 93950-4320
3	School District, Pajaro Valley Joint Unified		294 Greenvalley Rd	Watsonville, CA 95076-
3	School District, Paso Robles Joint Unified		800 Niblick Road	Paso Robles, CA 93447-7010
3	School District, Salinas City Elementary		431 W. Alisal St.	Salinas, CA 93901-1624
3	School District, Salinas Union High		431 W. Alisal St.	Salinas, CA 93901-1624
3	School District, San Benito High		1220 Monterey St.	Hollister, CA 95023-4708
3	School District, San Lorenzo Valley Unified		6134 Hwy. 9	Felton, CA 95018-9704
3	School District, San Luis Coastal Unified		1500 Lizzie St.	San Luis Obispo, CA 93401-3099
3	School District, Santa Barbara Elementary		720 Santa Barbara St.	Santa Barbara, CA 93101-
3	School District, Santa Barbara High		720 Santa Barbara St.	Santa Barbara, CA 93101-
3	School District, Santa Cruz City Elementary		2931 Mission St.	Santa Cruz, CA 95060-

Region	Agency	Facility	Address	City, State, ZIP
3	School District, Santa Cruz City High		2931 Mission St.	Santa Cruz, CA 95060-5709
3	School District, Santa Maria Joint Union High		2560 Skyway Dr.	Santa Maria, CA 93455-
3	School District, Santa Maria-Bonita Elementary		708 S. Miller St.	Santa Maria, CA 93454-6230
3	School District, Santa Rita Union Elementary		57 Russell Road	Salinas, CA 93906-4325
3	School District, Santa Ynez Valley Union High		2975 E. Hwy. 246	Santa Ynez, CA 93460-
3	School District, Scotts Valley Unified		4444 Scotts Valley Dr., Ste 5B	Scotts Valley, CA 95066-4529
3	School District, Soledad Unified		335 Market St.	Soledad, CA 93960-
3	School District, Solvang Elementary		565 Atterdag Road	Solvang, CA 93463-2690
3	School District, Soquel Union Elementary		620 Monterey Ave.	Capitola, CA 95010-3618
3	School District, Southside Elementary		4991 Southside Road	Hollister, CA 95023-9637
3	School District, Templeton Unified		960 Old County Road	Templeton, CA 93465-9419
3	School District, Washington Union Elementary		43 San Benancio Canyon Rd	Salinas, CA 93908-
3	University of California	UC Santa Barbara		Santa Barbara, CA 93106
3	University of California	University of California, Santa Cruz	1156 High Street	Santa Cruz, CA 95064
4	Bureau of Prisons	CCM Long Beach	535 N. Alameda Street	Los Angeles, CA 90012
4	Bureau of Prisons	FCI Terminal Island	1299 Seaside Avenue	Terminal Island, CA 90731
4	California Air National Guard	Channel Island Air National Guard Base	100 Mulcahey Dr	Port Hueneme, CA 93041-4002
4	California Community Colleges	Cerritos College	11110 Alondra Boulevard	Norwalk, CA 90650-6269
4	California Community Colleges	Citrus College	1000 West Foothill Boulevard	Glendora, CA 91741-1899
4	California Community Colleges	College Of The Canyons	26455 N. Rockwell Canyon Road	Santa Clarita, CA 91355-1899
4	California Community Colleges	Compton College	1111 East Artesia Boulevard	Compton, CA 90221-5393
4	California Community Colleges	East Los Angeles College	1301 Avenida Cesar Chavez	Monterey Park, CA 91754-6099
4	California Community Colleges	El Camino College	16007 Crenshaw Boulevard	Torrance, CA 90506-0002
4	California Community Colleges	Glendale Community College	1500 North Verdugo Road	Glendale, CA 91208-2894
4	California Community Colleges	Long Beach City College	4901 East Carson Street	Long Beach, CA 90808-1706
4	California Community Colleges	Los Angeles City College	855 North Vermont Avenue	Los Angeles, CA 90029-3590
4	California Community Colleges	Los Angeles Harbor College	1111 Figueroa Place	Wilmington, CA 90744-2397
4	California Community Colleges	Los Angeles Mission College	13356 Eldridge Avenue	Sylmar, CA 91342-3200
4	California Community Colleges	Los Angeles Pierce College	6201 Winnetka Avenue	Woodland Hills, CA 91371-0001
4	California Community Colleges	Los Angeles Southwest College	1600 West Imperial Highway	Los Angeles, CA 90047-4899
4	California Community Colleges	Los Angeles Trade-Tech College	400 West Washington Boulevard	Los Angeles, CA 90015-4108
4	California Community Colleges	Los Angeles Valley College	5800 Fulton Avenue	Van Nuys, CA 91401-4096
4	California Community Colleges	Moorpark College	7075 Campus Road	Moorpark, CA 93201-1695
4	California Community Colleges	Mt. San Antonio College	1100 North Grand Avenue	Walnut, CA 91789-1399
4	California Community Colleges	Oxnard College	4000 South Rose Avenue	Oxnard, CA 93033-6699
4	California Community Colleges	Pasadena City College	1570 East Colorado Boulevard	Pasadena, CA 91106-2003
4	California Community Colleges	Rio Hondo College	3600 Workman Mill Road	Whittier, CA 90601-1699
4	California Community Colleges	Santa Monica College	1900 Pico Boulevard	Santa Monica, CA 90405-1628
4	California Community Colleges	Ventura College	4667 Telegraph Road	Ventura, CA 93003-3899
4	California Community Colleges	West Los Angeles College	4800 Freshman Drive	Culver City, CA 90230-3500
4	California State University	California State Polytechnic University, Pomona	3801 West Temple Avenue	Pomona, CA 91768
4	California State University	California State University Channel Islands	One University Drive	Camarillo, CA 93012

Region	Agency	Facility	Address	City, State, ZIP
4	California State University	California State University Dominguez Hills	1000 E. Victoria Street	Carson, CA 90747
4	California State University	California State University Long Beach	1250 Bellflower Blvd.	Long Beach, CA 90840
4	California State University	California State University Los Angeles	5151 State University Drive	Los Angeles, CA 90032-4226
4	California State University	California State University Northridge	18111 Nordhoff Street	Northridge, CA 91330
4	California Youth Authority	Fred C. Nelles Youth Correcitonal Facility	11850 E Whittier	Whittier, CA
4	California Youth Authority	Southern Youth Correctional Reception Center and Clinic	13200 S Bloomfield Ave	Norwalk, CA
4	California Youth Authority	Ventura Youth Correctional Facility	3100 Wright Rd	Camarillo, CA
4	Defense, Department of	Corona Naval Station	P.O. Box 5000	Corona, CA 92878-5000
4	Defense, Department of	Los Angeles Air Force Base	61 ABG/CEZV, 2420 Vela Way Suite 14	El Segundo, CA 90245
4	Defense, Department of	Naval Auxiliary Landing Field, San Clemente Island	33000 Nixie Way Bldg 50, Suite 326	San Diego, CA 92147-5110
4	Defense, Department of	Naval Base Ventura County		, CA
4	Defense, Department of	Port Hueneme Naval Facility	4363 Missile Way	Port Hueneme, CA 93043-4307
4	Defense, Department of	San Nicholas Island Naval Facility	NAWS-890000E	Point Mugu, CA 93042-5001
4	Devlopmental Services, Dept of	Lanterman Developmental Center	3530 West Pomona Blvd	Pomona, CA
4	District Agricultural Association	Ventura County Fairgrounds	10 West Harbor Blvd	Ventura, CA
4	Mental Health, Dept of	Metropolitan State Hospital	11401 Bloomfield Avenue	Norwalk, CA
4	School District, ABC Unified		16700 Norwalk Blvd.	Cerritos, CA 90703-1838
4	School District, Acton-Agua Dulce Unified		32248 N. Crown Valley Road	Acton, CA 93510-0068
4	School District, Alhambra City Elementary		15 W. Alhambra Road	Alhambra, CA 91802-2110
4	School District, Alhambra City High		15 W. Alhambra Road	Alhambra, CA 91802-2110
4	School District, Arcadia Unified		234 Campus Dr.	Arcadia, CA 91007-6902
4	School District, Azusa Unified		546 S. Citrus Ave.	Azusa, CA 91702-0500
4	School District, Baldwin Park Unified		3699 N. Holly Ave.	Baldwin Park, CA 91706-5397
4	School District, Bassett Unified		904 N. Willow Ave.	La Puente, CA 91746-1615
4	School District, Bellflower Unified		16703 S. Clark Ave.	Bellflower, CA 90706-5203
4	School District, Beverly Hills Unified		255 S. Lasky Dr.	Beverly Hills, CA 90212-3644
4	School District, Bonita Unified		115 W. Allen Ave.	San Dimas, CA 91773-1437
4	School District, Briggs Elementary		14438 W. Telegraph Road	Santa Paula, CA 93060-3088
4	School District, Burbank Unified		1900 W Olive Ave	Burbank, CA 91506
4	School District, Castaic Union Elementary		28131 Livingston Ave.	Valencia, CA 91355-
4	School District, Centinela Valley Union High		14901 S. Inglewood Ave.	Lawndale, CA 90260-1251
4	School District, Charter Oak Unified		20240 Cienega Ave.	Covina, CA 91723-0009
4	School District, Claremont Unified		2080 N. Mountain Ave.	Claremont, CA 91711-2643
4	School District, Compton Unified		604 S. Tamarind Ave.	Compton, CA 90220-3826
4	School District, Conejo Valley Unified		1400 E. Janss Road	Thousand Oaks, CA 91362-2133
4	School District, Covina-Valley Unified		519 E. Badillo St.	Covina, CA 91723-0269
4	School District, Culver City Unified		4034 Irving Pl.	Culver City, CA 90232-2810
4	School District, Downey Unified		11627 Brookshire Ave.	Downey, CA 90241-7017
4	School District, Duarte Unified		1620 Huntington Dr.	Duarte, CA 91010-2534
4	School District, East Whittier City Elementary		14535 E. Whittier Blvd.	Whittier, CA 90605-2130
4	School District, El Monte City Elementary		3540 N. Lexington Ave.	El Monte, CA 91731-2684
4	School District, El Monte Union High		3537 Johnson Ave.	El Monte, CA 91731-3290

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4	School District, El Rancho Unified		9333 Loch Lomond Dr.	Pico Rivera, CA 90660-2913
4	School District, El Segundo Unified		641 Sheldon St.	El Segundo, CA 90245-3036
4	School District, Fillmore Unified		627 Sespe Ave.	Fillmore, CA 93016-0697
4	School District, Garvey Elementary		2730 N. del Mar	Rosemead, CA 91770-3026
4	School District, Glendale Unified		223 N. Jackson St.	Glendale, CA 91206-4334
4	School District, Glendora Unified		500 N. Loraine Ave.	Glendora, CA 91741-2964
4	School District, Hacienda la Puente Unified		15959 E. Gale Ave.	City Of Industry, CA 91716-
4	School District, Hawthorne Elementary		14120 S. Hawthorne Blvd.	Hawthorne, CA 90250-
4	School District, Hermosa Beach City Elementary		1645 Valley Dr.	Hermosa Beach, CA 90254-2921
4	School District, Hueneme Elementary		205 North Ventura Road	Port Hueneme, CA 93041-3065
4	School District, Inglewood Unified		401 S. Inglewood Ave.	Inglewood, CA 90301-2501
4	School District, La Canada Unified		5039 Palm Dr.	La Canada, CA 91011-1518
4	School District, Las Virgenes Unified		4111 N. Las Virgenes Road	Calabasas, CA 91302-1929
4	School District, Lawndale Elementary		4161 W. 147th St.	Lawndale, CA 90260-1709
4	School District, Lennox Elementary		10319 S. Firmona Ave.	Lennox, CA 90304-1419
4	School District, Little Lake City Elementary		10515 S. Pioneer Blvd.	Santa Fe Springs, CA 90670-3703
4	School District, Long Beach Unified		1515 Hughes Way	Long Beach, CA 90810-1839
4	School District, Los Angeles Unified		450 N. Grand Ave.	Los Angeles, CA 90012-2100
4	School District, Los Nietos Elementary		8324 S. Westman Ave., Whittier	Whittier, CA 90606-
4	School District, Lowell Joint		11019 Valley Home Ave.	Whittier, CA 90603-3042
4	School District, Lynwood Unified		11321 Bullis Road	Lynwood, CA 90262-3600
4	School District, Manhattan Beach Unified		1230 Rosecrans Suite 400	Manhattan Beach, CA 90266-2478
4	School District, Mesa Union Elementary		3901 N. Mesa School Road	Somis, CA 93066-9734
4	School District, Monrovia Unified		325 E. Huntington Dr.	Monrovia, CA 91016-3585
4	School District, Montebello Unified		123 S. Montebello Blvd.	Montebello, CA 90640-4729
4	School District, Moorpark Unified		30 Flory Ave.	Moorpark, CA 93021-1862
4	School District, Mountain View Elementary		3320 Gilman Road	El Monte, CA 91732-3226
4	School District, Mupu Elementary		4410 N. Ojai Road	Santa Paula, CA 93060-9681
4	School District, Newhall Elementary		25375 Orchard Village, Ste. 200	Valencia, CA 91355-3055
4	School District, Norwalk-La Mirada Unified		12820 Pioneer Blvd.	Norwalk, CA 90650-2894
4	School District, Ocean View Elementary		2382 Etting Road	Oxnard, CA 93033-6864
4	School District, Ojai Unified		414 E. Ojai Ave.	Ojai, CA 93024-0878
4	School District, Oxnard Elementary		1051 South A St.	Oxnard, CA 93030-7442
4	School District, Oxnard Union High		309 South K St.	Oxnard, CA 93030-5212
4	School District, Palos Verdes Peninsula Unified		3801 Via la Selva	Palos Verdes Estates, CA 90274-1119
4	School District, Paramount Unified		15110 California Ave.	Paramount, CA 90723-4320
4	School District, Pasadena Unified		351 S. Hudson Ave.	Pasadena, CA 91101-3507
4	School District, Pleasant Valley Elementary		600 Temple Ave.	Camarillo, CA 93010-4835
4	School District, Pomona Unified		800 S. Garey Ave	Pomona, CA 91769-2900
4	School District, Redondo Beach Unified		1401 Inglewood Ave.	Redondo Beach, CA 90278-3912
4	School District, Rio Elementary		3300 Cortez St.	Oxnard, CA 93030-1309

Region	Agency	Facility	Address	City, State, ZIP
4	School District, Rosemead Elementary		3907 Rosemead Blvd.	Rosemead, CA 91770-2041
4	School District, Rowland Unified		1830 Nogales St.	Rowland Heights, CA 91748-
4	School District, San Gabriel Unified		102 E. Broadway	San Gabriel, CA 91776-4500
4	School District, San Marino Unified		1665 West Dr.	San Marino, CA 91108-2594
4	School District, Santa Clara Elementary		20030 E. Telegraph Road	Santa Paula, CA 93060-9691
4	School District, Santa Monica-Malibu Unified		1651 16th St.	Santa Monica, CA 90404-3891
4	School District, Santa Paula Elementary		201 S. Steckel Dr.	Santa Paula, CA 93061-0710
4	School District, Santa Paula Union High		500 E. Santa Barbara St.	Santa Paula, CA 93060-2633
4	School District, Saugus Union Elementary		24930 Avenue Stanford .	Santa Clarita, CA 91355-1272
4	School District, Simi Valley Unified		875 E. Cochran	Simi Valley, CA 93065-0999
4	School District, Somis Union Elementary		5268 North St.	Somis, CA 93066-0900
4	School District, South Pasadena Unified		1020 El Centro St.	South Pasadena, CA 91030-3118
4	School District, South Whittier Elementary		10120 Painter Ave.	Whittier, CA 90605-0037
4	School District, Sulphur Springs Union Elementary		17866 Sierra Hwy.	Canyon Country, CA 91351-1671
4	School District, Temple City Unified		9700 Las Tunas Drive	Temple City, CA 91780-
4	School District, Torrance Unified		2335 Plaza del Amo	Torrance, CA 90501-3420
4	School District, Valle Lindo Elementary		1431 N. Central Ave.	South El Monte, CA 91733-3388
4	School District, Ventura Unified		120 E. Santa Clara St.	Ventura, CA 93001-2716
4	School District, Walnut Valley Unified		880 S. Lemon Ave.	Walnut, CA 91789-2931
4	School District, West Covina Unified		1717 W. Merced Ave.	West Covina, CA 91790-3406
4	School District, Whittier City Elementary		7211 S. Whittier Ave.	Whittier, CA 90602-1123
4	School District, Whittier Union High		9401 S. Painter Ave.	Whittier, CA 90605-2798
4	School District, William S. Hart Union High		21515 Redview Dr.	Santa Clarita, CA 91350-2948
4	School District, Wiseburn Elementary		13530 Aviation Blvd.	Hawthorne, CA 90250-6462
4	Science Center, California	California Science Center	700 State Drive	Los Angeles, CA
4	University of California	UCLA	405 Hilgard Avenue Box 951361	Los Angeles, CA 90095-1361
4	Veteran Affairs	Long Beach VA Medical Center	5901 E. 7th Street	Long Beach, CA 90822
4	Veteran Affairs	VA Greater Los Angeles Healthcare System (GLA)	11301 Willshire Boulevard	Los Angeles, CA 90073
5F	Bureau of Prisons	USP Atwater	PO Box 019000	Atwater, CA 95301
5F	California Air National Guard	144th Fighter Wing	5323 East McKinley Avenue	Fresno, CA 93727-2199
5F	California Air National Guard	Fresno Air National Guard Base	5323 E McKinley Ave	Fresno, CA 93727
5F	California Community Colleges	Bakersfield College	1801 Panorama Drive	Bakersfield, CA 93305-1299
5F	California Community Colleges	College of the Sequoias	915 South Mooney Boulevard	Visalia, CA 93277-2234
5F	California Community Colleges	Fresno City College	1101 E. University Avenue	Fresno, CA 93741-0001
5F	California Community Colleges	Merced College	3600 M Street	Merced, CA 95348-2898
5F	California Community Colleges	Porterville College	100 East College Avenue	Porterville, CA 93257-5901
5F	California Community Colleges	Reedley College	995 N. Reed Avenue	Reedley, CA 93654-2099
5F	California State University	California State University Bakersfield	9001 Stockdale Highway	Bakersfield, CA 93311-1099
5F	Defense, Department of	Lemoore Naval Air Station	751 Enterprise Ave	Lemoore NAS, CA 93246
5F	Developmental Services, Dept of	Porterville Developmental Center	26501 AVE 140	Porterville, CA
5F	District Agricultural Association	Kern County Fairgrounds	1142 South P Street	Bakersfield, CA
5F	District Agricultural Association	Kings County Fairgrounds	810 S 10th Ave	Hanford, CA

Region	Agency	Facility	Address	City, State, ZIP
5F	District Agricultural Association	Madera County Fairgournds	1850 W Cleveland	Madera, CA
5F	District Agricultural Association	Merced County Fairgrounds	900 Martin Luther King	Merced, CA
5F	District Agricultural Association	The Big Fresno Fair	1121 Chance Ave	Fresno, CA
5F	District Agricultural Association	Tulare County Fairgrounds	215 Martin Luther King	Tulare, CA
5F	School District, Alta Vista Elementary		2293 E. Crabtree Ave.	Porterville, CA 93257-5225
5F	School District, American Union Elementary		2801 W. Adams Ave.	Fresno, CA 93706-9601
5F	School District, Atwater Elementary		1401 Broadway Ave.	Atwater, CA 95301-
5F	School District, Bakersfield City Elementary		1300 Baker St.	Bakersfield, CA 93305-4326
5F	School District, Beardsley Elementary		1001 Roberts Lane	Bakersfield, CA 93308-4503
5F	School District, Buena Vista Elementary		21660 Road 60	Tulare, CA 93274-9470
5F	School District, Burton Elementary		264 N. Westwood St.	Porterville, CA 93257-2542
5F	School District, Central Unified		4605 N. Polk Ave.	Fresno, CA 93722-5334
5F	School District, Central Union Elementary		15783 18th Ave.	Lemoore, CA 93245-9742
5F	School District, Citrus South Tule Elementary		31374 Success Valley Dr.	Porterville, CA 93257-9638
5F	School District, Clay Joint Elementary		12449 S. Smith Ave.	Kingsburg, CA 93631-9717
5F	School District, Clovis Unified		1450 Herndon Ave.	Clovis, CA 93611-0567
5F	School District, Delhi Unified		9715 Hinton Ave.	Delhi, CA 95315-0338
5F	School District, Delta View Joint Union Elementary		1201 Lacey Blvd.	Hanford, CA 93230-9306
5F	School District, Edison Elementary		9600 Eucalyptus Dr.	Bakersfield, CA 93306-6781
5F	School District, Exeter Union Elementary		134 South E St.	Exeter, CA 93221-
5F	School District, Exeter Union High		134 South E St.	Exeter, CA 93221-
5F	School District, Fairfax Elementary		1500 S. Fairfax Road	Bakersfield, CA 93307-3151
5F	School District, Farmersville Unified		281 S. Farmersville Blvd.	Farmersville, CA 93223-1833
5F	School District, Fresno Unified		Ed. Cntr., Tulare & M Sts	Fresno, CA 93721-
5F	School District, Fruitvale Elementary		7311 Rosedale Hwy.	Bakersfield, CA 93308-5738
5F	School District, General Shafter Elementary		1316 Shafter Road	Bakersfield, CA 93313-9766
5F	School District, Golden Valley Unified		37479 Avenue 12	Madera, CA 93638-
5F	School District, Greenfield Union Elementary		1624 Fairview Road	Bakersfield, CA 93307-5512
5F	School District, Hanford Elementary		714 N. White St.	Hanford, CA 93232-
5F	School District, Hanford Joint Union High		120 E. Grangeville Road	Hanford, CA 93230-3067
5F	School District, Hope Elementary		816 W. Teapot Dome Ave.	Porterville, CA 93257-9465
5F	School District, Island Union Elementary		7799 21st Ave.	Lemoore, CA 93245-9673
5F	School District, Kern Union High		5801 Sundale Ave	Bakersfield, CA 93309-2924
5F	School District, Kings Canyon Joint Unified		675 W. Manning Ave.	Reedley, CA 93654-2427
5F	School District, Kings River Union Elementary		3961 Ave. 400	Kingsburg, CA 93631-9660
5F	School District, Kings River-Hardwick Union Elementary		10300 Excelsior Ave.	Hanford, CA 93230-9108
5F	School District, Kingsburg Joint Union Elementary		1310 Stroud Ave.	Kingsburg, CA 93631-1000
5F	School District, Kingsburg Joint Union High		1900 18th Ave.	Kingsburg, CA 93631-1629
5F	School District, Kit Carson Union Elementary		9895 Seventh Ave.	Hanford, CA 93230-8802
5F	School District, Lakeside Union Elementary		9100 Jersey Ave.	Hanford, CA 93230-9560
5F	School District, Lakeside Union School		14535 Old River Rd.	Bakersfield, CA 93311-9756
5F	School District, Lemoore Union Elementary		100 Vine St.	Lemoore, CA 93245-3418

Region	Agency	Facility	Address	City, State, ZIP
5F	School District, Lemoore Union High		101 E. Bush St.	Lemoore, CA 93245-3601
5F	School District, Liberty Elementary		11535 Ave. 264	Visalia, CA 93277-9483
5F	School District, Los Banos Unified		1717 S. 11th St.	Los Banos, CA 93635-4800
5F	School District, Madera Unified		1902 Howard Road	Madera, CA 93637-5123
5F	School District, McSwain Union Elementary		926 N. Scott Road	Merced, CA 95340-8893
5F	School District, Merced City Elementary		444 W. 23rd St.	Merced, CA 95340-3723
5F	School District, Merced Union High		Olive Ave. & G St.	Merced, CA 95344-0147
5F	School District, Monroe Elementary		11842 S. Chestnut Ave.	Fresno, CA 93725-9618
5F	School District, Norris Elementary		6940 Calloway Dr.	Bakersfield, CA 93312-9005
5F	School District, Oak Valley Union Elementary		24500 Road 68	Tulare, CA 93274-9607
5F	School District, Orange Center Elementary		3530 S. Cherry Ave.	Fresno, CA 93706-5615
5F	School District, Outside Creek Elementary		26452 Road 164	Visalia, CA 93292-9740
5F	School District, Pacific Union Elementary		2065 E. Bowles Ave.	Fresno, CA 93725-9630
5F	School District, Palo Verde Union Elementary		9637 Ave. 196	Tulare, CA 93274-9529
5F	School District, Panama Buena Vista Union Elementary		4200 Ashe Road	Bakersfield, CA 93313-2029
5F	School District, Pioneer Union Elementary		8810 14th Ave.	Hanford, CA 93230-9677
5F	School District, Plainsburg Union Elementary		3708 S. Plainsburg Road	Merced, CA 95340-9557
5F	School District, Pleasant View Elementary		14004 Road 184	Porterville, CA 93257-9214
5F	School District, Porterville Unified		600 West Grand Ave.	Porterville, CA 93257-2029
5F	School District, Rio Bravo-Greeley Union Elementary		6521 Enos Lane	Bakersfield, CA 93312-8721
5F	School District, Rockford Elementary		14983 Road 208	Porterville, CA 93257-9318
5F	School District, Rosedale Union Elementary		2553 Old Farm Road	Bakersfield, CA 93312-3531
5F	School District, Selma Unified		3036 Thompson Ave.	Selma, CA 93662-2497
5F	School District, Standard Elementary		1200 N. Chester Ave.	Bakersfield, CA 93308-3521
5F	School District, Stone Corral Elementary		15590 Ave. 383	Visalia, CA 93292-9545
5F	School District, Strathmore Union Elementary		23024 Ave. 198	Strathmore, CA 93267-0247
5F	School District, Strathmore Union High		22568 Ave. 196	Strathmore, CA 93267-0114
5F	School District, Sundale Union Elementary		13990 Ave. 240	Tulare, CA 93274-9563
5F	School District, Sunnyside Union Elementary		21644 Ave. 196	Strathmore, CA 93267-9795
5F	School District, Tulare City Elementary		600 N. Cherry Ave.	Tulare, CA 93274-2920
5F	School District, Tulare Joint Union High		426 N. Blackstone	Tulare, CA 93274-4449
5F	School District, Vineland Elementary		14713 Weedpatch Hwy.	Bakersfield, CA 93307-9653
5F	School District, Visalia Unified		5000 W Cypress Ave.	Visalia, CA 93277-8300
5F	School District, Washington Colony Elementary		130 E. Lincoln Ave.	Fresno, CA 93706-6043
5F	School District, Washington Union High		6041 S. Elm Ave.	Fresno, CA 93706-6099
5F	School District, Waukena Joint Union Elementary		19113 Road 28	Tulare, CA 93274-
5F	School District, Weaver Union Elementary		3076 E. Childs Ave.	Merced, CA 95340-9583
5F	School District, West Fresno Elementary		2888 S. Ivy St.	Fresno, CA 93706-5513
5F	School District, West Park Elementary		2695 S. Valentine Ave.	Fresno, CA 93706-9042
5F	School District, Woodville Elementary		16541 Road 168	Porterville, CA 93257-9205
5F	University of California	University of California, Merced	1170 W. Olive Avenue Suite I	Merced, CA 95348-1959
5F	Veteran Affairs	VA Central California Health Care System	2615 E. Clinton Avenue	Fresno, CA 93703

Region	Agency	Facility	Address	City, State, ZIP
5R	California Community Colleges	Shasta College	11555 Old Oregon Trail PO Box 496006	Redding, CA 96049-6006
5R	California State University	California State University Chico	400 West First Street	Chico, CA 95929
5R	District Agricultural Association	Shasta County Fairgrounds	1890 Briggs Street	Anderson, CA
5R	District Agricultural Association	Silver Dollar Fairgrounds	2357 Fair Street	Chico, CA
5R	School District, Anderson Union High		1471 Ferry St.	Anderson, CA 96007-3313
5R	School District, Cascade Union Elementary		1645 W. Mill St.	Anderson, CA 96007-3226
5R	School District, Chico Unified		1163 E. Seventh St.	Chico, CA 95928-5903
5R	School District, Columbia Elementary		10142 Old Oregon Trail Road	Redding, CA 96003-7995
5R	School District, Durham Unified		9420 Putney Dr.	Durham, CA 95938-0300
5R	School District, Enterprise Elementary		1155 Mistletoe Lane	Redding, CA 96002-0749
5R	School District, Gateway Unified		4411 Mountain Lakes Blvd.	Redding, CA 96003-1446
5R	School District, Grant Elementary		8835 Swasey Dr.	Redding, CA 96001-9722
5R	School District, Happy Valley Union Elementary		16300 Cloverdale Road	Anderson, CA 96007-
5R	School District, Pacheco Union Elementary		7433 Pacheco Rd	Redding, CA 96002-4603
5R	School District, Redding Elementary		5885 E. Bonnyview Road	Redding, CA 96099-2418
5R	School District, Shasta Union High		2200 Eureka way Suite B	Redding, CA 96001-
5S	California Air National Guard	162nd Combat Communications Group	3900 Roseville Road	North Highlands, CA 95660-5794
5S	California Community Colleges	American River College	4700 College Oak Drive	Sacramento, CA 95841-4286
5S	California Community Colleges	Cosumnes River College	8401 Center Parkway	Sacramento, CA 95823-5799
5S	California Community Colleges	Modesto Junior College	435 College Avenue	Modesto, CA 95350-5800
5S	California Community Colleges	Sacramento City College	3835 Freeport Boulevard	Sacramento, CA 95822-1386
5S	California Community Colleges	San Joaquin Delta College	5151 Pacific Avenue	Stockton, CA 95207-6370
5S	California Community Colleges	Sierra College	5000 Rocklin Road	Rocklin, CA 95677-3397
5S	California Community Colleges	Yuba College	2088 North Beale Road	Marysville, CA 95901-7699
5S	California State University	California State University Sacramento	6000 J Street	Sacramento, CA 95819
5S	California State University	California State University Stanislaus	801 West Monte Vista Ave	Turlock, CA 95382
5S	California Youth Authority	Northern California Youth Correctional Center	7650 Newcastle Rd	Stockton, CA
5S	California Youth Authority	Northern Youth Correctional Reception Center and Clinic	3001 Ramona Ave	Sacramento, CA
5S	Corrections, Dept of	California Medical Facility	1600 California Dr	Vacaville, CA 95696-2000
5S	Corrections, Dept of	CSP, Sacramento	PO Box 29	Represa, CA 95671
5S	Corrections, Dept of	CSP, Solano County	2100 Peabody Road	Vacaville, CA 95696-4000
5S	Corrections, Dept of	Deuel Vocational Institution	23500 Kasson Road	Tracy, CA 95378-0004
5S	Corrections, Dept of	Folsom State Prison	300 Prison Road	Represa, CA 95671
5S	Corrections, Dept of	Northern California Women's Facility	7150 East Arch Road	Stockton, CA 95213-9006
5S	Defense, Department of	Beale Air Force Base	9 CES/CEV 6601 B Street	Beale AFB, CA 95903-1708
5S	Defense, Department of	Defense Distribution San Joaquin	PO Box 960001	Stockton, CA 95296-0002
5S	Defense, Department of	McClellan Air Force Base	3237 Peacekeeper Way Suite 1	McClellan AFB, CA 95652-1044
5S	Defense, Department of	Stockton Naval Communications Station	305 Fyffe Ave	Stockton, CA 95203-4920
5S	District Agricultural Association	Contra Costa County Fairgrounds	1201 West 10th Street	Antioch, CA
5S	District Agricultural Association	Dixon May Fair	655 S First Street	Dixon, CA
5S	District Agricultural Association	Gold Country Fairgrounds	1273 High Street	Auburn, CA
5S	District Agricultural Association	Lake County Fairgrounds	401 Martin Street	Lakeport, CA

Region	Agency	Facility	Address	City, State, ZIP
5S	District Agricultural Association	Nevada County Fairgrounds	11228 McCourtney Road	Grass Valley, CA
5S	District Agricultural Association	San Joaquin County Fairgrounds	1658 S Airport Way	Stockton, CA
5S	District Agricultural Association	Stanislaus County Fairgrounds	900 N Broadway	Turlock, CA
5S	District Agricultural Association	Sutter County Fairgrounds	442 Franklin Ave	Yuba City, CA
5S	District Agricultural Association	Yolo County Fairgrounds	Hwy 113 & Gibson Rd	Woodland, CA
5S	Exposition & State Fair, California	California Exposition & State Fair	1600 Exposition Blvd	Sacramento, CA
5S	School District, Ackerman Elementary		13777 Bowman Road	Auburn, CA 95603-3147
5S	School District, Antioch Unified		510 G St.	Antioch, CA 94509-0904
5S	School District, Arcohe Union Elementary		11755 Ivie Road	Herald, CA 95638-0093
5S	School District, Auburn Union Elementary		55 College Way	Auburn, CA 95603-
5S	School District, Brentwood Union Elementary		255 Guthrie Lane	Brentwood, CA 94513-1610
5S	School District, Center Joint Unified		8408 Watt Ave.	Antelope, CA 95843-9116
5S	School District, Ceres Unified		2503 Lawrence St	Ceres, CA 95307-0307
5S	School District, Chatom Union Elementary		7201 Clayton Ave.	Turlock, CA 95380-9352
5S	School District, Chicago Park Elementary		15725 Mt Olive Road	Grass Valley, CA 95945-7906
5S	School District, Clear Creek Elementary		17700 McCourtney Road	Grass Valley, CA 95949-7636
5S	School District, Davis Joint Unified		526 B St.	Davis, CA 95616-3811
5S	School District, Del Paso Heights Elementary		3780 Rosin Court, Suite 270	Sacramento, CA 95834-1646
5S	School District, Dixon Unified		305 N. Almond St.	Dixon, CA 95620-2702
5S	School District, Dry Creek Joint Elementary		9707 Cook Riolo Road	Roseville, CA 95747-9793
5S	School District, El Dorado Union High		4675 Missouri Flat Road	Placerville, CA 95619-
5S	School District, Elk Grove Unified		9510 Elk Grove-Florin Road	Elk Grove, CA 95624-1801
5S	School District, Elverta Joint Elementary		8920 Elwyn Ave.	Elverta, CA 95626-9217
5S	School District, Empire Union Elementary		116 N. McClure Road	Modesto, CA 95357-1329
5S	School District, Eureka Union Elementary		5477 Eureka Road	Granite Bay, CA 95746-8808
5S	School District, Folsom-Cordova Unified		125 East Bidwell St.	Folsom, CA 95630-3241
5S	School District, Franklin Elementary		332 N. Township Road	Yuba City, CA 95993-9629
5S	School District, Galt Joint Union Elementary		1018 C St. Suite 210	Galt, CA 95632-
5S	School District, Galt Joint Union High		145 N. Lincoln Way	Galt, CA 95632-1720
5S	School District, Gold Oak Union Elementary		3171 Pleasant Valley Road	Placerville, CA 95667-7836
5S	School District, Gold Trail Union Elementary		1575 Old Ranch Road	Placerville, CA 95667-8929
5S	School District, Grant Joint Union High		1333 Grand Ave.	Sacramento, CA 95838-3697
5S	School District, Grass Valley Elementary		10840 Gilmore Way	Grass Valley, CA 95945-5409
5S	School District, Hart-Ransom Union Elementary		3920 Shoemake Ave.	Modesto, CA 95358-8577
5S	School District, Holt Union Elementary		1545 S. Holt Road	Stockton, CA 95206-9618
5S	School District, Hughson Unified		7419 East Whitmore Ave.	Hughson, CA 95326-
5S	School District, Jefferson Elementary		7500 W. Linne Road	Tracy, CA 95376-9278
5S	School District, Keyes Union Elementary		5465 Seventh St.	Keyes, CA 95328-0549
5S	School District, Knightsen Elementary		1923 Delta Road	Knightsen, CA 94548-0265
5S	School District, Lakeport Unified		100 Lange St.	Lakeport, CA 95453-3297
5S	School District, Lammersville Elementary		16555 W. Von Sosten Road	Tracy, CA 95376-7220
5S	School District, Liberty Union High		20 Oak St.	Brentwood, CA 94513-1379

Region	Agency	Facility	Address	City, State, ZIP
5S	School District, Lincoln Unified		2010 W. Swain Road	Stockton, CA 95207-4055
5S	School District, Lodi Unified		1305 E. Vine St.	Lodi, CA 95240-3148
5S	School District, Loomis Union Elementary		3290 Humphrey Road	Loomis, CA 95650-9043
5S	School District, Manteca Unified		2901 E. Louise Ave.	Manteca, CA 95336-0032
5S	School District, Marysville Joint Unified		1919 B St.	Marysville, CA 95901-3731
5S	School District, Modesto City Elementary		426 Locust St.	Modesto, CA 95351-2631
5S	School District, Modesto City High		426 Locust St.	Modesto, CA 95351-2631
5S	School District, Mother Lode Union Elementary		3783 Forni Road	Placerville, CA 95667-6207
5S	School District, Natomas Unified		1515 Sports Dr., Suite 1	Sacramento, CA 95834-1905
5S	School District, Nevada Joint Union High		11645 Ridge Road	Grass Valley, CA 95945-5024
5S	School District, New Jerusalem Elementary		31400 S. Koster Road	Tracy, CA 95376-8824
5S	School District, North Sacramento Elementary		670 Dixieanne Ave.	Sacramento, CA 95815-3023
5S	School District, Oakdale Joint Unified		168 S. Third Ave.	Oakdale, CA 95361-3935
5S	School District, Oakley Union Elementary		91 Mercedes Lane	Oakley, CA 94561-
5S	School District, Paradise Elementary		3361 California Ave.	Modesto, CA 95358-8337
5S	School District, Patterson Joint Unified		200 N. Seventh St.	Patterson, CA 95363-0547
5S	School District, Placer Union High		13000 New Airport Road	Auburn, CA 95604-5048
5S	School District, Placerville Union Elementary		1032 Thompson Way	Placerville, CA 95667-5713
5S	School District, Pleasant Ridge Union Elementary		22580 Kingston Lane	Grass Valley, CA 95949-7706
5S	School District, Plumas Elementary		2743 Plumas-Arboga Road	Marysville, CA 95901-9638
5S	School District, Rio Linda Union Elementary		627 L St.	Rio Linda, CA 95673-3430
5S	School District, Ripon Unified		304 N. Acacia Ave.	Ripon, CA 95366-2404
5S	School District, River Delta Joint Unified		445 Montezuma	Rio Vista, CA 94571-1651
5S	School District, Riverbank Unified		6715 7th St.	Riverbank, CA 95367-2345
5S	School District, Robla Elementary		5248 Rose St.	Sacramento, CA 95838-1633
5S	School District, Rocklin Unified		5035 Meyers St.	Rocklin, CA 95677-2811
5S	School District, Roseville City Elementary		1000 Darling Way	Roseville, CA 95678-4341
5S	School District, Roseville Joint Union High		1750 Cirby Way	Roseville, CA 95661-5520
5S	School District, Sacramento City Unified		520 Capitol Mall	Sacramento, CA 95812-2271
5S	School District, Salida Union Elementary		5250 Tamara Way	Salida, CA 95368-9226
5S	School District, San Juan Unified		3738 Walnut Ave.	Carmichael, CA 95609-0477
5S	School District, Shiloh Elementary		6633 Paradise Road	Modesto, CA 95358-9253
5S	School District, Stanislaus Union Elementary		3601 Carver Road	Modesto, CA 95356-0926
5S	School District, Stockton City Unified		701 N. Madison St.	Stockton, CA 95202-1634
5S	School District, Sylvan Union Elementary		605 Sylvan Ave.	Modesto, CA 95350-1517
5S	School District, Tracy Joint Unified		315 East Eleventh St.	Tracy, CA 95376-4095
5S	School District, Turlock Joint Elementary		1574 E Canal Dr.	Turlock, CA 95381-1105
5S	School District, Turlock Joint Union High		1574 E Canal Dr.	Turlock, CA 95381-1105
5S	School District, Union Hill Elementary		10879 Bartlett Dr.	Grass Valley, CA 95945-8730
5S	School District, Vacaville Unified		751 School St.	Vacaville, CA 95688-3945
5S	School District, Washington Unified		930 West Acres Road	West Sacramento, CA 95691-3224
5S	School District, Western Placer Unified		810 J Street	Lincoln, CA 95648-1825

Region	Agency	Facility	Address	City, State, ZIP
5S	School District, Woodland Joint Unified		630 Cottonwood St.	Woodland, CA 95695-3615
5S	School District, Yuba City Unified		750 Palora Ave.	Yuba City, CA 95991-3627
5S	University of California	The University of California, Davis	One Shields Avenue	Davis, CA 95616
5S	Veteran Affairs	Sacramento Medical Center @ Mather	10535 Hospital Way	Sacramento, CA 95655
6A	School District, Lake Tahoe Unified		1021 Al Tahoe Blvd.	South Lake Tahoe, CA 96150-4426
6B	Bureau of Prisons	FCI Victorville	PO Box 5400	Adelanto, CA 92301
6B	California Community Colleges	Antelope Valley College	3041 West Avenue K	Lancaster, CA 93536-5426
6B	California Community Colleges	Victor Valley College	18422 Bear Valley Road	Victorville, CA 92392-5849
6B	Corrections, Dept of	CSP, Los Angeles County	44750 60th Street West	Lancaster, CA 93536-7620
6B	Defense, Department of	Production Flight Test Installation, Air Force Plant 42	2503 East Avenue P	Palmdale, CA 93550-2196
6B	District Agricultural Association	San Bernardino County Fairgrounds	14800 Seventh Street	Victorville, CA
6B	School District, Antelope Valley Union High		44811 North Sierra Hwy.	Lancaster, CA 93534-3226
6B	School District, Apple Valley Unified		22974 Bear Valley Road	Apple Valley, CA 92308-7423
6B	School District, Eastside Union Elementary		6742 E. Avenue H	Lancaster, CA 93535-7849
6B	School District, Hesperia Unified		9144 Third St.	Hesperia, CA 92345-3643
6B	School District, Lancaster Elementary		44711 N. Cedar Ave.	Lancaster, CA 93534-3210
6B	School District, Palmdale Elementary		39139 10th St. East.	Palmdale, CA 93550-3419
6B	School District, Victor Elementary		15579 Eighth St.	Victorville, CA 92392-3348
6B	School District, Victor Valley Union High		16350 Mojave Dr.	Victorville, CA 92392-3655
6B	School District, Westside Union Elementary		46809 N. 70th St. West	Lancaster, CA 93535-7836
6B	School District, Wilsona Elementary		18050 East Ave. O	Palmdale, CA 93591-3800
7	California Community Colleges	College of the Desert	43 500 Monterey Avenue	Palm Desert, CA 92260-2499
7	School District, Banning Unified		161 W. Williams St.	Banning, CA 92220-4746
7	School District, Brawley Elementary		261 D St.	Brawley, CA 92227-1912
7	School District, Brawley Union High		480 N. Imperial Ave.	Brawley, CA 92227-1625
7	School District, Calexico Unified		901 Andrade Ave.	Calexico, CA 92232-0792
7	School District, Central Union High		1001 Brighton Ave.	El Centro, CA 92243-3110
7	School District, Coachella Valley Unified		87-225 Church St.	Thermal, CA 92274-0847
7	School District, Desert Sands Unified		47-950 Dune Palms Rd	La Quinta, CA 92253-4000
7	School District, El Centro Elementary		1256 Broadway	El Centro, CA 92243-2317
7	School District, Imperial Unified		219 North E Street	Imperial, CA 92254
7	School District, Palm Springs Unified		333 S. Farrell Dr.	Palm Springs, CA 92262-7905
8	California Air National Guard	163rd Air Refueling Wing	1620 Graeber Street, #6	March Field, CA 92518-1614
8	California Army National Guard	Los Alamitos AFRC	Lexington Dr	Los Alamitos, CA 90720
8	California Community Colleges	Chaffey College	5885 Haven Avenue	Rancho Cucamonga, CA 91737-3002
8	California Community Colleges	Coastline Community College	11460 Warner Avenue	Fountain Valley, CA 92708-2597
8	California Community Colleges	Crafton Hills College	11711 Sand Canyon Road	Yucaipa, CA 92399-1799
8	California Community Colleges	Cypress College	9200 Valley View Street	Cypress, CA 90630-5897
8	California Community Colleges	Fullerton College	321 East Chapman Avenue	Fullerton, CA 92832-2095
8	California Community Colleges	Golden West College	15744 Goldenwest Street	Huntington Beach, CA 92647 0592
8	California Community Colleges	Irvine Valley College	5500 Irvine Center Drive	Irvine, CA 92720-4399

Region	Agency	Facility	Address	City, State, ZIP
8	California Community Colleges	Mt. San Jacinto College	1499 North State Street	San Jacinto, CA 92583-2399
8	California Community Colleges	Orange Coast College	2701 Fairview Road PO Box 5005	Costa Mesa, CA 92628-5005
8	California Community Colleges	Riverside Community College	4800 Magnolia Avenue	Riverside, CA 92506-1293
8	California Community Colleges	San Bernardino Valley College	701 S. Mt. Vernon Avenue	San Bernardino, CA 92410-2798
8	California Community Colleges	Santa Ana College	1530 W. 17th Street	Santa Ana, CA 92706-3398
8	California Community Colleges	Santiago Canyon College	8045 E. Chapman Avenue	Orange, CA 92869-4512
8	California State University	California State University Fullerton	P.O. Box 34080	Fullerton, CA 92834
8	California State University	California State University San Bernardino	5500 University Parkway	San Bernardino, CA 92407
8	California Youth Authority	Heman G. Stark Youth Correctional Facility	15180 Eculid Ave	Chino, CA
8	Corrections, Dept of	California Institution for Men	14901 Central Avenue	Chino, CA 91710
8	Corrections, Dept of	California Institution for Women	16756 Chino-Corona Road	Corona, CA 92878-6000
8	Corrections, Dept of	California Rehabilitation Center	5th & Western	Norco, CA 91760
8	Defense, Department of	March Air Reserve Base	2145 Graeber St, Ste 117	March ARB, CA 92518-1671
8	Defense, Department of	Naval Warfare Assessment Sation	2300 Fifth St	Norco, CA 91760
8	Defense, Department of	Seal Beach Naval Weapons Station	800 Seal Beach Blvd	Seal Beach, CA 90740-5000
8	Developmental Services, Dept of.	Fairview Developmental Center	2501 Harbor Blvd	Cotsa Mesa, CA
8	District Agricultural Association	Orange County Fairgrounds	88 Fair Drive	Costa Mesa, CA
8	Education, Dept of	Calif. School for the Deaf	3044 Horace St.	Riverside, CA 92506-4498
8	Mental Health, Dept of	Patton State Hospital	3102 e Highland Ave	Patton, CA
8	School District, Alta Loma Elementary		9340 Baseline Road	Alta Loma, CA 91701-5821
8	School District, Alvord Unified		10365 Keller Ave	Riverside, CA 92505-1349
8	School District, Anaheim Elementary		1001 S. East St.	Anaheim, CA 92805-5749
8	School District, Anaheim Union High		501 Crescent Way	Anaheim, CA 92803-3520
8	School District, Bear Valley Unified		42271 Moonridge Road	Big Bear Lake, CA 92315-1529
8	School District, Beaumont Unified		500 Grace Ave.	Beaumont, CA 92223-0187
8	School District, Brea-Olinda Unified		Number One Civic Cntr.	Brea, CA 92821-9990
8	School District, Buena Park Elementary		6885 Orangethorpe Ave.	Buena Park, CA 90620-1348
8	School District, Central Elementary		10601 Church St., Suite 112	Rancho Cucamonga, CA 91730-6863
8	School District, Centralia Elementary		6625 la Palma Ave.	Buena Park, CA 90620-2859
8	School District, Chaffey Joint Union		211 W. Fifth St.	Ontario, CA 91762-1698
8	School District, Chino Valley Unified		5130 Riverside Dr.	Chino, CA 91710-4130
8	School District, Colton Joint Unified		1212 Valencia Dr.	Colton, CA 92324-1798
8	School District, Corona-Norco Unified		2820 Clark Ave.	Norco, CA 91760-1903
8	School District, Cucamonga Elementary		8776 Archibald Ave.	Rancho Cucamonga, CA 91730-4698
8	School District, Cypress Elementary		9470 Moody St.	Cypress, CA 90630-2919
8	School District, Etiwanda Elementary		6061 East Ave.	Etiwanda, CA 91739-0248
8	School District, Fontana Unified		9680 Citrus Ave.	Fontana, CA 92335-5571
8	School District, Fountain Valley Elementary		17210 Oak St.	Fountain Valley, CA 92708-3405
8	School District, Fullerton Elementary		1401 W. Valencia Dr.	Fullerton, CA 92633-3938
8	School District, Fullerton Joint Union High		1051 W. Bastanchury Road	Fullerton, CA 92833-2247

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8	School District, Garden Grove Unified		10331 Stanford Ave.	Garden Grove, CA 92840-6351
8	School District, Hemet Unified		2350 W. Latham Ave.	Hemet, CA 92545-3632
8	School District, Huntington Beach City Elementary		20451 Craimer Lane	Huntington Beach, CA 92646-0071
8	School District, Huntington Beach Union High		10251 Yorktown Ave.	Huntington Beach, CA 92646-2999
8	School District, Irvine Unified		5050 Barranca Parkway	Irvine, CA 92604-4652
8	School District, Jurupa Unified		3924 Riverview Dr.	Riverside, CA 92509-6611
8	School District, La Habra City Elementary		500 N. Walnut St.	La Habra, CA 90633-0307
8	School District, Lake Elsinore Unified		545 Chaney St.	Lake Elsinore, CA 92530-2723
8	School District, Los Alamitos Unified		10293 Bloomfield St.	Los Alamitos, CA 90720-2264
8	School District, Magnolia Elementary		2705 W. Orange Ave.	Anaheim, CA 92804-3203
8	School District, Menifee Union Elementary		30205 Menifee Road	Menifee, CA 92584-8109
8	School District, Moreno Valley Unified		25634 Alessandro Blvd.	Moreno Valley, CA 92553-4306
8	School District, Mountain View Elementary		2585 S. Archibald Ave.	Ontario, CA 91761-8146
8	School District, Newport-Mesa Unified		2985-A Bear St.	Costa Mesa, CA 92626-
8	School District, Nuview Union Elementary		29780 Lakeview Ave.	Nuevo, CA 92567-9261
8	School District, Ocean View Elementary		17200 Pinehurst Lane	Huntington Beach, CA 92647-5569
8	School District, Ontario-Montclair Elementary		950 West D St.	Ontario, CA 91762-3026
8	School District, Orange Unified		1401 N. Handy St.	Orange, CA 92856-
8	School District, Perris Elementary		143 E. First St.	Perris, CA 92570-2113
8	School District, Perris Union High		155 E. Fourth St.	Perris, CA 92570-2124
8	School District, Placentia-Yorba Linda Unified		1301 E. Orangethorpe Ave.	Placentia, CA 92670-5302
8	School District, Redlands Unified		20 W. Lugonia	Redlands, CA 92373-1508
8	School District, Rialto Unified		182 E. Walnut Ave.	Rialto, CA 92376-3530
8	School District, Riverside Unified		3380 14th St.	Riverside, CA 92516-2800
8	School District, Romoland Elementary		25900 Leon Road	Homeland, CA 92548-
8	School District, San Bernardino City Unified		777 North F St.	San Bernardino, CA 92410-3017
8	School District, San Jacinto Unified		2045 S. San Jacinto Ave.	San Jacinto, CA 92583-5626
8	School District, Santa Ana Unified		1601 E. Chestnut Ave.	Santa Ana, CA 92701-6322
8	School District, Savanna Elementary		1330 S. Knott Ave.	Anaheim, CA 92804-4711
8	School District, Tustin Unified		300 South C St.	Tustin, CA 92780-3695
8	School District, Upland Unified		390 N. Euclid Ave.	Upland, CA 91785-1239
8	School District, Val Verde Unified		975 E. Morgan Road	Perris, CA 92571-3103
8	School District, Westminster Elementary		14121 Cedarwood Ave.	Westminster, CA 92683-4482
8	School District, Yucaipa-Calimesa Jt. Unified		12797 Third St.	Yucaipa, CA 92399-4544
8	University of California	University of California, Irvine		Irvine, CA 92697
8	University of California	University of California, Riverside	900 University Avenue	Riverside, CA 92521
8	Veteran Affairs	Jerry L. Pettis Memorial VA Medical Center	11201 Benton Street	Loma Linda, CA 92357
9	Bureau of Prisons	MCC San Diego	808 Union Street	San Diego, CA 92101-6078
9	California Community Colleges	Cuyamaca College	900 Rancho San Diego Parkway	El Cajon, CA 92019-4304
9	California Community Colleges	Grossmont College	8800 Grossmont College Drive	El Cajon, CA 92020-1799
9	California Community Colleges	MiraCosta College	1 Barnard Drive	Oceanside, CA 92056-3899
9	California Community Colleges	Palomar College	1140 West Mission Road	San Marcos, CA 92069-1487

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9	California Community Colleges	Saddleback College	28000 Marguerite Parkway	Mission Viejo, CA 92692-3699
9	California Community Colleges	San Diego City College	1313 12th Avenue	San Diego, CA 92101-4787
9	California Community Colleges	San Diego Mesa College	7250 Mesa College Drive	San Diego, CA 92111-4996
9	California Community Colleges	San Diego Miramar College	10440 Black Mountain Road	San Diego, CA 92126-2999
9	California Community Colleges	Southwestern College	900 Otay Lakes Road	Chula Vista, CA 91910-7299
9	California State University	California State University San Marcos	333 S. Twin Oaks Valley Rd.	San Marcos, CA 92096
9	California State University	San Diego State University	5500 Campanile Drive	San Diego, CA 92182
9	Corrections, Dept of	R J Donovan Correctional Facility at Rock Mountain	480 Alta Road	San Diego, CA 92179
9	Defense, Department of	Camp Pendleton Marine Corps Base	PO Box 555010	Camp Pendleton, CA 92055-5010
9	Defense, Department of	Fleet & Industrial Supply Center, Pt. Loma	937 N Harbor Dr	San Diego, CA 92132-0002
9	Defense, Department of	Fleet and Industrial Supply Center, Broadway Complex	33000 Nixie Way Bldg 50, Suite 326	San Diego, CA 92147-5110
9	Defense, Department of	Fleet Anti-Submarine Warfare Training Center, Pacific	33000 Nixie Way Bldg 50, Suite 326	San Diego, CA 92147-5110
9	Defense, Department of	Fleet Combat Training Center, Pacific	33000 Nixie Way Bldg 50, Suite 326	San Diego, CA 92147-5110
9	Defense, Department of	Magnetic Silencing Facility	33000 Nixie Way Bldg 50, Suite 326	San Diego, CA 92147-5110
9	Defense, Department of	Miramar Marine Corps Air Station	PO Box 452013	San Diego, CA 92145
9	Defense, Department of	Mission Gorge Recreational Facility	33000 Nixie Way Bldg 50, Suite 326	San Diego, CA 92147-5110
9	Defense, Department of	Naval Air Station, North Island	33000 Nixie Way Bldg 50, Suite 326	San Diego, CA 92147-5110
9	Defense, Department of	Naval Amphibious Base, Coronado	33000 Nixie Way Bldg 50, Suite 326	San Diego, CA 92147-5110
9	Defense, Department of	Naval Medical Center, San Diego	34800 Bob Wilson Drive	San Diego, CA 92134
9	Defense, Department of	Naval Outlying Landing Field, Imperial Beach	33000 Nixie Way, Building 50, Suite 326	San Diego, CA 92147-5110
9	Defense, Department of	Naval Radio Receiving Facility	33000 Nixie Way, Building 50, Suite 326	San Diego, CA 92147-5110
9	Defense, Department of	Naval Station, San Diego	3455 Senn Rd	San Diego, CA 92136-5084
9	Defense, Department of	Naval Submarine Base, San Diego	140 Sylvester Rd	San Diego, CA 92106-5200
9	Defense, Department of	Naval Weapon Station, Fallbrook	700 Ammunition Rd	Fallbrook, CA 92028-3187
9	Defense, Department of	Navy Public Works Center, Taylor Street Facility	33000 Nixie Way Bldg 50, Suite 326	San Diego, CA 92147-5110
9	Defense, Department of	San Diego Marine Corps Recruit Depot	1600 Henderson Ave #120	San Diego, CA 92140-5001
9	Defense, Department of	Space and Naval Warfare Systems Center, Old Town Cam		San Diego, CA
9	Defense, Department of	Space and Naval Warfare Systems Center, Point Loma Ca		San Diego, CA
9	District Agricultural Association	San Diego County Fairgrounds	2260 Jimmy Durante Blvd	Del Mar, CA
9	School District, Alpine Union Elementary		1323 Administration Way	Alpine, CA 91901-2104
9	School District, Bonsall Union Elementary		31505 Old River Road	Bonsall, CA 92003-5112
9	School District, Cajon Valley Union Elementary		189 Roanoke Road	El Cajon, CA 92022-1007
9	School District, Capistrano Unified		32972 Calle Perfecto	San Juan Capistrano, CA 92675-4706
9	School District, Carlsbad Unified		801 Pine Ave.	Carlsbad, CA 92008-2430
9	School District, Chula Vista Elementary		84 East J St.	Chula Vista, CA 91910-6115
9	School District, Coronado Unified		555 D Ave.	Coronado, CA 92118-1714
9	School District, Dehesa Elementary		4612 Dehesa Road	El Cajon, CA 92019-2922
9	School District, Del Mar Union Elementary		225 Ninth St.	Del Mar, CA 92014-2716
9	School District, Encinitas Union Elementary		101 South Rancho Santa Fe Road	Encinitas, CA 92024-4308
9	School District, Escondido Union Elementary		1330 E. Grand Ave.	Escondido, CA 92027-3099
9	School District, Escondido Union High		302 N. Midway Dr.	Escondido, CA 92027-2741

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9	School District, Fallbrook Union Elementary		321 N. Iowa St.	Fallbrook, CA 92088-0698
9	School District, Fallbrook Union High		S. Mission Road & Stage Coach L	Fallbrook, CA 92088-0368
9	School District, Grossmont Union High		1100 Murray Dr.	La Mesa, CA 91944-1043
9	School District, Jamul-Dulzura Union Elementary		14581 Lyons Valley Road	Jamul, CA 91935-3324
9	School District, Julian Union Elementary		1704 Hwy. 78	Julian, CA 92036-0337
9	School District, Julian Union High		1656 Hwy. 78	Julian, CA 92036-0417
9	School District, La Mesa-Spring Valley		4750 Date Ave.	La Mesa, CA 91941-5214
9	School District, Laguna Beach Unified		550 Blumont St.	Laguna Beach, CA 92651-2356
9	School District, Lakeside Union Elementary		12335 Woodside Ave.	Lakeside, CA 92040-0578
9	School District, Lemon Grove Elementary		8025 Lincoln St.	Lemon Grove, CA 91945-2515
9	School District, Mountain Empire Unified		3291 Buckman Springs Road	Pine Valley, CA 91962-4003
9	School District, Murrieta Valley Unified		41870 McAlby ct	Murrieta, CA 92562-7021
9	School District, National Elementary		1500 N Ave.	National City, CA 91950-4827
9	School District, Oceanside Unified		2111 Mission Ave.	Oceanside, CA 92054-2326
9	School District, Poway Unified		13626 Twin Peaks Road	Poway, CA 92064-3034
9	School District, Ramona City Unified		720 Ninth St.	Ramona, CA 92065-2348
9	School District, Rancho Santa Fe Elementary		5927 la Granada	Rancho Santa Fe, CA 92067-0809
9	School District, Saddleback Valley Unified		25631 Peter A Hartman Way	Mission Viejo, CA 92691-
9	School District, San Diego City Unified		4100 Normal St.	San Diego, CA 92103-2653
9	School District, San Dieguito Union High		710 Encinitas Blvd.	Encinitas, CA 92024-3357
9	School District, San Marcos Unified		1 Civic Center Dr., Suite 300	San Marcos, CA 92069-
9	School District, San Pasqual Union Elementary		16666 San Pasqual Valley Road	Escondido, CA 92027-7001
9	School District, San Ysidro Elementary		4350 Otay Mesa Road	San Ysidro, CA 92173-1617
9	School District, Santee Elementary		9625 Cuyamaca St.	Santee, CA 92071-2674
9	School District, Solana Beach Elementary		309 N. Rios Ave.	Solana Beach, CA 92075-1241
9	School District, South Bay Union Elementary		601 Elm Ave.	Imperial Beach, CA 91932-2029
9	School District, Spencer Valley Elementary		4414 Hwys. 78 and 79	Santa Ysabel, CA 92070-0159
9	School District, Sweetwater Union High		1130 Fifth Ave.	Chula Vista, CA 91911-2812
9	School District, Temecula Valley Unified		31350 Rancho Vista Road	Temecula, CA 92592-6202
9	School District, Vallecitos Elementary		5211 Fifth St.	Fallbrook, CA 92028-9795
9	School District, Valley Center-Pauma Unified		28751 Cole Grade Rd.	Valley Center, CA 92082-6599
9	School District, Vista Unified		1234 Arcadia Ave.	Vista, CA 92084-3404
9	School District, Warner Unified		30951 Hwy. 79	Warner Springs, CA 92086-0008
9	University of California	University of California, San Diego	9500 Gilman Dr.	La Jolla, CA 92093
9	Veteran Affairs	VA San Diego Healthcare System	3350 La Jolla Village Drive	San Diego, CA 92161

Areas subject to high growth or serving a population of at least 50,000 must comply with the following provisions (for counties this threshold population applies to the population within the permit area).

A. RECEIVING WATER LIMITATIONS

1. Discharges shall not cause or contribute to an exceedance of water quality standards contained in a Statewide Water Quality Control Plan, the California Toxics Rule (CTR), or in the applicable RWQCB Basin Plan.

2. The permittees shall comply with Receiving Water Limitations A.1 through timely implementation of control measures and other actions to reduce pollutants in the discharges in accordance with the SWMP and other requirements of this permit including any modifications. The SWMP shall be designed to achieve compliance with Receiving Water Limitations A.1. If exceedance(s) of water quality objectives or water quality standards (collectively, WQS) persist notwithstanding implementation of the SWMP and other requirements of this permit, the permittees shall assure compliance with Receiving Water Limitations A.1 by complying with the following procedure:

   a. Upon a determination by either the permittees or the RWQCB that discharges are causing or contributing to an exceedance of an applicable WQS, the permittees shall promptly notify and thereafter submit a report to the RWQCB that describes BMPs that are currently being implemented and additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance of WQSs. The report may be incorporated in the annual update to the SWMP unless the RWQCB directs an earlier submittal. The report shall include an implementation schedule. The RWQCB may require modifications to the report.

   b. Submit any modifications to the report required by the RWQCB within 30 days of notification.

   c. Within 30 days following approval of the report described above by the RWQCB, the permittees shall revise the SWMP and monitoring program to incorporate the approved modified BMPs that have been and will be implemented, implementation schedule, and any additional monitoring required.

   d. Implement the revised SWMP and monitoring program in accordance with the approved schedule.

   So long as the permittees have complied with the procedures set forth above and are implementing the revised SWMP, the permittees do not have to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless directed by the RWQCB to develop additional BMPs.

B. DESIGN STANDARDS

Regulated Small MS4s subject to this requirement must adopt an ordinance or other document to ensure implementation of the Design Standards included herein or a functionally equivalent program that is acceptable to the appropriate RWQCB. The ordinance or other document must be adopted and effective prior to the expiration of this General Permit or, for Small MS4s designated subsequent to the Permit adoption, within five years of designation as a regulated Small MS4.

All discretionary development and redevelopment projects that fall into one of the following categories are subject to these Design Standards. These categories are:

- Single-Family Hillside Residences
- 100,000 Square Foot Commercial Developments
- Automotive Repair Shops
- Retail Gasoline Outlets
- Restaurants
- Home Subdivisions with 10 or more housing units
- Parking lots 5,000 square feet or more or with 25 or more parking spaces and potentially exposed to storm water runoff

1. Conflicts With Local Practices
   Where provisions of the Design Standards conflict with established local codes or other regulatory mechanism, (e.g., specific language of signage used on storm drain stenciling), the Permittee may continue the local practice and modify the Design Standards to be consistent with the code or other regulatory mechanism, except that to the extent that the standards in the Design Standards are more stringent than those under local codes or other regulatory mechanism, such more stringent standards shall apply.

2. Design Standards Applicable to All Categories

   a. Peak Storm Water Runoff Discharge Rates
      Post-development peak storm water runoff discharge rates shall not exceed the estimated pre-development rate for developments where the increased peak storm water discharge rate will result in increased potential for downstream erosion.

   b. Conserve Natural Areas
      If applicable, the following items are required and must be implemented in the site layout during the subdivision design and approval process, consistent with applicable General Plan and Local Area Plan policies:

      1) Concentrate or cluster Development on portions of a site while leaving the remaining land in a natural undisturbed condition.
      2) Limit clearing and grading of native vegetation at a site to the minimum amount needed to build lots, allow access, and provide fire protection.
      3) Maximize trees and other vegetation at each site by planting additional vegetation, clustering tree areas, and promoting the use of native and/or drought tolerant plants.

4) Promote natural vegetation by using parking lot islands and other landscaped areas.
5) Preserve riparian areas and wetlands.

c. Minimize Storm Water Pollutants of Concern
Storm water runoff from a site has the potential to contribute oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens to the storm water conveyance system. The development must be designed so as to minimize, to the maximum extent practicable, the introduction of pollutants of concern that may result in significant impacts, generated from site runoff of directly connected impervious areas (DCIA), to the storm water conveyance system as approved by the building official. Pollutants of concern consist of any pollutants that exhibit one or more of the following characteristics: current loadings or historic deposits of the pollutant are impacting the beneficial uses of a receiving water, elevated levels of the pollutant are found in sediments of a receiving water and/or have the potential to bioaccumulate in organisms therein, or the detectable inputs of the pollutant are at concentrations or loads considered potentially toxic to humans and/or flora and fauna.

In meeting this specific requirement, "minimization of the pollutants of concern" will require the incorporation of a BMP or combination of BMPs best suited to maximize the reduction of pollutant loadings in that runoff to the Maximum Extent Practicable. Those BMPs best suited for that purpose are those listed in the *California Storm Water Best Management Practices Handbook*s; *Caltrans Storm Water Quality Handbook: Planning and Design Staff Guid*e; *Manual for Storm Water Management in Washington Stat*e; *The Maryland Stormwater Design Manua*l; *Florida Development Manual: A Guide to Sound Land and Water Managemen*t; Denver *Urban Storm Drainage Criteria Manual, Volume 3 – Best Management Practices* and *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters* , USEPA Report No. EPA-840-B-92-002, as "likely to have significant impact" beneficial to water quality for targeted pollutants that are of concern at the site in question. However, it is possible that a combination of BMPs not so designated, may in a particular circumstance, be better suited to maximize the reduction of the pollutants.

d. Protect Slopes and Channels
Project plans must include BMPs consistent with local codes, ordinances, or other regulatory mechanism and the Design Standards to decrease the potential of slopes and/or channels from eroding and impacting storm water runoff:

1) Convey runoff safely from the tops of slopes and stabilize disturbed slopes.
2) Utilize natural drainage systems to the maximum extent practicable.
3) Stabilize permanent channel crossings.
4) Vegetate slopes with native or drought tolerant vegetation, as appropriate.
5) Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion, with the approval of all agencies

with jurisdiction, e.g., the U.S. Army Corps of Engineers and the California Department of Fish and Game.

e. Provide Storm Drain System Stenciling and Signage
Storm drain stencils are highly visible source controls that are typically placed directly adjacent to storm drain inlets. The stencil contains a brief statement that prohibits the dumping of improper materials into the storm water conveyance system. Graphical icons, either illustrating anti-dumping symbols or images of receiving water fauna, are effective supplements to the anti-dumping message. All storm drain inlets and catch basins within the project area must be stenciled with prohibitive language (such as: "NO DUMPING – DRAINS TO OCEAN") and/or graphical icons to discourage illegal dumping.· Signs and prohibitive language and/or graphical icons, which prohibit illegal dumping, must be posted at public access points along channels and creeks within the project area.· Legibility of stencils and signs must be maintained.

f. Properly Design Outdoor Material Storage Areas
Outdoor material storage areas refer to storage areas or storage facilities solely for the storage of materials. Improper storage of materials outdoors may provide an opportunity for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids, and other pollutants to enter the storm water conveyance system. Where proposed project plans include outdoor areas for storage of materials that may contribute pollutants to the storm water conveyance system, the following Structural or Treatment BMPs are required:

1) Materials with the potential to contaminate storm water must be: (1) placed in an enclosure such as, but not limited to, a cabinet, shed, or similar structure that prevents contact with runoff or spillage to the storm water conveyance system; or (2) protected by secondary containment structures such as berms, dikes, or curbs.
2) The storage area must be paved and sufficiently impervious to contain leaks and spills.
3) The storage area must have a roof or awning to minimize collection of storm water within the secondary containment area.

g. Properly Design Trash Storage Areas
A trash storage area refers to an area where a trash receptacle or receptacles (dumpsters) are located for use as a repository for solid wastes. Loose trash and debris can be easily transported by the forces of water or wind into nearby storm drain inlets, channels, and/or creeks. All trash container areas must meet the following Structural or Treatment Control BMP requirements (individual single family residences are exempt from these requirements):

1) Trash container areas must have drainage from adjoining roofs and pavement diverted around the area(s).
2) Trash container areas must be screened or walled to prevent off-site transport of trash.

h. Provide Proof of Ongoing BMP Maintenance

Improper maintenance is one of the most common reasons why water quality controls will not function as designed or which may cause the system to fail entirely. It is important to consider who will be responsible for maintenance of a permanent BMP, and what equipment is required to perform the maintenance properly. As part of project review, if a project applicant has included or is required to include, Structural or Treatment Control BMPs in project plans, the Permittee shall require that the applicant provide verification of maintenance provisions through such means as may be appropriate, including, but not limited to legal agreements, covenants, CEQA mitigation requirements and/or Conditional Use Permits.

For all properties, the verification will include the developer's signed statement, as part of the project application, accepting responsibility for all structural and treatment control BMP maintenance until the time the property is transferred and, where applicable, a signed agreement from the public entity assuming responsibility for Structural or Treatment Control BMP maintenance. The transfer of property to a private or public owner must have conditions requiring the recipient to assume responsibility for maintenance of any Structural or Treatment Control BMP to be included in the sales or lease agreement for that property, and will be the owner's responsibility. The condition of transfer shall include a provision that the property owners conduct maintenance inspection of all Structural or Treatment Control BMPs at least once a year and retain proof of inspection. For residential properties where the Structural or Treatment Control BMPs are located within a common area which will be maintained by a homeowner's association, language regarding the responsibility for maintenance must be included in the project's conditions, covenants and restrictions (CC&Rs). Printed educational materials will be required to accompany the first deed transfer to highlight the existence of the requirement and to provide information on what storm water management facilities are present, signs that maintenance is needed, how the necessary maintenance can be performed, and assistance that the Permittee can provide. The transfer of this information shall also be required with any subsequent sale of the property.

If Structural or Treatment Control BMPs are located within a public area proposed for transfer, they will be the responsibility of the developer until they are accepted for transfer by the County or other appropriate public agency. Structural or Treatment Control BMPs proposed for transfer must meet design standards adopted by the public entity for the BMP installed and should be approved by the County or other appropriate public agency prior to its installation.

i. Design Standards for Structural or Treatment Control BMPs
The Permittees shall require that post-construction treatment control BMPs incorporate, at a minimum, either a volumetric or flow based treatment control design standard, or both, as identified below to mitigate (infiltrate, filter or treat) storm water runoff:

1) Volumetric Treatment Control BMP

a) The 85th percentile 24-hour runoff event determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ ASCE Manual of Practice No. 87, (1998); or
b) The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment by the method recommended in California Stormwater Best Management Practices Handbook – Industrial/ Commercial, (2003); or
c) The volume of runoff produced from a historical-record based reference 24-hour rainfall criterion for "treatment" that achieves approximately the same reduction in pollutant loads achieved by the 85th percentile 24-hour runoff event.

2) Flow Based Treatment Control BMP
   a) The flow of runoff produced from a rain event equal to at least two times the 85th percentile hourly rainfall intensity for the area; or
   b) The flow of runoff produced from a rain event that will result in treatment of the same portion of runoff as treated using volumetric standards above.

Limited Exclusion
Restaurants and Retail Gasoline Outlets, where the land area for development or redevelopment is less than 5,000 square feet, are excluded from the numerical Structural or Treatment Control BMP design standard requirement only.

3. Provisions Applicable to Individual Priority Project Categories

   a. 100,000 Square Foot Commercial Developments

      1) Properly Design Loading/Unloading Dock Areas
      Loading/unloading dock areas have the potential for material spills to be quickly transported to the storm water conveyance system. To minimize this potential, the following design criteria are required:

         a) Cover loading dock areas or design drainage to minimize run-on and runoff of storm water.
         b) Direct connections to storm drains from depressed loading docks (truck wells) are prohibited.

      2) Properly Design Repair/Maintenance Bays
      Oil and grease, solvents, car battery acid, coolant and gasoline from the repair/maintenance bays can negatively impact storm water if allowed to come into contact with storm water runoff. Therefore, design plans for repair bays must include the following:

a) Repair/maintenance bays must be indoors or designed in such a way that doesn't allow storm water runon or contact with storm water runoff.
b) Design a repair/maintenance bay drainage system to capture all washwater, leaks and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm drain system is prohibited. If required by local jurisdiction, obtain an Industrial Waste Discharge Permit.

3) Properly Design Vehicle/Equipment Wash Areas
The activity of vehicle/equipment washing/steam cleaning has the potential to contribute metals, oil and grease, solvents, phosphates, and suspended solids to the storm water conveyance system. Include in the project plans an area for washing/steam cleaning of vehicles and equipment. The area in the site design must be:

a) Self-contained and/ or covered, equipped with a clarifier, or other pretreatment facility, and
b) Properly connected to a sanitary sewer or other appropriately permitted disposal facility.

b. Restaurants

1) Properly Design Equipment/Accessory Wash Areas
The activity of outdoor equipment/accessory washing/steam cleaning has the potential to contribute metals, oil and grease, solvents, phosphates, and suspended solids to the storm water conveyance system. Include in the project plans an area for the washing/steam cleaning of equipment and accessories. This area must be:

a) Self-contained, equipped with a grease trap, and properly connected to a sanitary sewer.
b) If the wash area is to be located outdoors, it must be covered, paved, have secondary containment, and be connected to the sanitary sewer or other appropriately permitted disposal facility.

c. Retail Gasoline Outlets

1) Properly Design Fueling Area
Fueling areas have the potential to contribute oil and grease, solvents, car battery acid, coolant and gasoline to the storm water conveyance system. The project plans must include the following BMPs:

a) The fuel dispensing area must be covered with an overhanging roof structure or canopy. The canopy's minimum dimensions must be equal to or greater than the area within the grade break. The canopy must not drain onto the fuel dispensing area, and the canopy downspouts must be routed to prevent drainage across the fueling area.

b) The fuel dispensing area must be paved with Portland cement concrete (or equivalent smooth impervious surface), and the use of asphalt concrete shall be prohibited.
c) The fuel dispensing area must have a 2% to 4% slope to prevent ponding, and must be separated from the rest of the site by a grade break that prevents run-on of storm water to the extent practicable.
d) At a minimum, the concrete fuel dispensing area must extend 6.5 feet (2.0 meters) from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus 1 foot (0.3 meter), whichever is less.

d. Automotive Repair Shops

1) Properly Design Fueling Area
Fueling areas have the potential to contribute oil and grease, solvents, car battery acid, coolant and gasoline to the storm water conveyance system. Therefore, design plans, which include fueling areas, must contain the following BMPs:

a. The fuel dispensing area must be covered with an overhanging roof structure or canopy. The canopy's minimum dimensions must be equal to or greater than the area within the grade break. The canopy must not drain onto the fuel dispensing area, and the canopy downspouts must be routed to prevent drainage across the fueling area.
b. The fuel dispensing area must be paved with Portland cement concrete (or equivalent smooth impervious surface), and the use of asphalt concrete shall be prohibited.
c. The fuel dispensing area must have a 2% to 4% slope to prevent ponding, and must be separated from the rest of the site by a grade break that prevents run-on of storm water to the extent practicable.
d. At a minimum, the concrete fuel dispensing area must extend 6.5 feet (2.0 meters) from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus 1 foot (0.3 meter), whichever is less.

2) Properly Design Repair/Maintenance Bays
Oil and grease, solvents, car battery acid, coolant and gasoline from the repair/maintenance bays can negatively impact storm water if allowed to come into contact with storm water runoff. Therefore, design plans for repair bays must include the following:

a) Repair/maintenance bays must be indoors or designed in such a way that doesn't allow storm water run-on or contact with storm water runoff.
b) Design a repair/maintenance bay drainage system to capture all wash-water, leaks and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm drain system is

prohibited. If required by local jurisdiction, obtain an Industrial Waste Discharge Permit.

3) Properly Design Vehicle/Equipment Wash Areas
The activity of vehicle/equipment washing/steam cleaning has the potential to contribute metals, oil and grease, solvents, phosphates, and suspended solids to the storm water conveyance system. Include in the project plans an area for washing/steam cleaning of vehicles and equipment. This area must be:

   a) Self-contained and/or covered, equipped with a clarifier, or other pretreatment facility, and properly connected to a sanitary sewer or other appropriately permitted disposal facility.

4) Properly Design Loading/Unloading Dock Areas
Loading/unloading dock areas have the potential for material spills to be quickly transported to the storm water conveyance system. To minimize this potential, the following design criteria are required:

   a) Cover loading dock areas or design drainage to minimize run-on and runoff of storm water.
   b) Direct connections to storm drains from depressed loading docks (truck wells) are prohibited.

e. Parking Lots

1) Properly Design Parking Area
Parking lots contain pollutants such as heavy metals, oil and grease, and polycyclic aromatic hydrocarbons that are deposited on parking lot surfaces by motor-vehicles. These pollutants are directly transported to surface waters. To minimize the offsite transport of pollutants, the following design criteria are required:

   a) Reduce impervious land coverage of parking areas.
   b) Infiltrate or treat runoff.

2) Properly Design To Limit Oil Contamination and Perform Maintenance
Parking lots may accumulate oil, grease, and water insoluble hydrocarbons from vehicle drippings and engine system leaks:

   a) Treat to remove oil and petroleum hydrocarbons at parking lots that are heavily used (e.g. fast food outlets, lots with 25 or more parking spaces , sports event parking lots, shopping malls, grocery stores, discount warehouse stores).
   b) Ensure adequate operation and maintenance of treatment systems particularly sludge and oil removal, and system fouling and plugging prevention control.

4. Waiver

A Permittee may, through adoption of an ordinance, code, or other regulatory mechanism incorporating the treatment requirements of the Design Standards, provide for a waiver from the requirement if impracticability for a specific property can be established. A waiver of impracticability shall be granted only when all other Structural or Treatment Control BMPs have been considered and rejected as infeasible. Recognized situations of impracticability include, (i) extreme limitations of space for treatment on a redevelopment project, (ii) unfavorable or unstable soil conditions at a site to attempt infiltration, and (iii) risk of ground water contamination because a known unconfined aquifer lies beneath the land surface or an existing or potential underground source of drinking water is less than 10 feet from the soil surface. Any other justification for impracticability must be separately petitioned by the Permittee and submitted to the appropriate RWQCB for consideration. The RWQCB may consider approval of the waiver justification or may delegate the authority to approve a class of waiver justifications to the RWQCB EO. The supplementary waiver justification becomes recognized and effective only after approval by the RWQCB or the RWQCB EO. A waiver granted by a Permittee to any development or redevelopment project may be revoked by the RWQCB EO for cause and with proper notice upon petition.

5. Limitation on Use of Infiltration BMPs

Three factors significantly influence the potential for storm water to contaminate ground water. They are (i) pollutant mobility, (ii) pollutant abundance in storm water, (iii) and soluble fraction of pollutant. The risk of contamination of groundwater may be reduced by pretreatment of storm water. A discussion of limitations and guidance for infiltration practices is contained in, *Potential Groundwater Contamination from Intentional and Non-Intentional Stormwater Infiltration, Report No. EPA/600/R-94/051, USEPA (1994).*

In addition, the distance of the groundwater table from the infiltration BMP may also be a factor determining the risk of contamination. A water table distance separation of ten feet depth in California presumptively poses negligible risk for storm water not associated with industrial activity or high vehicular traffic.

Site specific conditions must be evaluated when determining the most appropriate BMP. Additionally, monitoring and maintenance must be provided to ensure groundwater is protected and the infiltration BMP is not rendered ineffective by overload. This is especially important for infiltration BMPs for areas of industrial activity or areas subject to high vehicular traffic [25,000 or greater average daily traffic (ADT) on main roadway or 15,000 or more ADT on any intersecting roadway]. In some cases pretreatment may be necessary.

6. Alternative Certification for Storm Water Treatment Mitigation

In lieu of conducting detailed BMP review to verify Structural or Treatment Control BMP adequacy, a Permittee may elect to accept a signed certification from a Civil Engineer or a Licensed Architect registered in the State of California, that the plan meets

the criteria established herein. The Permittee is encouraged to verify that certifying person(s) have been trained on BMP design for water quality, not more than two years prior to the signature date. Training conducted by an organization with storm water BMP design expertise (e.g., a University, American Society of Civil Engineers, American Society of Landscape Architects, American Public Works Association, or the California Water Environment Association) may be considered qualifying.

Attachment 5
WQO# 2003 – 0005 – DWQ

Communities Anticipated to be Subject to Supplemental Provisions

RWQCB	Area	Reason/Population
1	Windsor	High Growth
2	Clayton	High Growth
2	Marin County	58563
2	Napa	72585
2	Petaluma	54548
2	San Francisco	776733
2	San Rafael	56063
3	Greenfield	High Growth
3	Hollister	High Growth
3	King City	High Growth
3	Morgan Hill	High Growth
3	Nipomo	High Growth
3	Prunedale	High Growth
3	Santa Barbara	92325
3	Santa Barbara County	140453
3	Santa Cruz	54593
3	Santa Cruz County	116783
3	Santa Maria	77423
3	Soledad	High Growth
3	Watsonville	High Growth
5F	Hanford	High Growth
5F	Lemoore	High Growth
5F	Los Banos	High Growth
5F	Madera	High Growth
5F	Merced	63893
5F	Visalia	91565
5R	Chico	59954
5R	Chico	High Growth
5R	Redding	80865
5S	Davis	60308
5S	Dixon	High Growth
5S	El Dorado Hills	High Growth
5S	Lathrop	High Growth
5S	Lincoln	High Growth
5S	Oakley	High Growth
5S	Placer County	75262
5S	Ripon	High Growth
5S	Riverbank	High Growth
5S	Rocklin	High Growth

RWQCB	Area	Reason/Population
5S	Roseville	79921
5S	Roseville	High Growth
5S	Salida	High Growth
5S	South Yuba City	High Growth
5S	Stanislaus County	67145
5S	Tracy	56929
5S	Tracy	High Growth
5S	Turlock	55810
5S	Vacaville	88625
6	Apple Valley	54239
6	Hesperia	62582
6	Lancaster	118718
6	Palmdale	116670
6	Victorville	64029
6B	Lake Los Angeles	High Growth
6B	Palmdale	High Growth
6B	Rosamond	High Growth
6B	Victorville	High Growth
7	Calexico	High Growth
7	Rancho Mirage	High Growth
5S	Lodi	56999

INSTRUCTIONS FOR COMPLETING THE NOTICE OF INTENT TO COMPLY WITH THE TERMS OF THE GENERAL PERMIT FOR STORM WATER DISCHARGES FROM SMALL MS4s (WATER QUALITY ORDER NO. 2003 – 0005 - DWQ)

I. NOI STATUS

Check box "1" if this is a new NOI submittal. Check box "2" if you are reporting changes to the NOI (e.g., new contact person, phone number, mailing address). Include the facility WDID number and highlight all the information that has been changed. The appropriate official must sign the form, certifying the changes.

II. AGENCY INFORMATION

A. Enter the name of the agency applying for coverage.
B. Enter the first and last name of the person familiar with the permit and responsible for permit compliance.
C. Enter the Title of the person listed in "B".
D. Enter the agency's mailing address.
E. Enter if necessary the 2nd address line.
F. Enter the agency's mailing address city.
G. Enter the agency's mailing address zip code.
H. Enter the county in which the agency is located. If the agency is located in more than one county, list all applicable counties. Attach additional sheets if necessary.
I. Enter the phone number where the contact person can be reached.
J. Enter the FAX number where the contact person can be reached.
K. Enter the email address where the contact person can be reached.
L. Check the box that corresponds to the agency owner.

III. Permit Area

General name of the permit area, such as the Sacramento Metropolitan Area

IV. Boundaries of Coverage

Describe the boundaries of the area to be permitted and include a site map. For a city, this would be the established city boundaries. For a county, unless the entire county is designated, the permitted area should be inclusive of the area of concern and rely on simplified boundaries for each general direction, such as rivers, major roads or highways, or an adjoining city's boundary. For non-traditional Small MS4s, in general, the property line shall serve as the permit boundary.

V. Billing Information

A. Enter the name of the agency applying for coverage.
B. Enter the first and last name of the person familiar with the permit and responsible for permit compliance.
C. Enter the Title of the person listed in "B".
D. Enter the agency's mailing address.
E. Enter if necessary the 2nd address line.
F. Enter the agency's mailing address city.

G. Enter the agency's mailing address zip code.
H. Enter the county in which the agency is located.
I. Enter the phone number where the contact person can be reached.
J. Enter the FAX number where the contact person can be reached.
K. Enter the email address where the contact person can be reached.
L. Enter the average daily-user population of the applicant's permitted area. This is not the combined permit area of co-permittees. Submit the amount indicated by the current fee schedule (California Code of Regulations, Title 23, Division 3, Chapter 9, Article 1.) with the NOI package to the Regional Board. The fee schedule may be found at www.swrcb.ca.gov/stormwtr/municipal.html. School districts are exempt from MS4 permit fees.

VI. Permit Type

Check the box that corresponds to the permitting option you wish to apply for:

Check box 1 if applying for individual general permit coverage.

Check box 2 if applying for a permit with one or more co-permittees. If you are applying to be a co-permittee, an appropriate official representing each agency who will participate in the area-wide permit must sign on the lines provided certifying the agency will be a co-permittee with the other agencies listed to implement a storm water program in the combined designated areas of each of the agency's jurisdiction. The agency to act as the Lead Agency (the entity responsible for being the main contact with the RWQCB for permit administration) shall start the list. If more than four agencies will act as co-permittees, continue the list on a separate page. The NOI must have original signatures.

Check box 3 if designating a Separate Implementing Entity and enter agency information.

A. Enter the name of the agency applying for coverage.
B. Enter the first and last name of the person familiar with the permit and responsible for permit compliance.
C. Enter the title of person in "B".
D. Enter the agency's mailing address phone number where the contact person can be reached.
E. Enter if necessary the 2nd address line.
F. Enter the agency's mailing address city.
G. Enter the agency's mailing address zip code.
H. Enter the county in which the agency is located. If the agency is located in more than one county, list all applicable counties. Attach additional sheets if necessary.
I. Enter the phone number where the contact person can be reached.
J. Enter the FAX number where the contact person can be reached.
K. Enter the email address where the contact person can be reached.
L. Check the box that corresponds to the agency owner.
M. List all of the Minimum Control Measure(s) that will be implemented by the SIE.
N. Certification by an appropriate SIE official that the SIE agrees to include the agency in implementing the SWMP. For a municipality, State, Federal, or other public agency the appropriate official would be a principal executive officer, ranking elected official or duly authorized representative. The principal executive officer of

a Federal agency includes the chief executive officer of the agency or the senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of USEPA).

For multiple agencies implementing different Minimum Control Measures please use a separate form for each Minimum Control Measures. A photocopy of the 2nd page of the NOI is adequate, but must have original signatures.

VII. STORM WATER MANAGEMENT PROGRAM

The SWMP must be submitted with the NOI. Check the box if the SWMP is completed and attached to the NOI. If a SIE is implementing all of the Minimum Control Measures it is not necessary to submit a SWMP.

VIII. CERTIFICATION

A. Print the name of the appropriate official. For a municipality, State, Federal, or other public agency this would be a principal executive officer, ranking elected official, or duly authorized representative. The principal executive officer of a Federal agency includes the chief executive officer of the agency or the senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of USEPA).
B. Enter the professional title of the person signing the NOI.
C. The person whose name is printed in box IV.A must sign the NOI.
D. Provide the date on which the Information Sheet was signed.

State Water Resources Control Board
NOTICE OF INTENT
TO COMPLY WITH THE TERMS OF THE GENERAL PERMIT FOR
STORM WATER DISCHARGES FROM
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS
(WATER QUALITY ORDER NO. 2003 – 0005 - DWQ)

I. NOI Status

Mark Only One Item 1. [ ]New Permittee 2. [ ]Change of Information WDID #:_____

II. Agency Information

A. Agency			
B. Contact Person		C. Title	
D. Mailing Address		E. Address (Line 2)	
F. City	State **CA**	G. Zip	H. County
I. Phone	J. FAX	K. Email Address	
L. Operator Type (check one) 1. [ ] City 2. [ ] County 3. [ ] State 4. [ ] Federal 5. [ ] Special District 6. [ ] Government Combination			

III. Permit Area

_____

IV. Boundaries of Coverage (include a site map with the submittal)

_____

_____

_____

_____

V. Billing Information

A. Agency			
B. Contact Person		C. Title	
D. Mailing Address		E. Address (Line 2)	
F. City	State **CA**	G. Zip	H. County
I. Phone	J. FAX	K. Email Address	

Fees are based on the daily population served by the Small MS4. To determine your fee, consult the current fee schedule (California Code of Regulations, Title 23, Division 3, Chapter 9 Article 1), which can be viewed at www.swrcb.ca.gov/stormwtr/municipal.html.

L. Population_____

Fee _____

Check(s) should be made payable to the SWRCB and submitted to the appropriate RWQCB.

SWRCB Tax ID is: 68-0281986

VI. Discharger Information (check applicable box(es) and complete corresponding information)

1. [ ] Applying for Individual General Permit Coverage

2. [ ] Applying for a permit with one or more co-permittees

The undersigned agree to work as co-permittees in implementing a complete small MS4 storm water program. The program must comply with the requirements found in Title 40 of the Code of Federal Regulations, parts 122.32. Attach additional sheets if necessary. Each co-permittee must complete an NOI.	
Lead Agency	Signature
Agency	Signature
Agency	Signature
Agency	Signature

3. [ ] Separate Implementing Entity (SIE)

A. Agency			
B. Contact Person	C. Title		
D. Mailing Address	E. Address (Line 2)		
F. City	State **CA**	G. Zip	H. County
I. Phone	J. FAX	K. Email Address	

H. Operator Type (check one)

1. [ ] City 2. [ ] County 3. [ ] State 4. [ ] Federal 5. [ ] Special District 6. [ ] Government Combination

Minimum Control Measures being implemented by the SIE (check all that apply)

[ ] Public Education [ ] Public Involvement [ ] Illicit Discharge/Elimination
[ ] Construction [ ] Post Construction [ ] Good Housekeeping

"I agree to coordinate with the agency identified in Section III of this form and comply with its qualifying storm water program. I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. Additionally, I certify that the provisions of the permit, including the development and implementation of a Storm Water Management Program, will be complied with."

_____ _____

N. Signature of Official Date

VII. Storm Water Management Plan (check box)

[ ] As per section A.2. of this General Permit, the SWMP is attached.

VIII. Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. Additionally, I certify that the provisions of the permit, including the development and implementation of a Storm Water Management Program, will be complied with."

A. Printed Name:_____

B. Title:_____

C. Signature:_____ D. Date: _____

STATE WATER RESOURCES CONTROL BOARD

Division of Water Quality
Attention: Storm Water Section
P.O. Box 1977
Sacramento, CA 95812-1977
(916) 341-5539 FAX: (916) 341-5543
Web Page: http://www.swrcb.ca.gov/stormwtr/index.html
Email: stormwater@dwq.swrcb.ca.gov

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARDS

NORTH COAST REGION (1)
5550 Skylane Blvd., Ste. A
Santa Rosa, CA 95403
(707) 576-2220 FAX: (707) 523-0135
Web Page: http://www.swrcb.ca.gov/rwqcb1

SAN FRANCISCO BAY REGION (2)
1515 Clay Street, Ste. 1400
Oakland, CA 94612
(510) 622-2300 FAX: (510) 622-2460
Web Page: http://www.swrcb.ca.gov/rwqcb2

CENTRAL COAST REGION (3)
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401
(805) 549-3147 FAX: (805) 543-0397
Web Page: http://www.swrcb.ca.gov/rwqcb3

LOS ANGELES REGION (4)
320 W. 4th Street, Ste. 200
Los Angeles, CA 90013
(213) 576-6600 FAX: (213) 576-6640
Web Page: http://www.swrcb.ca.gov/rwqcb4

CENTRAL VALLEY REGION (5S)
3443 Routier Road, Ste. A
Sacramento, CA 95827-3098
(916) 255-3000 FAX: (916) 255-3015
Web Page: http:// www.swrcb.ca.gov/rwqcb5

FRESNO BRANCH OFFICE (5F)
1685 "E" Street
Fresno, CA 93706-2020
(559) 445-5116 FAX: (559) 445-5910
Web Page: http:// www.swrcb.ca.gov/rwqcb5

REDDING BRANCH OFFICE (5R)
415 Knollcrest Drive, Ste. 100
Redding, CA 96002
(530) 224-4845 FAX: (530) 224-4857
Web Page: http:// www.swrcb.ca.gov/rwqcb5

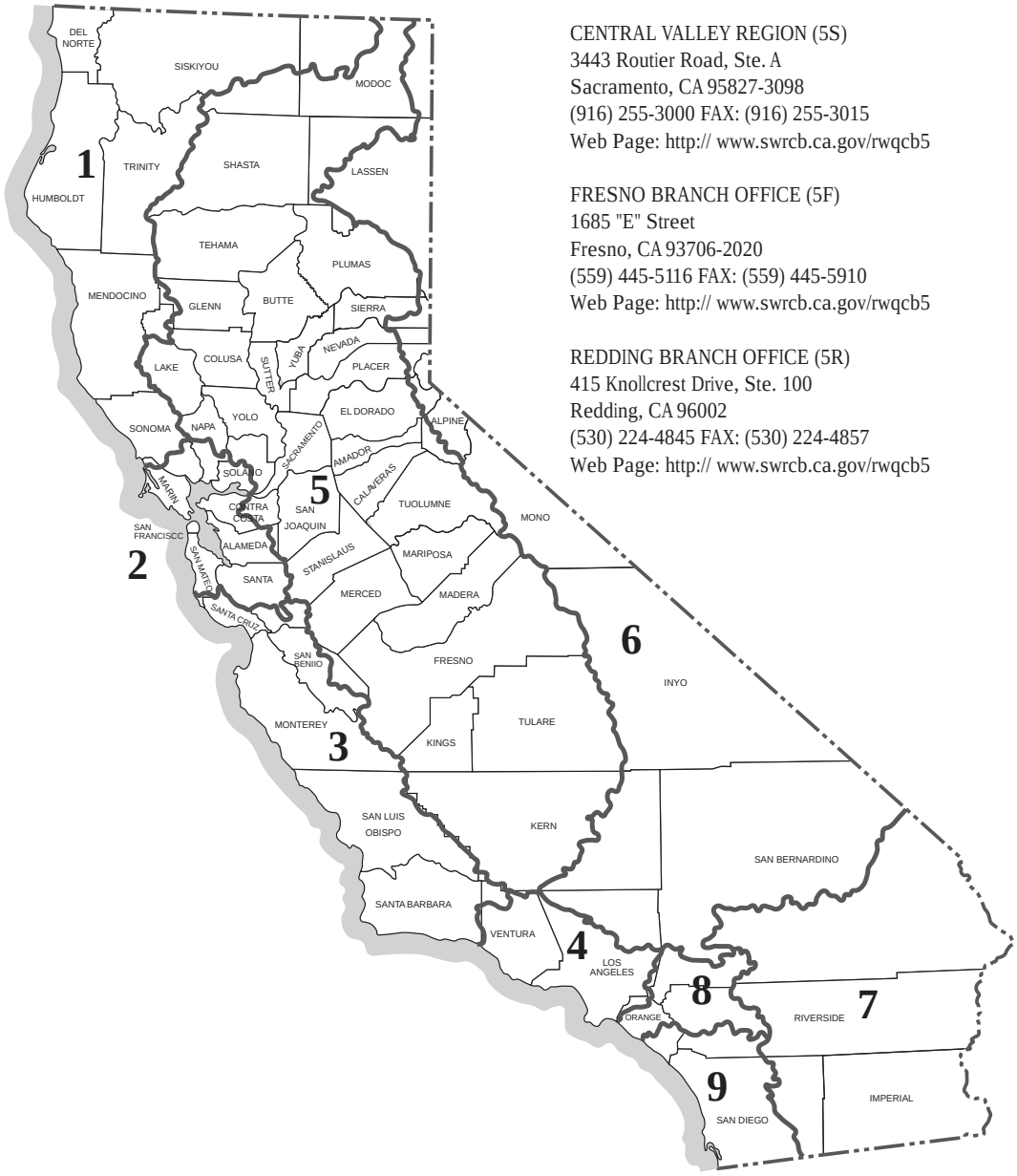
LAHONTAN REGION (6 SLT)
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150
(530) 542-5400 FAX: (530) 544-2271
Web Page: http:// www.swrcb.ca.gov/rwqcb6

VICTORVILLE BRANCH OFFICE (6V)
15428 Civic Drive, Ste. 100
Victorville, CA 92392-2383
(760) 241-6583 FAX: (760) 241-7308
Web Page: http:// www.swrcb.ca.gov/rwqcb6

COLORADO RIVER BASIN REGION (7)
73-720 Fred Waring Dr., Ste. 100
Palm Desert, CA 92260
(760) 346-7491 FAX: (760) 341-6820
Web Page: http:// www.swrcb.ca.gov/rwqcb7

SANTA ANA REGION (8)
California Tower
3737 Main Street, Ste. 500
Riverside, CA 92501-3339
(909) 782-4130 FAX: (909) 781-6288
Web Page: http://www.swrcb.ca.gov/rwqcb8

SAN DIEGO REGION (9)
9174 Sky Park Court, Suite 100
San Diego, CA 92123
(858) 467-2952 FAX: (858) 571-6972
Web Page: http://www.swrcb.ca.gov/rwqcb9



STATE OF CALIFORNIA
Gray Davis, Governor

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
Winston H. Hickox, Secretary

STATE WATER RESOURCES CONTROL BOARD
Arthur Baggett Jr., Chair

Attachment 9
To WQO 2003-0005-DWQ

Definition of Terms

1. **100,000 Square Foot Commercial Development** - 100,000 Square Foot Commercial Development means any commercial development that creates at least 100,000 square feet of impermeable area, including parking areas.

2. **Automotive Repair Shop** - Automotive Repair Shop means a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.

3. **Authorized Non-Storm Water Discharges** – Authorized non-storm water discharges are certain categories of discharges that are not composed entirely of storm water but are not found to pose a threat to water quality. They include: water line flushing; landscape irrigation; diverted stream flows; rising ground waters; uncontaminated ground water infiltration (as defined at 40 CFR §35.2005(20)) to separate storm sewers; uncontaminated pumped ground water; discharges from potable water sources; foundation drains; air conditioning condensate; irrigation water; springs; water from crawl space pumps; footing drains; lawn watering; individual residential car washing; flows from riparian habitats and wetlands; dechlorinated swimming pool discharges; and discharges or flows from emergency fire fighting activities. If any of the above authorized non-storm water discharges (except flows from fire fighting activities) are found to cause or contribute to an exceedance of water quality standards or cause or threaten to cause a condition of nuisance or pollution, the category of discharge must be prohibited.

4. **Best Management Practices (BMPs)** – Best management practices means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of 'waters of the United States." BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. (40 CFR §122.2)

5. **Commercial Development** - Commercial Development means any development on private land that is not heavy industrial or residential. The category includes, but is not limited to: hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, plant nurseries, multi-apartment buildings, car wash facilities, mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses and other light industrial complexes.

6. **Directly Connected Impervious Area (DCIA)** - DCIA is the acronym for directly connected impervious areas and means the area covered by a building, impermeable pavement, and/ or other impervious surfaces, which drains directly into the storm drain without first flowing across permeable land area (e.g. lawns).

7. **Discretionary Project** - Discretionary Project means a project which requires the exercise of judgement or deliberation when the public agency or public body decides to approve or disapprove a particular activity, as distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances, or regulations.

8. **Greater than (>) 9 unit home subdivision** - Greater than 9 unit home subdivision means any subdivision being developed for 10 or more single-family or multi-family dwelling units.

9. **Hillside** - Hillside means property located in an area with known erosive soil conditions, where the development contemplates grading on any natural slope that is twenty-five percent or greater.

10. **Infiltration** - Infiltration means the downward entry of water into the surface of the soil.

11. **Measurable Goal** – Measurable goals are definable tasks or accomplishments that are associated with implementing best management practices.

12. **Minimum Control Measure** – A minimum control measure is a storm water program area that must be addressed (best management practices implemented to accomplish the program goal) by all regulated Small MS4s. The following six minimum control measures are required to be addressed by the regulated Small MS4s: Public Education and Outreach on storm Water Impacts, Public Involvement/Participation, Illicit Discharge Detection and Elimination, construction Site Storm Water Runoff Control, Post-Construction Storm Water Management in New Development and Redevelopment, and Pollution Prevention/Good Housekeeping for Municipal Operations.

13. **New Development** - New Development means land disturbing activities; structural development, including construction or installation of a building or structure, creation of impervious surfaces; and land subdivision.

14. **Offsite Facility** - An offsite facility is a geographically non-adjacent or discontinuous site that serves, or is secondary to, the primary facility and has the same owner as the primary facility. Storm water discharges from an offsite facility must be permitted if it meets the definition of a regulated Small MS4 itself. The offsite facility may satisfy this permitting requirement if the SWMP of the primary facility addresses the offsite facility, such that the permitted area of the primary facility includes the offsite area.

15. **Outfall** – A point source at the point where a municipal separate storm sewer discharges to waters of the United States and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other waters of the United States and are used to convey waters of the United States. (40 CFR §122.26(b)(9))

16. **Parking Lot** - Parking Lot means land area or facility for the temporary parking or storage of motor vehicles used personally, for business or for commerce with a lot size of 5,000 square feet or more, or with 25 or more parking spaces.

17. **Point Source** – Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff. (40 CFR §122.2)

18. **Regulated Small MS4** – A regulated Small MS4 is a Small MS4 that is required to be permitted for discharging storm water through its MS4 to waters of the U.S. and is designated either automatically by the U.S. EPA because it is located within an urbanized area, or designated by the SWRCB or RWQCB in accordance with the designation criteria listed at Finding 11 of the General Permit.

19. **Redevelopment** - Redevelopment means, on an already developed site, the creation or addition of at least 5,000 square feet of impervious area. Redevelopment includes, but is not limited to: the expansion of a building footprint or addition of a structure; structural development including an increase in gross floor area and/ or exterior construction or remodeling; and land disturbing activities related with structural or impervious surfaces. Where redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing development, and the existing development was not subject to these Design Standards, the Design Standards apply only to the addition, and not to the entire development.

20. **Restaurant** - Restaurant means a stand-alone facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption. (SIC code 5812).

21. **Retail Gasoline Outlet** - Retail Gasoline Outlet means any facility engaged in selling gasoline and lubricating oils.

22. **Small Municipal Separate Storm Sewer System (Small MS4)** – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that are:
    (i) Owned or operated by the United States, a State, city, town, boroughs, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.
    (ii) Not defined as "large" or "medium" municipal separate storm sewer systems
    (iii) This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings. (40 CFR §122.26(b)(16))

23. **Separate Implementing Entity (SIE)** – A Separate Implementing Entity is an entity, such as a municipality, agency, or special district, other than the entity in question, that implements parts or all of a storm water program for a Permittee. The SIE may also be permitted under 40 CFR Part 122. Arrangements of one entity implementing a program for another entity is subject to approval by the Regional Water Quality Control Board Executive Officer.

24. **Source Control BMP** - Source Control BMP means any schedules of activities, prohibitions of practices, maintenance procedures, managerial practices or operational practices that aim to prevent storm water pollution by reducing the potential for contamination at the source of pollution.

25. **Storm Event** - Storm Event means a rainfall event that produces more than 0.1 inch of precipitation and that, which is separated from the previous storm event by at least 72 hours of dry weather.

26. **Structural BMP** - Structural BMP means any structural facility designed and constructed to mitigate the adverse impacts of storm water and urban runoff pollution (e.g. canopy, structural enclosure). The category may include both Treatment Control BMPs and Source Control BMPs.

27. **Treatment** - Treatment means the application of engineered systems that use physical, chemical, or biological processes to remove pollutants. Such processes include, but are not limited to, filtration, gravity settling, media adsorption, biodegradation, biological uptake, chemical oxidation and UV radiation.

28. **Treatment Control BMP** - Treatment Control BMP means any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media adsorption or any other physical, biological, or chemical process.

August 29, 2016

Ms. Mikaela Klein
Mt. San Antonio College
1100 North Grand Avenue
Walnut, CA 91789

RE: Responses to Comments on Mt. SAC 2015 Facilities Master Plan Update (FMPU) and Physical Education Projects Traffic Impact Study

Dear Ms. Klein:

I have reviewed the comments provided by the City of Walnut letter dated July 28, 2016. The responses are provided in the following table.

City of Walnut (Kunzman letter)		
Comment		**Response**
6-2.36	General Comment: The Traffic Impact Study appendices only contain partial information as provided in the 2015 Facilities Master Plan Update and Physical Education Projects, Appendices – Volume 2 of 2 (June 2016). The complete set of appendices for the Traffic Impact Study should be included in the publicly available documentation.	The Draft Traffic Impact Study Technical Appendices A – D have been forwarded for your use.
6-2.37	General Comment: The project description indicates that the 2015 Facilities Master Plan Update, compared to the 2012 Facilities Master Plan, includes a redesign of the athletic facilities, relocation of the Public Transportation Center, expansion of the Wildlife Sanctuary and Open Space Area, a pedestrian bridge across Temple Avenue, a net increase in buildout square footage, and continuation of special annual events. The project description also indicates that the District is filing an application to host Olympic track and field trials in year 2020. It should be noted, the Traffic Impact Study only evaluates the traffic impacts associated with additional trips generated by a net increase in enrollment of 3,745 students by year 2020 and 7,153 students by year 2025 (compared to existing 2015 conditions). Traffic impacts associated with other aspects of the project description appear to have been evaluated in a separate document.	The comments are informational and do not discuss new significant effects of the project. No additional response is required.

6-2.38	General Comment: The study area consisting of 19 intersections appears appropriate based on the project trip generation and trip distribution forecasts.	The comments are informational and do not discuss new significant effects of the project. No additional response is required. The sentence on page 96 of the Draft EIR stating "*The CMP criteria of adding 50 trips to any one movement of an intersection was used to identify the nineteen (19) study intersections (Exhibit 3.4)*" is hereby omitted in the Final EIR. The CMP criteria applies to CMP arterial monitoring intersections only, not to any intersection. Of the 164 CMP arterial monitoring intersection in Los Angeles County, none are within the study area.
6-2.39	List of Figures: There are several inconsistencies between the titles shown in the List of Figures and the titles shown on the actual figures. For example, Figure 1 is shown as "Project Location and Study Intersections" in the List of Figures, but Figure 1 is titled "Study Area".	The Traffic Impact Study report (September 1, 2016) contains the figure titles consistent with the titles identified in the List of Figures within the Table of Contents. No new significant effects would result upon incorporating this comment into the traffic study.
6-2.40	Figure 1, Study Area: Study intersection #2 is incorrectly shown at Creekside Drive/Amar Road instead of Lemon Avenue/Amar Road.	The correct intersection location is shown in Figure 1 of the Traffic Study (April 1, 2016) and any other figure where the location was incorrectly shown, and included in the Final Traffic Impact Study (September 1, 2016).
6-2.41	Pages 3/4, Roadway Configurations: The description for Amar Road/Temple Avenue states that on-street parking is prohibited; on-street parking is permitted along Temple Avenue between Mt. SAC Way and Bonita Avenue. Mountaineer Road terminates at Grand Avenue at the west end, not the east end as stated. Baker Parkway terminates at Grand Avenue at the east end, not the west end as stated.	These edits are included in the Roadway Configurations section of the Final Traffic Impact Study (September 1, 2016). No new significant effect would result upon incorporating this comment into the traffic study.
6-2.42	Page 8, Table 2 – Intersection Level of Service Definitions - HCM Methodology: The source noted in the footnote of Table 2 appears to indicate the 2000 Highway Capacity Manual methodology was used to analyze intersections under Caltrans' jurisdiction. The latest version (2010) of the Highway Capacity Manual delay methodology should be used for delay calculations. Additionally, Table 2 should show the delay ranges for unsignalized intersections since the unsignalized study intersection of Lot F/Temple Avenue is also analyzed using the Highway Capacity Manual delay methodology.	Table 2 in the Final Traffic Impact Study (September 1, 2016) includes delay ranges for unsignalized intersections. No new significant effect would result upon incorporating this comment into the traffic study. The traffic analysis was conducted using TRAFFIX software which is an acceptable software package by Caltrans guidelines. TRAFFIX software applies the HCM 2000 methodology, not HCM 2010. In order to maintain consistency with the analysis of the non-Caltrans intersections, TRAFFIX was used at the Caltrans intersections. Since the 2010 methodology would be applied to both existing and plus project scenarios, no new significant effect would result upon incorporating this comment into the traffic study.
6-2.43	Page 9, Table 3 – Intersection Significant Impact Criteria: It should be noted that Table 3 shows the thresholds of significance for corresponding Levels of Service based on "with project" conditions, whereas the Los Angeles County Public Works Traffic Impact Analysis Report Guidelines (January 1997) defines intersection thresholds of significance based	As noted, the criteria used in the Traffic Impact Study (April 1, 2016) is the more stringent criteria. If the intersection "pre-project" condition was used to determine the thresholds of significant instead of the "with project", the following changes would result:

	on "pre-project" conditions. While inconsistent with the Los Angeles County guidelines, the thresholds of significance used in the Traffic Impact Study are more stringent based on the scenarios analyzed.	- Table 7: #14 Mt SAC/Temple. This intersection would no longer be impacted in the 2020 E + P scenario - Table 16: #15 Bonita/Temple. This intersection would no longer be impacted in the 2025 E + P + C scenario The MTA guidelines do not conform with the judicial ruling in CEQA cases where an existing plus project analysis is required. The current criteria in Table 3 matches the judicial requirement. See pages 95-96 in the Draft EIR.
6-2.44	Figure 3 - Existing Intersection Lane Configuration: Nogales Street/Amar Road (#1) incorrectly shows one additional westbound through lane.	This lane configuration has been corrected in the Traffic Impact Study (September 1, 2016). Incorporating the revised lane configuration, the overall results of the analysis remain unchanged. No new significant effect would result if the comment were incorporated in the traffic study.
6-2.45	Figure 3 - Existing Intersection Lane Configuration: It should be noted that the eastbound approach at Grand Avenue/I-10 Eastbound Ramps (#4) has been restriped to consist of one left-turn lane and one right-turn lane.	The Draft EIR needs to describe existing conditions at the time the Notice of Preparation was issued (i.e. January 19, 2016). The existing information in the Traffic Study (April 1, 2016) was correct when the traffic study commenced and the field survey was completed. Several changes have occurred since that date and are acknowledged herein.
6-2.46	Figure 3 - Existing Intersection Lane Configuration: It should be noted that the northbound approach at Grand Avenue/SR-60 Eastbound Ramps (#13) has been restriped to consist of two through lanes and one shared through/right-turn lane (identified as a mitigation measure); the southbound approach has been restriped to consist of one left-turn lane and three through lanes.	See Response 6.2.45 above.
6-2.47	Figure 3 - Existing Intersection Lane Configuration: It should be noted, that the southbound approach at Valley Boulevard/Temple Avenue (#17) has been restriped to consist of one left-turn lane, one through lane, one shared through/right-turn lane, and one right-turn lane.	See Response 6.2.45 above.
6-2.48	Page 13, Table 5 - 2020 Project Trip Generation: The inbound and outbound trips generated during both peak hours are incorrectly calculated based on the in/out percentages shown. The AM peak hour should equal 377 inbound trips and 72 outbound trips. The PM peak hour should equal 283 inbound trips and 166 outbound trips.	The discrepancy in Inbound and Outbound trip generation is due to the method by which the trips were rounded. The total trip generation shown in the study is correct and would remain unchanged. No new significant effect would result if the comment were incorporated in the traffic study.
6-2.49	Page 13, Table 6 - 2025 Project Trip Generation: The inbound and outbound trips generated during both peak hours are incorrectly calculated based on the in/out percentages shown. The AM peak hour should equal 721 inbound trips and 137 outbound trips. The PM peak hour should equal 541 inbound trips and 317 outbound trips.	See Response 6.2.48 above.
6-2.50	Figure 5, 2020 Project Trip Assignment: Several intersection turning movements appear incorrect based on the project trip distribution percentages shown on Figure 4. For example, based on Figure 4, it would appear that the northbound right-turn movement at Nogales Street/Amar Road (#1) should equal	The project trip distribution percentages shown on Figure 4 represent approximate rounded percentages at the study intersections. However, the reason for potential confusions is that the analysis assumes some small trip distribution percentages to other

	15 AM peak hour trips (375 inbound AM peak hour project trips X 4% = 15). If the project trips have been improperly assigned to the study intersections, all subsequent analysis scenarios will also require revision.	streets that provide access to neighborhood/residential areas, via intersections that are not part of the 19 intersections studied in the analysis. These streets included Creekside Drive (between Nogales Street and Lemon Avenue), Shadow Mountain Road (between Cameron Drive and Mountaineer Road), and Snow Creek Drive (between Temple Avenue and La Puente Road). These percentages were not shown on Figure 4 but are correctly accounted for in the assignment of project trips shown on Figures 5 and 6 in the Traffic Study (April 1, 2016). Detailed trip distribution percentages can be added to Figure 4 to more clearly match the trip assignments shown on Figures 5 and 6. The added details to Figure 4 would be purely aesthetic, though, and would not result in changes to the intersection LOS analysis because the project trip assignments are correctly distributed. Thus, the clarifications do not have any new significant effects to the results of the analysis. Therefore, the changes are not being completed.
6-2.51	Figure 6, 2025 Project Trip Assignment: Several intersection turning movements appear incorrect based on the project trip distribution percentages shown on Figure 4. For example, based on Figure 4, it would appear that the northbound right-turn movement at Nogales Street/Amar Road (#1) should equal 29 AM peak hour trips (715 inbound AM peak hour project trips X 4% = 29). If the project trips have been improperly assigned to the study intersections, all subsequent analysis scenarios will also require revision.	The project trip distribution percentages shown on Figure 4 represent approximate rounded percentages at the study intersections. However, the reason for potential confusions is that the analysis assumes some small trip distribution percentages to other streets that provide access to neighborhood/residential areas, via intersections that are not part of the 19 intersections studied in the analysis. These streets included Creekside Drive (between Nogales Street and Lemon Avenue), Shadow Mountain Road (between Cameron Drive and Mountaineer Road), and Snow Creek Drive (between Temple Avenue and La Puente Road). These percentages were not shown on Figure 4 but are correctly accounted for in the assignment of project trips shown on Figures 5 and 6 of the Traffic Study (April 1, 2016). Detailed trip distribution percentages can be added to Figure 4 to more clearly match the trip assignments shown on Figures 5 and 6. The added details to Figure 4 would be purely aesthetic, though, and would not result in changes to the intersection LOS analysis because the project trip assignments are correctly distributed. Thus, the clarifications do not have any new significant effects to the results of the analysis. Therefore, the changes are not being completed.
6-2.52	Page 22, first paragraph: The intersection of Grand Avenue/La Puente Road should indicate a significant impact during both the AM and PM peak hours.	This is a discrepancy between the analysis results shown in table and the paragraph that follows. No new significant effect would result upon incorporating this comment into the Traffic Study (September 1, 2016).

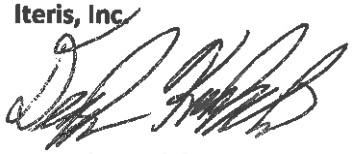
6-2.53	Page 54, Congestion Management Program Analysis (CMP): The Los Angeles County Guidelines for CMP Transportation Impact Analysis (CMP Appendix D) state that projects must consider transit impacts as defined in Section D.8.4 even if no CMP arterial intersections or freeway locations are identified for analysis; however, the Traffic Impact Study does not provide an assessment of transit impacts.	While there is not a specific section devoted to transit in the current traffic study, project impacts of prior and the current master plans has been extensively discussed in the prior and current Final EIRs. Section 3.8: Transit Services in the 2012 FMP Final EIR includes an evaluation of transit impacts and recommended mitigation measures. As shown in Table 3.8.1 of the certified 2012 FMP Final EIR, 17 – 21 public transit buses per hour serve the campus and close to 288 MTA and Foothill Transit buses serve the campus daily. In the 2015 FMPU & PEP (Phase 1, 2) transit issues are discussed more than 70 times, including evaluations on pp. 106-107, 173 and 489. The 2016 Mitigation Monitoring Program (Appendix D1) includes twelve mitigation measures for transit issues, including TR-07, TR-41 to TR-48, TP-03, TP-11 and TC-01. As a Program EIR, the evaluation in past and the current EIR, is adequate and sufficient for evaluation of transit issues. The 2015 FMPU includes development of a Public Transportation Center (PTC) in Lot D3. Since the Center has not been designed, additional CEQA evaluation is required at the site-specific planning stage when the Center, new traffic signal plans on Temple Avenue and public transit changes are known. Until the site plan and transit information is available, any additional analysis would be speculative. As stated in the Draft EIR, in the 2015 Fall Term, Foothill Transit Agency had 11,024 active Go Pass transit users and issued 17,681 cards to registered students. The Agency provided 100,730 rides to students in September 2015 and 104,987 rides in October 2015. There is no evidence that an increase in student enrollment of 3,745 in 2020 will result in significant impacts on public transit services for the campus. Both providers have ample resources and equipment to adjust and expand transit resources if demand increases. Based on LA County CMP guidelines for evaluating a project's impact to transit, a total of 22 new transit trips during each peak hour due to the 2015 FMPU is forecast for 2020, calculated as such: 449 peak hour vehicle trips * 1.4 persons per vehicle = 629 person trips 629 person trips * 3.5% transit usage = 22 peak hour

		transit trips. The 22 peak hour transit trips do not result in a significant effect. Therefore, the existing CEQA documentation and recommended mitigation measures are sufficient for the 2015 FMPU and PEP (Phase 1, 2) projects transit impacts.

If any additional information is required, please feel free to contact me at 213.802.1715.

Sincerely,

Iteris, Inc.



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August 24, 2016

Ms. Mikaela Klein, AIA, LEED AP
Mt. San Antonio College
1100 North Grand Ave.
Walnut, CA 91789

Subject: Mt. San Antonio College 2015 Facilities Master Plan Update Supplemental Environmental Impact Report

Dear: Ms Klein

This letter provides our responses to the California Department of Fish and Wildlife's (CDFW) comments on the Mt. San Antonio College (Mt. SAC) 2015 Facilities Master Plan Update (FMPU) Supplemental Environmental Impact Report (SEIR). These comments were provided in a letter dated August 8, 2016. The numbering provided below corresponds with that used by your Environmental Impact Report (EIR) consultant, Sidney Lindmark, who is coordinating the responses.

Comment 5-2.1. "CDFW is California's Trustee Agency for state fish and wildlife resources, and holds those resources in trust by statute for all the people of the State (Fish and Game Code, §§ 711.7, subdivision (a) & 1802; Public Resources Code, § 21070; California Environmental Quality Act [CEQA] Guidelines § 15386, subdivision (a)]). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (Id., § 1802.). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available. biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources."

Response 5.2.1. The comments on the agency's responsibilities as a Trustee Agency are noted. No additional response is required.

Comment 5-2.2. "CDFW is also submitting comments as a Responsible Agency under CEQA. (Public Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration

regulatory authority (Fish and Game Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish and Game Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required."

Response 5.2.2. The comments on the agency's responsibilities as a Responsible Agency under CEQA are noted. No additional response is required.

Comment 5-2.3. "Mt. SAC has proposed a 2015 Facilities Master Plan Update (FMPU). Three proposed elements of the 2015 FMPU Master Plan Update occur in areas that have not been previously developed. These elements, covering approximately 13 acres of the 420-acre campus, include an irrigation well site, a detention basin upgrade, and fire academy relocation.

Mt. SAC is located in the San Gabriel Valley in southeast Los Angeles County, California. The college is situated near the intersection of North Grand and Temple Avenues in the City of Walnut. It is within un-sectioned land of the Puente Land Grant, Township 2 South, Range 9 East on the U.S. Geological Survey (USGS) 7.5-minute San Dimas quadrangle map."

Response 5.2.3. The comments are noted and summarize elements of the 2015 FMPU that are of concern for the Agency. It should be noted that the Fire Training Academy project was evaluated in the certified 2012 Master Plan Update (MPU) Final EIR. However, the building has been moved within the site and the parking areas revised. Additional CEQA review will be completed at the site-specific level when a final site plan is available.

Comment 5-2.4. "The SEIR addresses the potential impacts on the state species of special concern burrowing owl (*Athene cunicularia*) but does not address the federally-listed (threatened) coastal California gnatcatcher (*Polioptila californica californica*) or the state species of special concern coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), both of which are known to occur on site and rely on coastal sage scrub and cactus scrub habitat that are present on site. As indicated in the Biological Technical Report (HELIX Environmental Planning, Inc. [HELIX] 2016), the coastal California gnatcatcher was observed on coastal sage scrub on Mt. SAC Hill in May 2012 and 2015. Similarly, coastal cactus wrens have been heard vocalizing in the coastal sage scrub in May and June 2012. These observations are acknowledged by the study to "indicate that all of the Venturan coastal sage scrub in the study area is occupied by the species." Based on the information contained in the Biological Technical Report, CDFW recommends the final SEIR include a full analysis of the direct and indirect impacts to these species, and any mitigation required to offset potentially significant impacts."

Response 5.2.4. The campus biological resource studies are included in the 2008 and 2012 Final EIRs. HELIX first completed a campus biological survey of 140 acres in the 2008 Final EIR (Appendix L[1]). This report is the *Mt. San Antonio College 2008 Master Plan Update Biological*

[1] Appendices referenced in this letter are found in the final SEIR for the 2015 FMPU.

Technical Report, dated April 24, 2008. The *Mt. San Antonio College 2008 Master Plan Update Jurisdictional Delineation Report*, dated April 24, 2008, was also completed for areas primarily south of Temple Avenue. The natural area east of Lot F and north of Temple Avenue was also included in the study area.

In 2012, HELIX completed the biological studies for 64.0 acres within the campus, which included the Fire Academy site, a sewer line extension, and the area surrounding Hilmer Lodge Stadium (Appendix E). The *Mt. San Antonio College 2012 Master Plan Update Draft Biological Technical Report* for this project is dated August 17, 2012. The *Mt. San Antonio College California Black Walnut Management* Plan, dated September 21, 2012, included a California black walnut (*Juglans californica*) tree inventory, a mitigation plan, and an implementation plan. The Mt. San Antonio College Campus Zoning now includes a 46-acre Land Management Zone (Exhibit 3.1), in which the California black walnut Management Plan will be implemented.

The biological studies included in the current Final Subsequent EIR (2015 FMPU & PEP [Phase 1, 2]) included surveys of the area listed in Comment 5.2-3. Several additional biological studies were prepared to fulfill conditions for Agency permits for the West Parcel Solar project, which received its CEQA clearances in the 2012 Final EIR. The mitigation stated:

> *Construction impacts on occupied coastal California gnatcatcher habitat shall be addressed by requested the U.S. Army Corps of Engineers (USACE) initiate a formal Section 7 Consultation with the U.S. Fish and Wildlife Service (USFWS) for "incidental" take of a threatened species. The Section consultation is part of the USACE 404 Nationwide Permit application, Facilities Planning & Management shall monitor compliance.*"

The *Mt. San Antonio College 2015 Facility Master Plan Update Biological Technical Report*, dated April 14, 2016, included 22 acres and eight work areas (Figure 3), and addressed the elements identified in Comment 5.2-2. An updated management plan and burrowing owl surveys were completed for the 2015 FMPU project.

Additional biological studies that have been completed as conditions of the USACE 404 permit application for the West Parcel Solar project certified in the 2012 Final EIR include coastal California gnatcatcher (2015) and burrowing owl surveys (2015), and an acoustical study (2016). A burrowing owl survey was also done for the 2015 Master Plan Update footprint in 2016.

Since all campus master plans have been evaluated in a Program EIR (i.e., including Subsequent and Supplement to an EIR), a full analysis of the direct and indirect impacts of development on these species (i.e., coastal California gnatcatcher and coastal cactus wren, and their habitat: Venturan coastal sage scrub, and burrowing owl) has been adequately evaluated in the current and prior EIRs. The complete mitigation plan (2016 MMP), which is enclosed as Appendix D1 herein, includes all required mitigation measures (BIO-01 to BIO-15) for project impacts on biological resources.

However, a Statement of Overriding Considerations (SOC) was adopted in 2012 in the event of "incidental" take of the California gnatcatcher for the West Parcel Solar project. Mt. SAC has been working with the USFWS to finalize the Biological Opinion (BO) and complete the Section 7 Consultation for the West Parcel Solar project. As of the date of this letter, the USFWS has all of the information they need from Mt. SAC to issue the BO. Similarly, the USACE has all the information they need from Mt. SAC to issue a Nationwide Permit, which will include the USFWS' BO. The current schedule is for the USACE to issue the Nationwide Permit, with the USFWS' BO incorporated, between the middle and end of September 2016. As such, this project will be a take of this species, but it is expected that USFWS will conclude a no jeopardy finding and a SOC will no longer be necessary for impacts to the coastal California gnatcatcher on the West Parcel Solar project site.

Comment 5-2.5. "The MMP, section B10-03, currently provided as follows: "[p]rior to grading within areas of Venturan Coastal Sage Scrub, the college shall identify replacement 2:1 acreage." Based on documented use of the site by coastal California gnatcatcher and coastal cactus wren, CDFW does not concur that a habitat mitigation ratio of 2:1 is sufficient to offset Project and cumulative impacts to coastal sage scrub. Coastal sage scrub habitat, including "lower quality", supports dispersal, feeding, and refuge for both the California gnatcatcher and cactus wren during various life stages (e.g., breeding, foraging, and dispersal) and refugia during wildfire events. The direct and indirect impacts to onsite and adjacent coastal sage scrub should be further evaluated in the final SEIR. The analysis should include use by California gnatcatcher and cactus wren based on appropriate surveys conducted during the appropriate time of year. For coastal sage scrub occupied by sensitive species, CDFW recommends a minimum mitigation ratio of 3:1. Additional mitigation may be required for impacts to occupied California gnatcatcher by the USFWS pursuant to the federal Endangered Species Act. CDFW recommends that Mt. SAC contact the USFWS to discuss potential impacts to the California gnatcatcher from the proposed Project."

Response 5.2.5. The comment that CDFW does not concur with a habitat mitigation ratio for Venturan coastal sage scrub of 2:1 and recommends a minimum 3:1 ratio is noted.

The mitigation ratio of 2:1 for impacts to coastal sage scrub is consistent with previous mitigation requirements beginning with the 2008 Master Plan Update, and most recently with the review by CDFW of the West Parcel Solar project Habitat Mitigation Plan (HMP) between September 2015 and June 2016. The habitat areas are shown in Appendix A31 and include the restrictive covenant area and portions of Mt. SAC Hill.

USFWS has reviewed the HMP and not requested an increase in the 2:1 coastal sage scrub mitigation. This is also the commonly accepted mitigation ratio for this habitat type throughout southern California.

Mt. SAC had extensive consultations with USFWS prior to certifying the 2012 Final EIR and during the Section 7 consultation and permit applications for the West Parcel Solar project. The previously established mitigation ratios established should apply to the 2015 FMPU.

Comment 5-2.6. “Mitigation Measure B10-05 on Page 6 of the 2012 MMP states that "[t]he College shall adopt a Land Management Plan to minimize impacts on California Black Walnut trees on campus. Any walnut trees with a diameter of six inches, four-feet above ground, damaged, or removed by construction activities shall be replaced according to the standards in Table 4 of the Mt. SAC California Black Walnut Management Plan (HELIX, September 2012). Replacement habitat shall be completed prior to project completion. The required mitigation acreage for replacement walnut trees is 2.02-acres. The replacement specimens shall be preserved, maintained, and monitored for a period of five years to ensure viability.”

Response 5.2.6. The comments are informational and do not raise new environmental issues. No additional response is required.

Comment 5-2.7. “Southern California black walnut (*Juglans californica*) trees found on the Project site should be considered as a locally and regional rare, unique and/or uncommon (and/or) regionally rare plant species; that is, species that are rare or uncommon in a local or regional context, as such, would meet the CEQA definition of a rare species (CEQA §Sec 15380). CEQA directs that a special emphasis be placed on "environmental resources" that are rare or unique to the region and would be affected by a proposed project [CEQA §15125 (c)] or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G). Public agencies have a duty under the CEQA to avoid or minimize environmental damage and to give major consideration to preventing environmental damage (CEQA §Section 15021). Southern California black walnuts are California Native Plant Society (CNPS) Rank 4.2 and are considered locally sensitive species. In addition, the southern California black walnut is designated S3, which is considered vulnerable in the state due to a restricted range with relative few populations. CDFW would consider loss of on-site populations of southern California black walnut to be potentially significant from a project and cumulative perspective under the CEQA. Accordingly, impacts to these locally rare resources and adequate mitigation measures that reduce the impacts to less than significant should be described and incorporated into the final SEIR.”

Response 5.2.7. The comments are primarily informational and state CDFW policy that the loss of on-site populations of California black walnut may be a project or cumulative impact under CEQA. The 2012 Final EIR addressed these concerns within the *Mt. San Antonio College California Black Walnut Management* Plan (September 21, 2012) and the 2016 MMP requires implementation of the Plan. Therefore, the California black walnut resources are described fully within the existing Mt. San Antonio Community College District (District) CEQA documentation.

Comment 5-2.8. CDFW acknowledges that the SEIR quantifies the impact acreage associated with southern California black walnut; however, the final EIR should quantify the actual number of tree impacted and size of each tree. For example, larger southern California black walnut trees may be over 100 years old and can be used by wildlife species (e.g., raptors) and are not readily replaced, which would be difficult to mitigate to a level of less than significant using only a habitat-based approach. CDFW recommends the final SEIR clarify total individual trees by size, anticipated to be permanently impacted; analyze the significance of impacts; and provide

adequate mitigation, if necessary, to reduce Project and cumulative impacts to less than significant. Feasible mitigation could include long-term protection in place; on-site nuts/seed collection for an on- or off-site mitigation enhancement/restoration area suitable to the species; and/or off-site land acquisition of similar or better habitat with corresponding number of trees (size and ages), all to be preserved with the necessary permanent land use protection (e.g., conservation easement), management and secured endowment funds."

Response 5.2.8. The *Mt. San Antonio College California Black Walnut Management Plan* (September 21, 2012) quantified the actual number of trees impacted and the size of each tree. The tree inventory of August 21, 2012 included 257 trees that would be impacted by stadium grading.

Previous biological studies have identified all areas with California black walnut but they have not been individually inventoried. The 2005 Master Plan Update (AC Martin Partners) referenced a Mt. SAC Tree Inventory (not dated) on page 40 in the Campus Conservation section (p. 21). Stands of California black walnut trees were included in an exhibit on page 20 of the 2005 Master Plan Update.

The 2015 Facility Master Plan Update impacts only five California black walnut trees, which range in size from 6 to 9 inches at 4 feet above the ground (Table 1). The *California Black Walnut Management Plan* incorporates on-site restoration in an area suitable for the species.

Table 1
CALIFORNIA BLACK WALNUT TREE[1]
IMPACT SUMMARY
FOR THE 2015 FMPU

LOCATION	NUMBER[2]
Detention Basin	5
Tank Site	1

[1]Trees are defined as having a diameter at 4 feet above the ground equal to or greater than 6 inches.
[2]One of the trees had two trunks with diameters equal to or greater than 6 inches.

If additional future campus projects impact California black walnut trees, the trees will be inventoried individually as part of a site-specific analysis. The current California black walnut survey methodology is appropriate when some projects are being evaluated in a Program EIR and others either in a Project EIR or as site-specific projects.

Comment 5-2.9. "CDFW also has concerns about the length of the proposed monitoring period for the planted southern California black walnut trees. The SEIR in B10-03 of the MMP states that "these trees should be planted in the approved California Black Walnut Management Plan area and preserved, maintained and monitored for 2 years." In B10-05 it states that "[t]he replacement specimens shall be preserved, maintained and monitored for a period of five years

to ensure viability." The final SEIR should be revised to achieve consistency between B10-03 and B10-05. Moreover, for larger/older southern California black walnut trees that would be impacted, CDFW recommends that a minimum of 10 years of monitoring be provided for tree plantings and site restoration to ensure that impacts would be reduced to a level of less than significant under CEQA."

Response 5.2.9. The comments are noted. BIO-03, as referenced in the comment, is now BIO-10 in the 2016 MMP (Appendix D1) and has been revised to state the monitoring period is five years. Therefore, the two mitigation measures are now consistent.

> *BIO-10. Impacts to California Black Walnut trees, if they cannot be avoided, should be mitigated by the replacement of each impacted tree that has a diameter of 6 inches at 4 feet, 6 inches above the ground by a 24-inch boxed specimen (Table 5 in Appendix G1). These trees should be planted in the approved California Black Walnut Management Plan area and preserved, maintained for five years to ensure establishment. Planning & Management shall ensure compliance.*

Comment 5-2.10. "The SEIR includes a discussion of impacts to state and federal wetland resources (provide reference to discussion in the SEIR). However, the SEIR does not appear to adequately analyze the wetland buffer proposed at the edge of the wetland along Snow Creek and future construction areas. Wetland buffers are crucial for the current and long-term protection and function of riparian habitat, especially in urban areas. They provide numerous functions, including: (a) expansion of the habitat's biological values (e.g., buffers are an integral part of the complex riparian ecosystems that provide food and habitat for the fish and wildlife); (b) protection from direct disturbance by humans and domestic animals; and, (c) reduction of edge effects from urbanized uses including artificial noise and light, line-of-sight disturbances, invasive species, and anthropogenic nutrients and sediments."

Response 5.2.10. The comment that the SEIR "does not appear to adequately analyze the wetland buffer proposed at the edge of the wetland along Snow Creek and future construction areas" is noted. Figure 4c (Biological Technical Report for the 2015 Facilities Master Plan Update) shows the proposed Fire Training Academy impact area is a minimum of 580 feet from Snow Creek. Figure 4c is included as Appendix A33.

Given the small size of Snow Creek and the large distance from the creek to the proposed location of the Fire Training Academy, it is clear why no mention of impacts to the buffer of Snow Creek is discussed: there are no impacts to the buffer of Snow Creek from the Fire Training Academy (Figure 4d; Appendix A34). This point is further supported by the fact only developed land, disturbed habitat, and extensive agriculture exist between the project and Snow Creek (Figures 4c and 4d). These habitats are very low value habitats and consequently Snow Creek's buffer is of very low value.

In actions unrelated to the 2015 Facilities Master Plan Update, Mt. SAC will discontinue grazing along Snow Creek and plant coastal sage scrub in the area between Snow Creek and Parking Lot M, creating a natural buffer on the east side of the creek up at least 145 feet wide and in the area between the creek and North Grand Avenue. This will significantly improve the habitat quality of the creek's buffer.

Comment 5-2.11. "Mitigation Measure BIO-08 on Page 7 of the MMP has been revised to state "[p]ermanent development adjacent to any future wetland mitigation areas shall incorporate a 100-foot buffer during final project design. If un-vegetated, the buffer shall be planted with non-invasive species that are compatible with the adjacent wetland mitigation area habitat. A qualified biologist shall review the final landscape plans for the buffer area to conform that no species on the California Invasive Council (Cal-IPC) list are present in the plan."

Response 5.2.11. See response 5-2.10. No additional response from the District is required.

Comment 5-2.12. "The Fish and Game Commission Policy on the Retention of Wetland Acreage and Habitat Values states, "[b]uffers should be of sufficient width and should be designed to eliminate potential disturbance of fish and wildlife resources from noise, human activity, feral animal intrusion, and any other potential sources of disturbance." The USACE suggest that narrow strips of 100 feet may be adequate to provide many of the functions cited above (USACE 1991). Wetland buffers should be measured starting at the outside edge of the wetland habitat (rather than the watercourse/streambed centerline). Moreover, previous studies of upland buffers used to protect and maintain functions of wetlands have concluded that, "[b]uffers of less than 50 feet were [found to be] more susceptible to degradation by human disturbance. In fact, no buffers of 25 feet or less were functioning to reduce disturbance to the adjacent wetlands" (McElfish et al 2008). CDFW recommends that a minimum 100-foot buffer be provided for all on-site wetlands (including proposed mitigation areas) and that the buffer be measured from the outside edge of the wetland habitat to reduce direct and indirect wetland impacts to a level of less than significant. Appropriate passive uses (e.g., trails, fuel clearing) may be acceptable on the outer limits of the buffer (e.g., last 15 feet) if appropriately located/managed and no sensitive species are known to utilize the wetland areas."

Response 5.2.12. The comment that CDFW recommends a "minimum 100-foot buffer be provided for all on site wetlands" is noted. The Fire Training Academy impact area is over 500 feet from Snow Creek and will not affect the area specified in this comment. In a previously approved project (2012 Master Plan Update), the buffer along Snow Creek will exceed the minimum specified by the CDFW. See Responses 5.2.10, 5.2.13.

Comment 5-2.13. "Mitigation Measure B10-11 on Page 8 of the MMP states "[a] 25-foot buffer shall be incorporated into the project design for the Fire Training Academy to protect future wetland mitigation areas along Snow Creek." As indicated above, the proposed 25-foot buffer would not be adequate to protect the current and long-term functions of the adjacent wetland habitat. Furthermore, it is unclear exactly what type of activities will take place at this academy, such as the use of water and fire retardant chemicals for related activities. For these reasons, CDFW recommends that a minimum 100-foot buffer be provided for the buffer adjacent to the

Fire Training Academy and that the buffer be measured from the outside edge of the wetland habitat to reduce direct and indirect wetland impacts to a level of less than significant."

Response 5.2.13. The comment that CDFW recommends a "minimum 100-foot buffer adjacent to the Fire Training Academy and that the buffer be measured from the outside edge of the wetland habitat" is noted.

While the final location for the Academy within this parking lot will be subject to additional CEQA review when a site-specific site plan is finalized and the uses are known, it will be over 100 feet from the creek. This response is based on the parking lot shown in Figure 4c (Appendix A33).

Mitigation Measure BIO-08 in the 2016 MMP is hereby revised to be consistent with other Responses.

> *BIO-08. Permanent development adjacent to any future wetland mitigation areas shall incorporate a 100-foot buffer during final project design. If un-vegetated, the buffer shall be planted with non- invasive species that are compatible with the adjacent wetland mitigation area habitat. A qualified biologist shall review the final landscape plans for the buffer area to conform that no species on the California Invasive Plan Council (Cal-IPC) list are present in the plan. Facilities Planning & Management shall monitor compliance.*

Comment 5-2.14. "The SEIR concludes that "the scrub does not qualify as jurisdictional wetland because it occurs within a constructed basin fed by pipes and a riprap drainage channel. It is a stormwater facility, not a lake or stream."

CDFW has regulatory authority with regard to activities occurring in streams and/or lakes that could adversely affect any fish or wildlife resource. For any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) or a river or stream or use material from a streambed, the Project applicant (or "entity") must provide written notification to CDFW pursuant to Section 1602 of the Fish and Game Code. Based on this notification and other information, CDFW then determines whether a Lake and Streambed Alteration (LSA) Agreement is required. CDFW's issuance of an LSA Agreement is a project subject to CEQA. To facilitate issuance of a LSA Agreement, the final SEIR should fully identify the potential impacts to the lake, stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the LSA Agreement. Early consultation is recommended, since modification of the Project may be required to avoid or reduce impacts to state fish and wildlife resources. Lack of such analysis in the final SEIR could preclude CDFW from relying on the Lead Agency's analysis to issue a LSA Agreement without CDFW first conducting its own, separate Lead Agency subsequent or supplemental analysis for the Project.

CDFW staff conducted a site visit with Mt. SAC and HELIX on August 5, 2016. Based on the inspection of the constructed basin, CDFW recommends the applicant notify CDFW prior to the final SEIR to ensure all Project impacts and mitigation measures are incorporated into the Mitigation Monitoring and Reporting Plan for the Project."

Response 5.2.14. As discussed during the August 5, 2016 meeting, Mt. SAC will submit a Notification of Lake or Streambed Alteration for unavoidable impacts to the constructed basin. The submittal of this notification will be prior to October 1, 2016.

At this meeting, Mt. SAC also confirmed that the existing basin will simply be replaced with a new basin in the same location and of similar type and function. Mt. SAC also discussed a proposal to incorporate mule fat, and potentially other native plant species, into the plant palette for the new basin as a project design feature, thereby compensating impacts on mule fat scrub habitat, which are not substantial or adverse. Revegetated portions of the new basin would be subject to inspection and monitoring during the establishment period as part of the long-term management tasks on the campus. Additional information will be provided in Mt. SAC's notification.

Comment 5-2.15. "CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations [Public Resources Code, § 21003, subdivision (e)]. Accordingly, CDFW recommends that any special status species and natural communities detected during Project surveys be reported to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be found at the following link: http://www.dfq.ca.qov/bioqeodata/cnddb/pdfs/CNDDBFieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDB at the following email address: CNDDBwildlife.ca.qov. The types of information reported to CNDDB can be found at the following link: http://www.dfq.ca.qov/bioqeodata/cnddb/plants and animals.asp."

Response 5.2.15. The CDFW recommendation that special status species and natural communities on campus be reported to the CNDDB is noted. The college will comply with this request within six months of final SEIR certification. .

Comment 5-2.16. "Based on the information contained in the SEIR, the Project, as currently proposed, would have an impact on state fish and/or wildlife, and an assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (California Code Regulations, Title 14, § 753.5; Fish and Game Code, § 711.4; Public Resources Code, § 21089.)"

Response 5.2.16. The District is filing the Notice of Determination and paying all applicable fees, including the CDFW fees.

Sincerely,

W. Larry Sward
Principal Biologist

c: Sid Lindmark (via email)
Sean Absher (via email)

Submitted by:

ITERIS

MT. SAC 2015 FACILITIES MASTER PLAN UPDATE & PHYSICAL EDUCATION PROJECTS

Traffic Impact Study

Technical Appendix

Submitted to:

Mt. San Antonio College

April 1, 2016

17J16-17A8

APPENDIX A:
TRAFFIC COUNT DATA

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

City of Walnut
N/S: Nogales Street
E/W: Amar Road
Weather: Clear

File Name : WNTNOAMAM
Site Code : 04215551
Start Date : 10/1/2015

Groups Printed- Total Volume

	Nogales Street Southbound					Amar Road Westbound					Nogales Street Northbound					Amar Road Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	1	0	4	0	5	16	304	1	0	321	91	1	35	0	127	2	188	48	0	238	691
07:15 AM	5	4	3	0	12	10	280	0	0	290	111	1	31	0	143	2	303	111	1	417	862
07:30 AM	4	1	6	0	11	31	257	0	0	288	151	1	32	0	184	1	317	146	2	466	949
07:45 AM	3	2	1	0	6	14	249	2	0	265	184	1	41	0	226	0	293	80	3	376	873
Total	13	7	14	0	34	71	1090	3	0	1164	537	4	139	0	680	5	1101	385	6	1497	3375
08:00 AM	6	3	2	0	11	23	232	1	1	257	148	1	36	1	186	1	257	99	3	360	814
08:15 AM	3	2	5	0	10	23	253	0	0	276	133	2	47	0	182	0	226	88	1	315	783
08:30 AM	3	0	6	0	9	39	242	1	0	282	110	2	27	0	139	2	168	88	1	259	689
08:45 AM	0	2	2	0	4	32	215	1	1	249	92	0	26	0	118	1	178	97	0	276	647
Total	12	7	15	0	34	117	942	3	2	1064	483	5	136	1	625	4	829	372	5	1210	2933
Grand Total	25	14	29	0	68	188	2032	6	2	2228	1020	9	275	1	1305	9	1930	757	11	2707	6308
Apprch %	36.8	20.6	42.6	0		8.4	91.2	0.3	0.1		78.2	0.7	21.1	0.1		0.3	71.3	28	0.4		
Total %	0.4	0.2	0.5	0	1.1	3	32.2	0.1	0	35.3	16.2	0.1	4.4	0	20.7	0.1	30.6	12	0.2	42.9	

	Nogales Street Southbound				Amar Road Westbound				Nogales Street Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	5	**4**	3	**12**	10	**280**	0	**290**	111	**1**	31	143	**2**	303	111	416	861
07:30 AM	4	1	**6**	11	**31**	257	0	288	151	1	32	184	1	**317**	**146**	**464**	**947**
07:45 AM	3	2	1	6	14	249	**2**	265	**184**	1	**41**	**226**	0	293	80	373	870
08:00 AM	**6**	3	2	11	23	232	1	256	148	1	36	185	1	257	99	357	809
Total Volume	18	10	12	40	78	1018	3	1099	594	4	140	738	4	1170	436	1610	3487
% App. Total	45	25	30		7.1	92.6	0.3		80.5	0.5	19		0.2	72.7	27.1		
PHF	.750	.625	.500	.833	.629	.909	.375	.947	.807	1.00	.854	.816	.500	.923	.747	.867	.921

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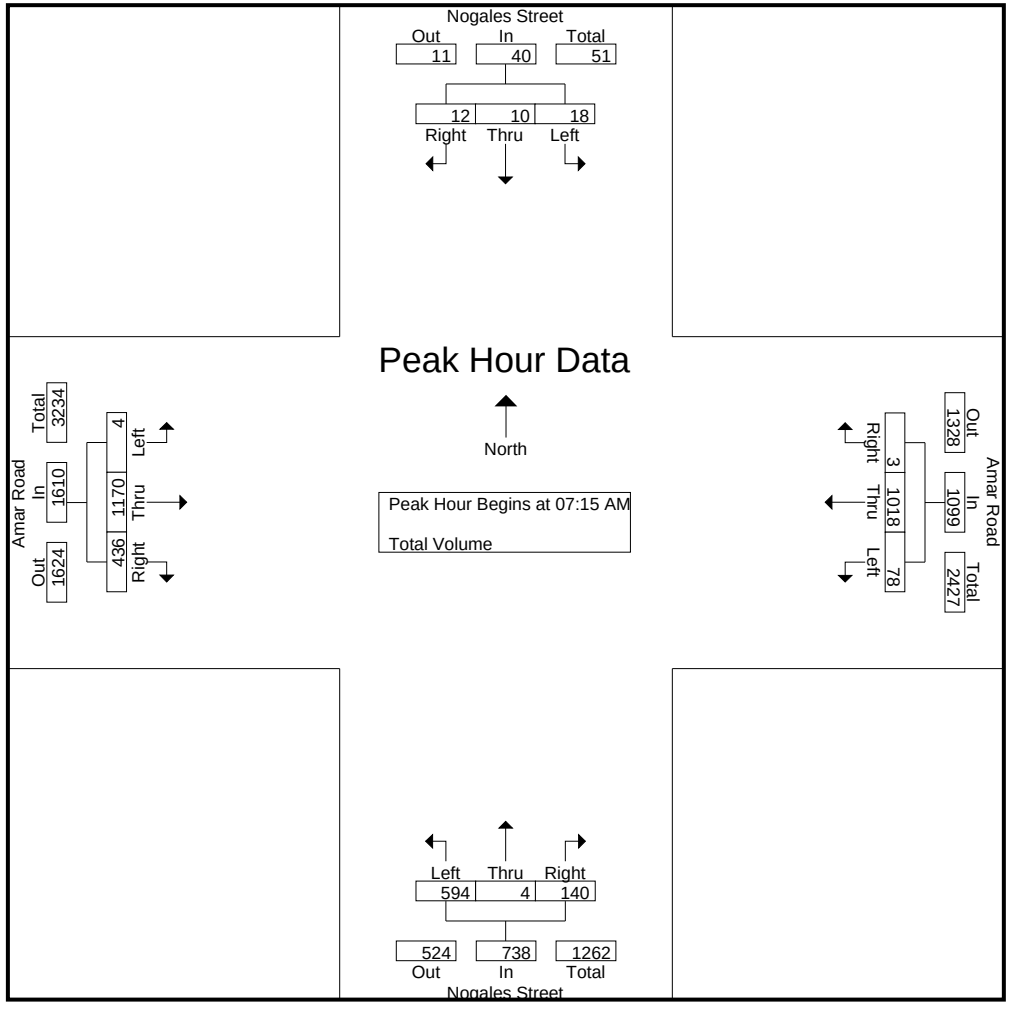
Page No : 2



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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:00 AM				07:30 AM				07:15 AM				
+0 mins.	5	**4**	3	**12**	16	**304**	1	**321**	151	1	32	184	**2**	303	111	416	
+15 mins.	4	1	**6**	11	10	280	0	290	**184**	1	41	**226**	1	**317**	**146**	**464**	
+30 mins.	3	2	1	6	**31**	257	0	288	148	1	36	185	0	293	80	373	
+45 mins.	**6**	3	2	11	14	249	**2**	265	133	**2**	**47**	182	1	257	99	357	
Total Volume	18	10	12	40	71	1090	3	1164	616	5	156	777	4	1170	436	1610	
% App. Total	45	25	30		6.1	93.6	0.3		79.3	0.6	20.1		0.2	72.7	27.1		
PHF	.750	.625	.500	.833	.573	.896	.375	.907	.837	.625	.830	.860	.500	.923	.747	.867	

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04:00 PM	1	0	4	0	5	25	145	0	0	170	108	2	43	1	154	3	277	83	5	368	697
04:15 PM	3	0	4	0	7	33	172	3	0	208	121	2	40	0	163	1	276	111	4	392	770
04:30 PM	2	2	4	0	8	36	167	3	1	207	114	3	47	0	164	2	279	111	2	394	773
04:45 PM	7	1	3	0	11	43	200	2	0	245	128	5	38	0	171	2	254	96	0	352	779
Total	13	3	15	0	31	137	684	8	1	830	471	12	168	1	652	8	1086	401	11	1506	3019
05:00 PM	0	0	5	0	5	29	213	2	1	245	119	1	42	0	162	0	306	129	3	438	850
05:15 PM	1	1	3	0	5	32	265	5	0	302	154	2	46	0	202	2	259	115	1	377	886
05:30 PM	1	2	2	0	5	32	205	3	2	242	168	5	61	0	234	2	268	115	3	388	869
05:45 PM	4	0	3	0	7	36	277	2	0	315	129	1	42	0	172	2	285	122	4	413	907
Total	6	3	13	0	22	129	960	12	3	1104	570	9	191	0	770	6	1118	481	11	1616	3512
Grand Total	19	6	28	0	53	266	1644	20	4	1934	1041	21	359	1	1422	14	2204	882	22	3122	6531
Apprch %	35.8	11.3	52.8	0		13.8	85	1	0.2		73.2	1.5	25.2	0.1		0.4	70.6	28.3	0.7		
Total %	0.3	0.1	0.4	0	0.8	4.1	25.2	0.3	0.1	29.6	15.9	0.3	5.5	0	21.8	0.2	33.7	13.5	0.3	47.8	

	Nogales Street Southbound				Amar Road Westbound				Nogales Street Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	**5**	5	29	213	2	244	119	1	42	162	0	**306**	**129**	**435**	846
05:15 PM	1	1	3	5	32	265	**5**	302	154	2	46	202	**2**	259	115	376	885
05:30 PM	1	**2**	2	5	32	205	3	240	**168**	**5**	**61**	**234**	2	268	115	385	864
05:45 PM	**4**	0	3	**7**	**36**	**277**	2	**315**	129	1	42	172	2	285	122	409	**903**
Total Volume	6	3	13	22	129	960	12	1101	570	9	191	770	6	1118	481	1605	3498
% App. Total	27.3	13.6	59.1		11.7	87.2	1.1		74	1.2	24.8		0.4	69.7	30		
PHF	.375	.375	.650	.786	.896	.866	.600	.874	.848	.450	.783	.823	.750	.913	.932	.922	.968

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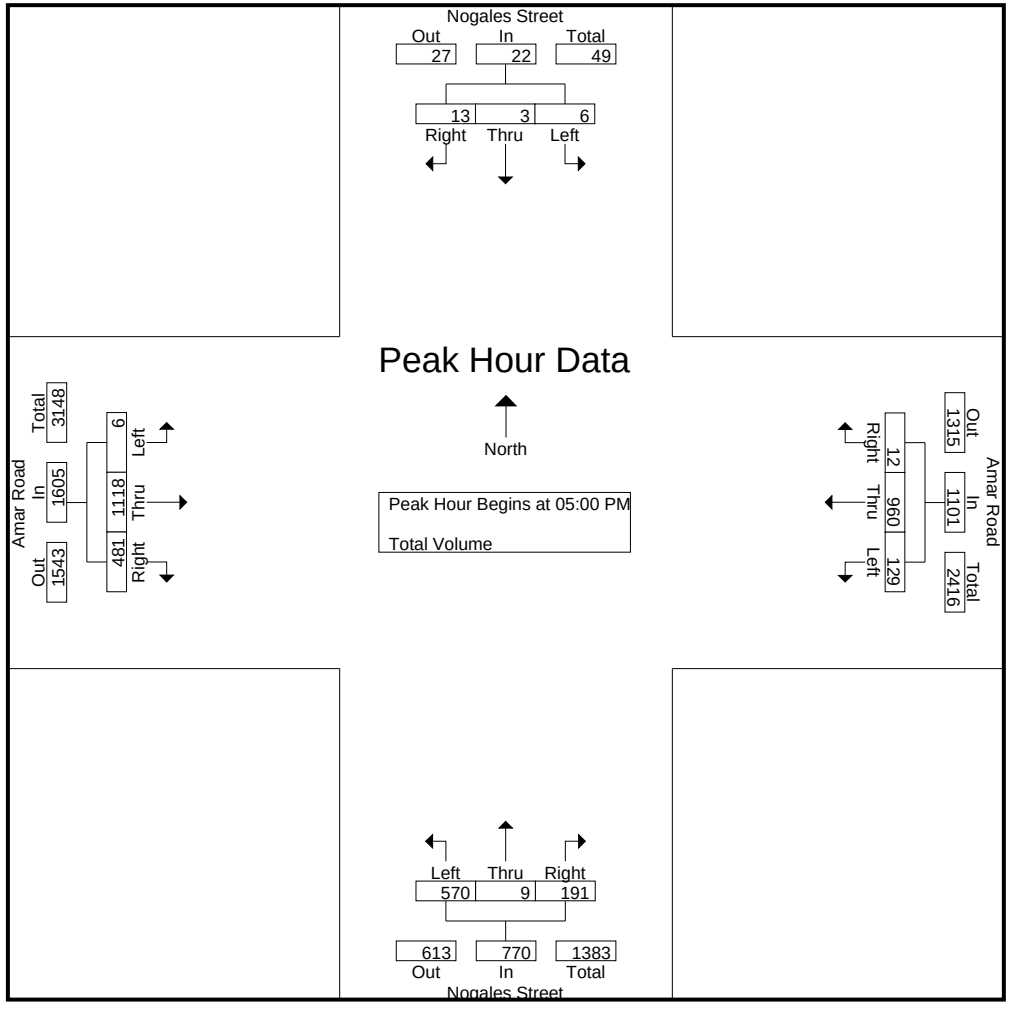
City of Walnut
N/S: Nogales Street
E/W: Amar Road
Weather: Clear

File Name : WNTNOAMPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Nogales Street
E/W: Amar Road
Weather: Clear

File Name : WNTNOAMPM
Site Code : 04215551
Start Date : 10/1/2015

	Nogales Street Southbound				Amar Road Westbound				Nogales Street Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	1	0	**4**	5	29	213	2	244	119	1	42	162	0	**306**	**129**	**435**	
+15 mins.	3	0	4	7	32	265	**5**	302	154	2	46	202	**2**	259	115	376	
+30 mins.	2	**2**	4	8	32	205	3	240	**168**	**5**	**61**	**234**	2	268	115	385	
+45 mins.	**7**	1	3	**11**	**36**	**277**	2	**315**	129	1	42	172	2	285	122	409	
Total Volume	13	3	15	31	129	960	12	1101	570	9	191	770	6	1118	481	1605	
% App. Total	41.9	9.7	48.4		11.7	87.2	1.1		74	1.2	24.8		0.4	69.7	30		
PHF	.464	.375	.938	.705	.896	.866	.600	.874	.848	.450	.783	.823	.750	.913	.932	.922	

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City of Walnut
N/S: Lemon Avenue
E/W: Amar Road
Weather: Clear

File Name : WNTLEAMAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Lemon Avenue Southbound					Amar Road Westbound					Lemon Avenue Northbound					Amar Road Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	3	7	6	0	16	7	248	5	0	260	24	5	16	1	46	2	199	58	0	259	581
07:15 AM	6	17	6	0	29	15	220	2	0	237	62	6	20	1	89	1	281	82	0	364	719
07:30 AM	9	13	4	0	26	10	180	4	0	194	93	11	30	4	138	2	274	69	0	345	703
07:45 AM	4	8	3	0	15	21	142	3	0	166	89	5	36	2	132	2	291	83	0	376	689
Total	22	45	19	0	86	53	790	14	0	857	268	27	102	8	405	7	1045	292	0	1344	2692
08:00 AM	6	6	11	0	23	26	178	3	0	207	53	9	32	1	95	3	186	59	0	248	573
08:15 AM	14	9	13	0	36	29	177	2	1	209	50	5	41	1	97	9	229	55	0	293	635
08:30 AM	17	11	8	0	36	36	239	9	2	286	30	7	25	0	62	1	176	42	0	219	603
08:45 AM	3	9	6	0	18	20	167	5	1	193	42	4	17	3	66	3	161	45	0	209	486
Total	40	35	38	0	113	111	761	19	4	895	175	25	115	5	320	16	752	201	0	969	2297
Grand Total	62	80	57	0	199	164	1551	33	4	1752	443	52	217	13	725	23	1797	493	0	2313	4989
Apprch %	31.2	40.2	28.6	0		9.4	88.5	1.9	0.2		61.1	7.2	29.9	1.8		1	77.7	21.3	0		
Total %	1.2	1.6	1.1	0	4	3.3	31.1	0.7	0.1	35.1	8.9	1	4.3	0.3	14.5	0.5	36	9.9	0	46.4	

	Lemon Avenue Southbound				Amar Road Westbound				Lemon Avenue Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	3	7	**6**	16	7	**248**	**5**	**260**	24	5	16	45	**2**	199	58	259	580
07:15 AM	6	**17**	6	**29**	15	220	2	237	62	6	20	88	1	281	82	364	**718**
07:30 AM	**9**	13	4	26	10	180	4	194	**93**	**11**	30	**134**	2	274	69	345	699
07:45 AM	4	8	3	15	**21**	142	3	166	89	5	**36**	130	2	**291**	**83**	**376**	687
Total Volume	22	45	19	86	53	790	14	857	268	27	102	397	7	1045	292	1344	2684
% App. Total	25.6	52.3	22.1		6.2	92.2	1.6		67.5	6.8	25.7		0.5	77.8	21.7		
PHF	.611	.662	.792	.741	.631	.796	.700	.824	.720	.614	.708	.741	.875	.898	.880	.894	.935

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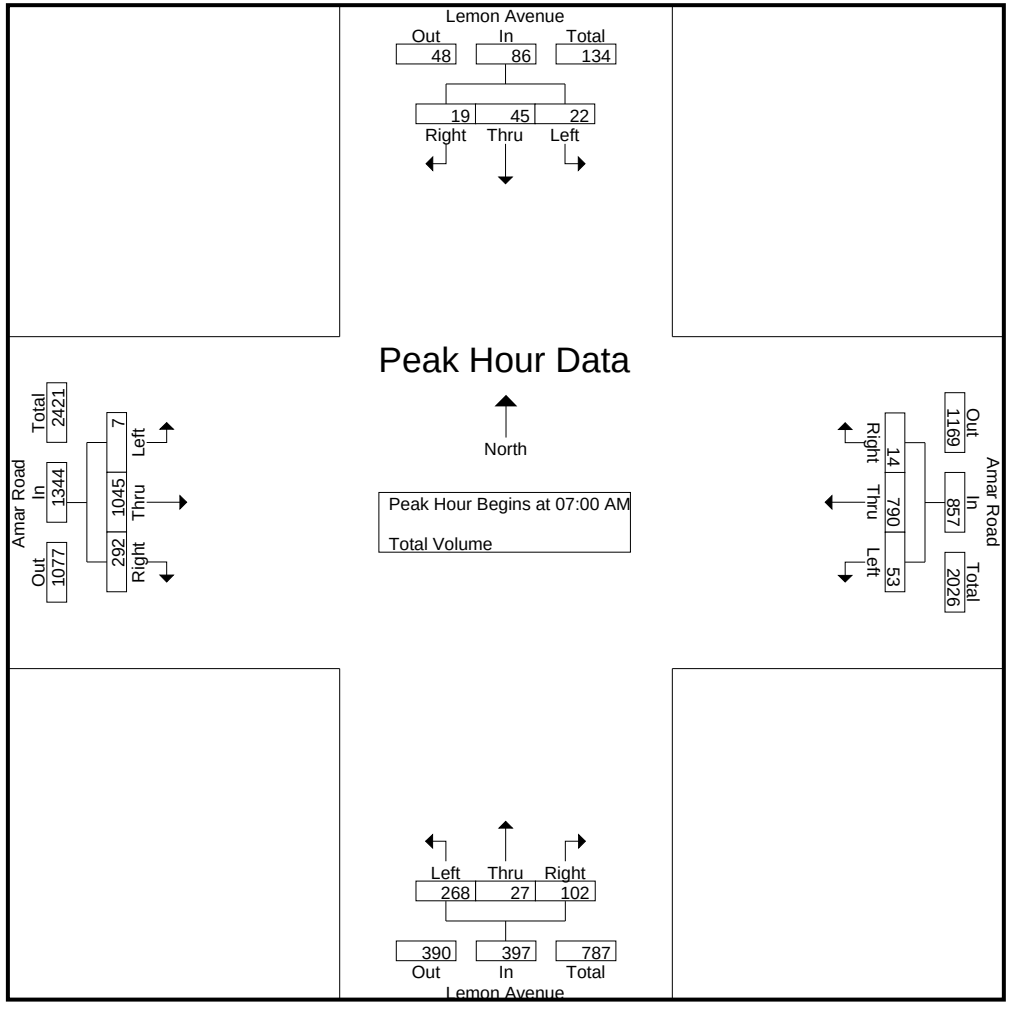
File Name : WNTLEAMAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Lemon Avenue
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Weather: Clear

File Name : WNTLEAMAM
Site Code : 04215551
Start Date : 10/1/2015

	Lemon Avenue Southbound				Amar Road Westbound				Lemon Avenue Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	08:00 AM				08:00 AM				07:30 AM				07:00 AM				
+0 mins.	6	6	11	23	26	178	3	207	**93**	**11**	30	**134**	**2**	199	58	259	
+15 mins.	14	9	**13**	**36**	29	177	2	208	89	5	36	130	1	281	82	364	
+30 mins.	**17**	**11**	8	36	**36**	**239**	**9**	**284**	53	9	32	94	2	274	69	345	
+45 mins.	3	9	6	18	20	167	5	192	50	5	**41**	96	2	**291**	**83**	**376**	
Total Volume	40	35	38	113	111	761	19	891	285	30	139	454	7	1045	292	1344	
% App. Total	35.4	31	33.6		12.5	85.4	2.1		62.8	6.6	30.6		0.5	77.8	21.7		
PHF	.588	.795	.731	.785	.771	.796	.528	.784	.766	.682	.848	.847	.875	.898	.880	.894	

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City of Walnut
N/S: Lemon Avenue
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File Name : WNTLEAMPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Lemon Avenue Southbound					Amar Road Westbound					Lemon Avenue Northbound					Amar Road Eastbound							
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	1	2	6	0	9	22	154	5	0	181	42	3	21	0	66	6	258	38	0	302	0	558	558
04:15 PM	1	5	3	0	9	24	165	2	0	191	43	5	21	1	70	6	254	48	0	308	0	578	578
04:30 PM	3	6	4	0	13	24	187	2	0	213	57	5	23	0	85	6	282	47	2	335	2	646	648
04:45 PM	4	6	4	0	14	23	182	2	0	207	57	5	20	0	82	8	242	39	0	289	0	592	592
Total	9	19	17	0	45	93	688	11	0	792	199	18	85	1	303	26	1036	172	2	1234	2	2374	2376
05:00 PM	6	2	1	0	9	28	214	5	0	247	71	10	29	0	110	6	247	46	1	299	1	665	666
05:15 PM	5	9	1	0	15	26	234	2	0	262	48	11	31	0	90	1	261	43	1	305	1	672	673
05:30 PM	5	3	1	0	9	28	213	9	1	251	67	13	35	1	116	6	263	35	0	304	0	680	680
05:45 PM	1	8	2	0	11	25	229	3	0	257	68	8	37	3	116	6	228	37	1	271	1	655	656
Total	17	22	5	0	44	107	890	19	1	1017	254	42	132	4	432	19	999	161	3	1179	3	2672	2675
Grand Total	26	41	22	0	89	200	1578	30	1	1809	453	60	217	5	735	45	2035	333	5	2413	5	5046	5051
Apprch %	29.2	46.1	24.7	0		11.1	87.2	1.7	0.1		61.6	8.2	29.5	0.7		1.9	84.3	13.8					
Total %	0.5	0.8	0.4	0	1.8	4	31.3	0.6	0	35.9	9	1.2	4.3	0.1	14.6	0.9	40.3	6.6		47.8	0.1	99.9	

	Lemon Avenue Southbound				Amar Road Westbound				Lemon Avenue Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**6**	2	1	9	**28**	214	5	247	**71**	10	29	110	**6**	247	**46**	299	665
05:15 PM	5	**9**	1	**15**	26	**234**	2	**262**	48	11	31	90	1	261	43	**305**	672
05:30 PM	5	3	1	9	28	213	**9**	250	67	**13**	35	**115**	6	**263**	35	304	**678**
05:45 PM	1	8	**2**	11	25	229	3	257	68	8	**37**	113	6	228	37	271	652
Total Volume	17	22	5	44	107	890	19	1016	254	42	132	428	19	999	161	1179	2667
% App. Total	38.6	50	11.4		10.5	87.6	1.9		59.3	9.8	30.8		1.6	84.7	13.7		
PHF	.708	.611	.625	.733	.955	.951	.528	.969	.894	.808	.892	.930	.792	.950	.875	.966	.983

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City of Walnut
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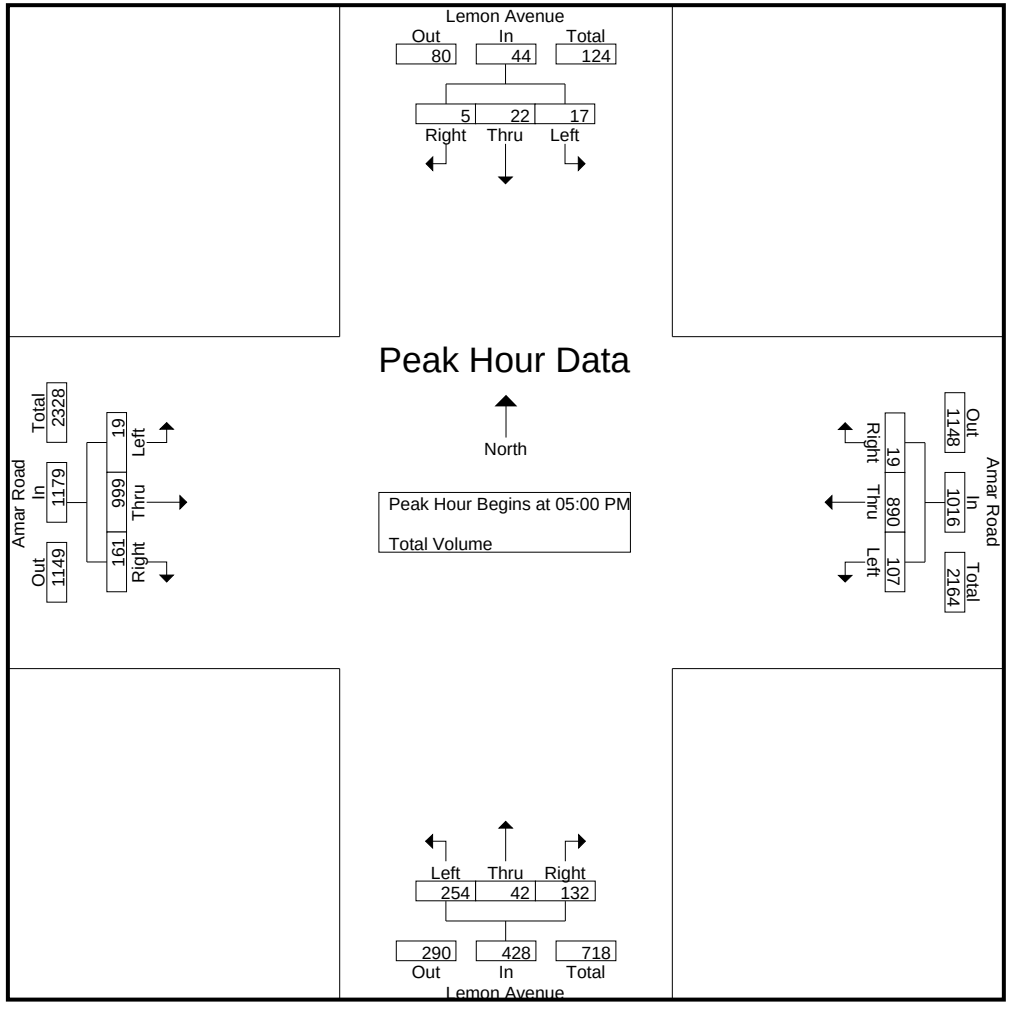
E/W: Amar Road
Weather: Clear

File Name : WNTLEAMPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Lemon Avenue
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Weather: Clear

File Name : WNTLEAMPM
Site Code : 04215551
Start Date : 10/1/2015

	Lemon Avenue Southbound				Amar Road Westbound				Lemon Avenue Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				05:00 PM				05:00 PM				04:00 PM				
+0 mins.	3	6	**4**	13	**28**	214	5	247	**71**	10	29	110	6	258	38	302	
+15 mins.	4	6	4	14	26	**234**	2	**262**	48	11	31	90	6	254	**48**	308	
+30 mins.	**6**	2	1	9	28	213	**9**	250	67	**13**	35	**115**	6	**282**	47	**335**	
+45 mins.	5	**9**	1	**15**	25	229	3	257	68	8	**37**	113	**8**	242	39	289	
Total Volume	18	23	10	51	107	890	19	1016	254	42	132	428	26	1036	172	1234	
% App. Total	35.3	45.1	19.6		10.5	87.6	1.9		59.3	9.8	30.8		2.1	84	13.9		
PHF	.750	.639	.625	.850	.955	.951	.528	.969	.894	.808	.892	.930	.813	.918	.896	.921	

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City of Walnut
N/S: Grand Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : WNTGR10WAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound					Driveway Westbound					Grand Avenue Northbound					I-10 Westbound Ramps Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	0	220	38	0	258	2	0	2	0	4	32	164	2	0	198	110	1	44	0	155	615
07:15 AM	0	233	17	0	250	4	2	2	0	8	27	217	5	0	249	116	0	60	0	176	683
07:30 AM	0	209	22	0	231	4	2	1	0	7	25	282	2	1	310	100	0	99	0	199	747
07:45 AM	0	202	31	0	233	3	0	1	0	4	41	258	0	0	299	113	3	73	0	189	725
Total	0	864	108	0	972	13	4	6	0	23	125	921	9	1	1056	439	4	276	0	719	2770
08:00 AM	0	202	45	0	247	1	0	2	0	3	38	229	10	0	277	126	2	77	0	205	732
08:15 AM	0	199	42	0	241	4	1	4	0	9	40	282	5	1	328	98	1	61	0	160	738
08:30 AM	1	214	50	0	265	3	2	1	0	6	48	250	4	0	302	104	3	40	0	147	720
08:45 AM	1	175	50	0	226	4	1	1	0	6	55	272	6	0	333	108	2	32	0	142	707
Total	2	790	187	0	979	12	4	8	0	24	181	1033	25	1	1240	436	8	210	0	654	2897
Grand Total	2	1654	295	0	1951	25	8	14	0	47	306	1954	34	2	2296	875	12	486	0	1373	5667
Apprch %	0.1	84.8	15.1	0		53.2	17	29.8	0		13.3	85.1	1.5	0.1		63.7	0.9	35.4	0		
Total %	0	29.2	5.2	0	34.4	0.4	0.1	0.2	0	0.8	5.4	34.5	0.6	0	40.5	15.4	0.2	8.6	0	24.2	

	Grand Avenue Southbound				Driveway Westbound				Grand Avenue Northbound				I-10 Westbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**209**	22	231	**4**	**2**	1	7	25	**282**	2	309	100	0	**99**	199	**746**
07:45 AM	0	202	31	233	3	0	1	4	**41**	258	0	299	113	**3**	73	189	725
08:00 AM	0	202	**45**	**247**	1	0	2	3	38	229	**10**	277	**126**	2	77	**205**	732
08:15 AM	0	199	42	241	4	1	**4**	**9**	40	282	5	**327**	98	1	61	160	737
Total Volume	0	812	140	952	12	3	8	23	144	1051	17	1212	437	6	310	753	2940
% App. Total	0	85.3	14.7		52.2	13	34.8		11.9	86.7	1.4		58	0.8	41.2		
PHF	.000	.971	.778	.964	.750	.375	.500	.639	.878	.932	.425	.927	.867	.500	.783	.918	.985

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Weather: Clear

File Name : WNTGR10WAM
Site Code : 04215551
Start Date : 10/1/2015
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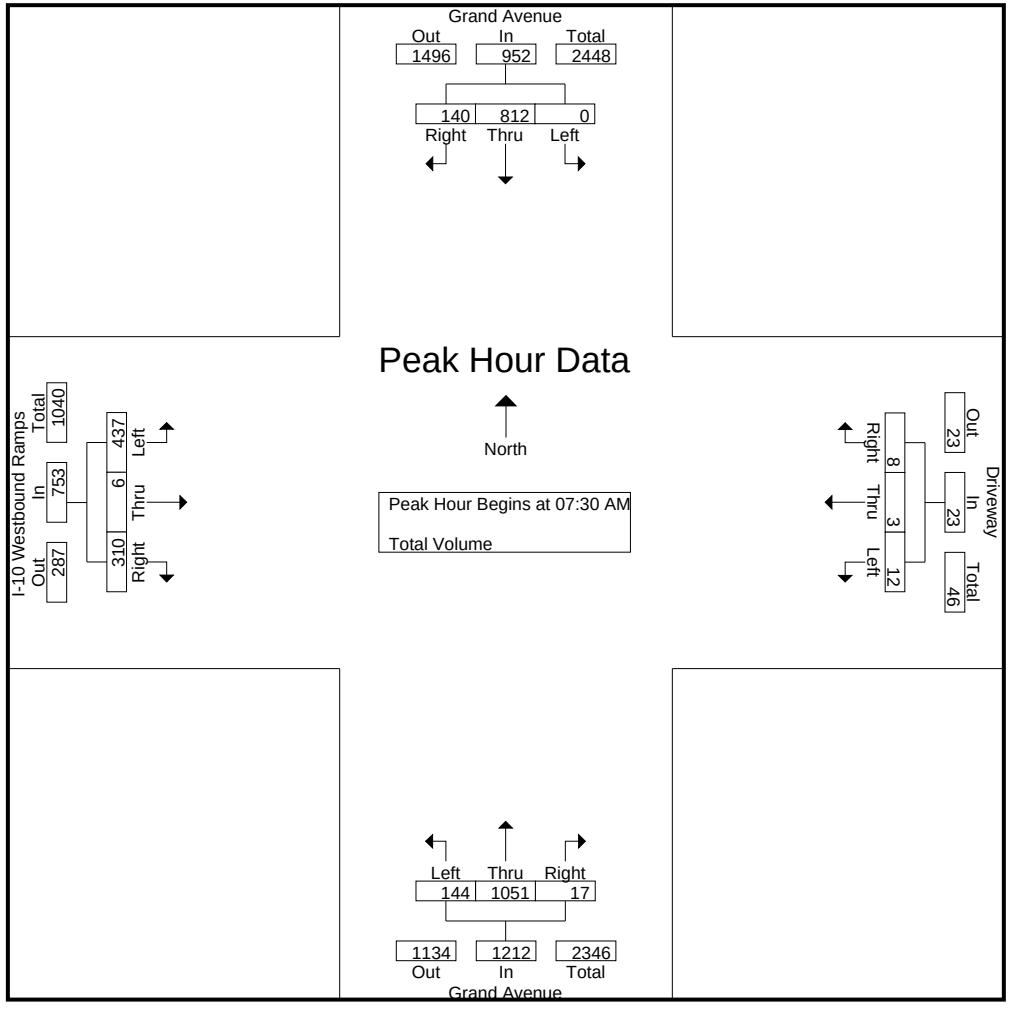

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City of Walnut
N/S: Grand Avenue
E/W: I-10 Westbound Ramps
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File Name : WNTGR10WAM
Site Code : 04215551
Start Date : 10/1/2015

	Grand Avenue Southbound				Driveway Westbound				Grand Avenue Northbound				I-10 Westbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				08:00 AM				08:00 AM				07:15 AM				
+0 mins.	0	202	31	233	1	0	2	3	38	229	**10**	277	116	0	60	176	
+15 mins.	0	202	45	247	**4**	1	**4**	**9**	40	**282**	5	327	100	0	**99**	199	
+30 mins.	0	199	42	241	3	**2**	1	6	48	250	4	302	113	**3**	73	189	
+45 mins.	**1**	**214**	**50**	**265**	4	1	1	6	**55**	272	6	**333**	**126**	2	77	**205**	
Total Volume	1	817	168	986	12	4	8	24	181	1033	25	1239	455	5	309	769	
% App. Total	0.1	82.9	17		50	16.7	33.3		14.6	83.4	2		59.2	0.7	40.2		
PHF	.250	.954	.840	.930	.750	.500	.500	.667	.823	.916	.625	.930	.903	.417	.780	.938	

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City of Walnut
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E/W: I-10 Westbound Ramps
Weather: Clear

File Name : WNTGR10WPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound					Driveway Westbound					Grand Avenue Northbound					I-10 Westbound Ramps Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	1	219	111	0	331	10	2	0	0	12	72	193	2	0	267	47	6	14	0	67	677
04:15 PM	0	245	87	0	332	4	2	6	0	12	99	241	7	0	347	47	4	13	0	64	755
04:30 PM	1	235	113	0	349	3	1	3	0	7	94	257	10	0	361	55	2	16	0	73	790
04:45 PM	1	215	111	0	327	10	0	5	0	15	85	274	1	1	361	46	3	20	0	69	772
Total	3	914	422	0	1339	27	5	14	0	46	350	965	20	1	1336	195	15	63	0	273	2994
05:00 PM	2	191	98	0	291	2	5	0	0	7	89	270	10	0	369	53	3	25	0	81	748
05:15 PM	0	197	116	0	313	6	1	0	0	7	101	252	6	0	359	81	2	27	0	110	789
05:30 PM	0	207	83	1	291	2	6	1	0	9	102	270	11	0	383	77	2	30	0	109	792
05:45 PM	1	220	88	1	310	8	5	5	0	18	97	298	7	0	402	71	4	35	0	110	840
Total	3	815	385	2	1205	18	17	6	0	41	389	1090	34	0	1513	282	11	117	0	410	3169
Grand Total	6	1729	807	2	2544	45	22	20	0	87	739	2055	54	1	2849	477	26	180	0	683	6163
Apprch %	0.2	68	31.7	0.1		51.7	25.3	23	0		25.9	72.1	1.9	0		69.8	3.8	26.4	0		
Total %	0.1	28.1	13.1	0	41.3	0.7	0.4	0.3	0	1.4	12	33.3	0.9	0	46.2	7.7	0.4	2.9	0	11.1	

	Grand Avenue Southbound				Driveway Westbound				Grand Avenue Northbound				I-10 Westbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**2**	191	98	291	2	5	0	7	89	270	10	369	53	3	25	81	748
05:15 PM	0	197	**116**	**313**	6	1	0	7	101	252	6	359	**81**	2	27	**110**	789
05:30 PM	0	207	83	290	2	**6**	1	9	**102**	270	**11**	383	77	2	30	109	791
05:45 PM	1	**220**	88	309	**8**	5	**5**	**18**	97	**298**	7	**402**	71	**4**	**35**	110	**839**
Total Volume	3	815	385	1203	18	17	6	41	389	1090	34	1513	282	11	117	410	3167
% App. Total	0.2	67.7	32		43.9	41.5	14.6		25.7	72	2.2		68.8	2.7	28.5		
PHF	.375	.926	.830	.961	.563	.708	.300	.569	.953	.914	.773	.941	.870	.688	.836	.932	.944

Counts Unlimited
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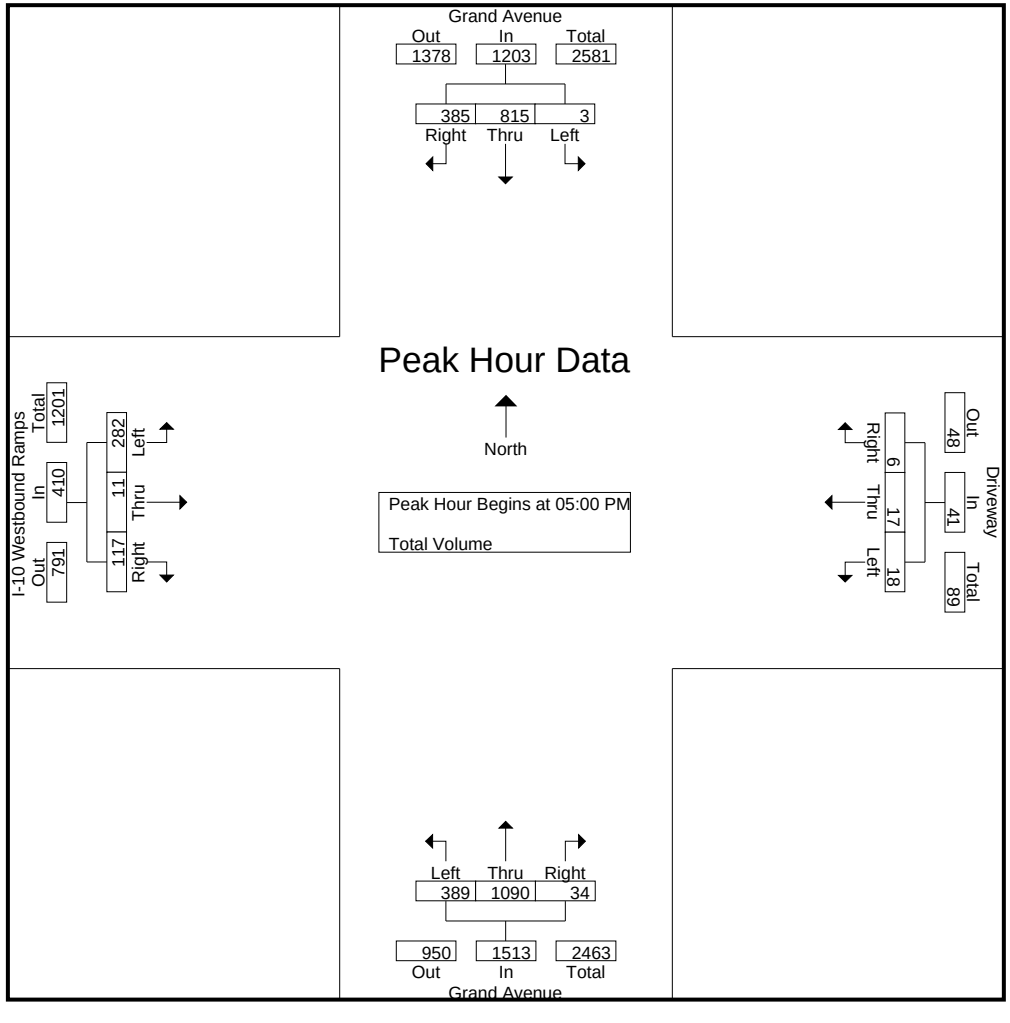
City of Walnut
N/S: Grand Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : WNTGR10WPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Grand Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : WNTGR10WPM
Site Code : 04215551
Start Date : 10/1/2015

	Grand Avenue Southbound				Driveway Westbound				Grand Avenue Northbound				I-10 Westbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				05:00 PM				05:00 PM				
+0 mins.	**1**	219	111	331	**10**	**2**	0	12	89	270	10	369	53	3	25	81	
+15 mins.	0	**245**	87	332	4	2	**6**	12	101	252	6	359	**81**	2	27	**110**	
+30 mins.	1	235	**113**	**349**	3	1	3	7	**102**	270	**11**	383	77	2	30	109	
+45 mins.	1	215	111	327	10	0	5	**15**	97	**298**	7	**402**	71	**4**	**35**	110	
Total Volume	3	914	422	1339	27	5	14	46	389	1090	34	1513	282	11	117	410	
% App. Total	0.2	68.3	31.5		58.7	10.9	30.4		25.7	72	2.2		68.8	2.7	28.5		
PHF	.750	.933	.934	.959	.675	.625	.583	.767	.953	.914	.773	.941	.870	.688	.836	.932	

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City of Walnut
N/S: Grand Avenue
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : WNTGR10EAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound				Grand Avenue Northbound				I-10 Eastbound Ramps Eastbound				
Start Time	Thru	Right	U-Turns	App. Total	Left	Thru	U-Turns	App. Total	Left	Right	U-Turns	App. Total	Int. Total
07:00 AM	218	43	0	261	9	141	0	150	55	166	0	221	632
07:15 AM	224	59	0	283	8	165	0	173	83	152	0	235	691
07:30 AM	237	56	0	293	5	209	0	214	102	142	0	244	751
07:45 AM	241	48	0	289	11	228	0	239	91	161	0	252	780
Total	920	206	0	1126	33	743	0	776	331	621	0	952	2854
08:00 AM	249	52	0	301	10	199	0	209	87	123	0	210	720
08:15 AM	200	67	1	268	15	237	0	252	69	107	0	176	696
08:30 AM	190	48	0	238	8	220	0	228	83	120	0	203	669
08:45 AM	163	58	0	221	7	240	0	247	100	130	0	230	698
Total	802	225	1	1028	40	896	0	936	339	480	0	819	2783
Grand Total	1722	431	1	2154	73	1639	0	1712	670	1101	0	1771	5637
Apprch %	79.9	20	0		4.3	95.7	0		37.8	62.2	0		
Total %	30.5	7.6	0	38.2	1.3	29.1	0	30.4	11.9	19.5	0	31.4	

	Grand Avenue Southbound			Grand Avenue Northbound			I-10 Eastbound Ramps Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	237	56	293	5	209	214	**102**	142	244	751
07:45 AM	241	48	289	11	228	239	91	**161**	**252**	**780**
08:00 AM	**249**	52	**301**	10	199	209	87	123	210	720
08:15 AM	200	**67**	267	**15**	**237**	**252**	69	107	176	695
Total Volume	927	223	1150	41	873	914	349	533	882	2946
% App. Total	80.6	19.4		4.5	95.5		39.6	60.4		
PHF	.931	.832	.955	.683	.921	.907	.855	.828	.875	.944

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City of Walnut
N/S: Grand Avenue
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : WNTGR10EAM
Site Code : 04215551
Start Date : 10/1/2015
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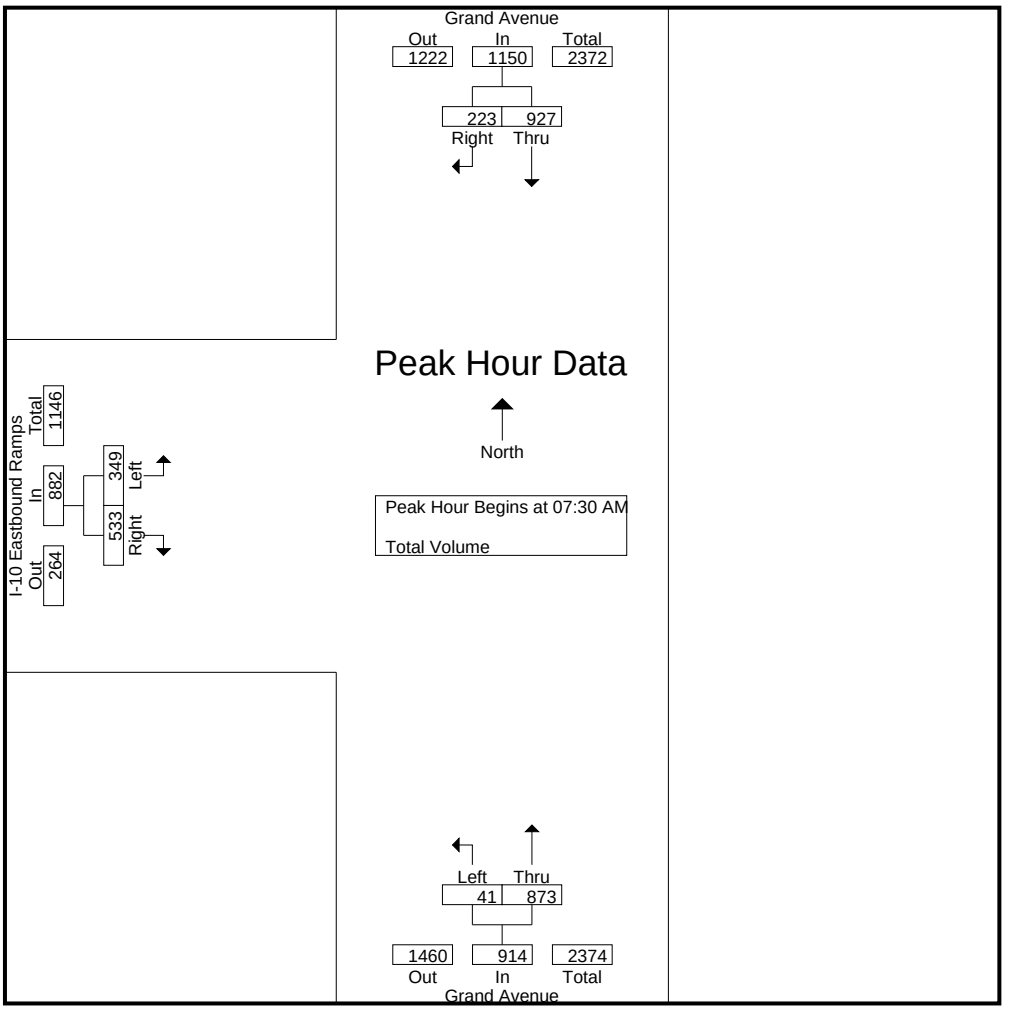

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			08:00 AM			07:00 AM		
+0 mins.	224	**59**	283	10	199	209	55	**166**	221
+15 mins.	237	56	293	**15**	237	**252**	83	152	235
+30 mins.	241	48	289	8	220	228	**102**	142	244
+45 mins.	**249**	52	**301**	7	**240**	247	91	161	**252**
Total Volume	951	215	1166	40	896	936	331	621	952
% App. Total	81.6	18.4		4.3	95.7		34.8	65.2	
PHF	.955	.911	.968	.667	.933	.929	.811	.935	.944

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City of Walnut
N/S: Grand Avenue
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : WNTGR10EPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound				Grand Avenue Northbound				I-10 Eastbound Ramps Eastbound				
Start Time	Thru	Right	U-Turns	App. Total	Left	Thru	U-Turns	App. Total	Left	Right	U-Turns	App. Total	Int. Total
04:00 PM	168	78	0	246	13	231	0	244	59	57	0	116	606
04:15 PM	181	95	0	276	14	265	0	279	75	41	0	116	671
04:30 PM	164	85	0	249	14	279	0	293	82	37	0	119	661
04:45 PM	167	81	0	248	16	287	0	303	64	53	0	117	668
Total	680	339	0	1019	57	1062	0	1119	280	188	0	468	2606
05:00 PM	135	70	0	205	19	315	0	334	65	46	0	111	650
05:15 PM	163	77	0	240	7	310	0	317	79	60	0	139	696
05:30 PM	182	70	0	252	11	328	0	339	75	32	0	107	698
05:45 PM	188	84	0	272	15	320	0	335	82	48	0	130	737
Total	668	301	0	969	52	1273	0	1325	301	186	0	487	2781
Grand Total	1348	640	0	1988	109	2335	0	2444	581	374	0	955	5387
Apprch %	67.8	32.2	0		4.5	95.5	0		60.8	39.2	0		
Total %	25	11.9	0	36.9	2	43.3	0	45.4	10.8	6.9	0	17.7	

	Grand Avenue Southbound			Grand Avenue Northbound			I-10 Eastbound Ramps Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	135	70	205	**19**	315	334	65	46	111	650
05:15 PM	163	77	240	7	310	317	79	**60**	**139**	696
05:30 PM	182	70	252	11	**328**	**339**	75	32	107	698
05:45 PM	**188**	**84**	**272**	15	320	335	**82**	48	130	**737**
Total Volume	668	301	969	52	1273	1325	301	186	487	2781
% App. Total	68.9	31.1		3.9	96.1		61.8	38.2		
PHF	.888	.896	.891	.684	.970	.977	.918	.775	.876	.943

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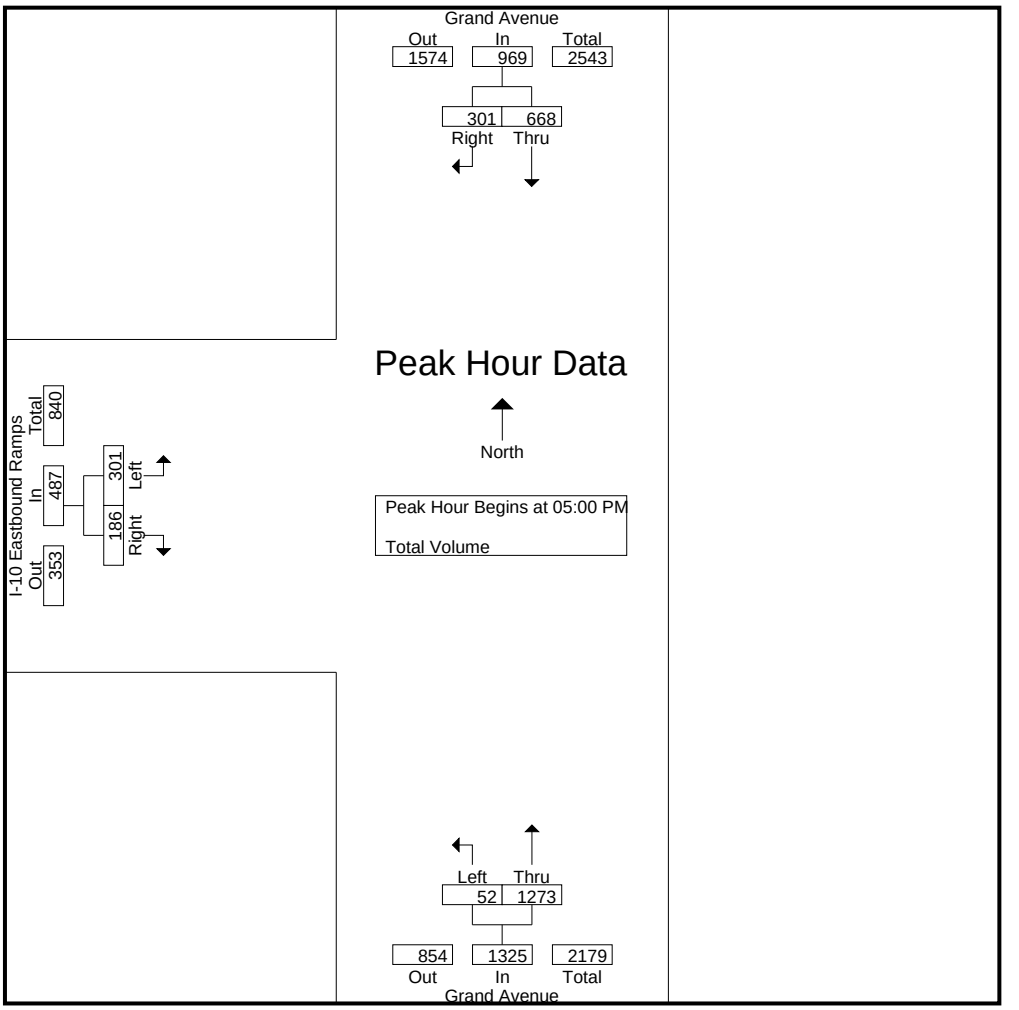
City of Walnut
N/S: Grand Avenue
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : WNTGR10EPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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

	04:00 PM			05:00 PM			05:00 PM		
+0 mins.	168	78	246	**19**	315	334	65	46	111
+15 mins.	**181**	**95**	**276**	7	310	317	79	**60**	**139**
+30 mins.	164	85	249	11	**328**	**339**	75	32	107
+45 mins.	167	81	248	15	320	335	**82**	48	130
Total Volume	680	339	1019	52	1273	1325	301	186	487
% App. Total	66.7	33.3		3.9	96.1		61.8	38.2	
PHF	.939	.892	.923	.684	.970	.977	.918	.775	.876

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City of Walnut
N/S: North Grand Avenue
E/W: Cameron Avenue
Weather: Clear

File Name : WNTGRCAAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	North Grand Avenue Southbound				North Grand Avenue Northbound				Cameron Avenue Eastbound				
Start Time	Thru	Right	U-Turns	App. Total	Left	Thru	U-Turns	App. Total	Left	Right	U-Turns	App. Total	Int. Total
07:00 AM	386	50	0	436	105	152	0	257	16	132	0	148	841
07:15 AM	450	47	0	497	115	195	0	310	8	168	0	176	983
07:30 AM	387	49	0	436	95	183	0	278	29	130	0	159	873
07:45 AM	430	35	0	465	82	209	0	291	33	131	0	164	920
Total	1653	181	0	1834	397	739	0	1136	86	561	0	647	3617
08:00 AM	358	47	0	405	82	177	0	259	22	115	0	137	801
08:15 AM	293	46	0	339	67	232	0	299	17	77	0	94	732
08:30 AM	268	52	0	320	98	222	0	320	12	84	0	96	736
08:45 AM	273	43	0	316	64	218	0	282	17	76	0	93	691
Total	1192	188	0	1380	311	849	0	1160	68	352	0	420	2960
Grand Total	2845	369	0	3214	708	1588	0	2296	154	913	0	1067	6577
Apprch %	88.5	11.5	0		30.8	69.2	0		14.4	85.6	0		
Total %	43.3	5.6	0	48.9	10.8	24.1	0	34.9	2.3	13.9	0	16.2	

	North Grand Avenue Southbound			North Grand Avenue Northbound			Cameron Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	386	**50**	436	105	152	257	16	132	148	841
07:15 AM	**450**	47	**497**	**115**	195	**310**	8	**168**	**176**	**983**
07:30 AM	387	49	436	95	183	278	29	130	159	873
07:45 AM	430	35	465	82	**209**	291	**33**	131	164	920
Total Volume	1653	181	1834	397	739	1136	86	561	647	3617
% App. Total	90.1	9.9		34.9	65.1		13.3	86.7		
PHF	.918	.905	.923	.863	.884	.916	.652	.835	.919	.920

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City of Walnut
N/S: North Grand Avenue
E/W: Cameron Avenue
Weather: Clear

File Name : WNTGRCAAM
Site Code : 04215551
Start Date : 10/1/2015
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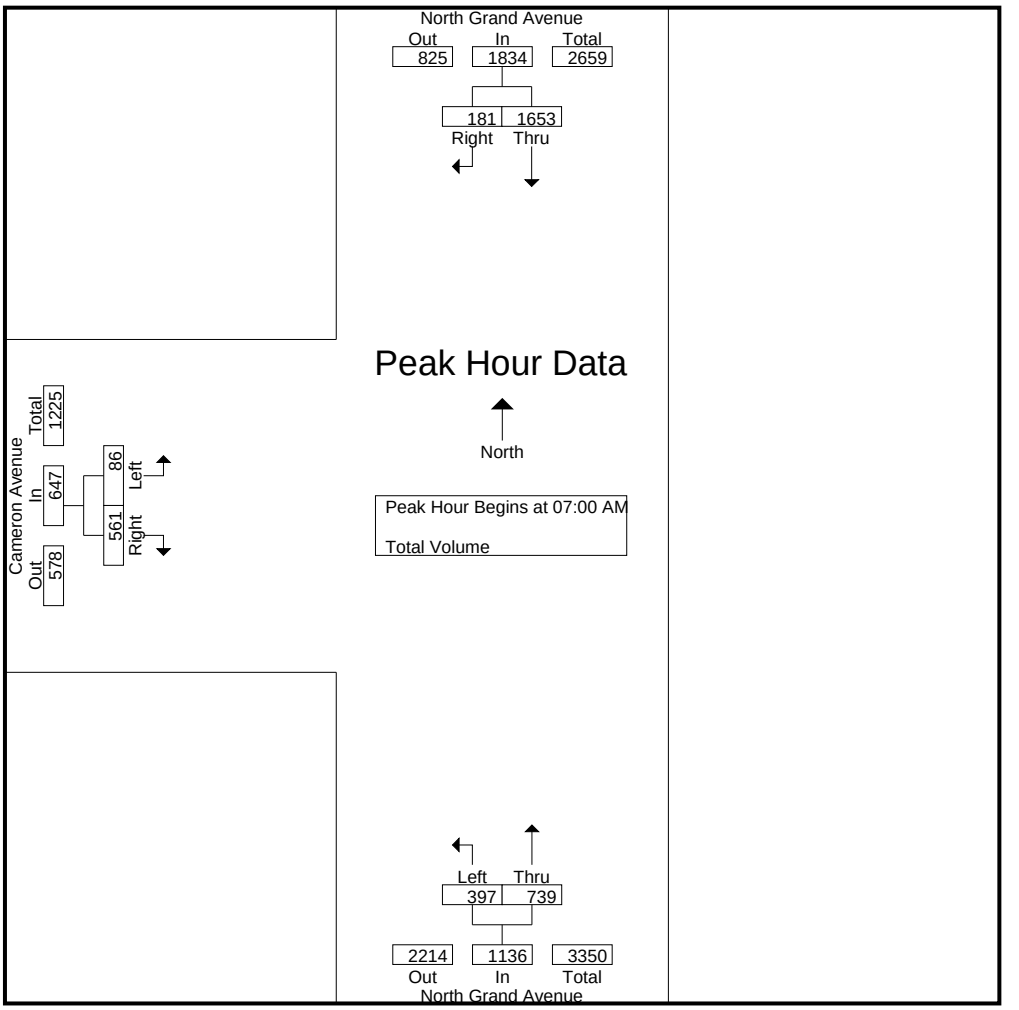

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:45 AM			07:00 AM		
+0 mins.	386	**50**	436	82	209	291	16	132	148
+15 mins.	**450**	47	**497**	82	177	259	8	**168**	**176**
+30 mins.	387	49	436	67	**232**	299	29	130	159
+45 mins.	430	35	465	**98**	222	**320**	**33**	131	164
Total Volume	1653	181	1834	329	840	1169	86	561	647
% App. Total	90.1	9.9		28.1	71.9		13.3	86.7	
PHF	.918	.905	.923	.839	.905	.913	.652	.835	.919

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City of Walnut
N/S: North Grand Avenue
E/W: Cameron Avenue
Weather: Clear

File Name : WNTGRCAPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	North Grand Avenue Southbound				North Grand Avenue Northbound				Cameron Avenue Eastbound				
Start Time	Thru	Right	U-Turns	App. Total	Left	Thru	U-Turns	App. Total	Left	Right	U-Turns	App. Total	Int. Total
04:00 PM	206	15	0	221	65	254	0	319	9	79	0	88	628
04:15 PM	198	13	0	211	76	282	0	358	18	103	0	121	690
04:30 PM	185	11	0	196	77	280	0	357	28	86	0	114	667
04:45 PM	213	18	0	231	86	328	0	414	20	101	0	121	766
Total	802	57	0	859	304	1144	0	1448	75	369	0	444	2751
05:00 PM	205	24	0	229	101	292	0	393	25	107	0	132	754
05:15 PM	174	29	0	203	97	282	0	379	24	98	0	122	704
05:30 PM	221	31	0	252	121	339	0	460	14	94	0	108	820
05:45 PM	208	31	0	239	99	330	0	429	18	108	0	126	794
Total	808	115	0	923	418	1243	0	1661	81	407	0	488	3072
Grand Total	1610	172	0	1782	722	2387	0	3109	156	776	0	932	5823
Apprch %	90.3	9.7	0		23.2	76.8	0		16.7	83.3	0		
Total %	27.6	3	0	30.6	12.4	41	0	53.4	2.7	13.3	0	16	

	North Grand Avenue Southbound			North Grand Avenue Northbound			Cameron Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	205	24	229	101	292	393	**25**	107	**132**	754
05:15 PM	174	29	203	97	282	379	24	98	122	704
05:30 PM	**221**	**31**	**252**	**121**	**339**	**460**	14	94	108	**820**
05:45 PM	208	31	239	99	330	429	18	**108**	126	794
Total Volume	808	115	923	418	1243	1661	81	407	488	3072
% App. Total	87.5	12.5		25.2	74.8		16.6	83.4		
PHF	.914	.927	.916	.864	.917	.903	.810	.942	.924	.937

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City of Walnut
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E/W: Cameron Avenue
Weather: Clear

File Name : WNTGRCAPM
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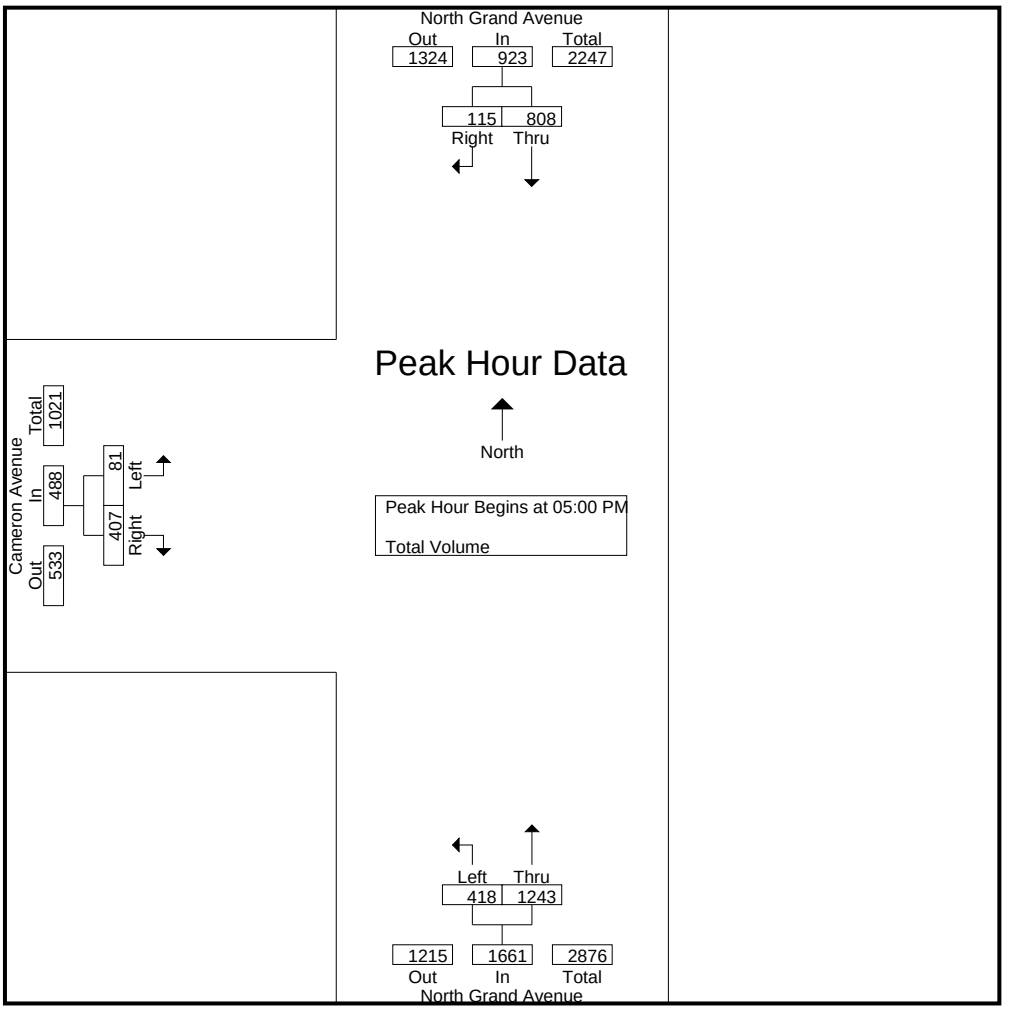

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			04:30 PM		
+0 mins.	205	24	229	101	292	393	**28**	86	114
+15 mins.	174	29	203	97	282	379	20	101	121
+30 mins.	**221**	**31**	**252**	**121**	**339**	**460**	25	**107**	**132**
+45 mins.	208	31	239	99	330	429	24	98	122
Total Volume	808	115	923	418	1243	1661	97	392	489
% App. Total	87.5	12.5		25.2	74.8		19.8	80.2	
PHF	.914	.927	.916	.864	.917	.903	.866	.916	.926

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City of Walnut
N/S: Grand Avenue
E/W: Mountaineer Road
Weather: Clear

File Name : WNTGRMOAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound				Mountaineer Road Westbound				Grand Avenue Northbound				
Start Time	Left	Thru	U-Turns	App. Total	Left	Right	U-Turns	App. Total	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	80	433	0	513	23	11	0	34	239	47	0	286	833
07:15 AM	133	455	0	588	36	19	0	55	287	58	0	345	988
07:30 AM	165	446	0	611	28	11	1	40	281	103	0	384	1035
07:45 AM	186	411	0	597	20	24	0	44	246	151	0	397	1038
Total	564	1745	0	2309	107	65	1	173	1053	359	0	1412	3894
08:00 AM	159	388	0	547	50	21	0	71	233	125	0	358	976
08:15 AM	57	389	0	446	60	12	1	73	296	61	0	357	876
08:30 AM	68	311	0	379	26	14	0	40	314	50	0	364	783
08:45 AM	54	319	0	373	26	12	0	38	267	41	0	308	719
Total	338	1407	0	1745	162	59	1	222	1110	277	0	1387	3354
Grand Total	902	3152	0	4054	269	124	2	395	2163	636	0	2799	7248
Apprch %	22.2	77.8	0		68.1	31.4	0.5		77.3	22.7	0		
Total %	12.4	43.5	0	55.9	3.7	1.7	0	5.4	29.8	8.8	0	38.6	

	Grand Avenue Southbound			Mountaineer Road Westbound			Grand Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	133	**455**	588	36	19	55	**287**	58	345	988
07:30 AM	165	446	**611**	28	11	39	281	103	384	1034
07:45 AM	**186**	411	597	20	**24**	44	246	**151**	**397**	**1038**
08:00 AM	159	388	547	**50**	21	**71**	233	125	358	976
Total Volume	643	1700	2343	134	75	209	1047	437	1484	4036
% App. Total	27.4	72.6		64.1	35.9		70.6	29.4		
PHF	.864	.934	.959	.670	.781	.736	.912	.724	.935	.972

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City of Walnut
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Site Code : 04215551
Start Date : 10/1/2015
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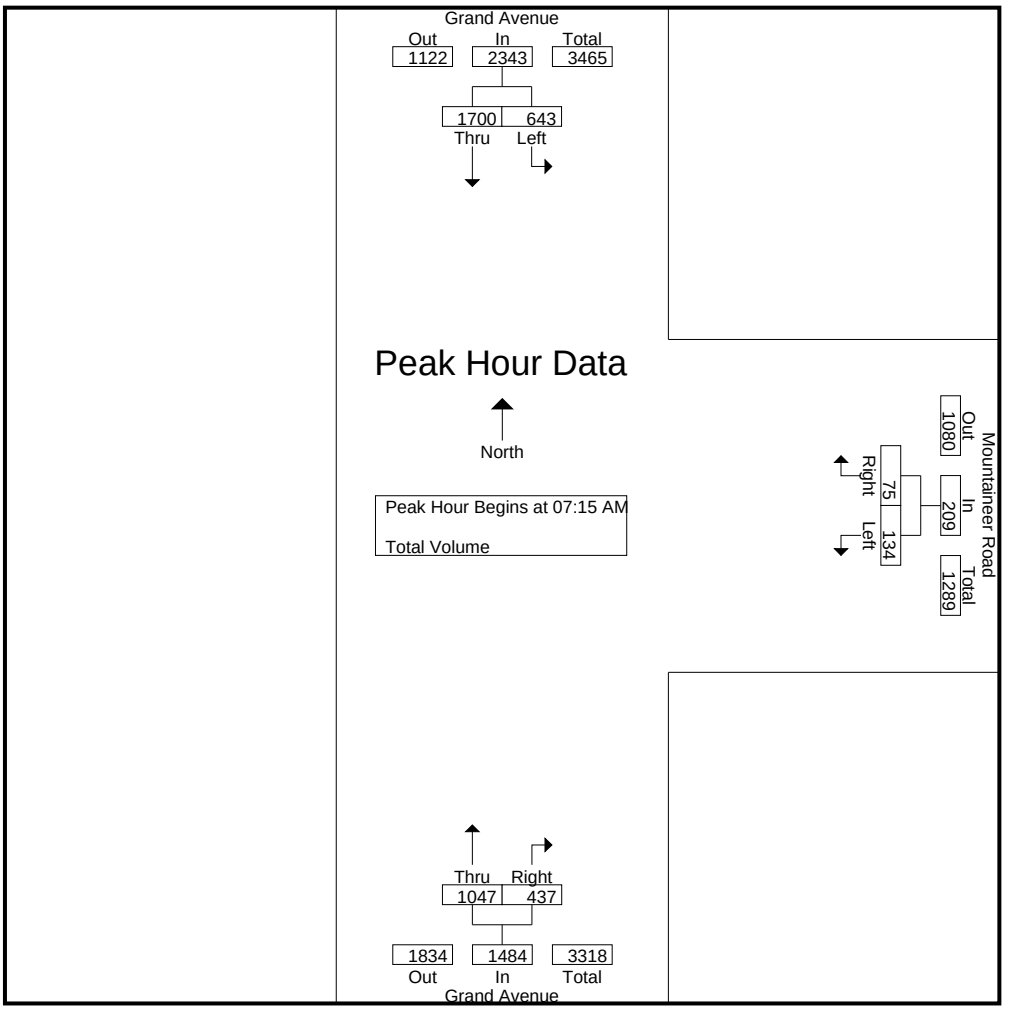

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:45 AM			07:30 AM		
+0 mins.	133	**455**	588	20	**24**	44	281	103	384
+15 mins.	165	446	**611**	50	21	71	246	**151**	**397**
+30 mins.	**186**	411	597	**60**	12	**72**	233	125	358
+45 mins.	159	388	547	26	14	40	**296**	61	357
Total Volume	643	1700	2343	156	71	227	1056	440	1496
% App. Total	27.4	72.6		68.7	31.3		70.6	29.4	
PHF	.864	.934	.959	.650	.740	.788	.892	.728	.942

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File Name : WNTGRMOPM
Site Code : 04215551
Start Date : 10/1/2015
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Groups Printed- Total Volume

	Grand Avenue Southbound				Mountaineer Road Westbound				Grand Avenue Northbound				
Start Time	Left	Thru	U-Turns	App. Total	Left	Right	U-Turns	App. Total	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	47	220	0	267	49	42	0	91	275	34	0	309	667
04:15 PM	42	263	0	305	71	73	0	144	317	46	0	363	812
04:30 PM	30	263	0	293	70	62	1	133	334	31	0	365	791
04:45 PM	25	293	0	318	31	35	0	66	370	42	0	412	796
Total	144	1039	0	1183	221	212	1	434	1296	153	0	1449	3066
05:00 PM	29	277	0	306	46	47	0	93	374	27	0	401	800
05:15 PM	17	269	0	286	22	44	0	66	460	31	0	491	843
05:30 PM	29	288	0	317	37	44	1	82	449	33	0	482	881
05:45 PM	31	286	0	317	31	26	0	57	429	27	0	456	830
Total	106	1120	0	1226	136	161	1	298	1712	118	0	1830	3354
Grand Total	250	2159	0	2409	357	373	2	732	3008	271	0	3279	6420
Apprch %	10.4	89.6	0		48.8	51	0.3		91.7	8.3	0		
Total %	3.9	33.6	0	37.5	5.6	5.8	0	11.4	46.9	4.2	0	51.1	

	Grand Avenue Southbound			Mountaineer Road Westbound			Grand Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	29	277	306	**46**	**47**	**93**	374	27	401	800
05:15 PM	17	269	286	22	44	66	**460**	31	**491**	843
05:30 PM	29	**288**	**317**	37	44	81	449	**33**	482	**880**
05:45 PM	**31**	286	317	31	26	57	429	27	456	830
Total Volume	106	1120	1226	136	161	297	1712	118	1830	3353
% App. Total	8.6	91.4		45.8	54.2		93.6	6.4		
PHF	.855	.972	.967	.739	.856	.798	.930	.894	.932	.953

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Site Code : 04215551
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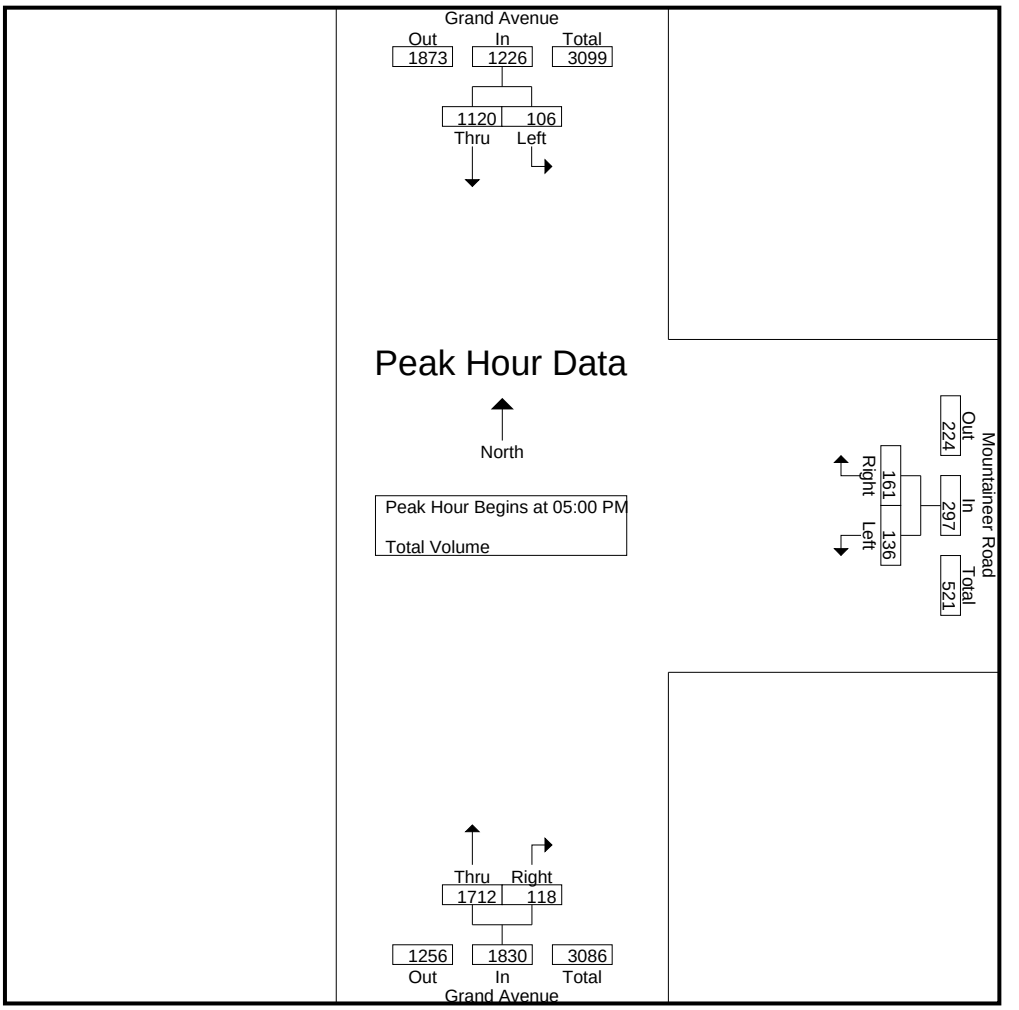

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:15 PM			05:00 PM		
+0 mins.	25	**293**	**318**	**71**	**73**	**144**	374	27	401
+15 mins.	**29**	277	306	70	62	132	**460**	31	**491**
+30 mins.	17	269	286	31	35	66	449	**33**	482
+45 mins.	29	288	317	46	47	93	429	27	456
Total Volume	100	1127	1227	218	217	435	1712	118	1830
% App. Total	8.1	91.9		50.1	49.9		93.6	6.4	
PHF	.862	.962	.965	.768	.743	.755	.930	.894	.932

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City of Walnut
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File Name : WNTGRSJAM
Site Code : 04215551
Start Date : 10/1/2015

Groups Printed- Total Volume

	Grand Avenue Southbound					San Jose Hills Road Westbound					Grand Avenue Northbound					San Jose Hills Road Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	60	341	26	0	427	14	3	16	0	33	18	246	48	1	313	43	10	32	0	85	858
07:15 AM	70	397	32	0	499	24	3	10	0	37	19	304	93	0	416	37	11	37	0	85	1037
07:30 AM	76	339	21	0	436	28	3	24	0	55	30	287	137	2	456	24	27	66	0	117	1064
07:45 AM	79	359	21	0	459	30	3	19	0	52	33	331	143	3	510	28	41	59	0	128	1149
Total	285	1436	100	0	1821	96	12	69	0	177	100	1168	421	6	1695	132	89	194	0	415	4108
08:00 AM	38	327	75	0	440	33	19	26	0	78	29	290	96	2	417	38	20	49	0	107	1042
08:15 AM	28	340	97	0	465	24	23	7	0	54	38	275	66	0	379	68	5	70	0	143	1041
08:30 AM	16	277	25	1	319	12	2	13	0	27	10	239	50	4	303	73	11	96	0	180	829
08:45 AM	24	325	11	1	361	9	4	12	0	25	13	254	36	5	308	20	5	35	0	60	754
Total	106	1269	208	2	1585	78	48	58	0	184	90	1058	248	11	1407	199	41	250	0	490	3666
Grand Total	391	2705	308	2	3406	174	60	127	0	361	190	2226	669	17	3102	331	130	444	0	905	7774
Apprch %	11.5	79.4	9	0.1		48.2	16.6	35.2	0		6.1	71.8	21.6	0.5		36.6	14.4	49.1	0		
Total %	5	34.8	4	0	43.8	2.2	0.8	1.6	0	4.6	2.4	28.6	8.6	0.2	39.9	4.3	1.7	5.7	0	11.6	

	Grand Avenue Southbound				San Jose Hills Road Westbound				Grand Avenue Northbound				San Jose Hills Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	76	339	21	436	28	3	24	55	30	287	137	454	24	27	66	117	1062
07:45 AM	**79**	**359**								**331**	**143**	**507**		**41**			**1146**
08:00 AM	38	327	75	440	**33**	19	**26**	**78**	29	290	96	415	38	20	49	107	1040
08:15 AM	28	340	**97**	**465**	24	**23**	7	54	**38**	275	66	379	**68**	5	**70**	**143**	1041
Total Volume	221	1365	214	1800	115	48	76	239	130	1183	442	1755	158	93	244	495	4289
% App. Total	12.3	75.8	11.9		48.1	20.1	31.8		7.4	67.4	25.2		31.9	18.8	49.3		
PHF	.699	.951	.552	.968	.871	.522	.731	.766	.855	.894	.773	.865	.581	.567	.871	.865	.936

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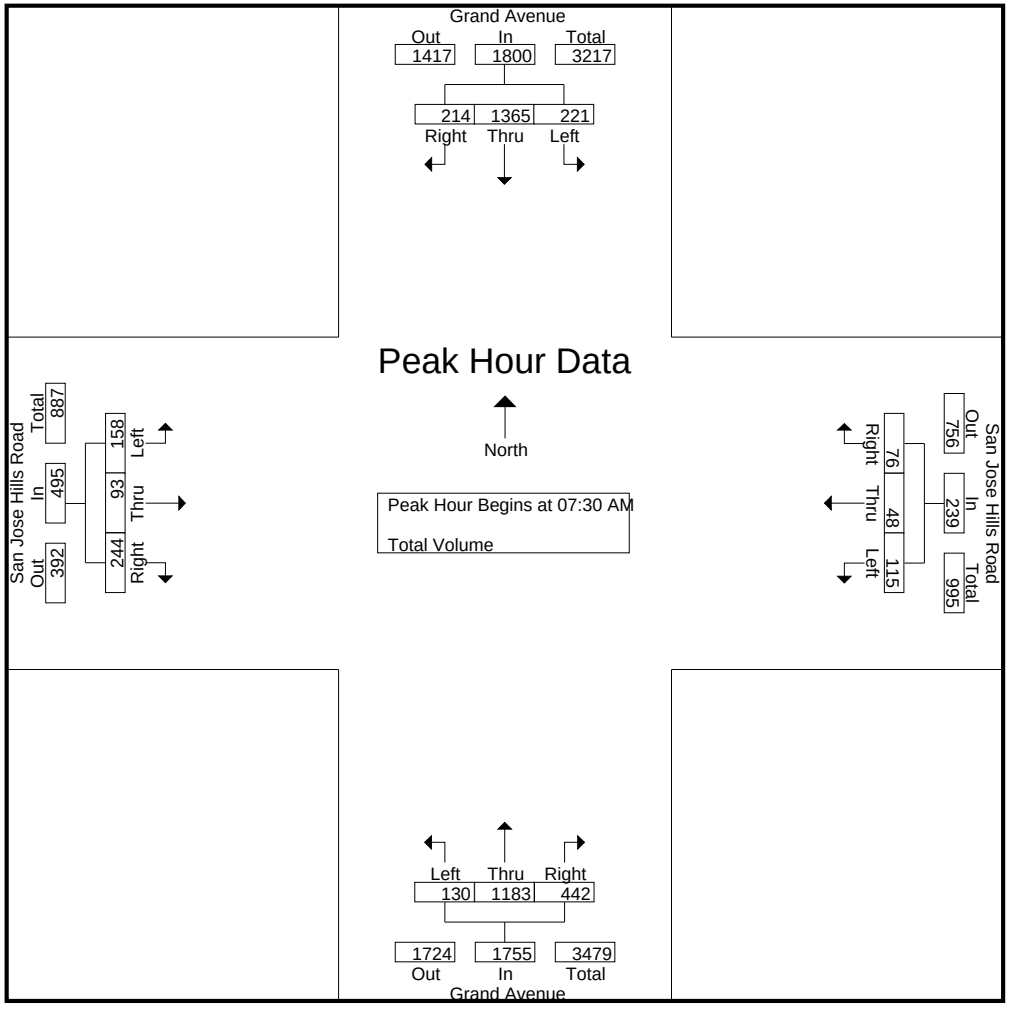

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N/S: Grand Avenue
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Site Code : 04215551
Start Date : 10/1/2015

	Grand Avenue Southbound				San Jose Hills Road Westbound				Grand Avenue Northbound				San Jose Hills Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:30 AM				07:15 AM				07:45 AM				
+0 mins.	70	**397**	32	**499**	28	3	24	55	19	304	93	416	28	**41**	59	128	
+15 mins.	76	339	21	436	30	3	19	52	30	287	137	454	38	20	49	107	
+30 mins.	**79**	359	21	459	**33**	19	**26**	**78**	**33**	**331**	**143**	**507**	68	5	70	143	
+45 mins.	38	327	**75**	440	24	**23**	7	54	29	290	96	415	**73**	11	**96**	**180**	
Total Volume	263	1422	149	1834	115	48	76	239	111	1212	469	1792	207	77	274	558	
% App. Total	14.3	77.5	8.1		48.1	20.1	31.8		6.2	67.6	26.2		37.1	13.8	49.1		
PHF	.832	.895	.497	.919	.871	.522	.731	.766	.841	.915	.820	.884	.709	.470	.714	.775	

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City of Walnut
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Groups Printed- Total Volume

	Grand Avenue Southbound					San Jose Hills Road Westbound					Grand Avenue Northbound					San Jose Hills Road Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	25	216	22	1	264	34	7	28	0	69	15	285	33	0	333	14	3	16	0	33	699
04:15 PM	28	269	22	1	320	54	6	38	0	98	25	297	48	2	372	21	4	19	0	44	834
04:30 PM	26	264	24	0	314	81	11	61	0	153	18	285	28	2	333	25	1	21	0	47	847
04:45 PM	24	302	32	0	358	48	7	44	0	99	19	329	41	2	391	16	2	24	0	42	890
Total	103	1051	100	2	1256	217	31	171	0	419	77	1196	150	6	1429	76	10	80	0	166	3270
05:00 PM	29	262	15	0	306	32	6	30	0	68	15	346	30	1	392	28	4	23	0	55	821
05:15 PM	10	265	27	0	302	32	6	21	0	59	26	453	29	0	508	17	2	32	0	51	920
05:30 PM	14	252	33	0	299	36	10	26	0	72	16	407	25	1	449	27	8	33	0	68	888
05:45 PM	28	288	21	0	337	23	6	21	0	50	23	422	25	1	471	31	2	25	0	58	916
Total	81	1067	96	0	1244	123	28	98	0	249	80	1628	109	3	1820	103	16	113	0	232	3545
Grand Total	184	2118	196	2	2500	340	59	269	0	668	157	2824	259	9	3249	179	26	193	0	398	6815
Apprch %	7.4	84.7	7.8	0.1		50.9	8.8	40.3	0		4.8	86.9	8	0.3		45	6.5	48.5	0		
Total %	2.7	31.1	2.9	0	36.7	5	0.9	3.9	0	9.8	2.3	41.4	3.8	0.1	47.7	2.6	0.4	2.8	0	5.8	

	Grand Avenue Southbound				San Jose Hills Road Westbound				Grand Avenue Northbound				San Jose Hills Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**29**	262	15	306	32	6	**30**	68	15	346	**30**	391	28	4	23	55	820
05:15 PM	10	265	27	302	32	6	21	59	**26**	**453**	29	**508**	17	2	32	51	**920**
05:30 PM	14	252	**33**	299	**36**	**10**	26	**72**	16	407	25	448	27	**8**	**33**	**68**	887
05:45 PM	28	**288**	21	**337**	23	6	21	50	23	422	25	470	**31**	2	25	58	915
Total Volume	81	1067	96	1244	123	28	98	249	80	1628	109	1817	103	16	113	232	3542
% App. Total	6.5	85.8	7.7		49.4	11.2	39.4		4.4	89.6	6		44.4	6.9	48.7		
PHF	.698	.926	.727	.923	.854	.700	.817	.865	.769	.898	.908	.894	.831	.500	.856	.853	.963

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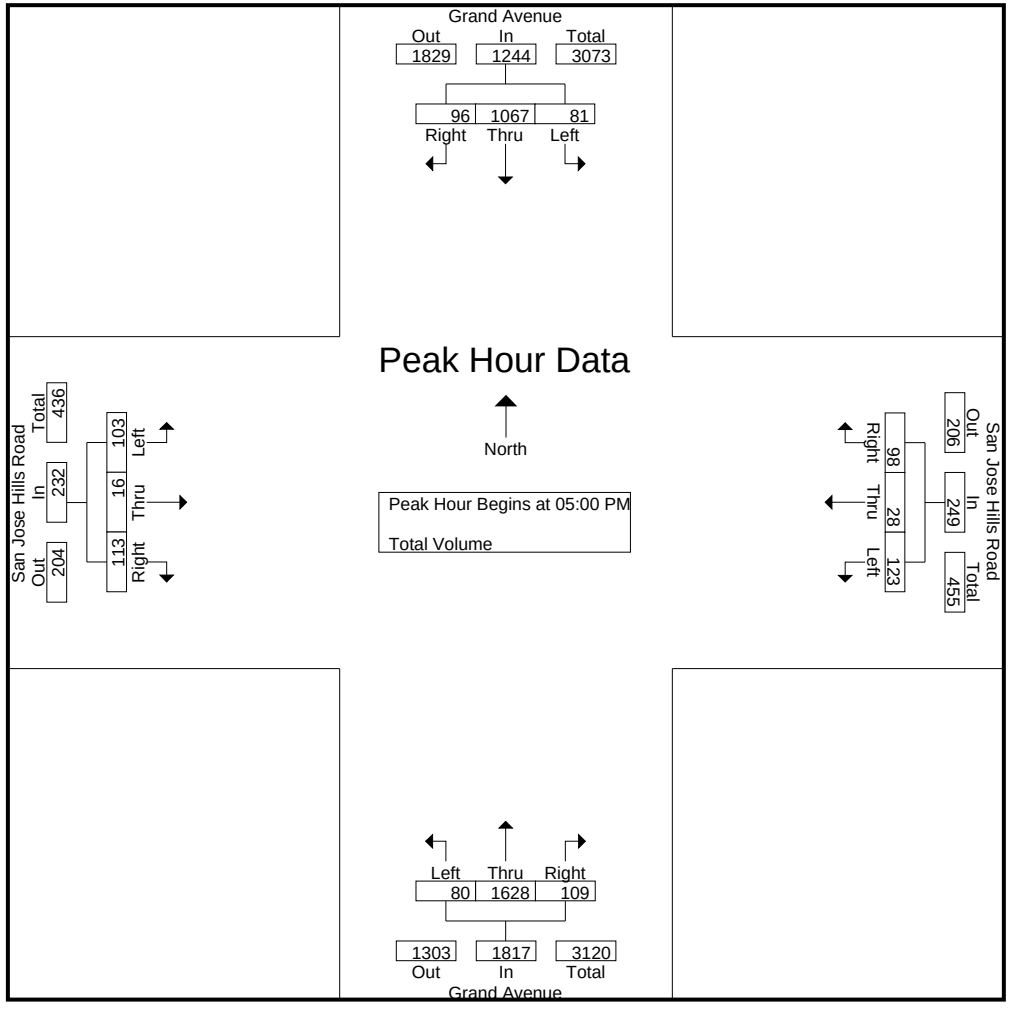

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File Name : WNTGRSJPM
Site Code : 04215551
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	Grand Avenue Southbound				San Jose Hills Road Westbound				Grand Avenue Northbound				San Jose Hills Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:00 PM				05:00 PM				05:00 PM				
+0 mins.	28	269	22	319	34	7	28	69	15	346	**30**	391	28	4	23	55	
+15 mins.	26	264	24	314	54	6	38	98	**26**	**453**	29	**508**	17	2	32	51	
+30 mins.	24	**302**	**32**	**358**	**81**	**11**	**61**	**153**	16	407	25	448	27	**8**	**33**	**68**	
+45 mins.	**29**	262	15	306	48	7	44	99	23	422	25	470	**31**	2	25	58	
Total Volume	107	1097	93	1297	217	31	171	419	80	1628	109	1817	103	16	113	232	
% App. Total	8.2	84.6	7.2		51.8	7.4	40.8		4.4	89.6	6		44.4	6.9	48.7		
PHF	.922	.908	.727	.906	.670	.705	.701	.685	.769	.898	.908	.894	.831	.500	.856	.853	

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E/W: Temple Avenue
Weather: Clear

File Name : WNTGRTEAM
Site Code : 04215551
Start Date : 10/1/2015
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Groups Printed- Total Volume

	Grand Avenue Southbound					Temple Avenue Westbound					Grand Avenue Northbound					Amar Road Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	100	292	42	0	434	15	152	62	0	229	38	195	130	0	363	63	132	38	0	233	1259
07:15 AM	83	290	37	0	410	25	165	40	0	230	65	289	158	0	512	61	202	47	0	310	1462
07:30 AM	116	267	47	0	430	22	84	56	0	162	58	339	188	0	585	85	192	38	0	315	1492
07:45 AM	111	251	42	0	404	29	92	41	0	162	52	398	165	0	615	72	189	24	0	285	1466
Total	410	1100	168	0	1678	91	493	199	0	783	213	1221	641	0	2075	281	715	147	0	1143	5679
08:00 AM	102	262	61	0	425	34	105	48	0	187	61	265	117	0	443	66	174	44	0	284	1339
08:15 AM	75	238	65	0	378	27	110	42	0	179	113	266	115	0	494	67	134	62	1	264	1315
08:30 AM	72	284	57	0	413	30	78	48	0	156	47	189	89	0	325	79	130	68	0	277	1171
08:45 AM	50	243	35	0	328	18	56	28	0	102	44	190	78	0	312	72	111	47	0	230	972
Total	299	1027	218	0	1544	109	349	166	0	624	265	910	399	0	1574	284	549	221	1	1055	4797
Grand Total	709	2127	386	0	3222	200	842	365	0	1407	478	2131	1040	0	3649	565	1264	368	1	2198	10476
Apprch %	22	66	12	0		14.2	59.8	25.9	0		13.1	58.4	28.5	0		25.7	57.5	16.7	0		
Total %	6.8	20.3	3.7	0	30.8	1.9	8	3.5	0	13.4	4.6	20.3	9.9	0	34.8	5.4	12.1	3.5	0	21	

	Grand Avenue Southbound				Temple Avenue Westbound				Grand Avenue Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	83	**290**	37	410	25	**165**	40	**230**	**65**	289	158	512	61	**202**	**47**	310	1462
07:30 AM	**116**	267	47	**430**	22	84	**56**	162	58	339	**188**	585	**85**	192	38	**315**	**1492**
07:45 AM	111	251	42	404	29	92	41	162	52	**398**	165	**615**	72	189	24	285	1466
08:00 AM	102	262	**61**	425	**34**	105	48	187	61	265	117	443	66	174	44	284	1339
Total Volume	412	1070	187	1669	110	446	185	741	236	1291	628	2155	284	757	153	1194	5759
% App. Total	24.7	64.1	11.2		14.8	60.2	25		11	59.9	29.1		23.8	63.4	12.8		
PHF	.888	.922	.766	.970	.809	.676	.826	.805	.908	.811	.835	.876	.835	.937	.814	.948	.965

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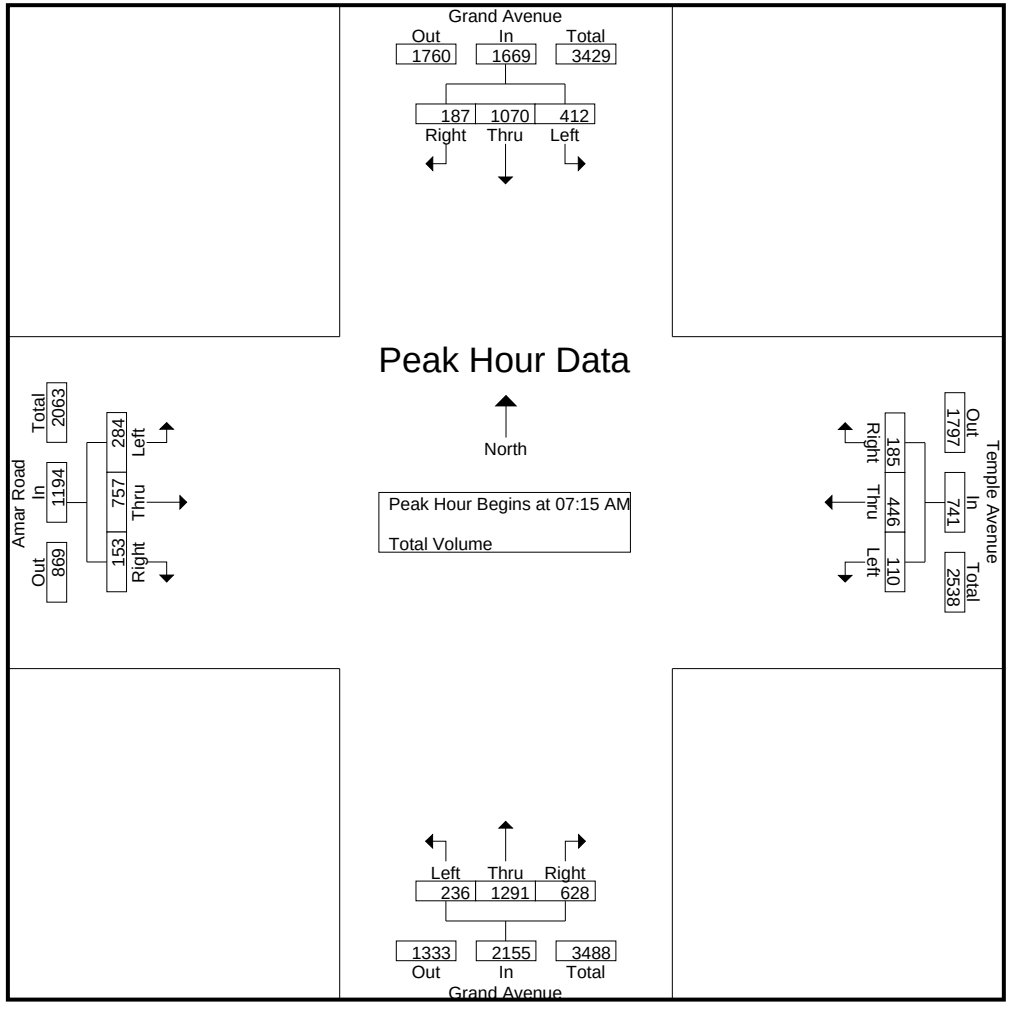
City of Walnut
N/S: Grand Avenue
E/W: Temple Avenue
Weather: Clear

File Name : WNTGRTEAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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PO Box 1178
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(951) 268-6268

City of Walnut
N/S: Grand Avenue
E/W: Temple Avenue
Weather: Clear

File Name : WNTGRTEAM
Site Code : 04215551
Start Date : 10/1/2015

	Grand Avenue Southbound				Temple Avenue Westbound				Grand Avenue Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:15 AM				07:15 AM				
+0 mins.	100	**292**	42	**434**	15	152	**62**	229	**65**	289	158	512	61	**202**	**47**	310	
+15 mins.	83	290	37	410	25	**165**	40	**230**	58	339	**188**	585	**85**	192	38	**315**	
+30 mins.	**116**	267	**47**	430	22	84	56	162	52	**398**	165	**615**	72	189	24	285	
+45 mins.	111	251	42	404	**29**	92	41	162	61	265	117	443	66	174	44	284	
Total Volume	410	1100	168	1678	91	493	199	783	236	1291	628	2155	284	757	153	1194	
% App. Total	24.4	65.6	10		11.6	63	25.4		11	59.9	29.1		23.8	63.4	12.8		
PHF	.884	.942	.894	.967	.784	.747	.802	.851	.908	.811	.835	.876	.835	.937	.814	.948	

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City of Walnut
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File Name : WNTGRTEPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound					Temple Avenue Westbound					Grand Avenue Northbound					Amar Road Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	61	188	50	0	299	64	112	60	0	236	62	183	74	0	319	93	134	75	0	302	1156
04:15 PM	80	206	46	0	332	86	118	71	0	275	53	228	100	0	381	71	161	88	0	320	1308
04:30 PM	84	256	73	0	413	97	147	62	0	306	47	233	56	0	336	72	149	67	2	290	1345
04:45 PM	73	204	71	0	348	89	160	57	1	307	59	266	79	0	404	71	171	68	0	310	1369
Total	298	854	240	0	1392	336	537	250	1	1124	221	910	309	0	1440	307	615	298	2	1222	5178
05:00 PM	57	230	72	0	359	98	138	75	0	311	73	238	60	0	371	94	159	74	1	328	1369
05:15 PM	50	192	50	1	293	85	157	70	0	312	91	330	79	0	500	86	165	62	0	313	1418
05:30 PM	52	206	73	0	331	99	178	95	0	372	76	293	68	0	437	91	153	81	0	325	1465
05:45 PM	50	204	67	1	322	77	186	86	1	350	87	289	81	0	457	75	174	75	0	324	1453
Total	209	832	262	2	1305	359	659	326	1	1345	327	1150	288	0	1765	346	651	292	1	1290	5705
Grand Total	507	1686	502	2	2697	695	1196	576	2	2469	548	2060	597	0	3205	653	1266	590	3	2512	10883
Apprch %	18.8	62.5	18.6	0.1		28.1	48.4	23.3	0.1		17.1	64.3	18.6	0		26	50.4	23.5	0.1		
Total %	4.7	15.5	4.6	0	24.8	6.4	11	5.3	0	22.7	5	18.9	5.5	0	29.4	6	11.6	5.4	0	23.1	

	Grand Avenue Southbound				Temple Avenue Westbound				Grand Avenue Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**57**	**230**	72	**359**	98	138	75	311	73	238	60	371	**94**	159	74	**327**	1368
05:15 PM	50	192	50	292	85	157	70	312	**91**	**330**	79	**500**	86	165	62	313	1417
05:30 PM	52	206	**73**	331	**99**	178	**95**	**372**	76	293	68	437	91	153	**81**	325	**1465**
05:45 PM	50	204	67	321	77	**186**	86	349	87	289	**81**	457	75	**174**	75	324	1451
Total Volume	209	832	262	1303	359	659	326	1344	327	1150	288	1765	346	651	292	1289	5701
% App. Total	16	63.9	20.1		26.7	49	24.3		18.5	65.2	16.3		26.8	50.5	22.7		
PHF	.917	.904	.897	.907	.907	.886	.858	.903	.898	.871	.889	.883	.920	.935	.901	.985	.973

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PO Box 1178
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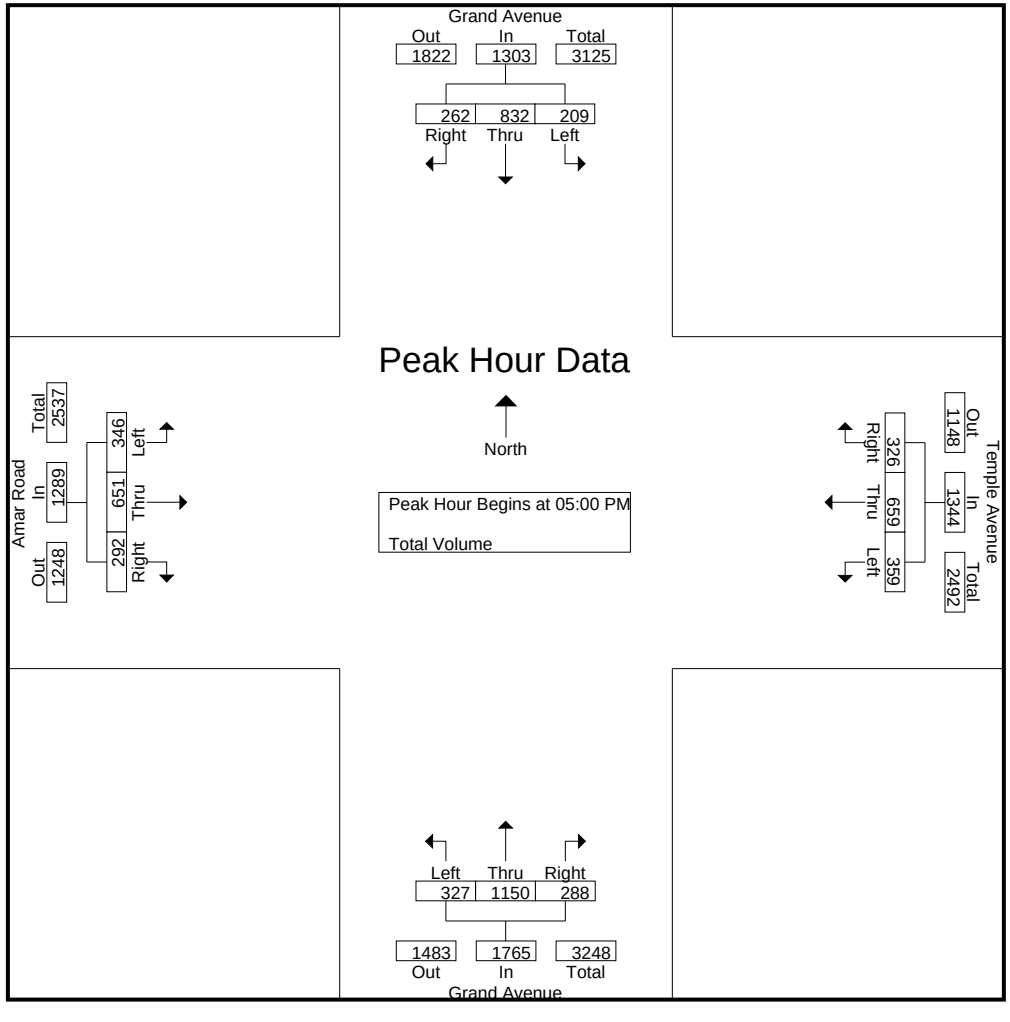
City of Walnut
N/S: Grand Avenue
E/W: Temple Avenue
Weather: Clear

File Name : WNTGRTEPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Grand Avenue
E/W: Temple Avenue
Weather: Clear

File Name : WNTGRTEPM
Site Code : 04215551
Start Date : 10/1/2015

	Grand Avenue Southbound				Temple Avenue Westbound				Grand Avenue Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	80	206	46	332	98	138	75	311	73	238	60	371	**94**	159	74	**327**	
+15 mins.	**84**	**256**	**73**	**413**	85	157	70	312	**91**	**330**	79	**500**	86	165	62	313	
+30 mins.	73	204	71	348	**99**	178	**95**	**372**	76	293	68	437	91	153	**81**	325	
+45 mins.	57	230	72	359	77	**186**	86	349	87	289	**81**	457	75	**174**	75	324	
Total Volume	294	896	262	1452	359	659	326	1344	327	1150	288	1765	346	651	292	1289	
% App. Total	20.2	61.7	18		26.7	49	24.3		18.5	65.2	16.3		26.8	50.5	22.7		
PHF	.875	.875	.897	.879	.907	.886	.858	.903	.898	.871	.889	.883	.920	.935	.901	.985	

Counts Unlimited
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City of Walnut
N/S: Grand Avenue
E/W: La Puente Road
Weather: Clear

File Name : WNTGRLPAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound					La Puente Road Westbound					Grand Avenue Northbound					La Puente Road Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	0	280	69	0	349	20	18	1	0	39	51	344	15	0	410	50	3	46	0	99	897
07:15 AM	0	247	128	0	375	42	71	2	0	115	57	368	26	0	451	115	30	99	0	244	1185
07:30 AM	0	294	85	0	379	26	21	5	0	52	34	488	18	0	540	148	25	138	0	311	1282
07:45 AM	0	250	27	0	277	25	8	4	0	37	25	400	15	0	440	111	16	114	0	241	995
Total	0	1071	309	0	1380	113	118	12	0	243	167	1600	74	0	1841	424	74	397	0	895	4359
08:00 AM	1	329	37	0	367	20	8	1	0	29	43	428	11	0	482	33	5	65	0	103	981
08:15 AM	0	280	37	0	317	33	6	2	0	41	51	356	9	1	417	39	3	69	0	111	886
08:30 AM	0	331	27	0	358	32	10	2	0	44	42	286	7	1	336	35	1	72	0	108	846
08:45 AM	2	280	42	0	324	29	8	2	0	39	45	241	11	0	297	34	7	55	0	96	756
Total	3	1220	143	0	1366	114	32	7	0	153	181	1311	38	2	1532	141	16	261	0	418	3469
Grand Total	3	2291	452	0	2746	227	150	19	0	396	348	2911	112	2	3373	565	90	658	0	1313	7828
Apprch %	0.1	83.4	16.5	0		57.3	37.9	4.8	0		10.3	86.3	3.3	0.1		43	6.9	50.1	0		
Total %	0	29.3	5.8	0	35.1	2.9	1.9	0.2	0	5.1	4.4	37.2	1.4	0	43.1	7.2	1.1	8.4	0	16.8	

	Grand Avenue Southbound				La Puente Road Westbound				Grand Avenue Northbound				La Puente Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	247	**128**	375	**42**	**71**	2	**115**	**57**	368	**26**	451	115	**30**	99	244	1185
07:30 AM	0	294	85	**379**	26	21	**5**	52	34	**488**	18	**540**	**148**	25	**138**	**311**	**1282**
07:45 AM	0	250	27	277	25	8	4	37	25	400	15	440	111	16	114	241	995
08:00 AM	**1**	**329**	37	367	20	8	1	29	43	428	11	482	33	5	65	103	981
Total Volume	1	1120	277	1398	113	108	12	233	159	1684	70	1913	407	76	416	899	4443
% App. Total	0.1	80.1	19.8		48.5	46.4	5.2		8.3	88	3.7		45.3	8.5	46.3		
PHF	.250	.851	.541	.922	.673	.380	.600	.507	.697	.863	.673	.886	.688	.633	.754	.723	.866

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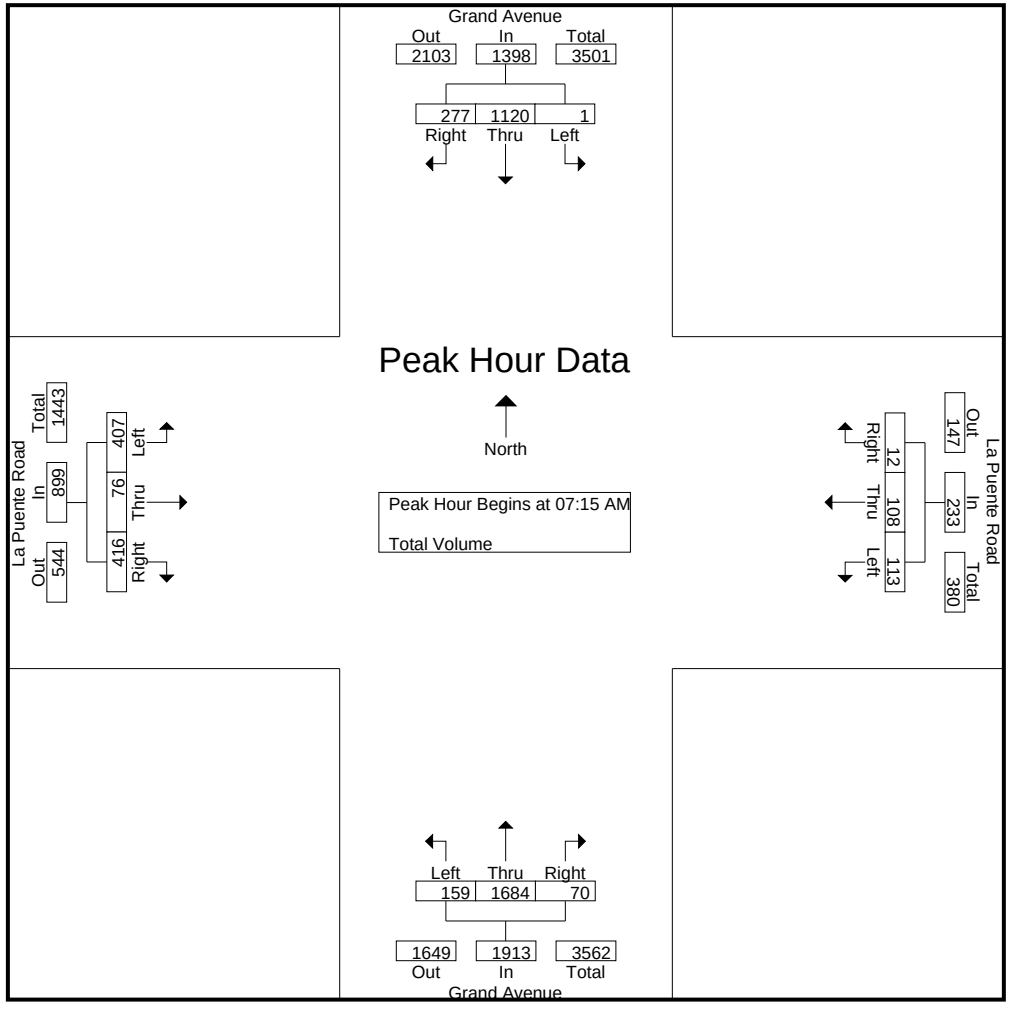
City of Walnut
N/S: Grand Avenue
E/W: La Puente Road
Weather: Clear

File Name : WNTGRLPAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Grand Avenue
E/W: La Puente Road
Weather: Clear

File Name : WNTGRLPAM
Site Code : 04215551
Start Date : 10/1/2015

	Grand Avenue Southbound				La Puente Road Westbound				Grand Avenue Northbound				La Puente Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:00 AM				07:15 AM				07:15 AM				
+0 mins.	0	247	**128**	375	20	18	1	39	**57**	368	**26**	451	115	**30**	99	244	
+15 mins.	0	294	85	**379**	**42**	**71**	2	**115**	34	**488**	18	**540**	**148**	25	**138**	**311**	
+30 mins.	0	250	27	277	26	21	**5**	52	25	400	15	440	111	16	114	241	
+45 mins.	**1**	**329**	37	367	25	8	4	37	43	428	11	482	33	5	65	103	
Total Volume	1	1120	277	1398	113	118	12	243	159	1684	70	1913	407	76	416	899	
% App. Total	0.1	80.1	19.8		46.5	48.6	4.9		8.3	88	3.7		45.3	8.5	46.3		
PHF	.250	.851	.541	.922	.673	.415	.600	.528	.697	.863	.673	.886	.688	.633	.754	.723	

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City of Walnut
N/S: Grand Avenue
E/W: La Puente Road
Weather: Clear

File Name : WNTGRLPPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound					La Puente Road Westbound					Grand Avenue Northbound					La Puente Road Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	1	272	40	0	313	16	9	2	0	27	45	319	24	0	388	42	7	64	0	113	841
04:15 PM	0	331	39	0	370	14	5	3	0	22	36	282	27	0	345	63	13	81	0	157	894
04:30 PM	0	373	43	0	416	11	5	2	0	18	36	311	13	1	361	43	6	84	0	133	928
04:45 PM	2	319	43	1	365	21	4	2	0	27	43	319	20	0	382	59	12	97	0	168	942
Total	3	1295	165	1	1464	62	23	9	0	94	160	1231	84	1	1476	207	38	326	0	571	3605
05:00 PM	0	350	48	0	398	20	6	2	0	28	44	377	29	0	450	52	9	72	0	133	1009
05:15 PM	3	280	47	0	330	20	8	6	0	34	65	366	43	0	474	62	15	107	0	184	1022
05:30 PM	1	343	45	0	389	26	6	3	0	35	74	440	46	0	560	58	13	72	0	143	1127
05:45 PM	3	286	50	0	339	19	15	1	0	35	50	352	35	1	438	73	26	99	0	198	1010
Total	7	1259	190	0	1456	85	35	12	0	132	233	1535	153	1	1922	245	63	350	0	658	4168
Grand Total	10	2554	355	1	2920	147	58	21	0	226	393	2766	237	2	3398	452	101	676	0	1229	7773
Apprch %	0.3	87.5	12.2	0		65	25.7	9.3	0		11.6	81.4	7	0.1		36.8	8.2	55	0		
Total %	0.1	32.9	4.6	0	37.6	1.9	0.7	0.3	0	2.9	5.1	35.6	3	0	43.7	5.8	1.3	8.7	0	15.8	

	Grand Avenue Southbound				La Puente Road Westbound				Grand Avenue Northbound				La Puente Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	**350**	48	**398**	20	6	2	28	44	377	29	450	52	9	72	133	1009
05:15 PM	**3**	280	47	330	20	8	**6**	34	65	366	43	474	62	15	**107**	184	1022
05:30 PM	1	343	45	389	**26**	6	3	**35**	**74**	**440**	**46**	**560**	58	13	72	143	**1127**
05:45 PM	3	286	**50**	339	19	**15**	1	35	50	352	35	437	**73**	**26**	99	**198**	1009
Total Volume	7	1259	190	1456	85	35	12	132	233	1535	153	1921	245	63	350	658	4167
% App. Total	0.5	86.5	13		64.4	26.5	9.1		12.1	79.9	8		37.2	9.6	53.2		
PHF	.583	.899	.950	.915	.817	.583	.500	.943	.787	.872	.832	.858	.839	.606	.818	.831	.924

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City of Walnut
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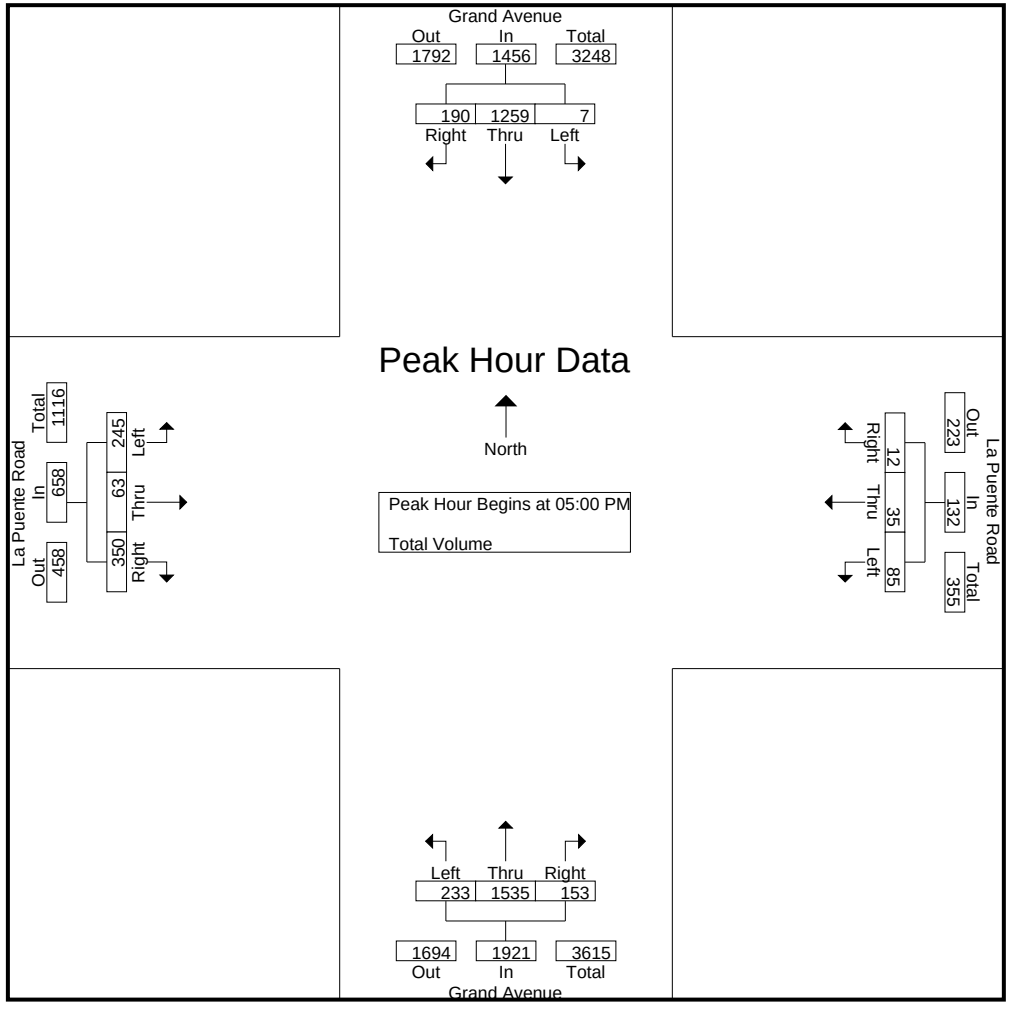
E/W: La Puente Road
Weather: Clear

File Name : WNTGRLPPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Grand Avenue
E/W: La Puente Road
Weather: Clear

File Name : WNTGRLPPM
Site Code : 04215551
Start Date : 10/1/2015

	Grand Avenue Southbound				La Puente Road Westbound				Grand Avenue Northbound				La Puente Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	331	39	370	20	6	2	28	44	377	29	450	52	9	72	133	
+15 mins.	0	**373**	43	**416**	20	8	**6**	34	65	366	43	474	62	15	**107**	184	
+30 mins.	**2**	319	43	364	**26**	6	3	**35**	**74**	**440**	**46**	**560**	58	13	72	143	
+45 mins.	0	350	**48**	398	19	**15**	1	35	50	352	35	437	**73**	**26**	99	**198**	
Total Volume	2	1373	173	1548	85	35	12	132	233	1535	153	1921	245	63	350	658	
% App. Total	0.1	88.7	11.2		64.4	26.5	9.1		12.1	79.9	8		37.2	9.6	53.2		
PHF	.250	.920	.901	.930	.817	.583	.500	.943	.787	.872	.832	.858	.839	.606	.818	.831	

Counts Unlimited
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(951) 268-6268

City of Walnut
N/S: Grand Avenue
E/W: Valley Boulevard
Weather: Clear

File Name : WNTGRVAAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound					Valley Boulevard Westbound					Grand Avenue Northbound					Valley Boulevard Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	31	215	94	0	340	39	320	44	1	404	76	340	83	0	499	74	112	33	0	219	1462
07:15 AM	50	225	107	1	383	53	311	40	4	408	91	348	117	0	556	88	120	46	0	254	1601
07:30 AM	66	238	108	0	412	37	266	28	3	334	67	364	85	0	516	112	148	54	2	316	1578
07:45 AM	60	260	87	0	407	38	219	27	6	290	57	312	79	0	448	127	120	36	0	283	1428
Total	207	938	396	1	1542	167	1116	139	14	1436	291	1364	364	0	2019	401	500	169	2	1072	6069
08:00 AM	51	250	90	0	391	39	257	31	1	328	72	322	68	0	462	107	128	29	0	264	1445
08:15 AM	29	258	95	0	382	60	220	25	5	310	41	302	80	0	423	78	118	41	0	237	1352
08:30 AM	53	250	84	3	390	37	253	37	4	331	52	225	67	0	344	61	111	40	1	213	1278
08:45 AM	42	242	86	1	371	41	190	23	1	255	56	216	75	1	348	72	107	51	2	232	1206
Total	175	1000	355	4	1534	177	920	116	11	1224	221	1065	290	1	1577	318	464	161	3	946	5281
Grand Total	382	1938	751	5	3076	344	2036	255	25	2660	512	2429	654	1	3596	719	964	330	5	2018	11350
Apprch %	12.4	63	24.4	0.2		12.9	76.5	9.6	0.9		14.2	67.5	18.2	0		35.6	47.8	16.4	0.2		
Total %	3.4	17.1	6.6	0	27.1	3	17.9	2.2	0.2	23.4	4.5	21.4	5.8	0	31.7	6.3	8.5	2.9	0	17.8	

	Grand Avenue Southbound				Valley Boulevard Westbound				Grand Avenue Northbound				Valley Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	31	215	94	340	39	**320**	**44**	403	76	340	83	499	74	112	33	219	1461
07:15 AM	50	225	107	382	**53**	311	40	**404**	**91**	348	**117**	**556**	88	120	46	254	**1596**
07:30 AM	**66**	238	**108**	**412**	37	266	28	331	67	**364**	85	516	112	**148**	**54**	**314**	1573
07:45 AM	60	**260**	87	407	38	219	27	284	57	312	79	448	**127**	120	36	283	1422
Total Volume	207	938	396	1541	167	1116	139	1422	291	1364	364	2019	401	500	169	1070	6052
% App. Total	13.4	60.9	25.7		11.7	78.5	9.8		14.4	67.6	18		37.5	46.7	15.8		
PHF	.784	.902	.917	.935	.788	.872	.790	.880	.799	.937	.778	.908	.789	.845	.782	.852	.948

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City of Walnut
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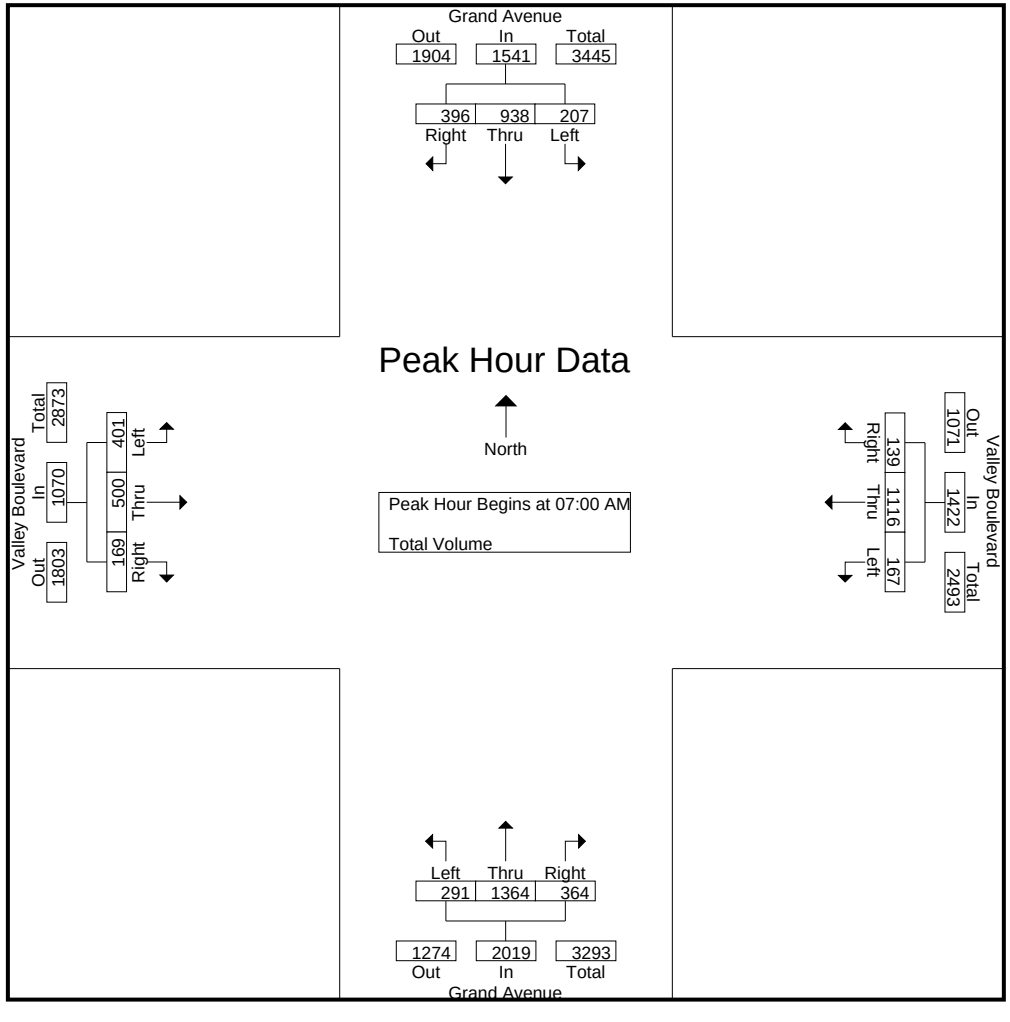
E/W: Valley Boulevard
Weather: Clear

File Name : WNTGRVAAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Grand Avenue
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Weather: Clear

File Name : WNTGRVAAM
Site Code : 04215551
Start Date : 10/1/2015

	Grand Avenue Southbound				Valley Boulevard Westbound				Grand Avenue Northbound				Valley Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:00 AM				07:00 AM				07:15 AM				
+0 mins.	50	225	107	382	39	**320**	**44**	403	76	340	83	499	88	120	46	254	
+15 mins.	**66**	238	**108**	**412**	**53**	311	40	**404**	**91**	348	**117**	**556**	112	**148**	**54**	**314**	
+30 mins.	60	**260**	87	407	37	266	28	331	67	**364**	85	516	**127**	120	36	283	
+45 mins.	51	250	90	391	38	219	27	284	57	312	79	448	107	128	29	264	
Total Volume	227	973	392	1592	167	1116	139	1422	291	1364	364	2019	434	516	165	1115	
% App. Total	14.3	61.1	24.6		11.7	78.5	9.8		14.4	67.6	18		38.9	46.3	14.8		
PHF	.860	.936	.907	.966	.788	.872	.790	.880	.799	.937	.778	.908	.854	.872	.764	.888	

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City of Walnut
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Groups Printed- Total Volume

	Grand Avenue Southbound					Valley Boulevard Westbound					Grand Avenue Northbound					Valley Boulevard Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	61	221	44	1	327	63	160	41	1	265	62	188	32	6	288	105	310	64	5	484	1364
04:15 PM	74	332	47	0	453	80	117	34	3	234	51	169	28	7	255	129	256	49	3	437	1379
04:30 PM	74	274	51	0	399	71	151	30	3	255	38	197	41	2	278	144	355	77	2	578	1510
04:45 PM	109	296	52	4	461	86	134	22	2	244	47	198	30	6	281	134	313	92	0	539	1525
Total	318	1123	194	5	1640	300	562	127	9	998	198	752	131	21	1102	512	1234	282	10	2038	5778
05:00 PM	81	250	52	1	384	101	176	50	2	329	61	253	37	6	357	158	396	90	1	645	1715
05:15 PM	109	280	48	2	439	110	180	64	4	358	63	268	48	8	387	167	357	63	4	591	1775
05:30 PM	84	263	45	2	394	101	212	72	5	390	54	273	54	10	391	180	397	76	0	653	1828
05:45 PM	103	249	64	3	419	102	134	58	3	297	52	246	40	7	345	154	381	58	2	595	1656
Total	377	1042	209	8	1636	414	702	244	14	1374	230	1040	179	31	1480	659	1531	287	7	2484	6974
Grand Total	695	2165	403	13	3276	714	1264	371	23	2372	428	1792	310	52	2582	1171	2765	569	17	4522	12752
Apprch %	21.2	66.1	12.3	0.4		30.1	53.3	15.6	1		16.6	69.4	12	2		25.9	61.1	12.6	0.4		
Total %	5.5	17	3.2	0.1	25.7	5.6	9.9	2.9	0.2	18.6	3.4	14.1	2.4	0.4	20.2	9.2	21.7	4.5	0.1	35.5	

	Grand Avenue Southbound					Valley Boulevard Westbound					Grand Avenue Northbound					Valley Boulevard Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	81	250	52	1	384	101	176	50	2	329	61	253	37	6	357	158	396	**90**			
05:15 PM	**109**	**280**	**48**	**2**	**439**	**110**	**180**	**64**	**4**	**358**	**63**	268	48	8	387	167	357	63	**4**	591	1775
05:30 PM	84	263	45	2	394	101	**212**	**72**	**5**	**390**	54	**273**	**54**	**10**	**391**	**180**	**397**			**653**	**1828**
05:45 PM	103	249	**64**	**3**	419	102	134	58	3	297	52	246	40	7	345	154	381	58	2	595	1656
Total Volume	377	1042	209	8	1636	414	702	244	14	1374	230	1040	179	31	1480	659	1531	287	7	2484	6974
% App. Total	23	63.7	12.8	0.5		30.1	51.1	17.8	1		15.5	70.3	12.1	2.1		26.5	61.6	11.6	0.3		
PHF	.865	.930	.816	.667	.932	.941	.828	.847	.700	.881	.913	.952	.829	.775	.946	.915	.964	.797	.438	.951	.954

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City of Walnut
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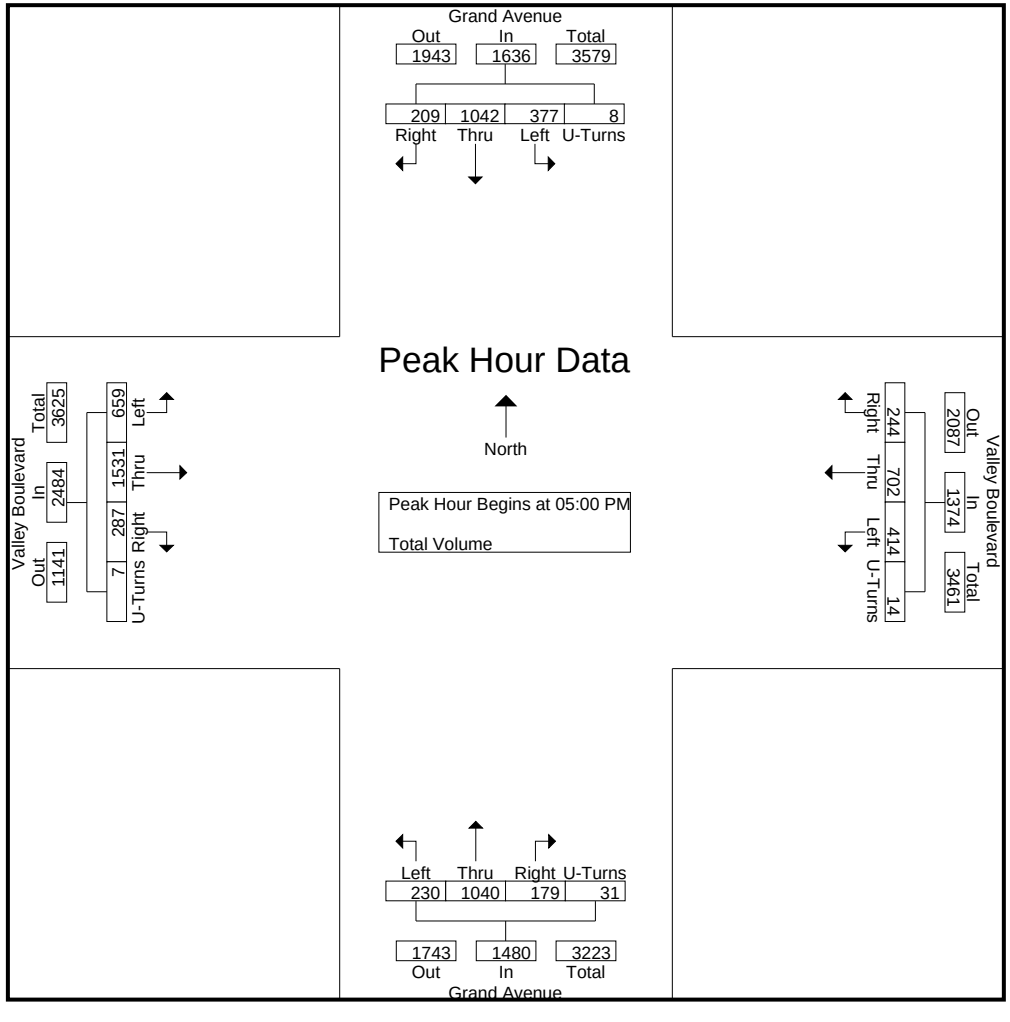
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Grand Avenue
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	Grand Avenue Southbound					Valley Boulevard Westbound					Grand Avenue Northbound					Valley Boulevard Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	04:15 PM					05:00 PM					05:00 PM					05:00 PM					
+0 mins.	74	**332**																**90**			
+15 mins.	**74**	**274**	**51**	**0**	**399**	**110**	**180**	**64**	**4**	**358**	**63**	268	48	8	387	167	357	63	**4**	591	
+30 mins.	**109**	296	**52**	**4**	**461**	101	**212**	**72**	**5**	**390**	54	**273**	**54**	**10**	**391**	**180**	**397**			**653**	
+45 mins.	81	250	52	1	384	102	134	58	3	297	52	246	40	7	345	154	381	58	2	595	
Total Volume	338	1152	202	5	1697	414	702	244	14	1374	230	1040	179	31	1480	659	1531	287	7	2484	
% App. Total	19.9	67.9	11.9	0.3		30.1	51.1	17.8	1		15.5	70.3	12.1	2.1		26.5	61.6	11.6	0.3		
PHF	.775	.867	.971	.313	.920	.941	.828	.847	.700	.881	.913	.952	.829	.775	.946	.915	.964	.797	.438	.951	

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City of Walnut
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E/W: Baker Parkway
Weather: Clear

File Name : WNTGRBAAM
Site Code : 04215551
Start Date : 10/1/2015
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Groups Printed- Total Volume

	Grand Avenue Southbound					Construction Driveway Westbound					Grand Avenue Northbound					Baker Parkway Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	0	235	33	0	268	0	0	0	0	0	29	535	0	0	564	8	0	4	0	12	844
07:15 AM	0	221	50	0	271	0	0	0	0	0	39	597	0	0	636	11	0	11	0	22	929
07:30 AM	0	300	17	0	317	0	0	0	0	0	31	568	0	0	599	10	0	13	0	23	939
07:45 AM	0	246	7	0	253	0	0	0	0	0	17	553	0	0	570	10	0	8	0	18	841
Total	0	1002	107	0	1109	0	0	0	0	0	116	2253	0	0	2369	39	0	36	0	75	3553
08:00 AM	0	251	11	0	262	0	0	0	0	0	22	541	0	0	563	8	0	6	0	14	839
08:15 AM	0	239	27	0	266	0	0	0	0	0	29	515	0	0	544	5	0	5	0	10	820
08:30 AM	0	271	13	0	284	0	0	0	0	0	32	425	0	0	457	4	0	12	0	16	757
08:45 AM	0	282	10	0	292	0	0	0	0	0	25	427	0	0	452	3	0	14	0	17	761
Total	0	1043	61	0	1104	0	0	0	0	0	108	1908	0	0	2016	20	0	37	0	57	3177
Grand Total	0	2045	168	0	2213	0	0	0	0	0	224	4161	0	0	4385	59	0	73	0	132	6730
Apprch %	0	92.4	7.6	0		0	0	0	0		5.1	94.9	0	0		44.7	0	55.3	0		
Total %	0	30.4	2.5	0	32.9	0	0	0	0	0	3.3	61.8	0	0	65.2	0.9	0	1.1	0	2	

	Grand Avenue Southbound				Construction Driveway Westbound				Grand Avenue Northbound				Baker Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	235	33	268	0	0	0	0	29	535	0	564	8	0	4	12	844
07:15 AM	0	221	**50**	271	0	0	0	0	**39**	**597**	0	**636**	**11**	0	11	22	929
07:30 AM	0	**300**	17	**317**	0	0	0	0	31	568	0	599	10	0	**13**	**23**	**939**
07:45 AM	0	246	7	253	0	0	0	0	17	553	0	570	10	0	8	18	841
Total Volume	0	1002	107	1109	0	0	0	0	116	2253	0	2369	39	0	36	75	3553
% App. Total	0	90.4	9.6		0	0	0		4.9	95.1	0		52	0	48		
PHF	.000	.835	.535	.875	.000	.000	.000	.000	.744	.943	.000	.931	.886	.000	.692	.815	.946

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Site Code : 04215551
Start Date : 10/1/2015
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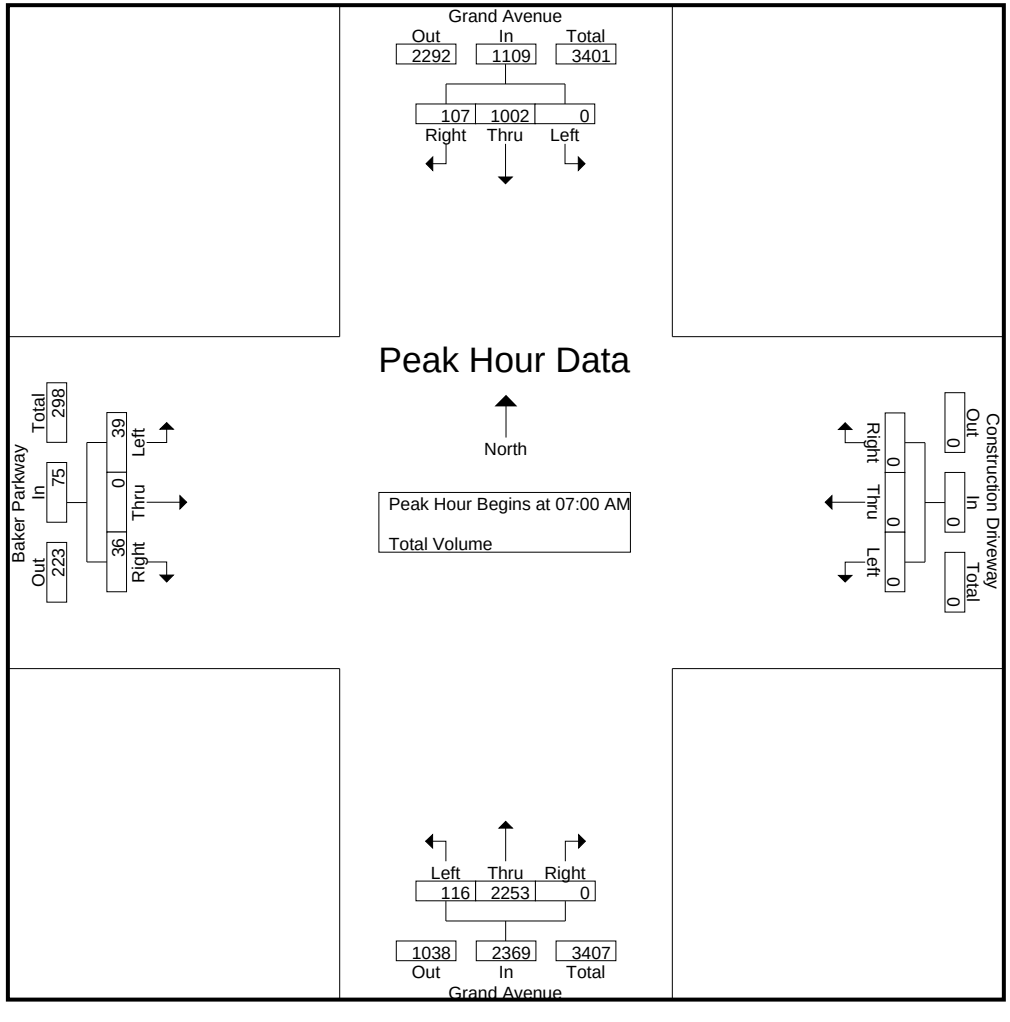

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City of Walnut
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	Grand Avenue Southbound				Construction Driveway Westbound				Grand Avenue Northbound				Baker Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:15 AM				
+0 mins.	0	235	33	268	0	0	0	0	29	535	0	564	**11**	0	11	22	
+15 mins.	0	221	**50**	271	0	0	0	0	**39**	**597**	0	**636**	10	0	**13**	**23**	
+30 mins.	0	**300**	17	**317**	0	0	0	0	31	568	0	599	10	0	8	18	
+45 mins.	0	246	7	253	0	0	0	0	17	553	0	570	8	0	6	14	
Total Volume	0	1002	107	1109	0	0	0	0	116	2253	0	2369	39	0	38	77	
% App. Total	0	90.4	9.6		0	0	0		4.9	95.1	0		50.6	0	49.4		
PHF	.000	.835	.535	.875	.000	.000	.000	.000	.744	.943	.000	.931	.886	.000	.731	.837	

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Groups Printed- Total Volume

	Grand Avenue Southbound					Construction Driveway Westbound					Grand Avenue Northbound					Baker Parkway Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	0	379	5	0	384	0	0	0	0	0	11	213	0	0	224	42	0	18	0	60	668
04:15 PM	0	375	13	0	388	0	0	0	0	0	20	244	0	0	264	23	0	13	0	36	688
04:30 PM	0	362	8	0	370	0	0	0	0	0	5	248	0	1	254	32	0	22	0	54	678
04:45 PM	0	375	8	0	383	0	0	0	0	0	6	280	0	0	286	35	0	9	0	44	713
Total	0	1491	34	0	1525	0	0	0	0	0	42	985	0	1	1028	132	0	62	0	194	2747
05:00 PM	0	402	8	0	410	0	0	0	0	0	10	283	0	0	293	33	0	22	0	55	758
05:15 PM	0	405	6	0	411	0	0	0	0	0	8	336	0	0	344	38	0	26	0	64	819
05:30 PM	0	410	13	1	424	2	0	0	0	2	6	330	0	0	336	74	0	22	0	96	858
05:45 PM	0	350	23	0	373	1	0	0	0	1	9	312	0	4	325	27	0	24	0	51	750
Total	0	1567	50	1	1618	3	0	0	0	3	33	1261	0	4	1298	172	0	94	0	266	3185
Grand Total	0	3058	84	1	3143	3	0	0	0	3	75	2246	0	5	2326	304	0	156	0	460	5932
Apprch %	0	97.3	2.7	0		100	0	0	0		3.2	96.6	0	0.2		66.1	0	33.9	0		
Total %	0	51.6	1.4	0	53	0.1	0	0	0	0.1	1.3	37.9	0	0.1	39.2	5.1	0	2.6	0	7.8	

	Grand Avenue Southbound				Construction Driveway Westbound				Grand Avenue Northbound				Baker Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	402	8	410	0	0	0	0	**10**	283	0	293	33	0	22	55	758
05:15 PM	0	405	6	411	0	0	0	0	8	**336**	0	**344**	38	0	**26**	64	819
05:30 PM	0	**410**	13	**423**	**2**	0	0	**2**	6	330	0	336	**74**	0	22	**96**	**857**
05:45 PM	0	350	**23**	373	1	0	0	1	9	312	0	321	27	0	24	51	746
Total Volume	0	1567	50	1617	3	0	0	3	33	1261	0	1294	172	0	94	266	3180
% App. Total	0	96.9	3.1		100	0	0		2.6	97.4	0		64.7	0	35.3		
PHF	.000	.955	.543	.956	.375	.000	.000	.375	.825	.938	.000	.940	.581	.000	.904	.693	.928

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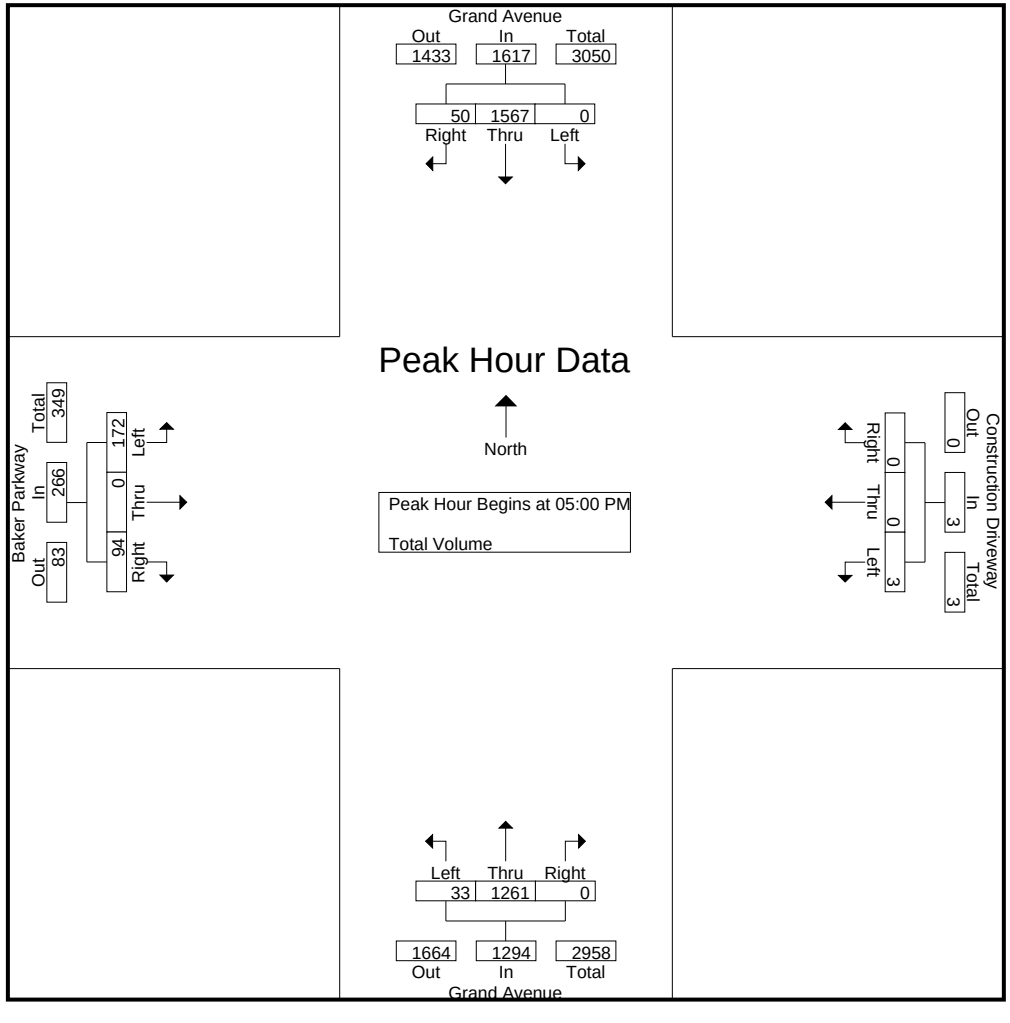

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City of Walnut
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Weather: Clear

File Name : WNTGRBAPM
Site Code : 04215551
Start Date : 10/1/2015

	Grand Avenue Southbound				Construction Driveway Westbound				Grand Avenue Northbound				Baker Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	375	8	383	0	0	0	0	**10**	283	0	293	33	0	22	55	
+15 mins.	0	402	8	410	0	0	0	0	8	**336**	0	**344**	38	0	**26**	64	
+30 mins.	0	405	6	411	**2**	0	0	**2**	6	330	0	336	**74**	0	22	**96**	
+45 mins.	0	**410**	**13**	**423**	1	0	0	1	9	312	0	321	27	0	24	51	
Total Volume	0	1592	35	1627	3	0	0	3	33	1261	0	1294	172	0	94	266	
% App. Total	0	97.8	2.2		100	0	0		2.6	97.4	0		64.7	0	35.3		
PHF	.000	.971	.673	.962	.375	.000	.000	.375	.825	.938	.000	.940	.581	.000	.904	.693	

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City of Walnut
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E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : WNTGR60WAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound					SR-60 Westbound Ramps Westbound					Grand Avenue Northbound					Driveway Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	88	124	0	0	212	50	0	118	0	168	0	463	69	0	532	0	0	1	0	1	913
07:15 AM	97	161	1	0	259	42	0	150	0	192	0	480	82	0	562	0	0	0	0	0	1013
07:30 AM	92	198	1	0	291	86	0	151	0	237	0	430	98	0	528	0	1	0	0	1	1057
07:45 AM	72	196	0	0	268	84	0	153	0	237	0	423	71	0	494	0	0	0	0	0	999
Total	349	679	2	0	1030	262	0	572	0	834	0	1796	320	0	2116	0	1	1	0	2	3982
08:00 AM	85	168	0	0	253	54	0	128	0	182	0	329	75	0	404	0	0	0	0	0	839
08:15 AM	69	171	1	0	241	67	0	108	0	175	0	362	112	0	474	1	0	0	0	1	891
08:30 AM	81	193	0	0	274	66	0	118	0	184	0	417	119	0	536	0	0	0	0	0	994
08:45 AM	58	217	1	0	276	56	0	110	0	166	0	344	82	1	427	0	1	0	0	1	870
Total	293	749	2	0	1044	243	0	464	0	707	0	1452	388	1	1841	1	1	0	0	2	3594
Grand Total	642	1428	4	0	2074	505	0	1036	0	1541	0	3248	708	1	3957	1	2	1	0	4	7576
Apprch %	31	68.9	0.2	0		32.8	0	67.2	0		0	82.1	17.9	0		25	50	25	0		
Total %	8.5	18.8	0.1	0	27.4	6.7	0	13.7	0	20.3	0	42.9	9.3	0	52.2	0	0	0	0	0.1	

	Grand Avenue Southbound				SR-60 Westbound Ramps Westbound				Grand Avenue Northbound				Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	88	124	0	212	50	0	118	168	0	463	69	532	0	0	**1**	**1**	913
07:15 AM	**97**	161	**1**	259	42	0	150	192	0	**480**	82	**562**	0	0	0	0	1013
07:30 AM	92	**198**	1	**291**	**86**	0	151	**237**	0	430	**98**	528	0	**1**	0	1	**1057**
07:45 AM	72	196	0	268	84	0	**153**	237	0	423	71	494	0	0	0	0	999
Total Volume	349	679	2	1030	262	0	572	834	0	1796	320	2116	0	1	1	2	3982
% App. Total	33.9	65.9	0.2		31.4	0	68.6		0	84.9	15.1		0	50	50		
PHF	.899	.857	.500	.885	.762	.000	.935	.880	.000	.935	.816	.941	.000	.250	.250	.500	.942

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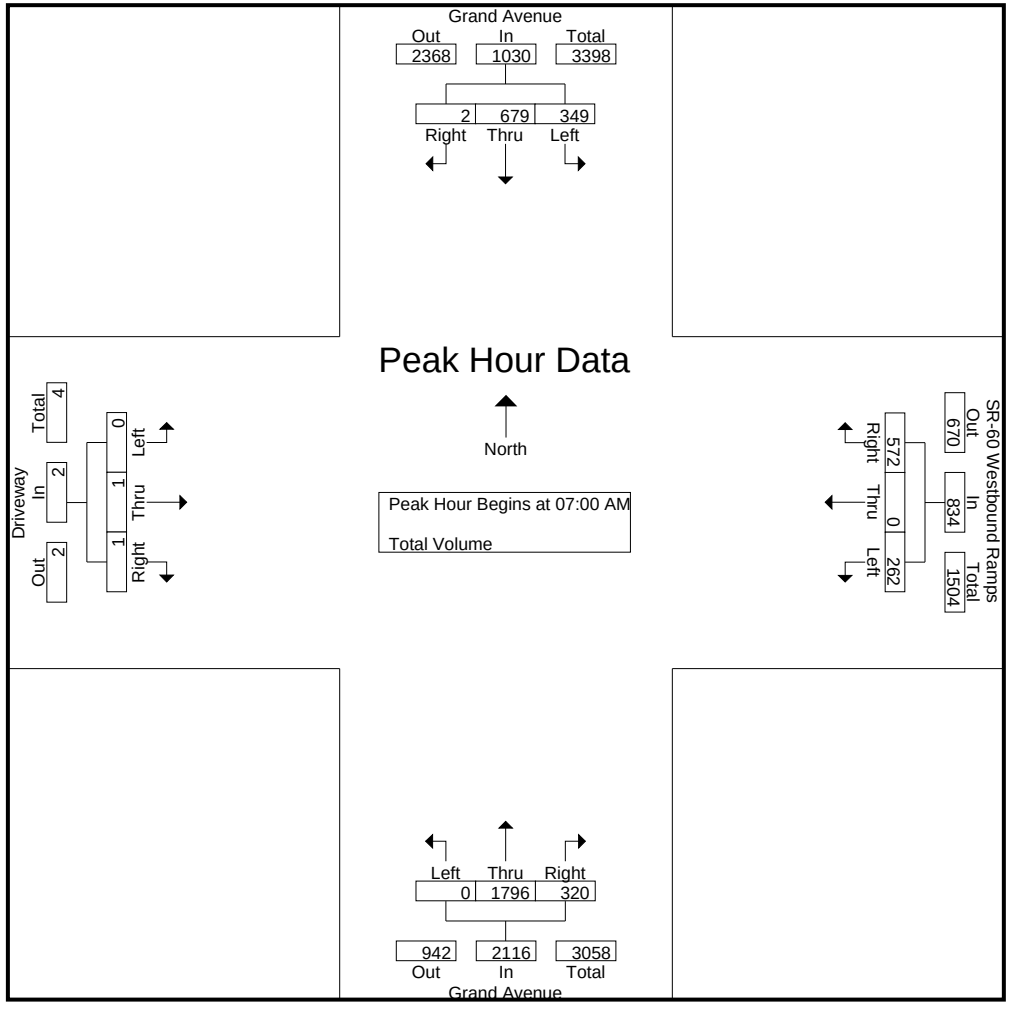
City of Walnut
N/S: Grand Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : WNTGR60WAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Grand Avenue
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File Name : WNTGR60WAM
Site Code : 04215551
Start Date : 10/1/2015

	Grand Avenue Southbound				SR-60 Westbound Ramps Westbound				Grand Avenue Northbound				Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:00 AM				07:00 AM				
+0 mins.	**97**	161	**1**	259	42	0	150	192	0	463	69	532	0	0	**1**	**1**	
+15 mins.	92	**198**	1	**291**	**86**	0	151	**237**	0	**480**	82	**562**	0	0	0	0	
+30 mins.	72	196	0	268	84	0	**153**	237	0	430	**98**	528	0	**1**	0	1	
+45 mins.	85	168	0	253	54	0	128	182	0	423	71	494	0	0	0	0	
Total Volume	346	723	2	1071	266	0	582	848	0	1796	320	2116	0	1	1	2	
% App. Total	32.3	67.5	0.2		31.4	0	68.6		0	84.9	15.1		0	50	50		
PHF	.892	.913	.500	.920	.773	.000	.951	.895	.000	.935	.816	.941	.000	.250	.250	.500	

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Groups Printed- Total Volume

	Grand Avenue Southbound					SR-60 Westbound Ramps Westbound					Grand Avenue Northbound					Driveway Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	142	274	0	0	416	49	0	95	0	144	2	143	60	1	206	0	2	0	0	2	768
04:15 PM	122	307	1	0	430	47	1	105	0	153	0	160	61	1	222	1	0	0	0	1	806
04:30 PM	145	356	0	0	501	68	0	90	0	158	2	179	68	2	251	0	0	0	0	0	910
04:45 PM	133	241	1	0	375	59	0	88	0	147	0	179	66	1	246	0	0	0	0	0	768
Total	542	1178	2	0	1722	223	1	378	0	602	4	661	255	5	925	1	2	0	0	3	3252
05:00 PM	144	254	3	0	401	49	0	114	0	163	0	181	61	0	242	2	1	0	0	3	809
05:15 PM	140	339	0	0	479	50	1	131	0	182	0	216	68	0	284	0	0	0	0	0	945
05:30 PM	157	362	2	0	521	36	0	124	0	160	1	206	73	1	281	2	0	4	0	6	968
05:45 PM	169	427	0	0	596	51	0	126	0	177	0	196	81	2	279	0	1	0	0	1	1053
Total	610	1382	5	0	1997	186	1	495	0	682	1	799	283	3	1086	4	2	4	0	10	3775
Grand Total	1152	2560	7	0	3719	409	2	873	0	1284	5	1460	538	8	2011	5	4	4	0	13	7027
Apprch %	31	68.8	0.2	0		31.9	0.2	68	0		0.2	72.6	26.8	0.4		38.5	30.8	30.8	0		
Total %	16.4	36.4	0.1	0	52.9	5.8	0	12.4	0	18.3	0.1	20.8	7.7	0.1	28.6	0.1	0.1	0.1	0	0.2	

	Grand Avenue Southbound				SR-60 Westbound Ramps Westbound				Grand Avenue Northbound				Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	144	254	**3**	401	49	0	114	163	0	181	61	242	**2**	**1**	0	3	809
05:15 PM	140	339	0	479	50	**1**	**131**	**182**	0	**216**	68	**284**	0	0	0	0	945
05:30 PM	157	362	2	521	36	0	124	160	**1**	206	73	280	2	0	**4**	**6**	967
05:45 PM	**169**	**427**	0	**596**	**51**	0	126	177	0	196	**81**	277	0	1	0	1	**1051**
Total Volume	610	1382	5	1997	186	1	495	682	1	799	283	1083	4	2	4	10	3772
% App. Total	30.5	69.2	0.3		27.3	0.1	72.6		0.1	73.8	26.1		40	20	40		
PHF	.902	.809	.417	.838	.912	.250	.945	.937	.250	.925	.873	.953	.500	.500	.250	.417	.897

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Site Code : 04215551
Start Date : 10/1/2015
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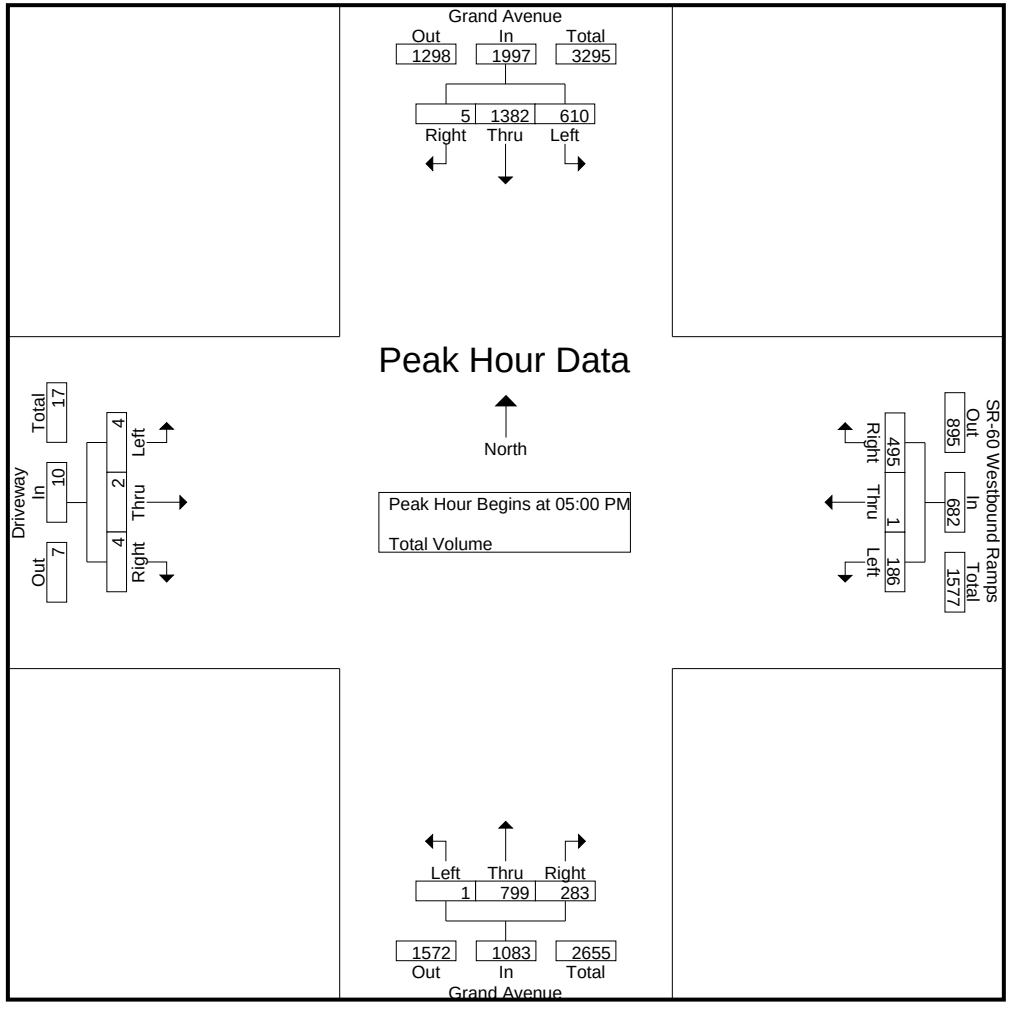

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	Grand Avenue Southbound				SR-60 Westbound Ramps Westbound				Grand Avenue Northbound				Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	144	254	**3**	401	49	0	114	163	0	181	61	242	**2**	**1**	0	3	
+15 mins.	140	339	0	479	50	**1**	**131**	**182**	0	**216**	68	**284**	0	0	0	0	
+30 mins.	157	362	2	521	36	0	124	160	**1**	206	73	280	2	0	**4**	**6**	
+45 mins.	**169**	**427**	0	**596**	**51**	0	126	177	0	196	**81**	277	0	1	0	1	
Total Volume	610	1382	5	1997	186	1	495	682	1	799	283	1083	4	2	4	10	
% App. Total	30.5	69.2	0.3		27.3	0.1	72.6		0.1	73.8	26.1		40	20	40		
PHF	.902	.809	.417	.838	.912	.250	.945	.937	.250	.925	.873	.953	.500	.500	.250	.417	

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Groups Printed- Total Volume

	Grand Avenue Southbound					SR-60 Eastbound On Ramp Westbound					Grand Avenue Northbound					SR-60 Eastbound Off Ramp Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	71	107	0	0	178	0	0	0	0	0	0	295	54	0	349	213	0	50	0	263	790
07:15 AM	65	136	0	1	202	0	0	0	0	0	0	295	64	0	359	262	0	70	0	332	893
07:30 AM	113	180	0	0	293	0	0	0	0	0	0	295	73	0	368	197	0	60	0	257	918
07:45 AM	67	208	0	0	275	0	0	0	0	0	0	258	60	0	318	249	0	84	0	333	926
Total	316	631	0	1	948	0	0	0	0	0	0	1143	251	0	1394	921	0	264	0	1185	3527
08:00 AM	67	152	0	0	219	0	0	0	0	0	0	329	70	0	399	197	0	67	0	264	882
08:15 AM	81	163	0	0	244	0	0	0	0	0	0	326	66	0	392	197	0	55	0	252	888
08:30 AM	72	171	0	0	243	0	0	0	0	0	0	260	67	0	327	185	1	65	0	251	821
08:45 AM	84	182	0	0	266	0	0	0	0	0	0	233	68	0	301	195	0	71	0	266	833
Total	304	668	0	0	972	0	0	0	0	0	0	1148	271	0	1419	774	1	258	0	1033	3424
Grand Total	620	1299	0	1	1920	0	0	0	0	0	0	2291	522	0	2813	1695	1	522	0	2218	6951
Apprch %	32.3	67.7	0	0.1		0	0	0	0		0	81.4	18.6	0		76.4	0	23.5	0		
Total %	8.9	18.7	0	0	27.6	0	0	0	0	0	0	33	7.5	0	40.5	24.4	0	7.5	0	31.9	

	Grand Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Grand Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	65	136	0	201	0	0	0	0	0	295	64	359	**262**	0	70	332	892
07:30 AM	**113**	180	0	**293**	0	0	0	0	0	295	**73**	368	197	0	60	257	918
07:45 AM	67	**208**	0	275	0	0	0	0	0	258	60	318	249	0	**84**	**333**	**926**
08:00 AM	67	152	0	219	0	0	0	0	0	**329**	70	**399**	197	0	67	264	882
Total Volume	312	676	0	988	0	0	0	0	0	1177	267	1444	905	0	281	1186	3618
% App. Total	31.6	68.4	0		0	0	0		0	81.5	18.5		76.3	0	23.7		
PHF	.690	.813	.000	.843	.000	.000	.000	.000	.000	.894	.914	.905	.864	.000	.836	.890	.977

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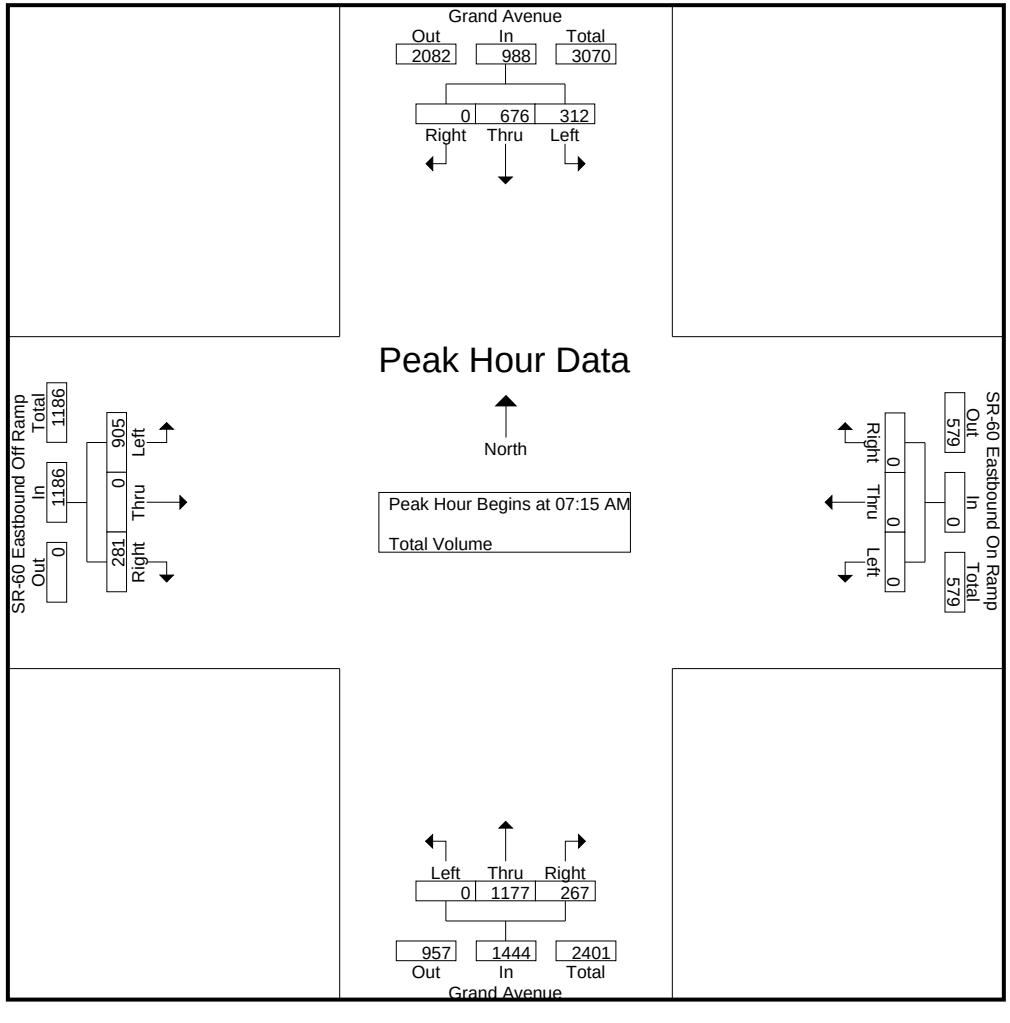

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	Grand Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Grand Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:00 AM				07:30 AM				07:15 AM				
+0 mins.	**113**	180	0	**293**	0	0	0	0	0	295	**73**	368	**262**	0	70	332	
+15 mins.	67	**208**	0	275	0	0	0	0	0	258	60	318	197	0	60	257	
+30 mins.	67	152	0	219	0	0	0	0	0	**329**	70	**399**	249	0	**84**	**333**	
+45 mins.	81	163	0	244	0	0	0	0	0	326	66	392	197	0	67	264	
Total Volume	328	703	0	1031	0	0	0	0	0	1208	269	1477	905	0	281	1186	
% App. Total	31.8	68.2	0		0	0	0		0	81.8	18.2		76.3	0	23.7		
PHF	.726	.845	.000	.880	.000	.000	.000	.000	.000	.918	.921	.925	.864	.000	.836	.890	

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Groups Printed- Total Volume

	Grand Avenue Southbound					SR-60 Eastbound On Ramp Westbound					Grand Avenue Northbound					SR-60 Eastbound Off Ramp Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	78	233	0	0	311	0	0	0	0	0	0	159	137	0	296	44	0	46	0	90	697
04:15 PM	100	257	0	0	357	0	0	0	0	0	0	198	118	0	316	42	0	42	0	84	757
04:30 PM	114	315	0	0	429	0	0	0	0	0	0	190	149	0	339	44	1	54	0	99	867
04:45 PM	83	303	0	1	387	0	0	0	0	0	0	200	154	0	354	50	0	47	0	97	838
Total	375	1108	0	1	1484	0	0	0	0	0	0	747	558	0	1305	180	1	189	0	370	3159
05:00 PM	88	311	0	0	399	0	0	0	0	0	0	228	179	0	407	39	0	44	0	83	889
05:15 PM	88	311	0	1	400	0	0	0	0	0	0	234	150	0	384	45	0	40	0	85	869
05:30 PM	92	302	0	0	394	0	0	0	0	0	0	227	154	0	381	37	0	56	0	93	868
05:45 PM	112	370	0	0	482	0	0	0	0	0	0	244	136	0	380	48	0	36	0	84	946
Total	380	1294	0	1	1675	0	0	0	0	0	0	933	619	0	1552	169	0	176	0	345	3572
Grand Total	755	2402	0	2	3159	0	0	0	0	0	0	1680	1177	0	2857	349	1	365	0	715	6731
Apprch %	23.9	76	0	0.1		0	0	0	0		0	58.8	41.2	0		48.8	0.1	51	0		
Total %	11.2	35.7	0	0	46.9	0	0	0	0	0	0	25	17.5	0	42.4	5.2	0	5.4	0	10.6	

	Grand Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Grand Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	88	311	0	399	0	0	0	0	0	228	**179**	**407**	39	0	44	83	889
05:15 PM	88	311	0	399	0	0	0	0	0	234	150	384	45	0	40	85	868
05:30 PM	92	302	0	394	0	0	0	0	0	227	154	381	37	0	**56**	**93**	868
05:45 PM	**112**	**370**	0	**482**	0	0	0	0	0	**244**	136	380	**48**	0	36	84	**946**
Total Volume	380	1294	0	1674	0	0	0	0	0	933	619	1552	169	0	176	345	3571
% App. Total	22.7	77.3	0		0	0	0		0	60.1	39.9		49	0	51		
PHF	.848	.874	.000	.868	.000	.000	.000	.000	.000	.956	.865	.953	.880	.000	.786	.927	.944

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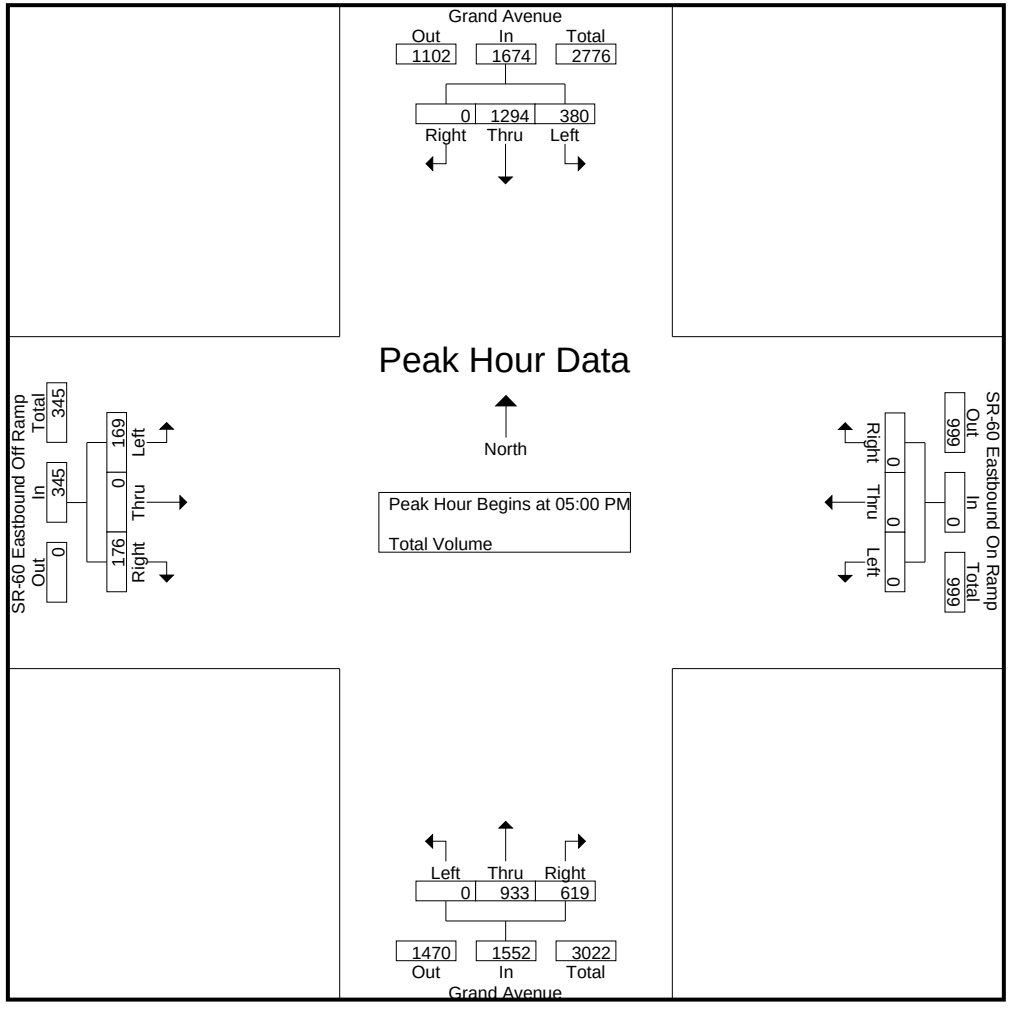

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	Grand Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Grand Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				04:00 PM				05:00 PM				04:00 PM				
+0 mins.	88	311	0	399	0	0	0	0	0	228	**179**	**407**	44	0	46	90	
+15 mins.	88	311	0	399	0	0	0	0	0	234	150	384	42	0	42	84	
+30 mins.	92	302	0	394	0	0	0	0	0	227	154	381	44	**1**	**54**	**99**	
+45 mins.	**112**	**370**	0	**482**	0	0	0	0	0	**244**	136	380	**50**	0	47	97	
Total Volume	380	1294	0	1674	0	0	0	0	0	933	619	1552	180	1	189	370	
% App. Total	22.7	77.3	0		0	0	0		0	60.1	39.9		48.6	0.3	51.1		
PHF	.848	.874	.000	.868	.000	.000	.000	.000	.000	.956	.865	.953	.900	.250	.875	.934	

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City of Walnut
N/S: Mount SAC Way
E/W: Temple Avenue
Weather: Clear

File Name : WNTMTTEAM
Site Code : 04215551
Start Date : 10/1/2015

Groups Printed- Total Volume

	Mount SAC Way Southbound					Temple Avenue Westbound					Mount SAC Way Northbound					Temple Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	32	2	60	0	94	0	180	26	4	210	10	3	1	0	14	46	208	6	1	261	579
07:15 AM	41	4	56	0	101	1	196	28	4	229	39	4	6	0	49	9	271	62	1	343	722
07:30 AM	55	3	80	0	138	2	188	15	6	211	44	3	7	0	54	6	235	51	0	292	695
07:45 AM	45	2	59	0	106	3	214	13	1	231	22	6	4	0	32	8	259	54	0	321	690
Total	173	11	255	0	439	6	778	82	15	881	115	16	18	0	149	69	973	173	2	1217	2686
08:00 AM	32	2	51	0	85	0	232	24	1	257	21	1	11	0	33	12	215	51	0	278	653
08:15 AM	29	0	49	0	78	3	215	6	2	226	24	2	4	0	30	5	226	36	0	267	601
08:30 AM	21	1	38	0	60	0	308	20	4	332	40	2	6	0	48	8	229	31	0	268	708
08:45 AM	26	5	35	0	66	4	284	15	0	303	26	5	4	0	35	9	224	49	0	282	686
Total	108	8	173	0	289	7	1039	65	7	1118	111	10	25	0	146	34	894	167	0	1095	2648
Grand Total	281	19	428	0	728	13	1817	147	22	1999	226	26	43	0	295	103	1867	340	2	2312	5334
Apprch %	38.6	2.6	58.8	0		0.7	90.9	7.4	1.1		76.6	8.8	14.6	0		4.5	80.8	14.7	0.1		
Total %	5.3	0.4	8	0	13.6	0.2	34.1	2.8	0.4	37.5	4.2	0.5	0.8	0	5.5	1.9	35	6.4	0	43.3	

	Mount SAC Way Southbound				Temple Avenue Westbound				Mount SAC Way Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	41	**4**	56	101	1	196	**28**	225	39	4	6	49	9	**271**	**62**	**342**	**717**
07:30 AM	**55**	3	**80**	**138**	2	188	15	205	**44**	3	7	**54**	6	235	51	292	689
07:45 AM	45	2	59	106	**3**	214	13	230	22	**6**	4	32	8	259	54	321	689
08:00 AM	32	2	51	85	0	**232**	24	**256**	21	1	**11**	33	**12**	215	51	278	652
Total Volume	173	11	246	430	6	830	80	916	126	14	28	168	35	980	218	1233	2747
% App. Total	40.2	2.6	57.2		0.7	90.6	8.7		75	8.3	16.7		2.8	79.5	17.7		
PHF	.786	.688	.769	.779	.500	.894	.714	.895	.716	.583	.636	.778	.729	.904	.879	.901	.958

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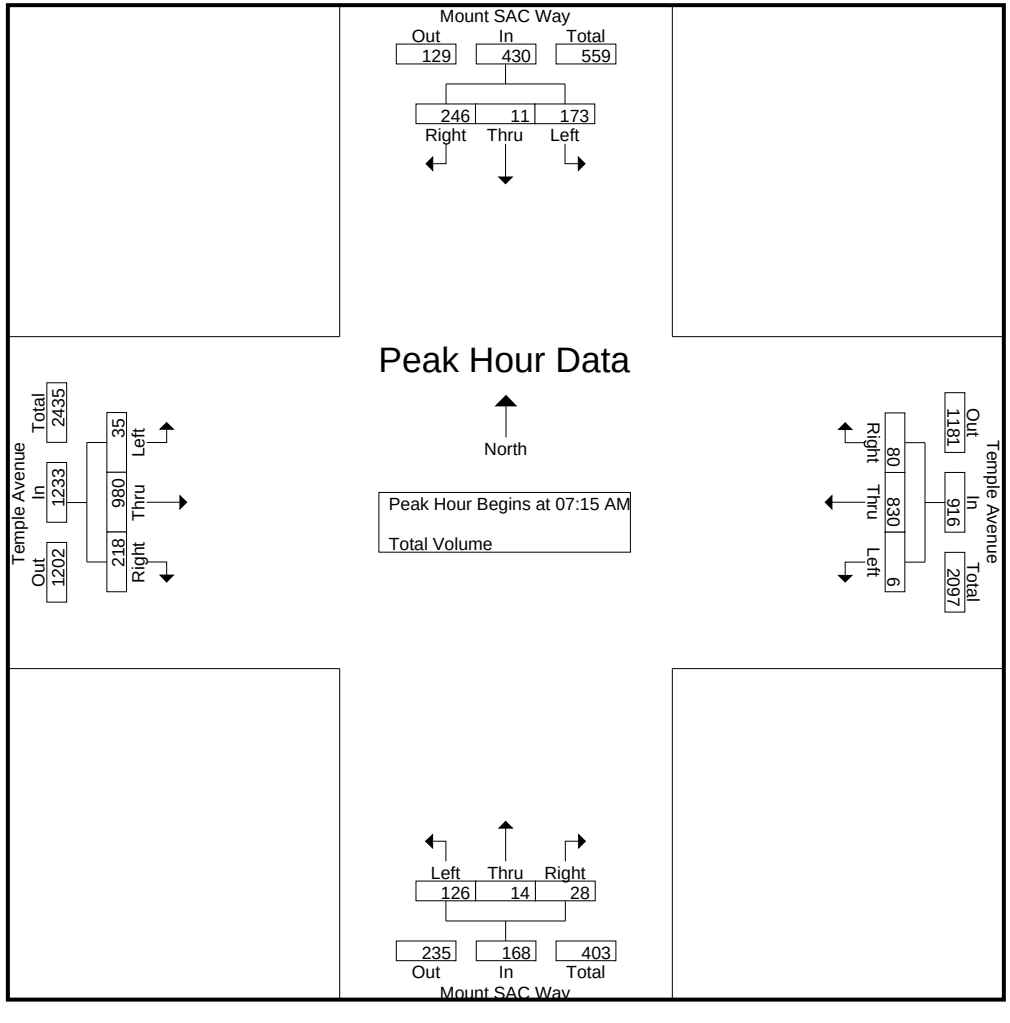
City of Walnut
N/S: Mount SAC Way
E/W: Temple Avenue
Weather: Clear

File Name : WNTMTTEAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Mount SAC Way
E/W: Temple Avenue
Weather: Clear

File Name : WNTMTTEAM
Site Code : 04215551
Start Date : 10/1/2015

	Mount SAC Way Southbound				Temple Avenue Westbound				Mount SAC Way Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				08:00 AM				07:15 AM				07:15 AM				
+0 mins.	32	2	60	94	0	232	**24**	256	39	4	6	49	9	**271**	**62**	**342**	
+15 mins.	41	**4**	56	101	3	215	6	224	**44**	3	7	**54**	6	235	51	292	
+30 mins.	**55**	3	**80**	**138**	0	**308**	20	**328**	22	**6**	4	32	8	259	54	321	
+45 mins.	45	2	59	106	**4**	284	15	303	21	1	**11**	33	**12**	215	51	278	
Total Volume	173	11	255	439	7	1039	65	1111	126	14	28	168	35	980	218	1233	
% App. Total	39.4	2.5	58.1		0.6	93.5	5.9		75	8.3	16.7		2.8	79.5	17.7		
PHF	.786	.688	.797	.795	.438	.843	.677	.847	.716	.583	.636	.778	.729	.904	.879	.901	

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City of Walnut
N/S: Mount SAC Way
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Weather: Clear

File Name : WNTMTTEPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Mount SAC Way Southbound					Temple Avenue Westbound					Mount SAC Way Northbound					Temple Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	7	0	12	0	19	2	250	55	0	307	2	4	1	0	7	78	228	19	0	325	658
04:15 PM	19	2	18	0	39	3	192	65	2	262	2	1	0	0	3	84	336	17	0	437	741
04:30 PM	21	1	18	0	40	10	141	74	3	228	1	3	1	0	5	98	324	40	0	462	735
04:45 PM	22	6	34	0	62	19	128	48	3	198	3	2	0	0	5	80	332	69	0	481	746
Total	69	9	82	0	160	34	711	242	8	995	8	10	2	0	20	340	1220	145	0	1705	2880
05:00 PM	32	29	32	0	93	10	148	50	1	209	0	1	0	0	1	41	343	63	0	447	750
05:15 PM	23	11	21	0	55	18	163	32	2	215	1	3	1	0	5	29	264	35	0	328	603
05:30 PM	9	8	9	0	26	10	141	11	1	163	0	7	0	0	7	27	233	25	0	285	481
05:45 PM	13	8	12	0	33	6	107	11	1	125	6	5	3	0	14	27	188	25	0	240	412
Total	77	56	74	0	207	44	559	104	5	712	7	16	4	0	27	124	1028	148	0	1300	2246
Grand Total	146	65	156	0	367	78	1270	346	13	1707	15	26	6	0	47	464	2248	293	0	3005	5126
Apprch %	39.8	17.7	42.5	0		4.6	74.4	20.3	0.8		31.9	55.3	12.8	0		15.4	74.8	9.8	0		
Total %	2.8	1.3	3	0	7.2	1.5	24.8	6.7	0.3	33.3	0.3	0.5	0.1	0	0.9	9.1	43.9	5.7	0	58.6	

	Mount SAC Way Southbound				Temple Avenue Westbound				Mount SAC Way Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	19	2	18	39	3	**192**	65	**260**	2	1	0	3	84	336	17	437	739
04:30 PM	21	1	18	40	10	141	**74**	225	1	**3**	**1**	**5**	**98**	324	40	462	732
04:45 PM	22	6	**34**	62	**19**	128	48	195	**3**	2	0	5	80	332	**69**	**481**	743
05:00 PM	**32**	**29**	32	**93**	10	148	50	208	0	1	0	1	41	**343**	63	447	**749**
Total Volume	94	38	102	234	42	609	237	888	6	7	1	14	303	1335	189	1827	2963
% App. Total	40.2	16.2	43.6		4.7	68.6	26.7		42.9	50	7.1		16.6	73.1	10.3		
PHF	.734	.328	.750	.629	.553	.793	.801	.854	.500	.583	.250	.700	.773	.973	.685	.950	.989

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City of Walnut
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E/W: Temple Avenue
Weather: Clear

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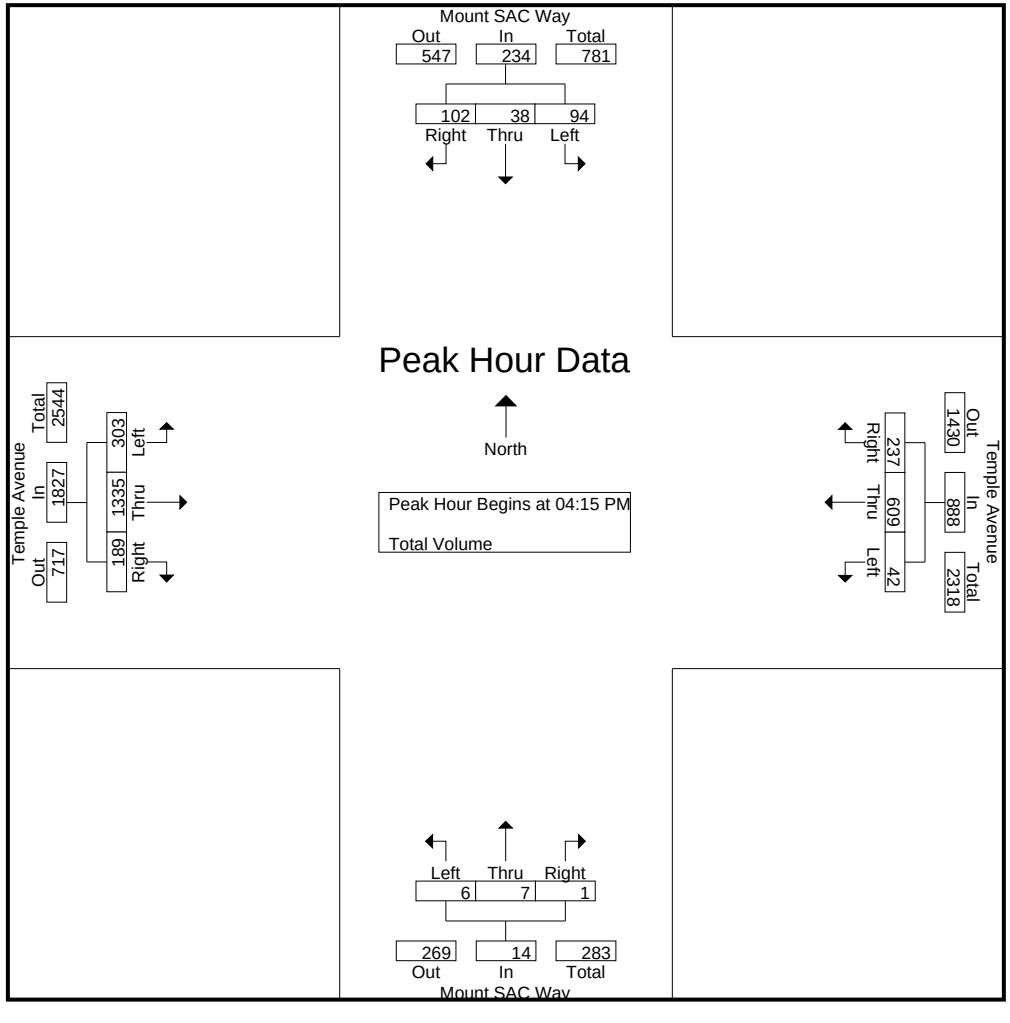
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Mount SAC Way
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Weather: Clear

File Name : WNTMTTEPM
Site Code : 04215551
Start Date : 10/1/2015

	Mount SAC Way Southbound				Temple Avenue Westbound				Mount SAC Way Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:00 PM				05:00 PM				04:15 PM				
+0 mins.	21	1	18	40	2	**250**	55	**307**	0	1	0	1	84	336	17	437	
+15 mins.	22	6	**34**	62	3	192	65	260	1	3	1	5	**98**	324	40	462	
+30 mins.	**32**	**29**	32	**93**	10	141	**74**	225	0	**7**	0	7	80	332	**69**	**481**	
+45 mins.	23	11	21	55	**19**	128	48	195	**6**	5	**3**	**14**	41	**343**	63	447	
Total Volume	98	47	105	250	34	711	242	987	7	16	4	27	303	1335	189	1827	
% App. Total	39.2	18.8	42		3.4	72	24.5		25.9	59.3	14.8		16.6	73.1	10.3		
PHF	.766	.405	.772	.672	.447	.711	.818	.804	.292	.571	.333	.482	.773	.973	.685	.950	

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City of Walnut
N/S: Bonita Avenue
E/W: Temple Avenue
Weather: Clear

File Name : WNTBOTEAM
Site Code : 04215551
Start Date : 10/1/2015

Groups Printed- Total Volume

	Bonita Avenue Southbound					Temple Avenue Westbound					Service Road Northbound					Temple Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	4	3	4	0	11	25	386	76	0	487	7	2	1	0	10	27	135	16	0	178	686
07:15 AM	9	3	13	0	25	24	291	82	0	397	3	5	17	0	25	60	207	30	0	297	744
07:30 AM	23	5	13	0	41	42	224	83	0	349	7	2	2	0	11	84	187	30	0	301	702
07:45 AM	33	8	28	0	69	22	208	124	0	354	4	3	0	0	7	104	158	31	0	293	723
Total	69	19	58	0	146	113	1109	365	0	1587	21	12	20	0	53	275	687	107	0	1069	2855
08:00 AM	15	2	20	0	37	31	229	135	0	395	7	3	2	0	12	133	173	39	0	345	789
08:15 AM	20	9	24	0	53	27	202	111	0	340	4	2	1	0	7	103	151	28	0	282	682
08:30 AM	13	7	21	0	41	15	160	58	0	233	4	5	6	0	15	68	146	16	0	230	519
08:45 AM	17	7	8	0	32	28	116	53	0	197	6	1	3	0	10	48	116	19	0	183	422
Total	65	25	73	0	163	101	707	357	0	1165	21	11	12	0	44	352	586	102	0	1040	2412
Grand Total	134	44	131	0	309	214	1816	722	0	2752	42	23	32	0	97	627	1273	209	0	2109	5267
Apprch %	43.4	14.2	42.4	0		7.8	66	26.2	0		43.3	23.7	33	0		29.7	60.4	9.9	0		
Total %	2.5	0.8	2.5	0	5.9	4.1	34.5	13.7	0	52.2	0.8	0.4	0.6	0	1.8	11.9	24.2	4	0	40	

	Bonita Avenue Southbound				Temple Avenue Westbound				Service Road Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	9	3	13	25	24	**291**	82	**397**	3	**5**	**17**	**25**	60	**207**	30	297	744
07:30 AM	23	5	13	41	**42**	224	83	349	**7**	2	2	11	84	187	30	301	702
07:45 AM	**33**	**8**	**28**	**69**	22	208	124	354	4	3	0	7	104	158	31	293	723
08:00 AM	15	2	20	37	31	229	**135**	395	7	3	2	12	**133**	173	**39**	**345**	**789**
Total Volume	80	18	74	172	119	952	424	1495	21	13	21	55	381	725	130	1236	2958
% App. Total	46.5	10.5	43		8	63.7	28.4		38.2	23.6	38.2		30.8	58.7	10.5		
PHF	.606	.563	.661	.623	.708	.818	.785	.941	.750	.650	.309	.550	.716	.876	.833	.896	.937

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City of Walnut
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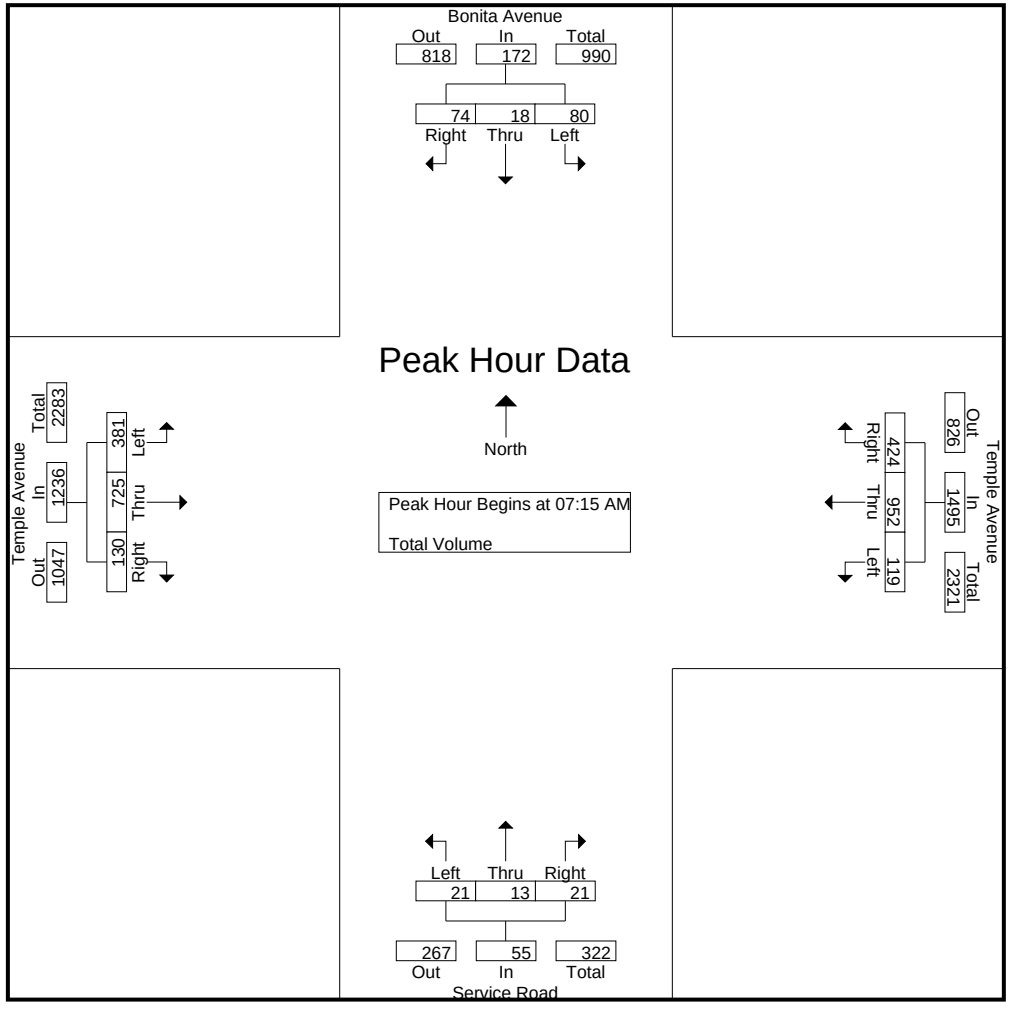
Page No : 2



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City of Walnut
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Start Date : 10/1/2015

	Bonita Avenue Southbound				Temple Avenue Westbound				Service Road Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:00 AM				07:15 AM				07:15 AM				
+0 mins.	23	5	13	41	25	**386**	76	**487**	3	**5**	**17**	**25**	60	**207**	30	297	
+15 mins.	**33**	8	**28**	**69**	24	291	82	397	**7**	2	2	11	84	187	30	301	
+30 mins.	15	2	20	37	**42**	224	83	349	4	3	0	7	104	158	31	293	
+45 mins.	20	**9**	24	53	22	208	**124**	354	7	3	2	12	**133**	173	**39**	**345**	
Total Volume	91	24	85	200	113	1109	365	1587	21	13	21	55	381	725	130	1236	
% App. Total	45.5	12	42.5		7.1	69.9	23		38.2	23.6	38.2		30.8	58.7	10.5		
PHF	.689	.667	.759	.725	.673	.718	.736	.815	.750	.650	.309	.550	.716	.876	.833	.896	

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Groups Printed- Total Volume

	Bonita Avenue Southbound					Temple Avenue Westbound					Service Road Northbound					Temple Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	54	4	23	0	81	5	163	29	0	197	25	6	19	0	50	50	184	13	0	247	575
04:15 PM	82	7	56	0	145	8	147	53	0	208	18	5	29	0	52	48	210	14	0	272	677
04:30 PM	105	4	55	0	164	11	176	36	0	223	22	9	27	0	58	32	266	8	0	306	751
04:45 PM	51	2	24	0	77	3	148	36	0	187	27	6	15	0	48	44	264	11	0	319	631
Total	292	17	158	0	467	27	634	154	0	815	92	26	90	0	208	174	924	46	0	1144	2634
05:00 PM	49	4	24	0	77	5	228	40	0	273	35	6	21	0	62	34	213	16	0	263	675
05:15 PM	31	2	21	0	54	6	284	45	0	335	24	3	16	0	43	40	202	10	0	252	684
05:30 PM	38	2	18	0	58	5	285	55	0	345	31	9	26	0	66	40	176	8	0	224	693
05:45 PM	33	1	33	0	67	15	300	60	0	375	13	3	12	0	28	39	185	20	0	244	714
Total	151	9	96	0	256	31	1097	200	0	1328	103	21	75	0	199	153	776	54	0	983	2766
Grand Total	443	26	254	0	723	58	1731	354	0	2143	195	47	165	0	407	327	1700	100	0	2127	5400
Apprch %	61.3	3.6	35.1	0		2.7	80.8	16.5	0		47.9	11.5	40.5	0		15.4	79.9	4.7	0		
Total %	8.2	0.5	4.7	0	13.4	1.1	32.1	6.6	0	39.7	3.6	0.9	3.1	0	7.5	6.1	31.5	1.9	0	39.4	

	Bonita Avenue Southbound				Temple Avenue Westbound				Service Road Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**49**	**4**	24	**77**	5	228	40	273	**35**	6	21	62	34	**213**	16	**263**	675
05:15 PM	31	2	21	54	6	284	45	335	24	3	16	43	**40**	202	10	252	684
05:30 PM	38	2	18	58	5	285	55	345	31	**9**	**26**	**66**	40	176	8	224	693
05:45 PM	33	1	**33**	67	**15**	**300**	**60**	**375**	13	3	12	28	39	185	**20**	244	**714**
Total Volume	151	9	96	256	31	1097	200	1328	103	21	75	199	153	776	54	983	2766
% App. Total	59	3.5	37.5		2.3	82.6	15.1		51.8	10.6	37.7		15.6	78.9	5.5		
PHF	.770	.563	.727	.831	.517	.914	.833	.885	.736	.583	.721	.754	.956	.911	.675	.934	.968

Counts Unlimited
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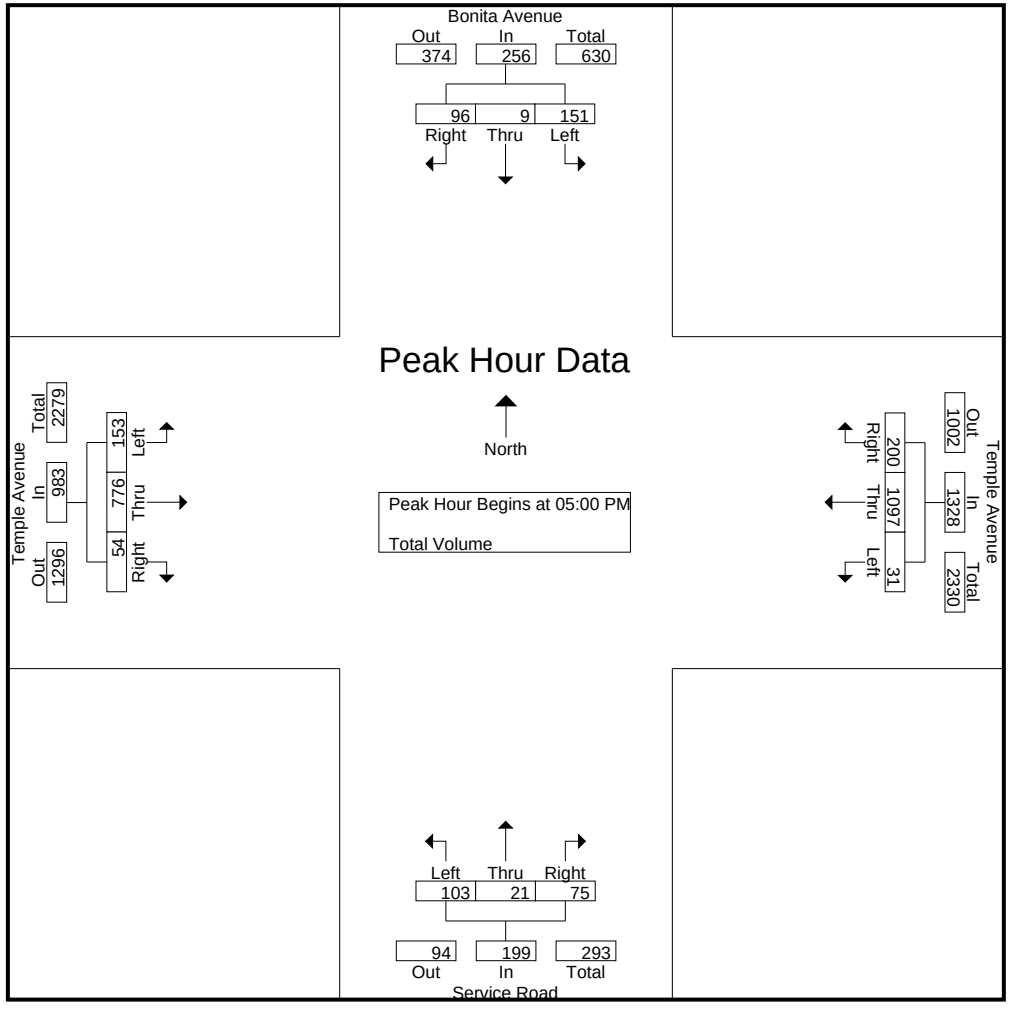
City of Walnut
N/S: Bonita Avenue
E/W: Temple Avenue
Weather: Clear

File Name : WNTBOTEPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Bonita Avenue
E/W: Temple Avenue
Weather: Clear

File Name : WNTBOTEPM
Site Code : 04215551
Start Date : 10/1/2015

	Bonita Avenue Southbound				Temple Avenue Westbound				Service Road Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				05:00 PM				04:15 PM				04:15 PM				
+0 mins.	54	4	23	81	5	228	40	273	18	5	**29**	52	**48**	210	14	272	
+15 mins.	82	**7**	**56**	145	6	284	45	335	22	**9**	27	58	32	**266**	8	306	
+30 mins.	**105**	4	55	**164**	5	285	55	345	27	6	15	48	44	264	11	**319**	
+45 mins.	51	2	24	77	**15**	**300**	**60**	**375**	**35**	6	21	**62**	34	213	**16**	263	
Total Volume	292	17	158	467	31	1097	200	1328	102	26	92	220	158	953	49	1160	
% App. Total	62.5	3.6	33.8		2.3	82.6	15.1		46.4	11.8	41.8		13.6	82.2	4.2		
PHF	.695	.607	.705	.712	.517	.914	.833	.885	.729	.722	.793	.887	.823	.896	.766	.909	

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City of Walnut
N/S: Lot F
E/W: Temple Avenue
Weather: Clear

File Name : WNTLFTEAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Lot F Driveway Southbound					Temple Avenue Westbound					Lot V Driveway Northbound					Temple Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	439	19	0	458	0	0	0	0	0	0	132	0	1	133	591
07:15 AM	0	0	0	0	0	0	388	18	0	406	0	0	0	0	0	0	249	0	0	249	655
07:30 AM	0	0	0	0	0	0	360	28	0	388	0	0	0	0	0	0	220	0	1	221	609
07:45 AM	0	0	0	0	0	0	389	61	0	450	0	0	0	0	0	2	201	0	1	204	654
Total	0	0	0	0	0	0	1576	126	0	1702	0	0	0	0	0	2	802	0	3	807	2509
08:00 AM	0	0	0	0	0	0	393	92	0	485	0	0	0	0	0	2	177	0	0	179	664
08:15 AM	0	0	0	0	0	0	283	60	0	343	0	0	0	0	0	3	182	0	0	185	528
08:30 AM	0	0	0	0	0	0	206	20	0	226	0	0	0	0	0	1	159	0	0	160	386
08:45 AM	0	0	0	0	0	0	221	37	0	258	0	0	0	0	0	0	143	0	0	143	401
Total	0	0	0	0	0	0	1103	209	0	1312	0	0	0	0	0	6	661	0	0	667	1979
Grand Total	0	0	0	0	0	0	2679	335	0	3014	0	0	0	0	0	8	1463	0	3	1474	4488
Apprch %	0	0	0	0		0	88.9	11.1	0		0	0	0	0		0.5	99.3	0	0.2		
Total %	0	0	0	0	0	0	59.7	7.5	0	67.2	0	0	0	0	0	0.2	32.6	0	0.1	32.8	

	Lot F Driveway Southbound				Temple Avenue Westbound				Lot V Driveway Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	388	18	406	0	0	0	0	0	**249**	0	**249**	655
07:30 AM	0	0	0	0	0	360	28	388	0	0	0	0	0	220	0	220	608
07:45 AM	0	0	0	0	0	389	61	450	0	0	0	0	**2**	201	0	203	653
08:00 AM	0	0	0	0	0	**393**	**92**	**485**	0	0	0	0	2	177	0	179	**664**
Total Volume	0	0	0	0	0	1530	199	1729	0	0	0	0	4	847	0	851	2580
% App. Total	0	0	0		0	88.5	11.5		0	0	0		0.5	99.5	0		
PHF	.000	.000	.000	.000	.000	.973	.541	.891	.000	.000	.000	.000	.500	.850	.000	.854	.971

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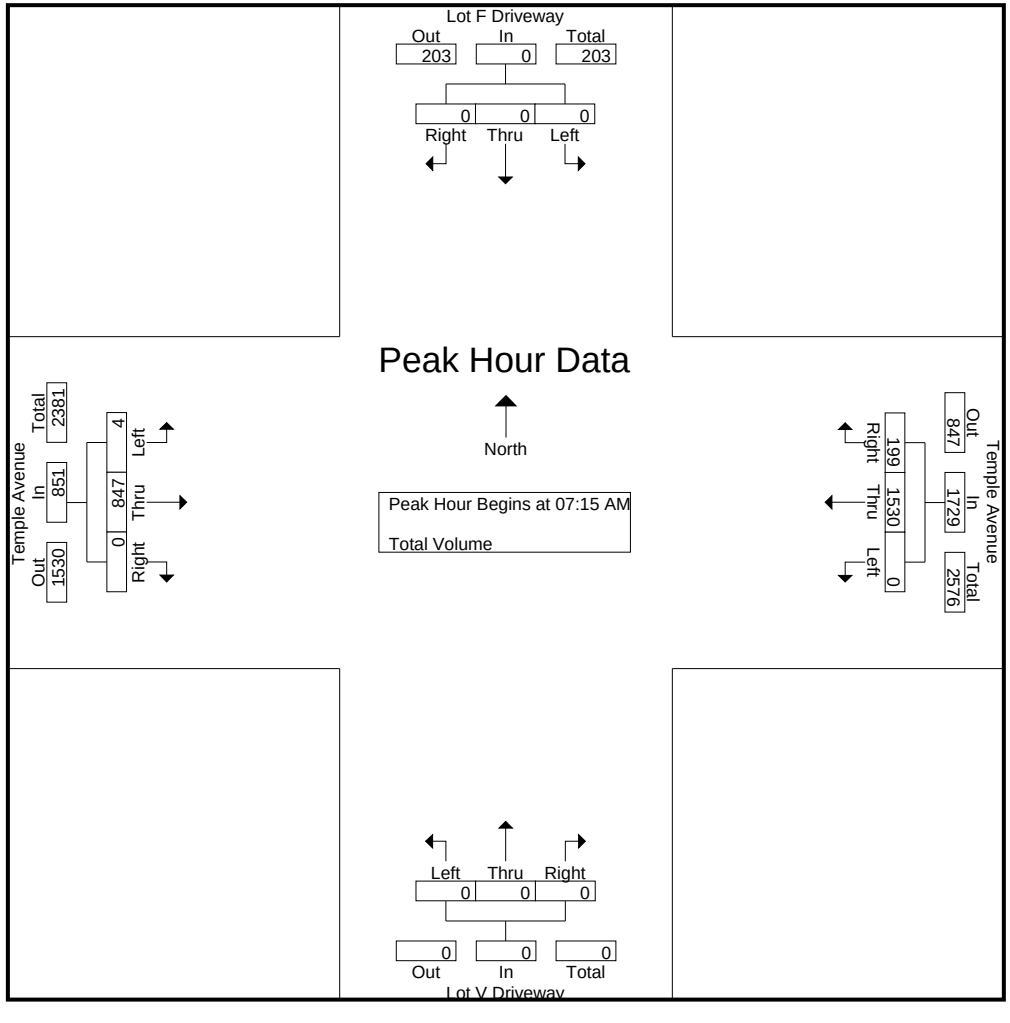
City of Walnut
N/S: Lot F
E/W: Temple Avenue
Weather: Clear

File Name : WNTLFTEAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Lot F
E/W: Temple Avenue
Weather: Clear

File Name : WNTLFTEAM
Site Code : 04215551
Start Date : 10/1/2015

	Lot F Driveway Southbound				Temple Avenue Westbound				Lot V Driveway Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:15 AM				07:00 AM				07:15 AM				
+0 mins.	0	0	0	0	0	388	18	406	0	0	0	0	0	**249**	0	**249**	
+15 mins.	0	0	0	0	0	360	28	388	0	0	0	0	0	220	0	220	
+30 mins.	0	0	0	0	0	389	61	450	0	0	0	0	**2**	201	0	203	
+45 mins.	0	0	0	0	0	**393**	**92**	**485**	0	0	0	0	2	177	0	179	
Total Volume	0	0	0	0	0	1530	199	1729	0	0	0	0	4	847	0	851	
% App. Total	0	0	0		0	88.5	11.5		0	0	0		0.5	99.5	0		
PHF	.000	.000	.000	.000	.000	.973	.541	.891	.000	.000	.000	.000	.500	.850	.000	.854	

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City of Walnut
N/S: Lot F
E/W: Temple Avenue
Weather: Clear

File Name : WNTLFTEPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Lot F Driveway Southbound					Temple Avenue Westbound					Lot V Driveway Northbound					Temple Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	192	3	0	195	0	0	0	0	0	0	253	0	0	253	448
04:15 PM	0	0	0	0	0	0	226	5	2	233	0	0	0	0	0	3	358	0	0	361	594
04:30 PM	0	0	1	0	1	0	202	0	0	202	0	0	0	0	0	0	389	0	1	390	593
04:45 PM	0	0	0	0	0	0	220	2	0	222	0	0	0	0	0	0	315	0	0	315	537
Total	0	0	1	0	1	0	840	10	2	852	0	0	0	0	0	3	1315	0	1	1319	2172
05:00 PM	0	0	0	0	0	0	264	4	0	268	0	0	0	0	0	0	291	0	0	291	559
05:15 PM	0	0	0	0	0	0	328	1	0	329	0	0	0	0	0	0	245	0	1	246	575
05:30 PM	0	0	0	0	0	0	353	4	0	357	0	0	0	0	0	0	265	0	0	265	622
05:45 PM	0	0	0	0	0	0	337	5	0	342	0	0	0	0	0	0	228	0	0	228	570
Total	0	0	0	0	0	0	1282	14	0	1296	0	0	0	0	0	0	1029	0	1	1030	2326
Grand Total	0	0	1	0	1	0	2122	24	2	2148	0	0	0	0	0	3	2344	0	2	2349	4498
Apprch %	0	0	100	0		0	98.8	1.1	0.1		0	0	0	0		0.1	99.8	0	0.1		
Total %	0	0	0	0	0	0	47.2	0.5	0	47.8	0	0	0	0	0	0.1	52.1	0	0	52.2	

	Lot F Driveway Southbound				Temple Avenue Westbound				Lot V Driveway Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	264	4	268	0	0	0	0	0	**291**	0	**291**	559
05:15 PM	0	0	0	0	0	328	1	329	0	0	0	0	0	245	0	245	574
05:30 PM	0	0	0	0	0	**353**	4	**357**	0	0	0	0	0	265	0	265	**622**
05:45 PM	0	0	0	0	0	337	**5**	342	0	0	0	0	0	228	0	228	570
Total Volume	0	0	0	0	0	1282	14	1296	0	0	0	0	0	1029	0	1029	2325
% App. Total	0	0	0		0	98.9	1.1		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.908	.700	.908	.000	.000	.000	.000	.000	.884	.000	.884	.934

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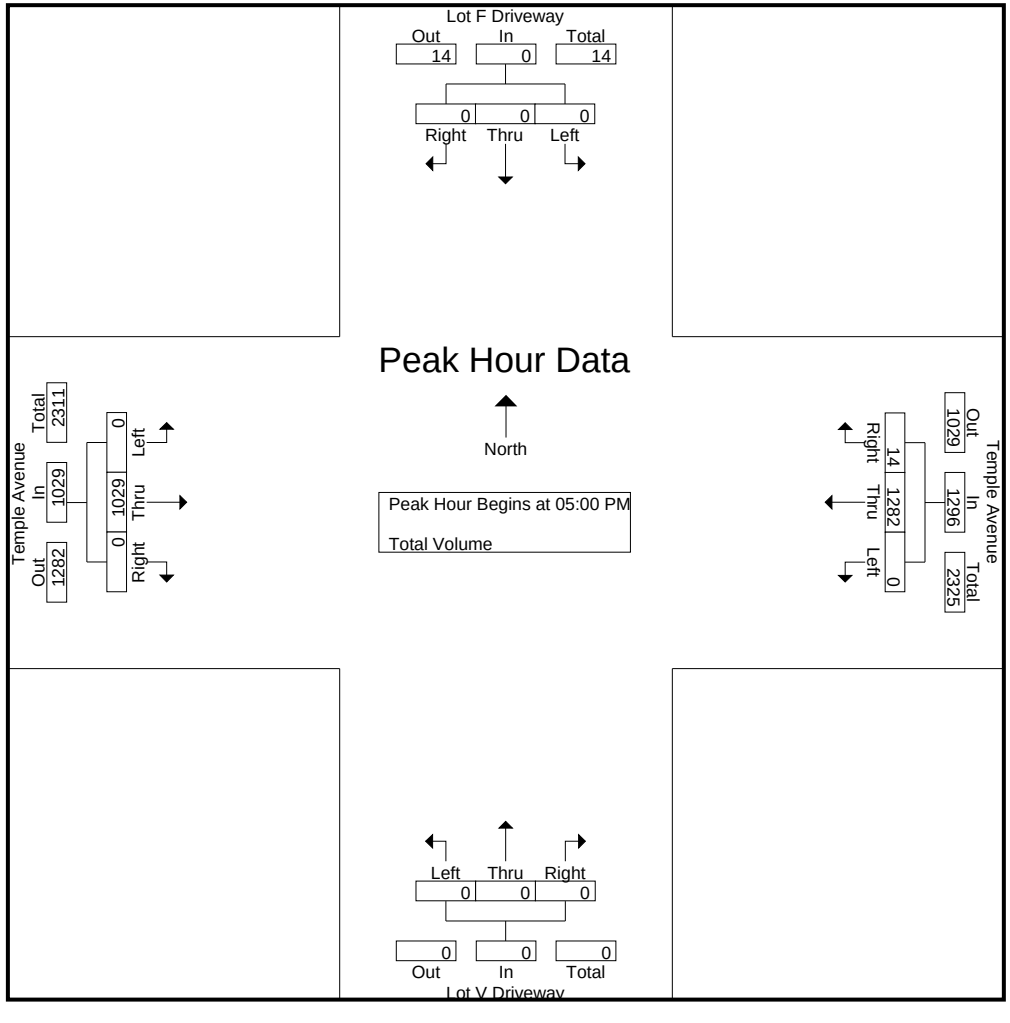
City of Walnut
N/S: Lot F
E/W: Temple Avenue
Weather: Clear

File Name : WNTLFTEPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Lot F
E/W: Temple Avenue
Weather: Clear

File Name : WNTLFTEPM
Site Code : 04215551
Start Date : 10/1/2015

	Lot F Driveway Southbound				Temple Avenue Westbound				Lot V Driveway Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				05:00 PM				04:00 PM				04:15 PM				
+0 mins.	0	0	0	0	0	264	4	268	0	0	0	0	**3**	358	0	361	
+15 mins.	0	0	0	0	0	328	1	329	0	0	0	0	0	**389**	0	**389**	
+30 mins.	0	0	**1**	**1**	0	**353**	4	**357**	0	0	0	0	0	315	0	315	
+45 mins.	0	0	0	0	0	337	**5**	342	0	0	0	0	0	291	0	291	
Total Volume	0	0	1	1	0	1282	14	1296	0	0	0	0	3	1353	0	1356	
% App. Total	0	0	100		0	98.9	1.1		0	0	0		0.2	99.8	0		
PHF	.000	.000	.250	.250	.000	.908	.700	.908	.000	.000	.000	.000	.250	.870	.000	.871	

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City of Walnut
N/S: Valley Boulevard
E/W: Temple Avenue
Weather: Clear

File Name : WNTVATEAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Valley Boulevard Southbound					Temple Avenue Westbound					Valley Boulevard Northbound					Temple Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	15	148	98	1	262	10	394	22	0	426	64	86	10	0	160	13	36	37	1	87	935
07:15 AM	19	167	62	2	250	7	319	18	0	344	58	142	11	0	211	29	57	49	0	135	940
07:30 AM	22	125	80	2	229	8	241	21	0	270	37	186	20	0	243	28	89	41	0	158	900
07:45 AM	32	120	79	0	231	9	300	28	1	338	47	117	9	0	173	27	85	28	0	140	882
Total	88	560	319	5	972	34	1254	89	1	1378	206	531	50	0	787	97	267	155	1	520	3657
08:00 AM	26	174	67	0	267	13	319	31	0	363	30	127	5	0	162	27	96	39	0	162	954
08:15 AM	10	158	64	0	232	29	272	38	0	339	56	75	11	0	142	32	73	29	0	134	847
08:30 AM	8	120	59	0	187	15	183	28	2	228	68	92	8	0	168	20	70	20	1	111	694
08:45 AM	17	87	64	0	168	14	342	36	1	393	53	87	6	0	146	23	83	17	1	124	831
Total	61	539	254	0	854	71	1116	133	3	1323	207	381	30	0	618	102	322	105	2	531	3326
Grand Total	149	1099	573	5	1826	105	2370	222	4	2701	413	912	80	0	1405	199	589	260	3	1051	6983
Apprch %	8.2	60.2	31.4	0.3		3.9	87.7	8.2	0.1		29.4	64.9	5.7	0		18.9	56	24.7	0.3		
Total %	2.1	15.7	8.2	0.1	26.1	1.5	33.9	3.2	0.1	38.7	5.9	13.1	1.1	0	20.1	2.8	8.4	3.7	0	15.1	

	Valley Boulevard Southbound				Temple Avenue Westbound				Valley Boulevard Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	19	167	62	248	7	**319**	18	344	**58**	142	11	211	**29**	57	**49**	135	938
07:30 AM	22	125	**80**	227	8	241	21	270	37	**186**	**20**	**243**	28	89	41	158	898
07:45 AM	**32**	120	79	231	9	300	28	337	47	117	9	173	27	85	28	140	881
08:00 AM	26	**174**	67	**267**	**13**	319	**31**	**363**	30	127	5	162	27	**96**	39	**162**	**954**
Total Volume	99	586	288	973	37	1179	98	1314	172	572	45	789	111	327	157	595	3671
% App. Total	10.2	60.2	29.6		2.8	89.7	7.5		21.8	72.5	5.7		18.7	55	26.4		
PHF	.773	.842	.900	.911	.712	.924	.790	.905	.741	.769	.563	.812	.957	.852	.801	.918	.962

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City of Walnut
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Site Code : 04215551
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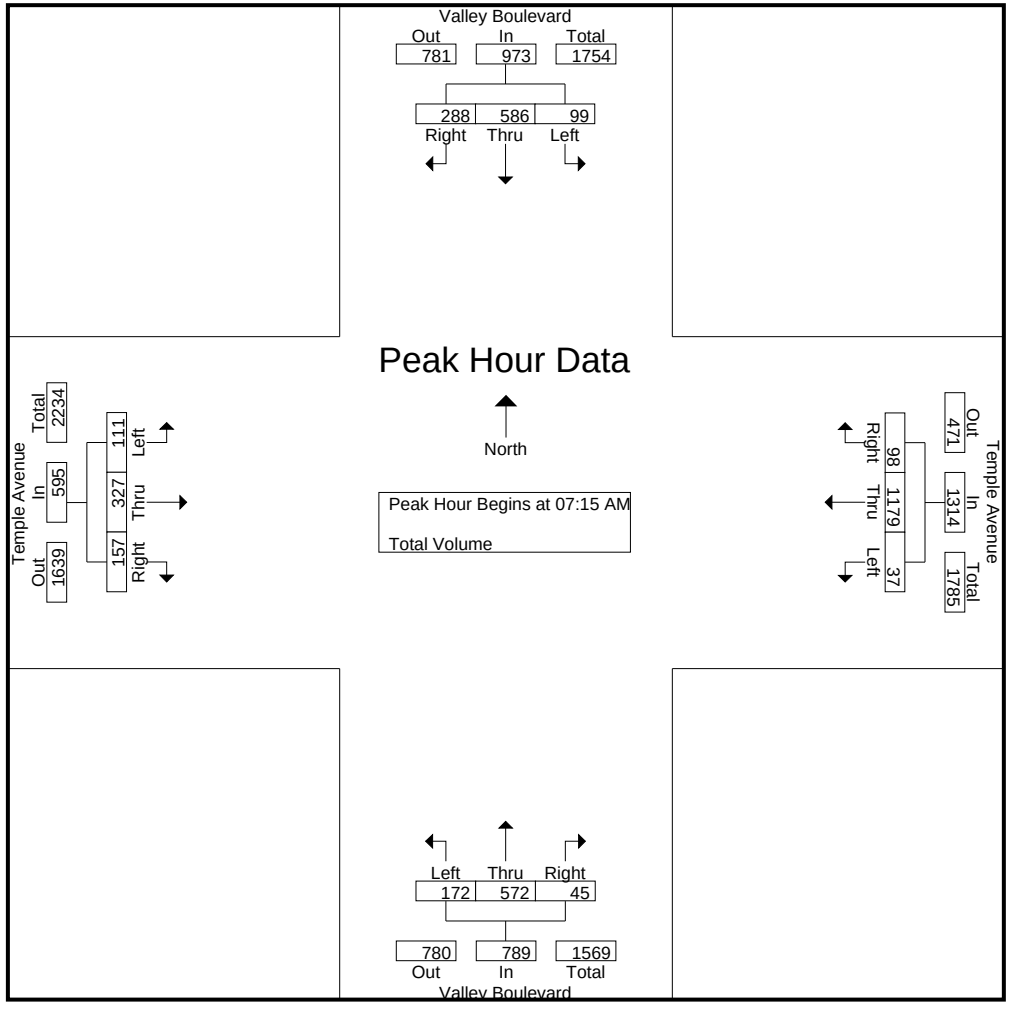

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City of Walnut
N/S: Valley Boulevard
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Weather: Clear

File Name : WNTVATEAM
Site Code : 04215551
Start Date : 10/1/2015

	Valley Boulevard Southbound				Temple Avenue Westbound				Valley Boulevard Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:00 AM				07:15 AM				07:15 AM				
+0 mins.	19	167	62	248	**10**	**394**	22	**426**	**58**	142	11	211	**29**	57	**49**	135	
+15 mins.	22	125	**80**	227	7	319	18	344	37	**186**	**20**	**243**	28	89	41	158	
+30 mins.	**32**	120	79	231	8	241	21	270	47	117	9	173	27	85	28	140	
+45 mins.	26	**174**	67	**267**	9	300	**28**	337	30	127	5	162	27	**96**	39	**162**	
Total Volume	99	586	288	973	34	1254	89	1377	172	572	45	789	111	327	157	595	
% App. Total	10.2	60.2	29.6		2.5	91.1	6.5		21.8	72.5	5.7		18.7	55	26.4		
PHF	.773	.842	.900	.911	.850	.796	.795	.808	.741	.769	.563	.812	.957	.852	.801	.918	

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City of Walnut
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Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Valley Boulevard Southbound					Temple Avenue Westbound					Valley Boulevard Northbound					Temple Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	49	90	29	0	168	18	163	17	0	198	35	144	8	0	187	51	194	42	0	287	840
04:15 PM	51	71	46	0	168	20	166	31	2	219	33	162	18	0	213	45	237	41	0	323	923
04:30 PM	54	96	31	4	185	19	146	27	0	192	53	203	11	0	267	51	286	39	5	381	1025
04:45 PM	54	97	28	0	179	21	182	33	0	236	40	155	15	0	210	66	328	59	1	454	1079
Total	208	354	134	4	700	78	657	108	2	845	161	664	52	0	877	213	1045	181	6	1445	3867
05:00 PM	36	113	32	0	181	16	139	26	0	181	57	234	17	1	309	37	184	46	0	267	938
05:15 PM	36	193	49	1	279	15	186	30	0	231	65	206	13	0	284	25	206	46	3	280	1074
05:30 PM	34	147	49	0	230	32	177	23	2	234	72	180	18	0	270	35	245	63	0	343	1077
05:45 PM	48	74	37	1	160	10	209	32	0	251	40	157	15	0	212	26	305	80	3	414	1037
Total	154	527	167	2	850	73	711	111	2	897	234	777	63	1	1075	123	940	235	6	1304	4126
Grand Total	362	881	301	6	1550	151	1368	219	4	1742	395	1441	115	1	1952	336	1985	416	12	2749	7993
Apprch %	23.4	56.8	19.4	0.4		8.7	78.5	12.6	0.2		20.2	73.8	5.9	0.1		12.2	72.2	15.1	0.4		
Total %	4.5	11	3.8	0.1	19.4	1.9	17.1	2.7	0.1	21.8	4.9	18	1.4	0	24.4	4.2	24.8	5.2	0.2	34.4	

	Valley Boulevard Southbound				Temple Avenue Westbound				Valley Boulevard Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**54**	97	28	179	21	182	**33**	**236**	40	155	15	210	**66**	**328**	59	**453**	**1078**
05:00 PM	36	113	32	181	16	139	26	181	57	**234**	17	**308**	37	184	46	267	937
05:15 PM	36	**193**	**49**	**278**	15	**186**	30	231	65	206	13	284	25	206	46	277	1070
05:30 PM	34	147	49	230	**32**	177	23	232	**72**	180	**18**	270	35	245	**63**	343	1075
Total Volume	160	550	158	868	84	684	112	880	234	775	63	1072	163	963	214	1340	4160
% App. Total	18.4	63.4	18.2		9.5	77.7	12.7		21.8	72.3	5.9		12.2	71.9	16		
PHF	.741	.712	.806	.781	.656	.919	.848	.932	.813	.828	.875	.870	.617	.734	.849	.740	.965

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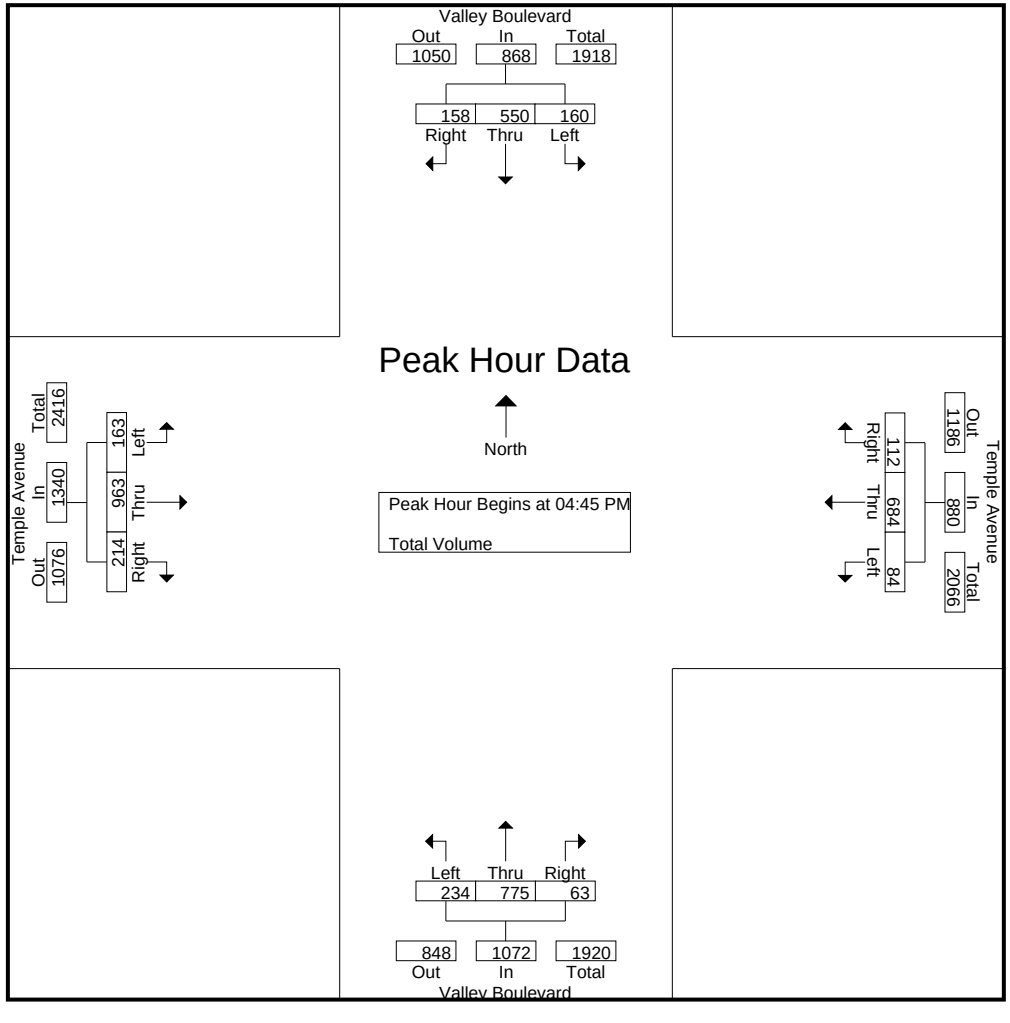
City of Walnut
N/S: Valley Boulevard
E/W: Temple Avenue
Weather: Clear

File Name : WNTVATEPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Valley Boulevard
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File Name : WNTVATEPM
Site Code : 04215551
Start Date : 10/1/2015

	Valley Boulevard Southbound				Temple Avenue Westbound				Valley Boulevard Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				05:00 PM				05:00 PM				04:00 PM				
+0 mins.	**54**	97	28	179	16	139	26	181	57	**234**	17	**308**	51	194	42	287	
+15 mins.	36	113	32	181	15	186	30	231	65	206	13	284	45	237	41	323	
+30 mins.	36	**193**	**49**	**278**	**32**	177	23	232	**72**	180	**18**	270	51	286	39	376	
+45 mins.	34	147	49	230	10	**209**	**32**	**251**	40	157	15	212	**66**	**328**	**59**	**453**	
Total Volume	160	550	158	868	73	711	111	895	234	777	63	1074	213	1045	181	1439	
% App. Total	18.4	63.4	18.2		8.2	79.4	12.4		21.8	72.3	5.9		14.8	72.6	12.6		
PHF	.741	.712	.806	.781	.570	.850	.867	.891	.813	.830	.875	.872	.807	.796	.767	.794	

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City of Walnut
N/S: SR-57 Southbound Ramps
E/W: Temple Avenue
Weather: Clear

File Name : WNT57STEAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	SR-57 Southbound Ramps Southbound					Temple Avenue Westbound					Driveway Northbound					Temple Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	141	0	246	0	387	1	452	12	8	473	0	0	1	0	1	0	120	0	0	120	981
07:15 AM	143	0	186	0	329	2	319	7	9	337	0	0	1	0	1	0	101	4	0	105	772
07:30 AM	159	0	145	0	304	1	209	8	16	234	0	0	0	0	0	0	160	4	0	164	702
07:45 AM	161	3	168	0	332	3	245	16	31	295	0	0	0	0	0	0	160	2	0	162	789
Total	604	3	745	0	1352	7	1225	43	64	1339	0	0	2	0	2	0	541	10	0	551	3244
08:00 AM	123	3	185	0	311	1	266	16	11	294	0	0	0	0	0	0	147	3	0	150	755
08:15 AM	151	3	186	0	340	2	270	7	7	286	0	0	0	0	0	0	142	8	0	150	776
08:30 AM	128	2	197	0	327	1	298	17	7	323	0	0	0	0	0	0	131	3	0	134	784
08:45 AM	113	3	200	0	316	1	308	23	7	339	0	0	1	0	1	0	122	3	0	125	781
Total	515	11	768	0	1294	5	1142	63	32	1242	0	0	1	0	1	0	542	17	0	559	3096
Grand Total	1119	14	1513	0	2646	12	2367	106	96	2581	0	0	3	0	3	0	1083	27	0	1110	6340
Apprch %	42.3	0.5	57.2	0		0.5	91.7	4.1	3.7		0	0	100	0		0	97.6	2.4	0		
Total %	17.6	0.2	23.9	0	41.7	0.2	37.3	1.7	1.5	40.7	0	0	0	0	0	0	17.1	0.4	0	17.5	

	SR-57 Southbound Ramps Southbound				Temple Avenue Westbound				Driveway Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	141	0	**246**	**387**	1	**452**	12	**465**	0	0	**1**	**1**	0	120	0	120	**973**
07:15 AM	143	0	186	329	2	319	7	328	0	0	1	1	0	101	**4**	105	763
07:30 AM	159	0	145	304	1	209	8	218	0	0	0	0	0	**160**	4	**164**	686
07:45 AM	**161**	**3**	168	332	**3**	245	**16**	264	0	0	0	0	0	160	2	162	758
Total Volume	604	3	745	1352	7	1225	43	1275	0	0	2	2	0	541	10	551	3180
% App. Total	44.7	0.2	55.1		0.5	96.1	3.4		0	0	100		0	98.2	1.8		
PHF	.938	.250	.757	.873	.583	.678	.672	.685	.000	.000	.500	.500	.000	.845	.625	.840	.817

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City of Walnut
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E/W: Temple Avenue
Weather: Clear

File Name : WNT57STEAM
Site Code : 04215551
Start Date : 10/1/2015
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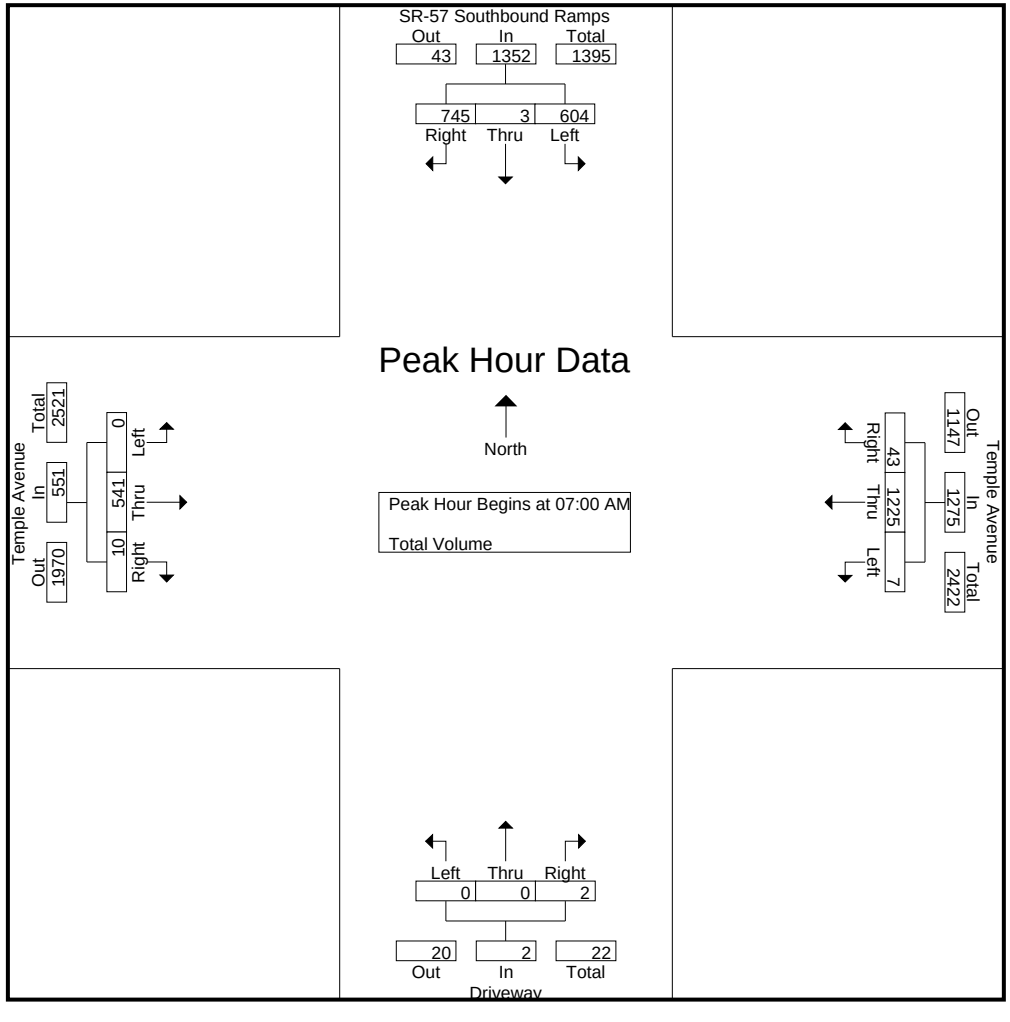

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City of Walnut
N/S: SR-57 Southbound Ramps
E/W: Temple Avenue
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File Name : WNT57STEAM
Site Code : 04215551
Start Date : 10/1/2015

	SR-57 Southbound Ramps Southbound				Temple Avenue Westbound				Driveway Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:30 AM				
+0 mins.	141	0	**246**	**387**	1	**452**	12	**465**	0	0	**1**	**1**	0	**160**	4	**164**	
+15 mins.	143	0	186	329	2	319	7	328	0	0	1	1	0	160	2	162	
+30 mins.	159	0	145	304	1	209	8	218	0	0	0	0	0	147	3	150	
+45 mins.	**161**	**3**	168	332	**3**	245	**16**	264	0	0	0	0	0	142	**8**	150	
Total Volume	604	3	745	1352	7	1225	43	1275	0	0	2	2	0	609	17	626	
% App. Total	44.7	0.2	55.1		0.5	96.1	3.4		0	0	100		0	97.3	2.7		
PHF	.938	.250	.757	.873	.583	.678	.672	.685	.000	.000	.500	.500	.000	.952	.531	.954	

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City of Walnut
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File Name : WNT57STEPM
Site Code : 04215551
Start Date : 10/1/2015

Groups Printed- Total Volume

	SR-57 Southbound Ramps Southbound					Temple Avenue Westbound					Driveway Northbound					Temple Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	173	2	122	0	297	1	125	40	14	180	0	0	10	0	10	0	375	0	0	375	862
04:15 PM	167	3	137	0	307	2	126	27	6	161	0	0	8	0	8	0	437	4	0	441	917
04:30 PM	180	3	97	0	280	2	147	22	10	181	0	0	18	0	18	0	498	13	0	511	990
04:45 PM	191	2	128	0	321	0	143	26	8	177	0	0	13	0	13	0	514	10	0	524	1035
Total	711	10	484	0	1205	5	541	115	38	699	0	0	49	0	49	0	1824	27	0	1851	3804
05:00 PM	207	1	117	0	325	5	145	37	10	197	0	0	16	0	16	0	445	15	0	460	998
05:15 PM	244	5	137	0	386	5	130	32	12	179	0	0	19	0	19	0	441	16	0	457	1041
05:30 PM	246	4	145	0	395	2	162	31	13	208	1	0	20	0	21	0	437	24	0	461	1085
05:45 PM	226	2	137	0	365	6	139	16	6	167	0	0	28	0	28	0	473	17	0	490	1050
Total	923	12	536	0	1471	18	576	116	41	751	1	0	83	0	84	0	1796	72	0	1868	4174
Grand Total	1634	22	1020	0	2676	23	1117	231	79	1450	1	0	132	0	133	0	3620	99	0	3719	7978
Apprch %	61.1	0.8	38.1	0		1.6	77	15.9	5.4		0.8	0	99.2	0		0	97.3	2.7	0		
Total %	20.5	0.3	12.8	0	33.5	0.3	14	2.9	1	18.2	0	0	1.7	0	1.7	0	45.4	1.2	0	46.6	

	SR-57 Southbound Ramps Southbound				Temple Avenue Westbound				Driveway Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	207	1	117	325	5	145	**37**	187	0	0	16	16	0	445	15	460	988
05:15 PM	244	**5**	137	386	5	130	32	167	0	0	19	19	0	441	16	457	1029
05:30 PM	**246**	4	**145**	**395**	2	**162**	31	**195**	**1**	0	20	21	0	437	**24**	461	**1072**
05:45 PM	226	2	137	365	**6**	139	16	161	0	0	**28**	**28**	0	**473**	17	**490**	1044
Total Volume	923	12	536	1471	18	576	116	710	1	0	83	84	0	1796	72	1868	4133
% App. Total	62.7	0.8	36.4		2.5	81.1	16.3		1.2	0	98.8		0	96.1	3.9		
PHF	.938	.600	.924	.931	.750	.889	.784	.910	.250	.000	.741	.750	.000	.949	.750	.953	.964

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City of Walnut
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Weather: Clear

File Name : WNT57STEPM
Site Code : 04215551
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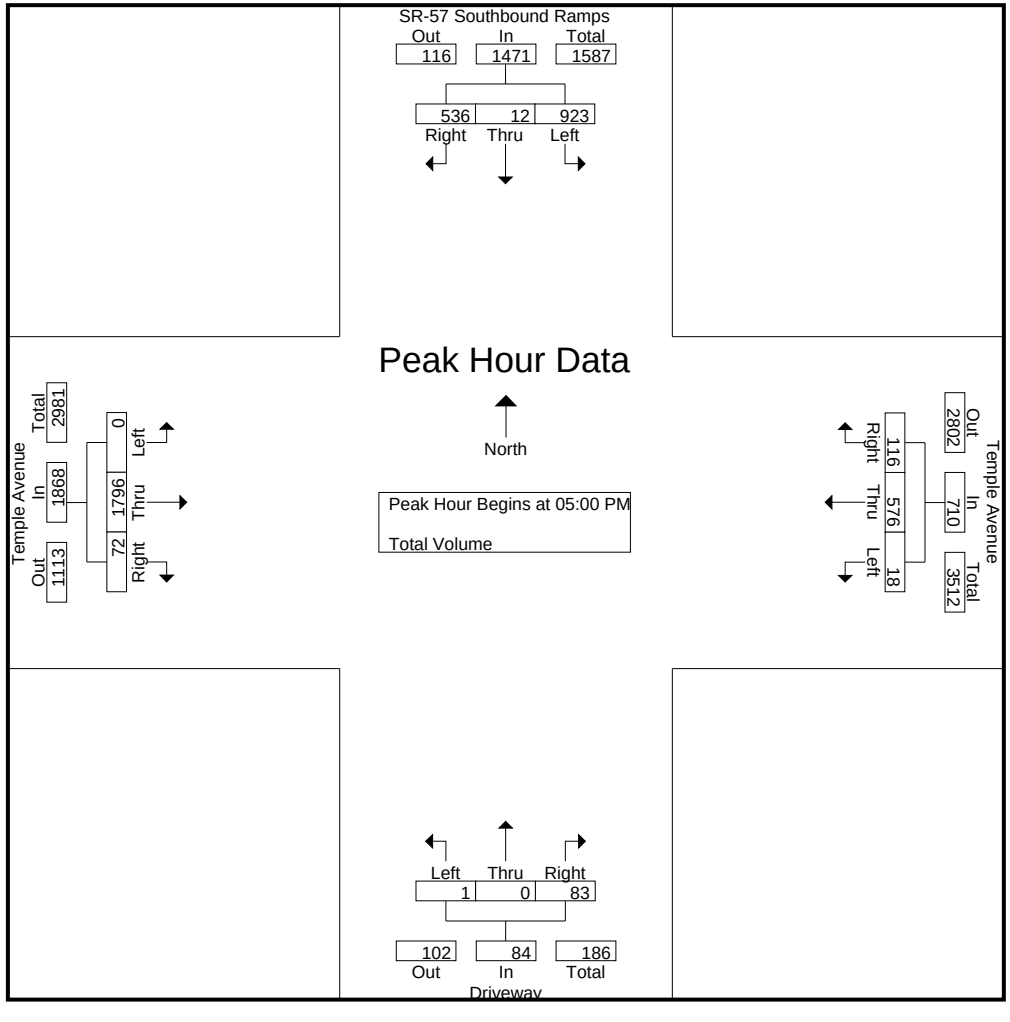

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City of Walnut
N/S: SR-57 Southbound Ramps
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Site Code : 04215551
Start Date : 10/1/2015

	SR-57 Southbound Ramps Southbound				Temple Avenue Westbound				Driveway Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				04:45 PM				05:00 PM				04:30 PM				
+0 mins.	207	1	117	325	0	143	26	169	0	0	16	16	0	498	13	511	
+15 mins.	244	**5**	137	386	**5**	145	**37**	187	0	0	19	19	0	**514**	10	**524**	
+30 mins.	**246**	4	**145**	**395**	5	130	32	167	**1**	0	20	21	0	445	15	460	
+45 mins.	226	2	137	365	2	**162**	31	**195**	0	0	**28**	**28**	0	441	**16**	457	
Total Volume	923	12	536	1471	12	580	126	718	1	0	83	84	0	1898	54	1952	
% App. Total	62.7	0.8	36.4		1.7	80.8	17.5		1.2	0	98.8		0	97.2	2.8		
PHF	.938	.600	.924	.931	.600	.895	.851	.921	.250	.000	.741	.750	.000	.923	.844	.931	

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City of Walnut
N/S: SR-57 Northbound Ramps
E/W: Temple Avenue
Weather: Clear

File Name : WNT57NTEAM
Site Code : 04215551
Start Date : 10/1/2015

Groups Printed- Total Volume

	Temple Avenue Westbound				SR-57 Northbound Ramps Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	U-Turns	App. Total	Left	Right	U-Turns	App. Total	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	0	534	0	534	161	41	0	202	178	64	0	242	978
07:15 AM	0	396	0	396	101	70	0	171	199	44	1	244	811
07:30 AM	0	335	0	335	65	62	0	127	216	82	0	298	760
07:45 AM	0	334	0	334	58	101	0	159	213	86	0	299	792
Total	0	1599	0	1599	385	274	0	659	806	276	1	1083	3341
08:00 AM	0	350	0	350	74	91	0	165	200	70	0	270	785
08:15 AM	0	361	0	361	92	67	0	159	217	78	0	295	815
08:30 AM	0	335	0	335	94	74	0	168	202	59	0	261	764
08:45 AM	0	328	0	328	150	59	0	209	180	54	0	234	771
Total	0	1374	0	1374	410	291	0	701	799	261	0	1060	3135
Grand Total	0	2973	0	2973	795	565	0	1360	1605	537	1	2143	6476
Apprch %	0	100	0		58.5	41.5	0		74.9	25.1	0		
Total %	0	45.9	0	45.9	12.3	8.7	0	21	24.8	8.3	0	33.1	

	Temple Avenue Westbound			SR-57 Northbound Ramps Northbound			Temple Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	**534**	**534**	**161**	41	**202**	178	64	242	**978**
07:15 AM	0	396	396	101	70	171	199	44	243	810
07:30 AM	0	335	335	65	62	127	**216**	82	298	760
07:45 AM	0	334	334	58	**101**	159	213	**86**	**299**	792
Total Volume	0	1599	1599	385	274	659	806	276	1082	3340
% App. Total	0	100		58.4	41.6		74.5	25.5		
PHF	.000	.749	.749	.598	.678	.816	.933	.802	.905	.854

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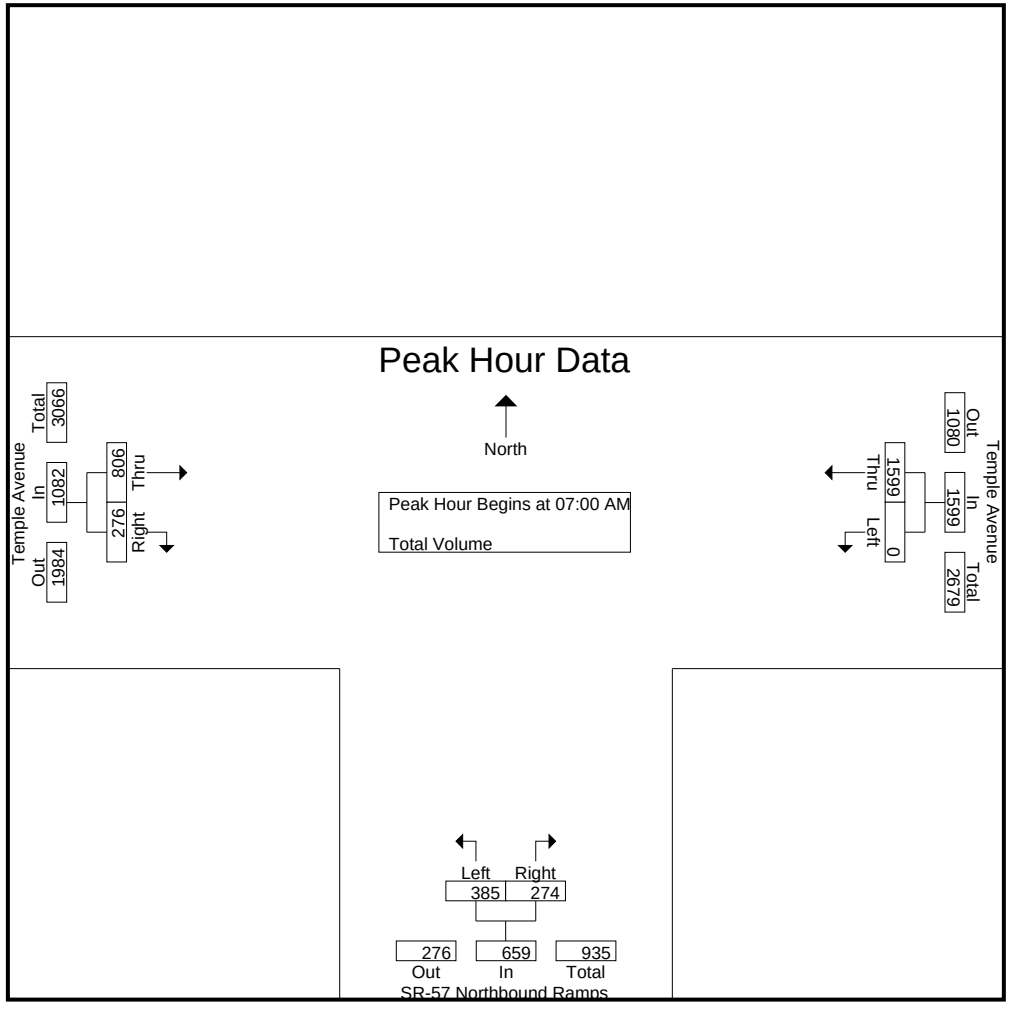

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City of Walnut
N/S: SR-57 Northbound Ramps
E/W: Temple Avenue
Weather: Clear

File Name : WNT57NTEAM
Site Code : 04215551
Start Date : 10/1/2015

	Temple Avenue Westbound			SR-57 Northbound Ramps Northbound			Temple Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Each Approach Begins at:										
	07:00 AM			08:00 AM			07:30 AM			
+0 mins.	0	**534**	**534**	74	**91**	165	216	82	298	
+15 mins.	0	396	396	92	67	159	213	**86**	**299**	
+30 mins.	0	335	335	94	74	168	200	70	270	
+45 mins.	0	334	334	**150**	59	**209**	**217**	78	295	
Total Volume	0	1599	1599	410	291	701	846	316	1162	
% App. Total	0	100		58.5	41.5		72.8	27.2		
PHF	.000	.749	.749	.683	.799	.839	.975	.919	.972	

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City of Walnut
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File Name : WNT57NTEPM
Site Code : 04215551
Start Date : 10/1/2015
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Groups Printed- Total Volume

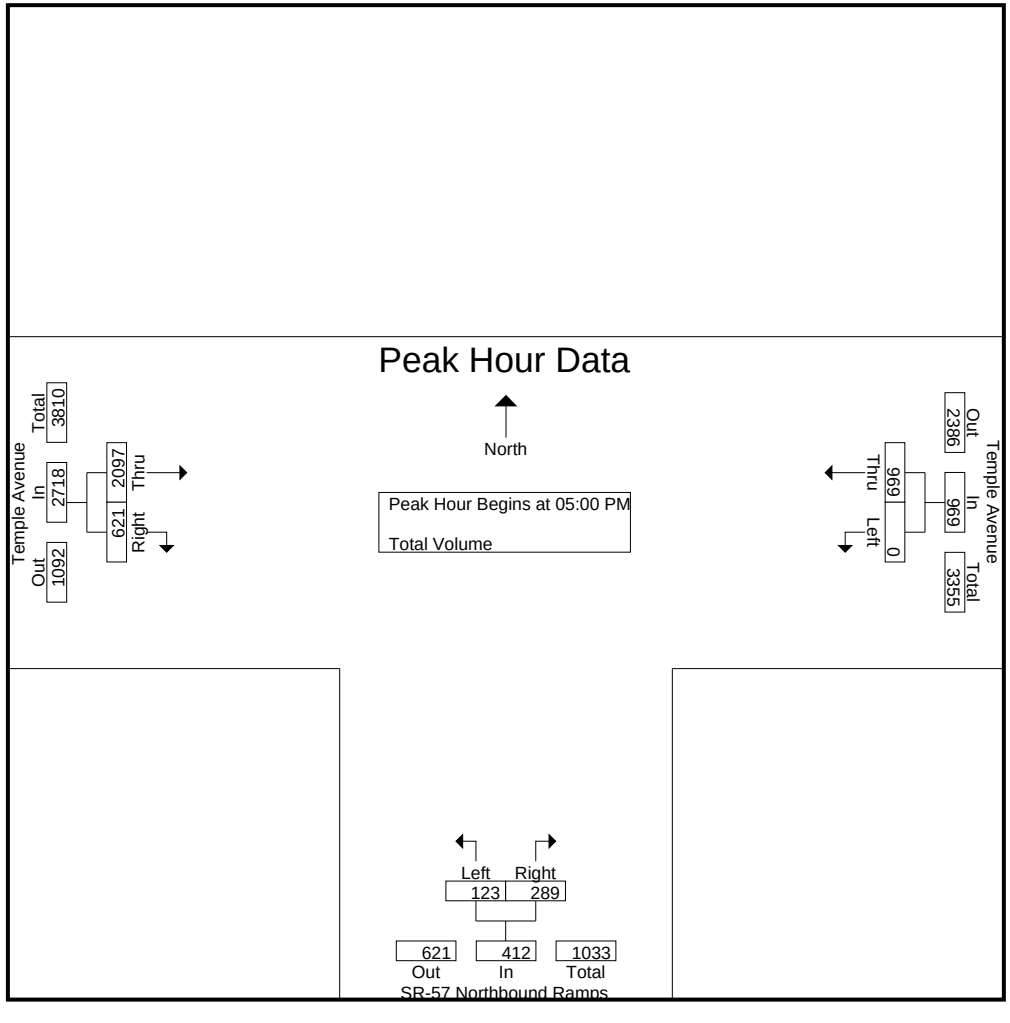
	Temple Avenue Westbound				SR-57 Northbound Ramps Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	U-Turns	App. Total	Left	Right	U-Turns	App. Total	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	0	222	0	222	32	58	0	90	407	145	0	552	864
04:15 PM	0	214	0	214	33	57	0	90	386	195	0	581	885
04:30 PM	0	185	0	185	42	76	0	118	428	205	0	633	936
04:45 PM	0	210	0	210	28	69	0	97	510	164	0	674	981
Total	0	831	0	831	135	260	0	395	1731	709	0	2440	3666
05:00 PM	0	246	0	246	24	61	0	85	485	156	0	641	972
05:15 PM	0	253	0	253	36	64	0	100	542	142	0	684	1037
05:30 PM	0	255	0	255	35	83	0	118	525	168	0	693	1066
05:45 PM	0	215	0	215	28	81	0	109	545	155	0	700	1024
Total	0	969	0	969	123	289	0	412	2097	621	0	2718	4099
Grand Total	0	1800	0	1800	258	549	0	807	3828	1330	0	5158	7765
Apprch %	0	100	0		32	68	0		74.2	25.8	0		
Total %	0	23.2	0	23.2	3.3	7.1	0	10.4	49.3	17.1	0	66.4	

	Temple Avenue Westbound			SR-57 Northbound Ramps Northbound			Temple Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	246	246	24	61	85	485	156	641	972
05:15 PM	0	253	253	**36**	64	100	542	142	684	1037
05:30 PM	0	**255**	**255**	35	**83**	**118**	525	**168**	693	**1066**
05:45 PM	0	215	215	28	81	109	**545**	155	**700**	1024
Total Volume	0	969	969	123	289	412	2097	621	2718	4099
% App. Total	0	100		29.9	70.1		77.2	22.8		
PHF	.000	.950	.950	.854	.870	.873	.962	.924	.971	.961

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

City of Walnut
N/S: SR-57 Northbound Ramps
E/W: Temple Avenue
Weather: Clear

File Name : WNT57NTEPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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

City of Walnut
N/S: SR-57 Northbound Ramps
E/W: Temple Avenue
Weather: Clear

File Name : WNT57NTEPM
Site Code : 04215551
Start Date : 10/1/2015

	Temple Avenue Westbound			SR-57 Northbound Ramps Northbound			Temple Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Each Approach Begins at:										
	05:00 PM			05:00 PM			05:00 PM			
+0 mins.	0	246	246	24	61	85	485	156	641	
+15 mins.	0	253	253	**36**	64	100	542	142	684	
+30 mins.	0	**255**	**255**	35	**83**	**118**	525	**168**	693	
+45 mins.	0	215	215	28	81	109	**545**	155	**700**	
Total Volume	0	969	969	123	289	412	2097	621	2718	
% App. Total	0	100		29.9	70.1		77.2	22.8		
PHF	.000	.950	.950	.854	.870	.873	.962	.924	.971	

APPENDIX B:
LOS CALCULATION SHEETS

EXISTING CONDITIONS

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.760
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0	1	0	0	1! 0	0	1	0	2	0 1	1	0	2	1 0
Volume Module:																
Base Vol:	594	4	140		18	10	12		4	1170	436		78	1018	3	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	594	4	140		18	10	12		4	1170	436		78	1018	3	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	594	4	140		18	10	12		4	1170	436		78	1018	3	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92	
PHF Volume:	645	4	152		20	11	13		4	1270	473		85	1105	3	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	645	4	152		20	11	13		4	1270	473		85	1105	3	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	645	4	152		20	11	13		4	1270	473		85	1105	3	
OvlAdjVol:											149					
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.99	0.01	1.00		0.45	0.25	0.30		1.00	2.00	1.00		1.00	2.99	0.01	
Final Sat.:	3179	21	1600		720	400	480		1600	3200	1600		1600	4786	14	
Capacity Analysis Module:																
Vol/Sat:	0.20	0.20	0.10		0.03	0.03	0.03		0.00	0.40	0.30		0.05	0.23	0.23	
OvlAdjV/S:											0.09					
Crit Moves:	****						****			****			****			

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.706
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0	1	0	1	0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	268	27	102		22	45	19		7	1045	292		53	790	14	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	268	27	102		22	45	19		7	1045	292		53	790	14	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	268	27	102		22	45	19		7	1045	292		53	790	14	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94	
PHF Volume:	287	29	109		24	48	20		7	1118	312		57	845	15	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	287	29	109		24	48	20		7	1118	312		57	845	15	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	287	29	109		24	48	20		7	1118	312		57	845	15	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.82	0.18	1.00		0.33	0.67	1.00		1.00	1.56	0.44		1.00	2.00	1.00	
Final Sat.:	2907	293	1600		525	1075	1600		1600	2501	699		1600	3200	1600	
Capacity Analysis Module:																
Vol/Sat:	0.10	0.10	0.07		0.04	0.04	0.01		0.00	0.45	0.45		0.04	0.26	0.01	
Crit Moves:	****				****					****			****			

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.605
Loss Time (sec):	6	Average Delay (sec/veh):	23.4
Optimal Cycle:	33	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	0	1 0	0 1	0	0 1!	0 0
Volume Module:												
Base Vol:	144	1051	17	0	812	140	437	6	310	12	3	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	144	1051	17	0	812	140	437	6	310	12	3	8
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	144	1051	17	0	812	140	437	6	310	12	3	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	146	1063	17	0	821	142	442	6	314	12	3	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	146	1063	17	0	821	142	442	6	314	12	3	8
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	146	1063	17	0	821	142	442	6	314	12	3	8
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	1.00	0.95	0.85	0.95	0.95	0.85	0.93	0.93	0.93
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.99	0.01	1.00	0.52	0.13	0.35
Final Sat.:	1805	3610	1615	1900	3610	1615	1786	25	1615	921	230	614
Capacity Analysis Module:												
Vol/Sat:	0.08	0.29	0.01	0.00	0.23	0.09	0.25	0.25	0.19	0.01	0.01	0.01
Crit Moves:	****				****			****			****	
Green/Cycle:	0.13	0.51	0.51	0.00	0.38	0.38	0.41	0.41	0.41	0.02	0.02	0.02
Volume/Cap:	0.61	0.58	0.02	0.00	0.61	0.23	0.61	0.61	0.47	0.61	0.61	0.61
Delay/Veh:	45.2	17.5	12.2	0.0	26.0	21.5	24.7	24.7	22.2	73.0	73.0	73.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.2	17.5	12.2	0.0	26.0	21.5	24.7	24.7	22.2	73.0	73.0	73.0
LOS by Move:	D	B	B	A	C	C	C	C	C	E	E	E
HCM2kAvgQ:	4	12	0	0	11	3	11	11	7	2	2	2

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to MMA, LONG BEACH, CA

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.817
Loss Time (sec):	6	Average Delay (sec/veh):	26.3
Optimal Cycle:	62	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 0	0	0 1	1 0	1	0 1!	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	41	873	0	0	927	223	349	0	533	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	873	0	0	927	223	349	0	533	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	873	0	0	927	223	349	0	533	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	41	873	0	0	927	223	349	0	533	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	873	0	0	927	223	349	0	533	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	41	873	0	0	927	223	349	0	533	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.92	0.92	0.89	1.00	0.89	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.61	0.39	1.25	0.00	0.75	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2826	680	2112	0	1276	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.24	0.00	0.00	0.33	0.33	0.17	0.00	0.42	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.03	0.43	0.00	0.00	0.40	0.40	0.51	0.00	0.51	0.00	0.00	0.00
Volume/Cap:	0.82	0.56	0.00	0.00	0.82	0.82	0.32	0.00	0.82	0.00	0.00	0.00
Delay/Veh:	112.3	22.0	0.0	0.0	30.5	30.5	14.4	0.0	25.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	112.3	22.0	0.0	0.0	30.5	30.5	14.4	0.0	25.5	0.0	0.0	0.0
LOS by Move:	F	C	A	A	C	C	B	A	C	A	A	A
HCM2kAvgQ:	3	11	0	0	17	17	5	0	20	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.944
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	128	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 0	1 0	1	0 1	0 1
Volume Module:												
Base Vol:	130	1183	442	221	1365	214	158	93	244	115	48	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1183	442	221	1365	214	158	93	244	115	48	76
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	130	1183	442	221	1365	214	158	93	244	115	48	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	139	1264	472	236	1458	229	169	99	261	123	51	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	1264	472	236	1458	229	169	99	261	123	51	81
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	139	1264	472	236	1458	229	169	99	261	123	51	81
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.28	0.72	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	442	1158	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.39	0.30	0.15	0.46	0.14	0.11	0.23	0.23	0.08	0.03	0.05
Crit Moves:	****				****			****		****		

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.885
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	93	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	236	1291	628	412	1070	187	284	757	153	110	446	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	236	1291	628	412	1070	187	284	757	153	110	446	185
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	236	1291	628	412	1070	187	284	757	153	110	446	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	245	1338	651	427	1109	194	294	784	159	114	462	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	1338	651	427	1109	194	294	784	159	114	462	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	245	1338	651	427	1109	194	294	784	159	114	462	192
OvlAdjVol:			594						36			0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.55	0.45	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4086	714	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.28	0.41	0.13	0.27	0.27	0.09	0.25	0.10	0.04	0.14	0.12
OvlAdjV/S:			0.37						0.02			0.00
Crit Moves:			****	****				****		****		

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.065
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	159	1684	70	1	1120	277	407	76	416	113	108	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	1684	70	1	1120	277	407	76	416	113	108	12
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	159	1684	70	1	1120	277	407	76	416	113	108	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	184	1945	81	1	1293	320	470	88	480	130	125	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	1945	81	1	1293	320	470	88	480	130	125	14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	1945	81	1	1293	320	470	88	480	130	125	14
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.69	0.31	1.00	1.46	1.39	0.15
Final Sat.:	1600	3200	1600	1600	3200	1600	2696	504	1600	2331	2222	247
Capacity Analysis Module:												
Vol/Sat:	0.11	0.61	0.05	0.00	0.40	0.20	0.17	0.17	0.30	0.06	0.06	0.06
OvlAdjV/S:						0.00						
Crit Moves:		****			****				****			****

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.845
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	79	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	291	1364	364	207	938	396	401	500	169	167	1116	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	291	1364	364	207	938	396	401	500	169	167	1116	139
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	291	1364	364	207	938	396	401	500	169	167	1116	139
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	307	1439	0	218	989	0	423	527	0	176	1177	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	307	1439	0	218	989	0	423	527	0	176	1177	147
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	307	1439	0	218	989	0	423	527	0	176	1177	147
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.30	0.00	0.07	0.21	0.00	0.13	0.11	0.00	0.06	0.25	0.09
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.828
Loss Time (sec):	6	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 0	0	0 3	0 1	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	116	2253	0	0	1002	107	39	0	36	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	116	2253	0	0	1002	107	39	0	36	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	2253	0	0	1002	107	39	0	36	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	123	2382	0	0	1059	113	41	0	38	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	2382	0	0	1059	113	41	0	38	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	123	2382	0	0	1059	113	41	0	38	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	4800	1600	3200	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.74	0.00	0.00	0.22	0.07	0.01	0.00	0.02	0.00	0.00	0.00
Crit Moves:		****			****				****			

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.846
Loss Time (sec):	10	Average Delay (sec/veh):	22.8
Optimal Cycle:	84	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	1 1	0	1 0	0 1	0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	1796	320	349	679	2	0	1	1	262	0	572
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1796	320	349	679	2	0	1	1	262	0	572
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1796	320	349	679	2	0	1	1	262	0	572
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	1907	340	370	721	2	0	1	1	278	0	607
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1907	340	370	721	2	0	1	1	278	0	607
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1907	340	370	721	2	0	1	1	278	0	607
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	0.95	1.00	0.93	0.93	0.88	1.00	0.88
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.50	0.50	1.31	0.00	1.69
Final Sat.:	1900	3610	1615	3502	3599	11	1900	879	879	2206	0	2830
Capacity Analysis Module:												
Vol/Sat:	0.00	0.53	0.21	0.11	0.20	0.20	0.00	0.00	0.00	0.13	0.00	0.21
Crit Moves:		****		****				****		****		
Green/Cycle:	0.00	0.62	0.77	0.13	0.75	0.75	0.00	0.00	0.00	0.15	0.00	0.28
Volume/Cap:	0.00	0.85	0.27	0.85	0.27	0.27	0.00	0.85	0.85	0.85	0.00	0.78
Delay/Veh:	0.0	18.1	3.4	56.9	4.0	4.0	0.0	470	470.0	47.9	0.0	36.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.1	3.4	56.9	4.0	4.0	0.0	470	470.0	47.9	0.0	36.9
LOS by Move:	A	B	A	E	A	A	A	F	F	D	A	D
HCM2kAvgQ:	0	24	3	6	4	4	0	1	1	9	0	12

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.861
Loss Time (sec):	10	Average Delay (sec/veh):	31.9
Optimal Cycle:	89	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2 0	1	1 0	2 0	0	2 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	1177	267	312	676	0	905	0	281	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1177	267	312	676	0	905	0	281	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1177	267	312	676	0	905	0	281	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	0	1205	273	319	692	0	926	0	288	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1205	273	319	692	0	926	0	288	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1205	273	319	692	0	926	0	288	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.33	0.17	0.18	0.19	0.00	0.26	0.00	0.18	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green/Cycle:	0.00	0.39	0.39	0.21	0.59	0.00	0.31	0.00	0.31	0.00	0.00	0.00
Volume/Cap:	0.00	0.86	0.44	0.86	0.32	0.00	0.86	0.00	0.58	0.00	0.00	0.00
Delay/Veh:	0.0	33.9	23.1	56.5	10.3	0.0	39.9	0.0	30.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	33.9	23.1	56.5	10.3	0.0	39.9	0.0	30.9	0.0	0.0	0.0
LOS by Move:	A	C	C	E	B	A	D	A	C	A	A	A
HCM2kAvgQ:	0	21	6	10	5	0	17	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.724
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	126	14	28	173	11	246	35	980	218	6	830	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	14	28	173	11	246	35	980	218	6	830	80
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	126	14	28	173	11	246	35	980	218	6	830	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	132	15	29	181	11	257	37	1023	228	6	866	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	15	29	181	11	257	37	1023	228	6	866	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	132	15	29	181	11	257	37	1023	228	6	866	84
OvlAdjVol:						220						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.90	0.10	1.00	0.94	0.06	1.00	1.00	1.64	0.36	1.00	2.00	1.00
Final Sat.:	1440	160	1600	1504	96	1600	1600	2618	582	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.02	0.12	0.12	0.16	0.02	0.39	0.39	0.00	0.27	0.05
OvlAdjV/S:						0.14						
Crit Moves:		****				****		****		****		

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.580
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	0 1	2	0 1	0 1	2	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	21	13	21	80	18	74	381	725	130	119	952	424
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	13	21	80	18	74	381	725	130	119	952	424
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	21	13	21	80	18	74	381	725	130	119	952	424
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	22	14	22	85	19	79	407	774	139	127	1016	453
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	14	22	85	19	79	407	774	139	127	1016	453
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	22	14	22	85	19	79	407	774	139	127	1016	453
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.70	0.30	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	3200	2713	487	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.03	0.01	0.05	0.13	0.29	0.29	0.08	0.32	0.28
OvlAdjV/S:						0.00						
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[15.3]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		4	847	0		0	1530	199	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		4	847	0		0	1530	199	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		4	847	0		0	1530	199	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	0	0	0		0	0	0		4	872	0		0	1576	205	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		4	872	0		0	1576	205	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	1668	2661	436		2020	2456	788		1781	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	89	23	574		52	31	338		353	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	88	23	574		51	31	338		353	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		0.01	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		15.3	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		C	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.751
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0	2	0 1	1	0	2	0 1	1	0	2	1 0	1	0	2	1 0
Volume Module:																
Base Vol:	172	572	45		99	586	288		111	327	157		37	1179	98	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	172	572	45		99	586	288		111	327	157		37	1179	98	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	172	572	45		99	586	288		111	327	157		37	1179	98	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.96	0.96	0.96		0.96	0.96	0.96		0.96	0.96	0.96		0.96	0.96	0.96	
PHF Volume:	179	595	47		103	609	299		115	340	163		38	1226	102	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	179	595	47		103	609	299		115	340	163		38	1226	102	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	179	595	47		103	609	299		115	340	163		38	1226	102	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.03	0.97		1.00	2.77	0.23	
Final Sat.:	1600	3200	1600		1600	3200	1600		1600	3243	1557		1600	4432	368	
Capacity Analysis Module:																
Vol/Sat:	0.11	0.19	0.03		0.06	0.19	0.19		0.07	0.10	0.10		0.02	0.28	0.28	
Crit Moves:	****					****			****					****		

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.825
Loss Time (sec):	6	Average Delay (sec/veh):	22.9
Optimal Cycle:	64	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 1	1 0	1! 0	1	0 0	2	1 0	1 0	3 0	1
Volume Module:												
Base Vol:	0	0	2	604	3	745	0	541	10	7	1225	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	2	604	3	745	0	541	10	7	1225	43
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	2	604	3	745	0	541	10	7	1225	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.00
PHF Volume:	0	0	2	739	4	912	0	662	12	9	1499	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	2	739	4	912	0	662	12	9	1499	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	0	2	739	4	912	0	662	12	9	1499	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.90	0.90	0.90	1.00	0.91	0.91	0.95	0.91	1.00
Lanes:	0.00	0.00	1.00	1.44	0.01	1.55	0.00	2.95	0.05	1.00	3.00	1.00
Final Sat.:	0	0	1644	2464	8	2641	0	5078	94	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.30	0.49	0.35	0.00	0.13	0.13	0.00	0.29	0.00
Crit Moves:					****		****				****	
Green/Cycle:	0.00	0.00	0.00	0.59	0.59	0.59	0.00	0.34	0.34	0.01	0.35	0.00
Volume/Cap:	0.00	0.00	xxxx	0.51	0.83	0.59	0.00	0.39	0.39	0.39	0.83	0.00
Delay/Veh:	0.0	0.0	0.0	12.2	19.3	13.2	0.0	25.3	25.3	59.8	32.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	12.2	19.3	13.2	0.0	25.3	25.3	59.8	32.9	0.0
LOS by Move:	A	A	A	B	B	B	A	C	C	E	C	A
HCM2kAvgQ:	0	0	0	13	6	9	0	6	6	1	18	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.084
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2	0 0	0 0	1	1 0	1 0	0	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	397	739	0	0	1653	181	86	0	561	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	397	739	0	0	1653	181	86	0	561	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	397	739	0	0	1653	181	86	0	561	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	432	803	0	0	1797	197	93	0	610	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	432	803	0	0	1797	197	93	0	610	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	432	803	0	0	1797	197	93	0	610	0	0	0
OvlAdjVol:									394			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.80	0.20	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	2884	316	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.13	0.25	0.00	0.00	0.62	0.62	0.06	0.00	0.38	0.00	0.00	0.00
OvlAdjV/S:									0.25			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.559
Loss Time (sec):	6	Average Delay (sec/veh):	13.6
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	0	1	0	2	1 1
Volume Module:												
Base Vol:	385	0	274	0	0	0	0	806	276	0	1599	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	385	0	274	0	0	0	0	806	276	0	1599	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	385	0	274	0	0	0	0	806	276	0	1599	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.00	0.85	0.85	0.85
PHF Volume:	451	0	321	0	0	0	0	944	0	0	1872	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	451	0	321	0	0	0	0	944	0	0	1872	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	451	0	321	0	0	0	0	944	0	0	1872	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Lanes:	1.58	0.00	1.42	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.00	0.00
Final Sat.:	2744	0	2453	0	0	0	1900	5187	1729	0	5187	0
Capacity Analysis Module:												
Vol/Sat:	0.16	0.00	0.13	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.36	0.00
Crit Moves:	****										****	
Green/Cycle:	0.29	0.00	0.29	0.00	0.00	0.00	0.00	0.65	0.00	0.00	0.65	0.00
Volume/Cap:	0.56	0.00	0.44	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.56	0.00
Delay/Veh:	30.3	0.0	28.9	0.0	0.0	0.0	0.0	7.7	0.0	0.0	10.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.3	0.0	28.9	0.0	0.0	0.0	0.0	7.7	0.0	0.0	10.0	0.0
LOS by Move:	C		A	C		A	A		A	A		B A
HCM2kAvgQ:	8	0	6	0	0	0	0	5	0	0	12	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.666
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 0 1	2	0	2 0 0	0	0	0 0 0	2	0	0 0 2
Volume Module:												
Base Vol:	0	1047	437	643	1700	0	0	0	0	134	0	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1047	437	643	1700	0	0	0	0	134	0	75
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1047	437	643	1700	0	0	0	0	134	0	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	1077	450	662	1749	0	0	0	0	138	0	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1077	450	662	1749	0	0	0	0	138	0	77
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1077	450	662	1749	0	0	0	0	138	0	77
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	3200	3200	0	0	0	0	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.28	0.21	0.55	0.00	0.00	0.00	0.00	0.04	0.00	0.02
OvlAdjV/S:												0.00
Crit Moves:		****			****						****	

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.725
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0	1	0	0 1!	0	0	1	0 2	0	1	1	0 2	1	0
Volume Module:																
Base Vol:	570	9	191		6	3	13		6	1118	481		129	960		12
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	570	9	191		6	3	13		6	1118	481		129	960		12
Added Vol:	0	0	0		0	0	0		0	0	0		0	0		0
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0		0
Initial Fut:	570	9	191		6	3	13		6	1118	481		129	960		12
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97		0.97
PHF Volume:	589	9	197		6	3	13		6	1155	497		133	992		12
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0		0
Reduced Vol:	589	9	197		6	3	13		6	1155	497		133	992		12
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
FinalVolume:	589	9	197		6	3	13		6	1155	497		133	992		12
OvlAdjVol:											198					
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600		1600
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Lanes:	1.97	0.03	1.00		0.27	0.14	0.59		1.00	2.00	1.00		1.00	2.96		0.04
Final Sat.:	3150	50	1600		436	218	945		1600	3200	1600		1600	4741		59
Capacity Analysis Module:																
Vol/Sat:	0.19	0.19	0.12		0.01	0.01	0.01		0.00	0.36	0.31		0.08	0.21		0.21
OvlAdjV/S:											0.12					
Crit Moves:	****					****				****				****		

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.636
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0	1	0	1 0	0	1	1	0 1	1	0	1	0 2	0	1
Volume Module:																
Base Vol:	254	42	132		17	22	5		19	999	161		107	890		19
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	254	42	132		17	22	5		19	999	161		107	890		19
Added Vol:	0	0	0		0	0	0		0	0	0		0	0		0
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0		0
Initial Fut:	254	42	132		17	22	5		19	999	161		107	890		19
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.98	0.98	0.98		0.98	0.98	0.98		0.98	0.98	0.98		0.98	0.98		0.98
PHF Volume:	258	43	134		17	22	5		19	1016	164		109	905		19
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0		0
Reduced Vol:	258	43	134		17	22	5		19	1016	164		109	905		19
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
FinalVolume:	258	43	134		17	22	5		19	1016	164		109	905		19
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600		1600
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Lanes:	1.72	0.28	1.00		0.44	0.56	1.00		1.00	1.72	0.28		1.00	2.00		1.00
Final Sat.:	2746	454	1600		697	903	1600		1600	2756	444		1600	3200		1600
Capacity Analysis Module:																
Vol/Sat:	0.09	0.09	0.08		0.02	0.02	0.00		0.01	0.37	0.37		0.07	0.28		0.01
Crit Moves:	****					****				****				****		

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.719
Loss Time (sec):	6	Average Delay (sec/veh):	24.8
Optimal Cycle:	44	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	0	1 0	0 1	0	0 1!	0 0
Volume Module:												
Base Vol:	389	1090	34	3	815	385	282	11	117	18	17	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	389	1090	34	3	815	385	282	11	117	18	17	6
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	389	1090	34	3	815	385	282	11	117	18	17	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	412	1155	36	3	863	408	299	12	124	19	18	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	412	1155	36	3	863	408	299	12	124	19	18	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	412	1155	36	3	863	408	299	12	124	19	18	6
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.96	0.96	0.96
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.96	0.04	1.00	0.44	0.41	0.15
Final Sat.:	1805	3610	1615	1805	3610	1615	1745	68	1615	800	756	267
Capacity Analysis Module:												
Vol/Sat:	0.23	0.32	0.02	0.00	0.24	0.25	0.17	0.17	0.08	0.02	0.02	0.02
Crit Moves:	****					****	****				****	
Green/Cycle:	0.32	0.67	0.67	0.00	0.35	0.35	0.24	0.24	0.24	0.03	0.03	0.03
Volume/Cap:	0.72	0.48	0.03	0.48	0.68	0.72	0.72	0.72	0.32	0.72	0.72	0.72
Delay/Veh:	34.6	8.4	5.8	96.1	29.2	32.6	40.8	40.8	31.9	81.9	81.9	81.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.6	8.4	5.8	96.1	29.2	32.6	40.8	40.8	31.9	81.9	81.9	81.9
LOS by Move:	C	A	A	F	C	C	D	D	C	F	F	F
HCM2kAvgQ:	11	9	0	1	13	12	10	10	3	3	3	3

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

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Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.616
Loss Time (sec):	6	Average Delay (sec/veh):	16.7
Optimal Cycle:	34	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	52	1273	0	0	668	301	301	0	186	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	52	1273	0	0	668	301	301	0	186	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	1273	0	0	668	301	301	0	186	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	55	1350	0	0	708	319	319	0	197	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	1350	0	0	708	319	319	0	197	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	55	1350	0	0	708	319	319	0	197	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.91	0.91	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.38	0.62	1.45	0.00	0.55	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2372	1069	2515	0	961	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.37	0.00	0.00	0.30	0.30	0.13	0.00	0.21	0.00	0.00	0.00
Crit Moves:		****		****					****			
Green/Cycle:	0.06	0.61	0.00	0.00	0.55	0.55	0.33	0.00	0.33	0.00	0.00	0.00
Volume/Cap:	0.54	0.62	0.00	0.00	0.54	0.54	0.38	0.00	0.62	0.00	0.00	0.00
Delay/Veh:	51.8	12.9	0.0	0.0	14.7	14.7	25.6	0.0	29.4	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.8	12.9	0.0	0.0	14.7	14.7	25.6	0.0	29.4	0.0	0.0	0.0
LOS by Move:	D	B	A	A	B	B	C	A	C	A	A	A
HCM2kAvgQ:	3	14	0	0	10	10	5	0	10	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.844
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	78	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	80	1628	109	81	1067	96	103	16	113	123	28	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	1628	109	81	1067	96	103	16	113	123	28	98
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	1628	109	81	1067	96	103	16	113	123	28	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	83	1691	113	84	1108	100	107	17	117	128	29	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1691	113	84	1108	100	107	17	117	128	29	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	1691	113	84	1108	100	107	17	117	128	29	102
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.12	0.88	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	198	1402	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.53	0.07	0.05	0.35	0.06	0.07	0.08	0.08	0.08	0.02	0.06
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.764
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	327	1150	288	209	832	262	346	651	292	359	659	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	327	1150	288	209	832	262	346	651	292	359	659	326
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	327	1150	288	209	832	262	346	651	292	359	659	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	336	1182	296	215	855	269	356	669	300	369	677	335
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	336	1182	296	215	855	269	356	669	300	369	677	335
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	336	1182	296	215	855	269	356	669	300	369	677	335
OvlAdjVol:			112						132			228
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.28	0.72	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	3650	1150	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.25	0.18	0.07	0.23	0.23	0.11	0.21	0.19	0.12	0.21	0.21
OvlAdjV/S:			0.07						0.08			0.14
Crit Moves:	****				****			****			****	

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.950
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	133	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	233	1535	153	7	1259	190	245	63	350	85	35	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	233	1535	153	7	1259	190	245	63	350	85	35	12
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1535	153	7	1259	190	245	63	350	85	35	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	252	1661	166	8	1363	206	265	68	379	92	38	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	1661	166	8	1363	206	265	68	379	92	38	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	252	1661	166	8	1363	206	265	68	379	92	38	13
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.59	0.41	1.00	1.94	0.79	0.27
Final Sat.:	1600	3200	1600	1600	3200	1600	2545	655	1600	3098	1268	434
Capacity Analysis Module:												
Vol/Sat:	0.16	0.52	0.10	0.00	0.43	0.13	0.10	0.10	0.24	0.03	0.03	0.03
OvlAdjV/S:						0.00						
Crit Moves:	****				****				****			****

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.928
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	116	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	261	1040	179	385	1042	209	666	1531	287	428	702	244
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	274	1090	0	404	1092	0	698	1605	0	449	736	256
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	274	1090	0	404	1092	0	698	1605	0	449	736	256
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	274	1090	0	404	1092	0	698	1605	0	449	736	256
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.23	0.00	0.13	0.23	0.00	0.22	0.33	0.00	0.14	0.15	0.16
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.543
Loss Time (sec):	6	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 0	0	0 3	0 1	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	33	1261	0	0	1567	50	172	0	94	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	1261	0	0	1567	50	172	0	94	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	1261	0	0	1567	50	172	0	94	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	36	1359	0	0	1689	54	185	0	101	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1359	0	0	1689	54	185	0	101	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	1359	0	0	1689	54	185	0	101	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	4800	1600	3200	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.42	0.00	0.00	0.35	0.03	0.06	0.00	0.06	0.00	0.00	0.00
Crit Moves:		****			****			****				

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.746
Loss Time (sec):	10	Average Delay (sec/veh):	22.8
Optimal Cycle:	61	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	1 1	0	1 0	0 1	0	1 0	1! 0	1
Volume Module:												
Base Vol:	1	799	283	610	1382	5	4	2	4	186	1	495
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	799	283	610	1382	5	4	2	4	186	1	495
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	799	283	610	1382	5	4	2	4	186	1	495
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	1	891	315	680	1541	6	4	2	4	207	1	552
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	891	315	680	1541	6	4	2	4	207	1	552
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	891	315	680	1541	6	4	2	4	207	1	552
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.95	0.95	0.95	0.90	0.90	0.88	0.88	0.88
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.33	0.67	1.27	0.01	1.72
Final Sat.:	1805	3610	1615	3502	3593	13	1805	570	1140	2126	5	2882
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.20	0.19	0.43	0.43	0.00	0.00	0.00	0.10	0.23	0.19
Crit Moves:		****		****			****				****	
Green/Cycle:	0.00	0.33	0.63	0.26	0.59	0.59	0.00	0.01	0.01	0.30	0.31	0.57
Volume/Cap:	0.73	0.75	0.31	0.75	0.73	0.73	0.75	0.33	0.31	0.33	0.75	0.34
Delay/Veh:	462.5	32.3	8.8	37.3	16.0	16.0	246.2	58.2	56.8	27.5	34.3	11.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	462.5	32.3	8.8	37.3	16.0	16.0	246.2	58.2	56.8	27.5	34.3	11.7
LOS by Move:	F	C	A	D	B	B	F	E	E	C	C	B
HCM2kAvgQ:	0	13	4	10	18	18	1	1	1	4	12	5

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.827
Loss Time (sec):	10	Average Delay (sec/veh):	21.4
Optimal Cycle:	78	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2 0	1	1 0	2 0	0	2 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	933	619	380	1294	0	169	0	176	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	933	619	380	1294	0	169	0	176	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	933	619	380	1294	0	169	0	176	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	988	656	403	1371	0	179	0	186	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	988	656	403	1371	0	179	0	186	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	988	656	403	1371	0	179	0	186	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.41	0.22	0.38	0.00	0.05	0.00	0.12	0.00	0.00	0.00
Crit Moves:			****	****					****			
Green/Cycle:	0.00	0.49	0.49	0.27	0.76	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Volume/Cap:	0.00	0.56	0.83	0.83	0.50	0.00	0.37	0.00	0.83	0.00	0.00	0.00
Delay/Veh:	0.0	18.2	29.0	45.5	4.8	0.0	39.5	0.0	63.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.2	29.0	45.5	4.8	0.0	39.5	0.0	63.5	0.0	0.0	0.0
LOS by Move:	A	B	C	D	A	A	D	A	E	A	A	A
HCM2kAvgQ:	0	11	20	12	8	0	3	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.700
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Ovl				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0	1 0	0	1	0	1 0	0	1	1	0 1	1	0	1	0 2	0	1
Volume Module:																
Base Vol:	6	7	1		94	38	102		303	1335	189		42	609	237	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	6	7	1		94	38	102		303	1335	189		42	609	237	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	6	7	1		94	38	102		303	1335	189		42	609	237	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99		0.99	0.99	0.99	
PHF Volume:	6	7	1		95	38	103		306	1350	191		42	616	240	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	6	7	1		95	38	103		306	1350	191		42	616	240	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	6	7	1		95	38	103		306	1350	191		42	616	240	
OvlAdjVol:							0									
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.46	0.54	1.00		0.71	0.29	1.00		1.00	1.75	0.25		1.00	2.00	1.00	
Final Sat.:	738	862	1600		1139	461	1600		1600	2803	397		1600	3200	1600	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.01	0.00		0.08	0.08	0.06		0.19	0.48	0.48		0.03	0.19	0.15	
OvlAdjV/S:							0.00									
Crit Moves:	****				****					****			****			

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.601
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Ovl				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	0	1	2	0 1	0	1	2	0 1	1	0	1	0 2	0	1
Volume Module:																
Base Vol:	103	21	75		151	9	96		153	776	54		31	1097	200	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	103	21	75		151	9	96		153	776	54		31	1097	200	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	103	21	75		151	9	96		153	776	54		31	1097	200	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	106	22	77		156	9	99		158	802	56		32	1133	207	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	106	22	77		156	9	99		158	802	56		32	1133	207	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	106	22	77		156	9	99		158	802	56		32	1133	207	
OvlAdjVol:							20									
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.00	1.00		2.00	1.00	1.00		2.00	1.87	0.13		1.00	2.00	1.00	
Final Sat.:	1600	1600	1600		3200	1600	1600		3200	2992	208		1600	3200	1600	
Capacity Analysis Module:																
Vol/Sat:	0.07	0.01	0.05		0.05	0.01	0.06		0.05	0.27	0.27		0.02	0.35	0.13	
OvlAdjV/S:							0.01									
Crit Moves:					****	****				****				****		

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		0	1029	0		0	1282	14	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93	
PHF Volume:	0	0	0		0	0	0		0	1102	0		0	1373	15	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		0	1102	0		0	1373	15	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1788	2489	551		1923	2474	686		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	74	30	483		60	30	394		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	74	30	483		60	30	394		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.763
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0	2	0 1	1	0	2	0 1	1	0	2	1 0	1	0	2	1 0
Volume Module:																
Base Vol:	234	775	63		160	550	158		163	963	214		84	684	112	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	234	775	63		160	550	158		163	963	214		84	684	112	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	234	775	63		160	550	158		163	963	214		84	684	112	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	242	803	65		166	570	164		169	998	222		87	709	116	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	242	803	65		166	570	164		169	998	222		87	709	116	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	242	803	65		166	570	164		169	998	222		87	709	116	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.45	0.55		1.00	2.58	0.42	
Final Sat.:	1600	3200	1600		1600	3200	1600		1600	3927	873		1600	4125	675	
Capacity Analysis Module:																
Vol/Sat:	0.15	0.25	0.04		0.10	0.18	0.10		0.11	0.25	0.25		0.05	0.17	0.17	
Crit Moves:		****				****					****			****		

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.881
Loss Time (sec):	6	Average Delay (sec/veh):	24.5
Optimal Cycle:	84	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0 1! 0	1	0	2 1 0	1	0	3 0 1
Volume Module:												
Base Vol:	1	0	83	923	12	536	0	1796	72	18	576	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	0	83	923	12	536	0	1796	72	18	576	116
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	83	923	12	536	0	1796	72	18	576	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00
PHF Volume:	1	0	86	957	12	556	0	1863	75	19	598	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	86	957	12	556	0	1863	75	19	598	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	1	0	86	957	12	556	0	1863	75	19	598	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	1.00	0.87	0.92	0.92	0.92	1.00	0.90	0.90	0.95	0.91	1.00
Lanes:	0.01	0.00	0.99	1.62	0.02	1.36	0.00	2.88	0.12	1.00	3.00	1.00
Final Sat.:	20	0	1628	2826	28	2371	0	4957	199	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.05	0.34	0.44	0.23	0.00	0.38	0.38	0.01	0.12	0.00
Crit Moves:					****			****		****		
Green/Cycle:	0.00	0.00	0.00	0.50	0.50	0.50	0.00	0.43	0.43	0.01	0.44	0.00
Volume/Cap:	xxxx	0.00	xxxx	0.68	0.88	0.47	0.00	0.88	0.88	0.88	0.26	0.00
Delay/Veh:	0.0	0.0	0.0	19.6	27.9	16.3	0.0	30.8	30.8	191.5	17.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	19.6	27.9	16.3	0.0	30.8	30.8	191.5	17.9	0.0
LOS by Move:	A	A	A	B	C	B	A	C	C	F	B	A
HCM2kAvgQ:	2	0	2	22	1	11	0	23	23	2	4	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.659
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2 0 0	0	0	1 1 0	1	0	0 0 1	0	0	0 0 0
Volume Module:												
Base Vol:	418	1243	0	0	808	115	81	0	407	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	418	1243	0	0	808	115	81	0	407	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	418	1243	0	0	808	115	81	0	407	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	446	1327	0	0	862	123	86	0	434	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	446	1327	0	0	862	123	86	0	434	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	446	1327	0	0	862	123	86	0	434	0	0	0
OvlAdjVol:									211			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.75	0.25	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	2801	399	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.14	0.41	0.00	0.00	0.31	0.31	0.05	0.00	0.27	0.00	0.00	0.00
OvlAdjV/S:									0.13			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.560
Loss Time (sec):	6	Average Delay (sec/veh):	8.8
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	0	0	1	0	2
Volume Module:												
Base Vol:	123	0	289	0	0	0	0	2097	621	0	969	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	123	0	289	0	0	0	0	2097	621	0	969	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	123	0	289	0	0	0	0	2097	621	0	969	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00	0.96	0.96	0.96
PHF Volume:	128	0	301	0	0	0	0	2182	0	0	1008	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	0	301	0	0	0	0	2182	0	0	1008	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	128	0	301	0	0	0	0	2182	0	0	1008	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Lanes:	1.30	0.00	1.70	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.00	0.00
Final Sat.:	2175	0	2850	0	0	0	1900	5187	1729	0	5187	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.11	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.19	0.00
Crit Moves:			****					****				
Green/Cycle:	0.19	0.00	0.19	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.75	0.00
Volume/Cap:	0.31	0.00	0.56	0.00	0.00	0.00	0.00	0.56	0.00	0.00	0.26	0.00
Delay/Veh:	35.1	0.0	37.8	0.0	0.0	0.0	0.0	5.5	0.0	0.0	3.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.1	0.0	37.8	0.0	0.0	0.0	0.0	5.5	0.0	0.0	3.9	0.0
LOS by Move:	D		A	D		A	A		A	A		A
HCM2kAvgQ:	3		0	6		0	0		11	0		4

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.721
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 0	1	2	0	2	0	0	0	0	0
Volume Module:												
Base Vol:	0	1712	118	106	1120	0	0	0	0	136	0	161
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1712	118	106	1120	0	0	0	0	136	0	161
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1712	118	106	1120	0	0	0	0	136	0	161
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1796	124	111	1175	0	0	0	0	143	0	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1796	124	111	1175	0	0	0	0	143	0	169
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1796	124	111	1175	0	0	0	0	143	0	169
OvlAdjVol:												58
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	3200	3200	0	0	0	0	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.56	0.08	0.03	0.37	0.00	0.00	0.00	0.00	0.04	0.00	0.05
OvlAdjV/S:												0.02
Crit Moves:		****			****						****	

EXISTING PLUS 2020 PROJECT CONDITIONS

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.764
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	0 1!	0 0	1	0 2	0 1	1	0 2	1 0
Volume Module:												
Base Vol:	594	4	140	18	10	12	4	1170	436	78	1018	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	594	4	140	18	10	12	4	1170	436	78	1018	3
Added Vol:	0	0	8	0	0	0	0	11	0	1	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	594	4	148	18	10	12	4	1181	436	79	1020	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	645	4	161	20	11	13	4	1282	473	86	1107	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	645	4	161	20	11	13	4	1282	473	86	1107	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	645	4	161	20	11	13	4	1282	473	86	1107	3
OvlAdjVol:									149			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.99	0.01	1.00	0.45	0.25	0.30	1.00	2.00	1.00	1.00	2.99	0.01
Final Sat.:	3179	21	1600	720	400	480	1600	3200	1600	1600	4786	14
Capacity Analysis Module:												
Vol/Sat:	0.20	0.20	0.10	0.03	0.03	0.03	0.00	0.40	0.30	0.05	0.23	0.23
OvlAdjV/S:									0.09			
Crit Moves:	****					****		****		****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.716
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	268	27	102	22	45	19	7	1045	292	53	790	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	268	27	102	22	45	19	7	1045	292	53	790	14
Added Vol:	0	0	13	0	0	0	0	26	0	3	5	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	268	27	115	22	45	19	7	1071	292	56	795	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	287	29	123	24	48	20	7	1145	312	60	850	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	287	29	123	24	48	20	7	1145	312	60	850	15
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	287	29	123	24	48	20	7	1145	312	60	850	15
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.82	0.18	1.00	0.33	0.67	1.00	1.00	1.57	0.43	1.00	2.00	1.00
Final Sat.:	2907	293	1600	525	1075	1600	1600	2514	686	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.08	0.04	0.04	0.01	0.00	0.46	0.46	0.04	0.27	0.01
Crit Moves:	****			****				****		****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.611
Loss Time (sec):	6	Average Delay (sec/veh):	23.5
Optimal Cycle:	34	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	144	1051	17	0	812	140	437	6	310	12	3	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	144	1051	17	0	812	140	437	6	310	12	3	8
Added Vol:	6	1	0	0	8	0	0	0	34	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	150	1052	17	0	820	140	437	6	344	12	3	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	152	1064	17	0	830	142	442	6	348	12	3	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	1064	17	0	830	142	442	6	348	12	3	8
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	152	1064	17	0	830	142	442	6	348	12	3	8
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	1.00	0.95	0.85	0.95	0.95	0.85	0.93	0.93	0.93
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.99	0.01	1.00	0.52	0.13	0.35
Final Sat.:	1805	3610	1615	1900	3610	1615	1786	25	1615	921	230	614
Capacity Analysis Module:												
Vol/Sat:	0.08	0.29	0.01	0.00	0.23	0.09	0.25	0.25	0.22	0.01	0.01	0.01
Crit Moves:	****				****			****			****	
Green/Cycle:	0.14	0.51	0.51	0.00	0.38	0.38	0.40	0.40	0.40	0.02	0.02	0.02
Volume/Cap:	0.61	0.57	0.02	0.00	0.61	0.23	0.61	0.61	0.53	0.61	0.61	0.61
Delay/Veh:	45.0	17.2	12.0	0.0	26.1	21.5	25.1	25.1	23.4	74.3	74.3	74.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.0	17.2	12.0	0.0	26.1	21.5	25.1	25.1	23.4	74.3	74.3	74.3
LOS by Move:	D	B	B	A	C	C	C	C	C	E	E	E
HCM2kAvgQ:	4	12	0	0	11	3	11	11	8	2	2	2

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

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Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.853
Loss Time (sec):	6	Average Delay (sec/veh):	28.0
Optimal Cycle:	73	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	41	873	0	0	927	223	349	0	533	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	873	0	0	927	223	349	0	533	0	0	0
Added Vol:	7	7	0	0	41	0	0	0	30	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	48	880	0	0	968	223	349	0	563	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	48	880	0	0	968	223	349	0	563	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	880	0	0	968	223	349	0	563	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	48	880	0	0	968	223	349	0	563	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.92	0.92	0.89	1.00	0.89	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.63	0.37	1.24	0.00	0.76	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2852	657	2091	0	1291	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.24	0.00	0.00	0.34	0.34	0.17	0.00	0.44	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.03	0.43	0.00	0.00	0.40	0.40	0.51	0.00	0.51	0.00	0.00	0.00
Volume/Cap:	0.85	0.57	0.00	0.00	0.85	0.85	0.33	0.00	0.85	0.00	0.00	0.00
Delay/Veh:	117.7	22.1	0.0	0.0	32.8	32.8	14.4	0.0	28.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	117.7	22.1	0.0	0.0	32.8	32.8	14.4	0.0	28.0	0.0	0.0	0.0
LOS by Move:	F	C	A	A	C	C	B	A	C	A	A	A
HCM2kAvgQ:	3	11	0	0	18	18	5	0	22	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.967
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	151	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	130	1183	442	221	1365	214	158	93	244	115	48	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1183	442	221	1365	214	158	93	244	115	48	76
Added Vol:	0	45	11	8	9	0	0	2	0	2	0	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	130	1228	453	229	1374	214	158	95	244	117	48	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	139	1312	484	245	1468	229	169	101	261	125	51	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	1312	484	245	1468	229	169	101	261	125	51	83
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	139	1312	484	245	1468	229	169	101	261	125	51	83
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.28	0.72	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	448	1152	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.41	0.30	0.15	0.46	0.14	0.11	0.23	0.23	0.08	0.03	0.05
Crit Moves:		****			****				****		****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.928
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	116	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	236	1291	628	412	1070	187	284	757	153	110	446	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	236	1291	628	412	1070	187	284	757	153	110	446	185
Added Vol:	0	45	45	0	9	2	11	41	0	9	8	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	236	1336	673	412	1079	189	295	798	153	119	454	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	245	1384	697	427	1118	196	306	827	159	123	470	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	1384	697	427	1118	196	306	827	159	123	470	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	245	1384	697	427	1118	196	306	827	159	123	470	192
OvlAdjVol:			636						36			0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.55	0.45	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4085	715	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.29	0.44	0.13	0.27	0.27	0.10	0.26	0.10	0.04	0.15	0.12
OvlAdjV/S:			0.40						0.02			0.00
Crit Moves:			****	****				****		****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.089
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	159	1684	70	1	1120	277	407	76	416	113	108	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	1684	70	1	1120	277	407	76	416	113	108	12
Added Vol:	0	56	0	2	11	4	23	0	0	0	0	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	159	1740	70	3	1131	281	430	76	416	113	108	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	184	2009	81	3	1306	324	497	88	480	130	125	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	2009	81	3	1306	324	497	88	480	130	125	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	2009	81	3	1306	324	497	88	480	130	125	27
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.70	0.30	1.00	1.39	1.33	0.28
Final Sat.:	1600	3200	1600	1600	3200	1600	2719	481	1600	2223	2125	453
Capacity Analysis Module:												
Vol/Sat:	0.11	0.63	0.05	0.00	0.41	0.20	0.18	0.18	0.30	0.06	0.06	0.06
OvlAdjV/S:						0.00						
Crit Moves:		****			****				****	****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.859
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	83	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	291	1364	364	207	938	396	401	500	169	167	1116	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	291	1364	364	207	938	396	401	500	169	167	1116	139
Added Vol:	0	41	0	0	8	3	15	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	291	1405	364	207	946	399	416	500	169	167	1116	139
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	307	1482	0	218	998	0	439	527	0	176	1177	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	307	1482	0	218	998	0	439	527	0	176	1177	147
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	307	1482	0	218	998	0	439	527	0	176	1177	147
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.31	0.00	0.07	0.21	0.00	0.14	0.11	0.00	0.06	0.25	0.09
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.837
Loss Time (sec):	6	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 0	0	0 3	0 1	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	116	2253	0	0	1002	107	39	0	36	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	116	2253	0	0	1002	107	39	0	36	0	0	0
Added Vol:	0	26	0	0	5	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	2279	0	0	1007	107	39	0	36	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	123	2409	0	0	1064	113	41	0	38	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	2409	0	0	1064	113	41	0	38	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	123	2409	0	0	1064	113	41	0	38	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	4800	1600	3200	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.75	0.00	0.00	0.22	0.07	0.01	0.00	0.02	0.00	0.00	0.00
Crit Moves:		****			****				****			

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.855
Loss Time (sec):	10	Average Delay (sec/veh):	23.1
Optimal Cycle:	87	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	2	0 1	1 0	1	0 0	1 0	1	0 1!	0 1
Volume Module:												
Base Vol:	0	1796	320	349	679	2	0	1	1	262	0	572
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1796	320	349	679	2	0	1	1	262	0	572
Added Vol:	0	26	0	3	2	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1822	320	352	681	2	0	1	1	262	0	572
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	1934	340	374	723	2	0	1	1	278	0	607
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1934	340	374	723	2	0	1	1	278	0	607
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1934	340	374	723	2	0	1	1	278	0	607
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	0.95	1.00	0.93	0.93	0.88	1.00	0.88
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.50	0.50	1.31	0.00	1.69
Final Sat.:	1900	3610	1615	3502	3599	11	1900	879	879	2206	0	2830
Capacity Analysis Module:												
Vol/Sat:	0.00	0.54	0.21	0.11	0.20	0.00	0.00	0.00	0.13	0.00	0.21	
Crit Moves:		****		****			****		****			
Green/Cycle:	0.00	0.63	0.77	0.12	0.75	0.75	0.00	0.00	0.00	0.15	0.00	0.27
Volume/Cap:	0.00	0.86	0.27	0.86	0.27	0.27	0.00	0.86	0.86	0.86	0.00	0.78
Delay/Veh:	0.0	18.5	3.4	58.1	3.9	3.9	0.0	482	481.6	48.7	0.0	37.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.5	3.4	58.1	3.9	3.9	0.0	482	481.6	48.7	0.0	37.3
LOS by Move:	A	B	A	E	A	A	A	F	F	D	A	D
HCM2kAvgQ:	0	24	3	7	4	4	0	1	1	9	0	12

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.870
Loss Time (sec):	10	Average Delay (sec/veh):	32.4
Optimal Cycle:	92	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 2	0 1	1	0 2	0 0	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	1177	267	312	676	0	905	0	281	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1177	267	312	676	0	905	0	281	0	0	0
Added Vol:	0	11	0	0	2	0	15	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1188	267	312	678	0	920	0	281	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	0	1216	273	319	694	0	942	0	288	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1216	273	319	694	0	942	0	288	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1216	273	319	694	0	942	0	288	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.17	0.18	0.19	0.00	0.27	0.00	0.18	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green/Cycle:	0.00	0.39	0.39	0.20	0.59	0.00	0.31	0.00	0.31	0.00	0.00	0.00
Volume/Cap:	0.00	0.87	0.44	0.87	0.33	0.00	0.87	0.00	0.58	0.00	0.00	0.00
Delay/Veh:	0.0	34.5	23.1	58.0	10.5	0.0	40.4	0.0	30.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	34.5	23.1	58.0	10.5	0.0	40.4	0.0	30.7	0.0	0.0	0.0
LOS by Move:	A	C	C	E	B	A	D	A	C	A	A	A
HCM2kAvgQ:	0	21	6	11	6	0	17	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.752
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	126	14	28	173	11	246	35	980	218	6	830	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	14	28	173	11	246	35	980	218	6	830	80
Added Vol:	5	0	5	5	0	5	23	39	23	26	8	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	131	14	33	178	11	251	58	1019	241	32	838	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	137	15	34	186	11	262	61	1064	252	33	875	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	15	34	186	11	262	61	1064	252	33	875	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	137	15	34	186	11	262	61	1064	252	33	875	111
OvlAdjVol:						201						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.90	0.10	1.00	0.94	0.06	1.00	1.00	1.62	0.38	1.00	2.00	1.00
Final Sat.:	1446	154	1600	1507	93	1600	1600	2588	612	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.02	0.12	0.12	0.16	0.04	0.41	0.41	0.02	0.27	0.07
OvlAdjV/S:						0.13						
Crit Moves:	****					****		****		****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.618
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	0 1	2	0 1	0 1	2	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	21	13	21	80	18	74	381	725	130	119	952	424
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	13	21	80	18	74	381	725	130	119	952	424
Added Vol:	4	0	8	8	0	4	20	10	20	41	53	41
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	13	29	88	18	78	401	735	150	160	1005	465
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	27	14	31	94	19	83	428	784	160	171	1073	496
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	14	31	94	19	83	428	784	160	171	1073	496
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	14	31	94	19	83	428	784	160	171	1073	496
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.66	0.34	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	3200	2658	542	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.02	0.03	0.01	0.05	0.13	0.30	0.30	0.11	0.34	0.31
OvlAdjV/S:						0.00						
Crit Moves:			****	****			****				****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[16.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		4	847	0		0	1530	199	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		4	847	0		0	1530	199	
Added Vol:	0	0	0		0	0	0		0	27	0		0	135	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		4	874	0		0	1665	199	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	0	0	0		0	0	0		4	900	0		0	1715	205	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		4	900	0		0	1715	205	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	1766	2828	450		2173	2623	857		1920	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	77	18	562		41	24	305		312	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	76	18	562		40	24	305		312	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		0.01	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		16.7	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		C	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.796
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 66 Level Of Service: C

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0		
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	2	1	0	1	0	2	1	0
Volume Module:																				
Base Vol:	172	572	45			99	586	288			111	327	157			37	1179	98		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	172	572	45			99	586	288			111	327	157			37	1179	98		
Added Vol:	8	0	0			0	0	30			6	18	1			0	90	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	180	572	45			99	586	318			117	345	158			37	1269	98		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.96	0.96	0.96			0.96	0.96	0.96			0.96	0.96	0.96			0.96	0.96	0.96		
PHF Volume:	187	595	47			103	609	331			122	359	164			38	1319	102		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	187	595	47			103	609	331			122	359	164			38	1319	102		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	187	595	47			103	609	331			122	359	164			38	1319	102		
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600			1600	1600	1600			1600	1600	1600			1600	1600	1600		
Adjustment:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Lanes:	1.00	2.00	1.00			1.00	2.00	1.00			1.00	2.06	0.94			1.00	2.78	0.22		
Final Sat.:	1600	3200	1600			1600	3200	1600			1600	3292	1508			1600	4456	344		
Capacity Analysis Module:																				
Vol/Sat:	0.12	0.19	0.03			0.06	0.19	0.21			0.08	0.11	0.11			0.02	0.30	0.30		
Crit Moves:	****							****			****						****			

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.853
Loss Time (sec):	6	Average Delay (sec/veh):	23.6
Optimal Cycle:	73	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0 0 1	1	0	1! 0 1	0	0	2 1 0	1	0	3 0 1
Volume Module:												
Base Vol:	0	0	2	604	3	745	0	541	10	7	1225	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	2	604	3	745	0	541	10	7	1225	43
Added Vol:	0	0	0	0	0	38	0	18	0	0	53	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	2	604	3	783	0	559	10	7	1278	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.00
PHF Volume:	0	0	2	739	4	958	0	684	12	9	1564	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	2	739	4	958	0	684	12	9	1564	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	0	2	739	4	958	0	684	12	9	1564	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.90	0.90	0.90	1.00	0.91	0.91	0.95	0.91	1.00
Lanes:	0.00	0.00	1.00	1.43	0.01	1.56	0.00	2.95	0.05	1.00	3.00	1.00
Final Sat.:	0	0	1644	2443	7	2662	0	5081	91	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.30	0.50	0.36	0.00	0.13	0.13	0.00	0.30	0.00
Crit Moves:					****		****				****	
Green/Cycle:	0.00	0.00	0.00	0.59	0.59	0.59	0.00	0.34	0.34	0.01	0.35	0.00
Volume/Cap:	0.00	0.00	xxxx	0.52	0.85	0.61	0.00	0.39	0.39	0.40	0.85	0.00
Delay/Veh:	0.0	0.0	0.0	12.4	20.9	13.8	0.0	25.2	25.2	60.5	34.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	12.4	20.9	13.8	0.0	25.2	25.2	60.5	34.0	0.0
LOS by Move:	A	A	A	B	C	B	A	C	C	E	C	A
HCM2kAvgQ:	0	0	0	13	8	10	0	6	6	1	19	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.116
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2 0 0	0	0	1 1 0	1	0	0 0 1	0	0	0 0 0
Volume Module:												
Base Vol:	397	739	0	0	1653	181	86	0	561	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	397	739	0	0	1653	181	86	0	561	0	0	0
Added Vol:	2	16	0	0	79	0	0	0	8	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	399	755	0	0	1732	181	86	0	569	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	434	821	0	0	1883	197	93	0	618	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	434	821	0	0	1883	197	93	0	618	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	434	821	0	0	1883	197	93	0	618	0	0	0
OvlAdjVol:									402			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.81	0.19	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	2897	303	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.14	0.26	0.00	0.00	0.65	0.65	0.06	0.00	0.39	0.00	0.00	0.00
OvlAdjV/S:									0.25			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.577
Loss Time (sec):	6	Average Delay (sec/veh):	14.3
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	0	1	0	2	1 1
Volume Module:												
Base Vol:	385	0	274	0	0	0	0	806	276	0	1599	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	385	0	274	0	0	0	0	806	276	0	1599	0
Added Vol:	38	0	0	0	0	0	0	3	7	0	15	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	423	0	274	0	0	0	0	809	283	0	1614	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.00	0.85	0.85	0.85
PHF Volume:	495	0	321	0	0	0	0	947	0	0	1890	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	495	0	321	0	0	0	0	947	0	0	1890	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	495	0	321	0	0	0	0	947	0	0	1890	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Lanes:	1.61	0.00	1.39	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.00	0.00
Final Sat.:	2790	0	2419	0	0	0	1900	5187	1729	0	5187	0
Capacity Analysis Module:												
Vol/Sat:	0.18	0.00	0.13	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.36	0.00
Crit Moves:	****										****	
Green/Cycle:	0.31	0.00	0.31	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.63	0.00
Volume/Cap:	0.58	0.00	0.43	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.58	0.00
Delay/Veh:	29.7	0.0	27.8	0.0	0.0	0.0	0.0	8.3	0.0	0.0	10.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.7	0.0	27.8	0.0	0.0	0.0	0.0	8.3	0.0	0.0	10.9	0.0
LOS by Move:	C		A C	A		A	A		A	A	B	A
HCM2kAvgQ:	9	0	6	0	0	0	0	5	0	0	12	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.698
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 0	1	2	0	2	0	0	0	0	0 0
Volume Module:												
Base Vol:	0	1047	437	643	1700	0	0	0	0	134	0	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1047	437	643	1700	0	0	0	0	134	0	75
Added Vol:	0	2	45	87	8	0	0	0	0	9	0	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1049	482	730	1708	0	0	0	0	143	0	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	1079	496	751	1757	0	0	0	0	147	0	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1079	496	751	1757	0	0	0	0	147	0	95
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1079	496	751	1757	0	0	0	0	147	0	95
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	3200	3200	0	0	0	0	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.31	0.23	0.55	0.00	0.00	0.00	0.00	0.05	0.00	0.03
OvlAdjV/S:												0.00
Crit Moves:		****		****						****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.730
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	0 1!	0 0	1	0 2	0 1	1	0 2	1 0
Volume Module:												
Base Vol:	570	9	191	6	3	13	6	1118	481	129	960	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	570	9	191	6	3	13	6	1118	481	129	960	12
Added Vol:	0	0	6	0	0	0	0	9	0	3	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	570	9	197	6	3	13	6	1127	481	132	964	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	589	9	204	6	3	13	6	1164	497	136	996	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	589	9	204	6	3	13	6	1164	497	136	996	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	589	9	204	6	3	13	6	1164	497	136	996	12
OvlAdjVol:									198			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.97	0.03	1.00	0.27	0.14	0.59	1.00	2.00	1.00	1.00	2.96	0.04
Final Sat.:	3150	50	1600	436	218	945	1600	3200	1600	1600	4741	59
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.13	0.01	0.01	0.01	0.00	0.36	0.31	0.09	0.21	0.21
OvlAdjV/S:									0.12			
Crit Moves:	****				****			****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.646
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	254	42	132	17	22	5	19	999	161	107	890	19
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	254	42	132	17	22	5	19	999	161	107	890	19
Added Vol:	0	0	11	0	0	0	0	21	0	5	10	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	254	42	143	17	22	5	19	1020	161	112	900	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	258	43	145	17	22	5	19	1038	164	114	916	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	258	43	145	17	22	5	19	1038	164	114	916	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	258	43	145	17	22	5	19	1038	164	114	916	19
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.72	0.28	1.00	0.44	0.56	1.00	1.00	1.73	0.27	1.00	2.00	1.00
Final Sat.:	2746	454	1600	697	903	1600	1600	2764	436	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.02	0.02	0.00	0.01	0.38	0.38	0.07	0.29	0.01
Crit Moves:	****				****			****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.727
Loss Time (sec):	6	Average Delay (sec/veh):	25.1
Optimal Cycle:	45	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	0	1 0	0 1	0	0 1!	0 0
Volume Module:												
Base Vol:	389	1090	34	3	815	385	282	11	117	18	17	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	389	1090	34	3	815	385	282	11	117	18	17	6
Added Vol:	12	3	0	0	6	0	0	0	27	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	401	1093	34	3	821	385	282	11	144	18	17	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	425	1158	36	3	870	408	299	12	153	19	18	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	425	1158	36	3	870	408	299	12	153	19	18	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	425	1158	36	3	870	408	299	12	153	19	18	6
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.96	0.96	0.96
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.96	0.04	1.00	0.44	0.41	0.15
Final Sat.:	1805	3610	1615	1805	3610	1615	1745	68	1615	800	756	267
Capacity Analysis Module:												
Vol/Sat:	0.24	0.32	0.02	0.00	0.24	0.25	0.17	0.17	0.09	0.02	0.02	0.02
Crit Moves:	****					****	****				****	
Green/Cycle:	0.32	0.67	0.67	0.00	0.35	0.35	0.24	0.24	0.24	0.03	0.03	0.03
Volume/Cap:	0.73	0.48	0.03	0.48	0.69	0.73	0.73	0.73	0.40	0.73	0.73	0.73
Delay/Veh:	34.4	8.3	5.7	95.9	29.7	33.2	41.4	41.4	32.9	83.7	83.7	83.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.4	8.3	5.7	95.9	29.7	33.2	41.4	41.4	32.9	83.7	83.7	83.7
LOS by Move:	C	A	A	F	C	C	D	D	C	F	F	F
HCM2kAvgQ:	11	9	0	1	13	12	10	10	4	3	3	3

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

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Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.638
Loss Time (sec):	6	Average Delay (sec/veh):	18.0
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	52	1273	0	0	668	301	301	0	186	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	52	1273	0	0	668	301	301	0	186	0	0	0
Added Vol:	13	15	0	0	33	0	0	0	24	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	65	1288	0	0	701	301	301	0	210	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	69	1366	0	0	743	319	319	0	223	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	69	1366	0	0	743	319	319	0	223	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	69	1366	0	0	743	319	319	0	223	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.91	0.91	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.40	0.60	1.42	0.00	0.58	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2412	1036	2453	0	1008	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.38	0.00	0.00	0.31	0.31	0.13	0.00	0.22	0.00	0.00	0.00
Crit Moves:		****		****					****			
Green/Cycle:	0.07	0.59	0.00	0.00	0.53	0.53	0.35	0.00	0.35	0.00	0.00	0.00
Volume/Cap:	0.58	0.64	0.00	0.00	0.58	0.58	0.38	0.00	0.64	0.00	0.00	0.00
Delay/Veh:	52.7	13.9	0.0	0.0	16.6	16.6	24.7	0.0	29.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.7	13.9	0.0	0.0	16.6	16.6	24.7	0.0	29.0	0.0	0.0	0.0
LOS by Move:	D	B	A	A	B	B	C	A	C	A	A	A
HCM2kAvgQ:	3	15	0	0	11	11	5	0	11	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.865
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	85	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	80	1628	109	81	1067	96	103	16	113	123	28	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	1628	109	81	1067	96	103	16	113	123	28	98
Added Vol:	0	36	9	7	18	0	0	2	0	4	1	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	1664	118	88	1085	96	103	18	113	127	29	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	83	1728	123	91	1127	100	107	19	117	132	30	105
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1728	123	91	1127	100	107	19	117	132	30	105
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	1728	123	91	1127	100	107	19	117	132	30	105
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.14	0.86	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	220	1380	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.54	0.08	0.06	0.35	0.06	0.07	0.09	0.09	0.08	0.02	0.07
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.785
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	327	1150	288	209	832	262	346	651	292	359	659	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	327	1150	288	209	832	262	346	651	292	359	659	326
Added Vol:	0	36	36	0	18	4	9	33	0	18	16	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	327	1186	324	209	850	266	355	684	292	377	675	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	336	1219	333	215	874	273	365	703	300	387	694	335
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	336	1219	333	215	874	273	365	703	300	387	694	335
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	336	1219	333	215	874	273	365	703	300	387	694	335
OvlAdjVol:			139						132			228
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.28	0.72	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	3656	1144	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.25	0.21	0.07	0.24	0.24	0.11	0.22	0.19	0.12	0.22	0.21
OvlAdjV/S:			0.09						0.08			0.14
Crit Moves:	****				****			****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.960
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	142	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	233	1535	153	7	1259	190	245	63	350	85	35	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	233	1535	153	7	1259	190	245	63	350	85	35	12
Added Vol:	0	45	0	4	22	9	18	0	0	0	0	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1580	153	11	1281	199	263	63	350	85	35	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	252	1710	166	12	1386	215	285	68	379	92	38	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	1710	166	12	1386	215	285	68	379	92	38	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	252	1710	166	12	1386	215	285	68	379	92	38	23
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.61	0.39	1.00	1.82	0.74	0.44
Final Sat.:	1600	3200	1600	1600	3200	1600	2582	618	1600	2901	1188	711
Capacity Analysis Module:												
Vol/Sat:	0.16	0.53	0.10	0.01	0.43	0.13	0.11	0.11	0.24	0.03	0.03	0.03
OvlAdjV/S:						0.00						
Crit Moves:	****				****				****			****

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.935
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	121	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Added Vol:	0	33	0	0	16	6	12	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	261	1073	179	385	1058	215	678	1531	287	428	702	244
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	274	1125	0	404	1109	0	711	1605	0	449	736	256
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	274	1125	0	404	1109	0	711	1605	0	449	736	256
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	274	1125	0	404	1109	0	711	1605	0	449	736	256
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.23	0.00	0.13	0.23	0.00	0.22	0.33	0.00	0.14	0.15	0.16
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.550
Loss Time (sec):	6	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 0	0	0 3	0 1	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	33	1261	0	0	1567	50	172	0	94	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	1261	0	0	1567	50	172	0	94	0	0	0
Added Vol:	0	21	0	0	10	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	1282	0	0	1577	50	172	0	94	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	36	1381	0	0	1699	54	185	0	101	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1381	0	0	1699	54	185	0	101	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	1381	0	0	1699	54	185	0	101	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	4800	1600	3200	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.43	0.00	0.00	0.35	0.03	0.06	0.00	0.06	0.00	0.00	0.00
Crit Moves:		****			****			****				

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.755
Loss Time (sec):	10	Average Delay (sec/veh):	22.9
Optimal Cycle:	62	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	2	0 1	1 0	1	0 0	1 0	1	0 1!	0 1
Volume Module:												
Base Vol:	1	799	283	610	1382	5	4	2	4	186	1	495
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	799	283	610	1382	5	4	2	4	186	1	495
Added Vol:	0	21	0	6	4	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	820	283	616	1386	5	4	2	4	186	1	495
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	1	914	315	687	1545	6	4	2	4	207	1	552
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	914	315	687	1545	6	4	2	4	207	1	552
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	914	315	687	1545	6	4	2	4	207	1	552
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.95	0.95	0.95	0.90	0.90	0.88	0.88	0.88
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.33	0.67	1.27	0.01	1.72
Final Sat.:	1805	3610	1615	3502	3593	13	1805	570	1140	2126	5	2882
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.20	0.20	0.43	0.43	0.00	0.00	0.00	0.10	0.23	0.19
Crit Moves:		****		****			****				****	
Green/Cycle:	0.00	0.34	0.63	0.26	0.59	0.59	0.00	0.01	0.01	0.29	0.30	0.56
Volume/Cap:	0.72	0.76	0.31	0.76	0.72	0.72	0.76	0.33	0.31	0.33	0.76	0.34
Delay/Veh:	458.9	32.3	8.7	37.7	15.7	15.7	253.5	58.5	57.0	27.8	34.9	12.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	458.9	32.3	8.7	37.7	15.7	15.7	253.5	58.5	57.0	27.8	34.9	12.0
LOS by Move:	F	C	A	D	B	B	F	E	E	C	C	B
HCM2kAvgQ:	0	13	4	10	18	18	1	1	1	4	12	5

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.827
Loss Time (sec):	10	Average Delay (sec/veh):	21.4
Optimal Cycle:	78	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 2	0 1	1	0 2	0 0	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	933	619	380	1294	0	169	0	176	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	933	619	380	1294	0	169	0	176	0	0	0
Added Vol:	0	9	0	0	4	0	12	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	942	619	380	1298	0	181	0	176	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	998	656	403	1375	0	192	0	186	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	998	656	403	1375	0	192	0	186	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	998	656	403	1375	0	192	0	186	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.41	0.22	0.38	0.00	0.05	0.00	0.12	0.00	0.00	0.00
Crit Moves:			****	****					****			
Green/Cycle:	0.00	0.49	0.49	0.27	0.76	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Volume/Cap:	0.00	0.56	0.83	0.83	0.50	0.00	0.39	0.00	0.83	0.00	0.00	0.00
Delay/Veh:	0.0	18.3	29.0	45.5	4.8	0.0	39.7	0.0	63.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.3	29.0	45.5	4.8	0.0	39.7	0.0	63.5	0.0	0.0	0.0
LOS by Move:	A	B	C	D	A	A	D	A	E	A	A	A
HCM2kAvgQ:	0	12	20	12	8	0	3	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.741
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 56 Level Of Service: C

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Split Phase						Split Phase						Protected						Protected					
Rights:	Include						Ovl						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Y+R:	4.0	4.0	4.0				4.0	4.0	4.0				4.0	4.0	4.0				4.0	4.0	4.0			
Lanes:	0	1	0	0	1		0	1	0	0	1		1	0	1	1	0		1	0	2	0	1	
Volume Module:																								
Base Vol:	6	7	1				94	38	102				303	1335	189				42	609	237			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	6	7	1				94	38	102				303	1335	189				42	609	237			
Added Vol:	9	0	10				10	0	9				19	32	19				21	16	21			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	15	7	11				104	38	111				322	1367	208				63	625	258			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.99	0.99	0.99				0.99	0.99	0.99				0.99	0.99	0.99				0.99	0.99	0.99			
PHF Volume:	15	7	11				105	38	112				326	1382	210				64	632	261			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	15	7	11				105	38	112				326	1382	210				64	632	261			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	15	7	11				105	38	112				326	1382	210				64	632	261			
OvlAdjVol:									0															
Saturation Flow Module:																								
Sat/Lane:	1600	1600	1600				1600	1600	1600				1600	1600	1600				1600	1600	1600			
Adjustment:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Lanes:	0.68	0.32	1.00				0.73	0.27	1.00				1.00	1.74	0.26				1.00	2.00	1.00			
Final Sat.:	1091	509	1600				1172	428	1600				1600	2777	423				1600	3200	1600			
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.01	0.01				0.09	0.09	0.07				0.20	0.50	0.50				0.04	0.20	0.16			
OvlAdjV/S:									0.00															
Crit Moves:		****						****							****									

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.635
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Ovl						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Y+R:	4.0	4.0	4.0				4.0	4.0	4.0				4.0	4.0	4.0				4.0	4.0	4.0			
Lanes:	1	0	1	0	1		2	0	1	0	1		2	0	1	1	0		1	0	2	0	1	
Volume Module:																								
Base Vol:	103	21	75				151	9	96				153	776	54				31	1097	200			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	103	21	75				151	9	96				153	776	54				31	1097	200			
Added Vol:	8	0	16				16	0	8				16	21	16				33	42	33			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	111	21	91				167	9	104				169	797	70				64	1139	233			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.97	0.97	0.97				0.97	0.97	0.97				0.97	0.97	0.97				0.97	0.97	0.97			
PHF Volume:	115	22	94				173	9	107				175	823	72				66	1177	241			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	115	22	94				173	9	107				175	823	72				66	1177	241			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	115	22	94				173	9	107				175	823	72				66	1177	241			
OvlAdjVol:									20															
Saturation Flow Module:																								
Sat/Lane:	1600	1600	1600				1600	1600	1600				1600	1600	1600				1600	1600	1600			
Adjustment:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Lanes:	1.00	1.00	1.00				2.00	1.00	1.00				2.00	1.84	0.16				1.00	2.00	1.00			
Final Sat.:	1600	1600	1600				3200	1600	1600				3200	2942	258				1600	3200	1600			
Capacity Analysis Module:																								
Vol/Sat:	0.07	0.01	0.06				0.05	0.01	0.07				0.05	0.28	0.28				0.04	0.37	0.15			
OvlAdjV/S:									0.01															
Crit Moves:							****	****							****						****			

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Added Vol:	0	0	0		0	0	0		0	54	0		0	108	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		0	1083	0		0	1390	14	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93	
PHF Volume:	0	0	0		0	0	0		0	1160	0		0	1488	15	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		0	1160	0		0	1488	15	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1904	2663	580		2068	2648	744		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	62	23	463		48	23	362		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	62	23	463		48	23	362		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.772
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 61 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0	2	0 1	1	0	2	0 1	1	0	2	1 0	1	0	2	1 0
Volume Module:																
Base Vol:	234	775	63		160	550	158		163	963	214		84	684	112	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	234	775	63		160	550	158		163	963	214		84	684	112	
Added Vol:	6	0	0		0	0	24		12	36	3		0	72	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	240	775	63		160	550	182		175	999	217		84	756	112	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	249	803	65		166	570	189		181	1035	225		87	783	116	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	249	803	65		166	570	189		181	1035	225		87	783	116	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	249	803	65		166	570	189		181	1035	225		87	783	116	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.46	0.54		1.00	2.61	0.39	
Final Sat.:	1600	3200	1600		1600	3200	1600		1600	3943	857		1600	4181	619	
Capacity Analysis Module:																
Vol/Sat:	0.16	0.25	0.04		0.10	0.18	0.12		0.11	0.26	0.26		0.05	0.19	0.19	
Crit Moves:		****				****					****			****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.899
Loss Time (sec): 6 Average Delay (sec/veh): 25.2
Optimal Cycle: 93 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0 1! 0	1	0	2 1 0	1	0	3 0 1
Volume Module:												
Base Vol:	1	0	83	923	12	536	0	1796	72	18	576	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	0	83	923	12	536	0	1796	72	18	576	116
Added Vol:	0	0	0	0	0	30	0	36	0	0	42	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	83	923	12	566	0	1832	72	18	618	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00
PHF Volume:	1	0	86	957	12	587	0	1900	75	19	641	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	86	957	12	587	0	1900	75	19	641	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	1	0	86	957	12	587	0	1900	75	19	641	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	1.00	0.87	0.91	0.91	0.91	1.00	0.90	0.90	0.95	0.91	1.00
Lanes:	0.01	0.00	0.99	1.61	0.02	1.37	0.00	2.89	0.11	1.00	3.00	1.00
Final Sat.:	20	0	1628	2798	28	2388	0	4961	195	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.05	0.34	0.45	0.25	0.00	0.38	0.38	0.01	0.12	0.00
Crit Moves:					****			****		****		
Green/Cycle:	0.00	0.00	0.00	0.50	0.50	0.50	0.00	0.43	0.43	0.01	0.44	0.00
Volume/Cap:	xxxx	0.00	xxxx	0.68	0.90	0.49	0.00	0.90	0.90	0.90	0.28	0.00
Delay/Veh:	0.0	0.0	0.0	19.7	29.3	16.5	0.0	32.1	32.1	199.9	18.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	19.7	29.3	16.5	0.0	32.1	32.1	199.9	18.1	0.0
LOS by Move:	A	A	A	B	C	B	A	C	C	F	B	A
HCM2kAvgQ:	2	0	2	22	1	12	0	24	24	2	5	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.685
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 Level Of Service: B

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Protected			Protected			Protected				Protected			
Rights:	Include			Include			Ovl				Include			
Min. Green:	0	0	0	0	0	0	0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	2 0 0	0	0	1 1 0	1	0	0 0 1		0	0	0 0 0	
Volume Module:														
Base Vol:	418	1243	0	0	808	115	81	0	407		0	0	0	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	418	1243	0	0	808	115	81	0	407		0	0	0	
Added Vol:	3	31	0	0	63	0	0	0	7		0	0	0	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	421	1274	0	0	871	115	81	0	414		0	0	0	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94		0.94	0.94	0.94	
PHF Volume:	449	1360	0	0	930	123	86	0	442		0	0	0	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
Reduced Vol:	449	1360	0	0	930	123	86	0	442		0	0	0	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	449	1360	0	0	930	123	86	0	442		0	0	0	
OvlAdjVol:									217					
Saturation Flow Module:														
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	2.00	0.00	0.00	1.77	0.23	1.00	0.00	1.00		0.00	0.00	0.00	
Final Sat.:	3200	3200	0	0	2827	373	1600	0	1600		0	0	0	
Capacity Analysis Module:														
Vol/Sat:	0.14	0.42	0.00	0.00	0.33	0.33	0.05	0.00	0.28		0.00	0.00	0.00	
OvlAdjV/S:									0.14					
Crit Moves:	****				****				****					

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.564
Loss Time (sec):	6	Average Delay (sec/veh):	9.1
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	1	0	2	1	1	0
Volume Module:												
Base Vol:	123	0	289	0	0	0	0	2097	621	0	969	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	123	0	289	0	0	0	0	2097	621	0	969	0
Added Vol:	30	0	0	0	0	0	0	6	15	0	12	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	153	0	289	0	0	0	0	2103	636	0	981	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00	0.96	0.96	0.96
PHF Volume:	159	0	301	0	0	0	0	2188	0	0	1021	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	159	0	301	0	0	0	0	2188	0	0	1021	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	159	0	301	0	0	0	0	2188	0	0	1021	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Lanes:	1.35	0.00	1.65	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.00	0.00
Final Sat.:	2268	0	2786	0	0	0	1900	5187	1729	0	5187	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.00	0.11	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.20	0.00
Crit Moves:			****					****				
Green/Cycle:	0.19	0.00	0.19	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.75	0.00
Volume/Cap:	0.37	0.00	0.56	0.00	0.00	0.00	0.00	0.56	0.00	0.00	0.26	0.00
Delay/Veh:	35.3	0.0	37.6	0.0	0.0	0.0	0.0	5.7	0.0	0.0	4.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.3	0.0	37.6	0.0	0.0	0.0	0.0	5.7	0.0	0.0	4.0	0.0
LOS by Move:	D		A	D		A	A		A	A		A
HCM2kAvgQ:	3		0	6		0	0		11	0		4	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.751
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 0 1	2	0	2 0 0	0	0	0 0 0	2	0	0 0 2
Volume Module:												
Base Vol:	0	1712	118	106	1120	0	0	0	0	136	0	161
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1712	118	106	1120	0	0	0	0	136	0	161
Added Vol:	0	3	36	70	7	0	0	0	0	18	0	35
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1715	154	176	1127	0	0	0	0	154	0	196
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1800	162	185	1183	0	0	0	0	162	0	206
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1800	162	185	1183	0	0	0	0	162	0	206
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1800	162	185	1183	0	0	0	0	162	0	206
OvlAdjVol:												21
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	3200	3200	0	0	0	0	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.56	0.10	0.06	0.37	0.00	0.00	0.00	0.00	0.05	0.00	0.06
OvlAdjV/S:												0.01
Crit Moves:		****			****						****	

EXISTING PLUS 2025 PROJECT CONDITIONS

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.769
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0	1	0	0 1!	0	0	1	0 2	0	1	1	0 2	1	0
Volume Module:																
Base Vol:	594	4	140		18	10	12		4	1170	436		78	1018		3
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	594	4	140		18	10	12		4	1170	436		78	1018		3
Added Vol:	0	0	14		0	0	0		0	21	0		3	4		0
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0		0
Initial Fut:	594	4	154		18	10	12		4	1191	436		81	1022		3
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92		0.92
PHF Volume:	645	4	167		20	11	13		4	1293	473		88	1110		3
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0		0
Reduced Vol:	645	4	167		20	11	13		4	1293	473		88	1110		3
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
FinalVolume:	645	4	167		20	11	13		4	1293	473		88	1110		3
OvlAdjVol:											149					
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600		1600
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Lanes:	1.99	0.01	1.00		0.45	0.25	0.30		1.00	2.00	1.00		1.00	2.99		0.01
Final Sat.:	3179	21	1600		720	400	480		1600	3200	1600		1600	4786		14
Capacity Analysis Module:																
Vol/Sat:	0.20	0.20	0.10		0.03	0.03	0.03		0.00	0.40	0.30		0.05	0.23		0.23
OvlAdjV/S:											0.09					
Crit Moves:	****						****			****			****			

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.726
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0	1	0	1 0	0	1	1	0 1	1	0	1	0 2	0	1
Volume Module:																
Base Vol:	268	27	102		22	45	19		7	1045	292		53	790		14
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	268	27	102		22	45	19		7	1045	292		53	790		14
Added Vol:	0	0	25		0	0	0		0	50	0		5	10		0
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0		0
Initial Fut:	268	27	127		22	45	19		7	1095	292		58	800		14
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94		0.94
PHF Volume:	287	29	136		24	48	20		7	1171	312		62	856		15
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0		0
Reduced Vol:	287	29	136		24	48	20		7	1171	312		62	856		15
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
FinalVolume:	287	29	136		24	48	20		7	1171	312		62	856		15
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600		1600
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Lanes:	1.82	0.18	1.00		0.33	0.67	1.00		1.00	1.58	0.42		1.00	2.00		1.00
Final Sat.:	2907	293	1600		525	1075	1600		1600	2526	674		1600	3200		1600
Capacity Analysis Module:																
Vol/Sat:	0.10	0.10	0.08		0.04	0.04	0.01		0.00	0.46	0.46		0.04	0.27		0.01
Crit Moves:	****				****					****			****			

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.616
Loss Time (sec):	6	Average Delay (sec/veh):	23.7
Optimal Cycle:	34	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	144	1051	17	0	812	140	437	6	310	12	3	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	144	1051	17	0	812	140	437	6	310	12	3	8
Added Vol:	11	3	0	0	14	0	0	0	64	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	155	1054	17	0	826	140	437	6	374	12	3	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	157	1066	17	0	836	142	442	6	378	12	3	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	157	1066	17	0	836	142	442	6	378	12	3	8
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	157	1066	17	0	836	142	442	6	378	12	3	8
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	1.00	0.95	0.85	0.95	0.95	0.85	0.93	0.93	0.93
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.99	0.01	1.00	0.52	0.13	0.35
Final Sat.:	1805	3610	1615	1900	3610	1615	1786	25	1615	921	230	614
Capacity Analysis Module:												
Vol/Sat:	0.09	0.30	0.01	0.00	0.23	0.09	0.25	0.25	0.23	0.01	0.01	0.01
Crit Moves:	****				****			****			****	
Green/Cycle:	0.14	0.52	0.52	0.00	0.38	0.38	0.40	0.40	0.40	0.02	0.02	0.02
Volume/Cap:	0.62	0.57	0.02	0.00	0.62	0.23	0.62	0.62	0.58	0.62	0.62	0.62
Delay/Veh:	44.9	17.0	11.8	0.0	26.2	21.6	25.4	25.4	24.7	75.4	75.4	75.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.9	17.0	11.8	0.0	26.2	21.6	25.4	25.4	24.7	75.4	75.4	75.4
LOS by Move:	D	B	B	A	C	C	C	C	C	E	E	E
HCM2kAvgQ:	4	11	0	0	11	3	11	11	10	2	2	2

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

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Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.885
Loss Time (sec):	6	Average Delay (sec/veh):	29.9
Optimal Cycle:	86	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	41	873	0	0	927	223	349	0	533	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	873	0	0	927	223	349	0	533	0	0	0
Added Vol:	13	14	0	0	79	0	0	0	57	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	54	887	0	0	1006	223	349	0	590	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	54	887	0	0	1006	223	349	0	590	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	887	0	0	1006	223	349	0	590	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	54	887	0	0	1006	223	349	0	590	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.92	0.92	0.89	1.00	0.89	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.64	0.36	1.23	0.00	0.77	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2875	637	2076	0	1305	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.25	0.00	0.00	0.35	0.35	0.17	0.00	0.45	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.03	0.43	0.00	0.00	0.40	0.40	0.51	0.00	0.51	0.00	0.00	0.00
Volume/Cap:	0.89	0.57	0.00	0.00	0.89	0.89	0.33	0.00	0.89	0.00	0.00	0.00
Delay/Veh:	123.6	22.1	0.0	0.0	35.3	35.3	14.4	0.0	30.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	123.6	22.1	0.0	0.0	35.3	35.3	14.4	0.0	30.9	0.0	0.0	0.0
LOS by Move:	F	C	A	A	D	D	B	A	C	A	A	A
HCM2kAvgQ:	4	11	0	0	20	20	5	0	24	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.989
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	130	1183	442	221	1365	214	158	93	244	115	48	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1183	442	221	1365	214	158	93	244	115	48	76
Added Vol:	0	86	21	16	17	0	0	4	0	4	1	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	130	1269	463	237	1382	214	158	97	244	119	49	79
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	139	1356	495	253	1476	229	169	104	261	127	52	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	1356	495	253	1476	229	169	104	261	127	52	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	139	1356	495	253	1476	229	169	104	261	127	52	84
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.28	0.72	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	455	1145	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.42	0.31	0.16	0.46	0.14	0.11	0.23	0.23	0.08	0.03	0.05
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.967
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 150 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	236	1291	628	412	1070	187	284	757	153	110	446	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	236	1291	628	412	1070	187	284	757	153	110	446	185
Added Vol:	0	86	86	0	17	4	21	79	0	17	16	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	236	1377	714	412	1087	191	305	836	153	127	462	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	245	1427	740	427	1126	198	316	866	159	132	479	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	1427	740	427	1126	198	316	866	159	132	479	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	245	1427	740	427	1126	198	316	866	159	132	479	192
OvlAdjVol:			674						36			0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.55	0.45	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4083	717	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.30	0.46	0.13	0.28	0.28	0.10	0.27	0.10	0.04	0.15	0.12
OvlAdjV/S:			0.42						0.02			0.00
Crit Moves:			****	****				****		****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.111
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	159	1684	70	1	1120	277	407	76	416	113	108	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	1684	70	1	1120	277	407	76	416	113	108	12
Added Vol:	0	107	0	4	21	9	43	0	0	0	0	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	159	1791	70	5	1141	286	450	76	416	113	108	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	184	2068	81	6	1318	330	520	88	480	130	125	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	2068	81	6	1318	330	520	88	480	130	125	38
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	2068	81	6	1318	330	520	88	480	130	125	38
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.71	0.29	1.00	1.34	1.27	0.39
Final Sat.:	1600	3200	1600	1600	3200	1600	2738	462	1600	2138	2040	622
Capacity Analysis Module:												
Vol/Sat:	0.11	0.65	0.05	0.00	0.41	0.21	0.19	0.19	0.30	0.06	0.06	0.06
OvlAdjV/S:						0.00						
Crit Moves:		****			****				****			****

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.872
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	88	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	291	1364	364	207	938	396	401	500	169	167	1116	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	291	1364	364	207	938	396	401	500	169	167	1116	139
Added Vol:	0	79	0	0	16	6	29	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	291	1443	364	207	954	402	430	500	169	167	1116	139
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	307	1522	0	218	1006	0	454	527	0	176	1177	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	307	1522	0	218	1006	0	454	527	0	176	1177	147
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	307	1522	0	218	1006	0	454	527	0	176	1177	147
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.32	0.00	0.07	0.21	0.00	0.14	0.11	0.00	0.06	0.25	0.09
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.865
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	80	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 1	1	0 3	0 1	2	0 1	0 1	1	0 1	0 1
Volume Module:												
Base Vol:	116	2253	0	0	1002	107	39	0	36	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	116	2253	0	0	1002	107	39	0	36	0	0	0
Added Vol:	0	50	0	0	10	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	2303	0	0	1012	107	39	0	36	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	123	2434	0	0	1070	113	41	0	38	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	2434	0	0	1070	113	41	0	38	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	123	2434	0	0	1070	113	41	0	38	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	3200	3200	1600	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.76	0.00	0.00	0.22	0.07	0.01	0.00	0.02	0.00	0.00	0.00
Crit Moves:		****			****				****			

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.864
Loss Time (sec):	10	Average Delay (sec/veh):	23.5
Optimal Cycle:	90	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	1 1	0	1 0	0 1	0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	1796	320	349	679	2	0	1	1	262	0	572
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1796	320	349	679	2	0	1	1	262	0	572
Added Vol:	0	50	0	6	4	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1846	320	355	683	2	0	1	1	262	0	572
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	1960	340	377	725	2	0	1	1	278	0	607
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1960	340	377	725	2	0	1	1	278	0	607
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1960	340	377	725	2	0	1	1	278	0	607
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	0.95	1.00	0.93	0.93	0.88	1.00	0.88
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.50	0.50	1.31	0.00	1.69
Final Sat.:	1900	3610	1615	3502	3599	11	1900	879	879	2206	0	2830
Capacity Analysis Module:												
Vol/Sat:	0.00	0.54	0.21	0.11	0.20	0.20	0.00	0.00	0.00	0.13	0.00	0.21
Crit Moves:		****		****				****		****		
Green/Cycle:	0.00	0.63	0.77	0.12	0.75	0.75	0.00	0.00	0.00	0.15	0.00	0.27
Volume/Cap:	0.00	0.86	0.27	0.86	0.27	0.27	0.00	0.86	0.86	0.86	0.00	0.79
Delay/Veh:	0.0	18.8	3.4	59.2	3.9	3.9	0.0	493	492.6	49.5	0.0	37.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.8	3.4	59.2	3.9	3.9	0.0	493	492.6	49.5	0.0	37.6
LOS by Move:	A	B	A	E	A	A	A	F	F	D	A	D
HCM2kAvgQ:	0	25	3	7	4	4	0	1	1	9	0	12

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.877
Loss Time (sec):	10	Average Delay (sec/veh):	32.8
Optimal Cycle:	95	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2 0	1	1 0	2 0	0	2 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	1177	267	312	676	0	905	0	281	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1177	267	312	676	0	905	0	281	0	0	0
Added Vol:	0	21	0	0	4	0	29	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1198	267	312	680	0	934	0	281	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	0	1226	273	319	696	0	956	0	288	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1226	273	319	696	0	956	0	288	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1226	273	319	696	0	956	0	288	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.17	0.18	0.19	0.00	0.27	0.00	0.18	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green/Cycle:	0.00	0.39	0.39	0.20	0.59	0.00	0.31	0.00	0.31	0.00	0.00	0.00
Volume/Cap:	0.00	0.88	0.44	0.88	0.33	0.00	0.88	0.00	0.57	0.00	0.00	0.00
Delay/Veh:	0.0	35.0	23.1	59.4	10.6	0.0	40.9	0.0	30.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	35.0	23.1	59.4	10.6	0.0	40.9	0.0	30.5	0.0	0.0	0.0
LOS by Move:	A	D	C	E	B	A	D	A	C	A	A	A
HCM2kAvgQ:	0	22	6	11	6	0	18	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.790
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0 1	0	0 1	1 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	126	14	28	173	11	246	35	980	218	6	830	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	14	28	173	11	246	35	980	218	6	830	80
Added Vol:	9	0	10	10	0	9	45	75	45	50	15	50
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	135	14	38	183	11	255	80	1055	263	56	845	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	141	15	40	191	11	266	84	1101	275	58	882	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	15	40	191	11	266	84	1101	275	58	882	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	141	15	40	191	11	266	84	1101	275	58	882	136
OvlAdjVol:						183						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.91	0.09	1.00	0.94	0.06	1.00	1.00	1.60	0.40	1.00	2.00	1.00
Final Sat.:	1450	150	1600	1509	91	1600	1600	2561	639	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.02	0.13	0.13	0.17	0.05	0.43	0.43	0.04	0.28	0.08
OvlAdjV/S:						0.11						
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.647
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	0 1	2 0	1	0 1	2 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	21	13	21	80	18	74	381	725	130	119	952	424
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	13	21	80	18	74	381	725	130	119	952	424
Added Vol:	8	0	16	16	0	8	38	20	38	79	100	79
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	13	37	96	18	82	419	745	168	198	1052	503
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	31	14	39	102	19	88	447	795	179	211	1123	537
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	14	39	102	19	88	447	795	179	211	1123	537
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	31	14	39	102	19	88	447	795	179	211	1123	537
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.63	0.37	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	3200	2611	589	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.02	0.03	0.01	0.05	0.14	0.30	0.30	0.13	0.35	0.34
OvlAdjV/S:						0.00						
Crit Moves:			****	****				****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[18.1]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		4	847	0		0	1530	199	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		4	847	0		0	1530	199	
Added Vol:	0	0	0		0	0	0		0	51	0		0	257	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		4	898	0		0	1787	199	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	0	0	0		0	0	0		4	925	0		0	1840	205	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		4	925	0		0	1840	205	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	1853	2978	462		2311	2773	920		2045	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	67	14	552		33	19	277		279	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	66	14	552		32	19	277		279	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		0.01	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		18.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		C	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.838
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 76 Level Of Service: D

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0		
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	2	1	0	1	0	2	1	0
Volume Module:																				
Base Vol:	172	572	45			99	586	288			111	327	157			37	1179	98		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	172	572	45			99	586	288			111	327	157			37	1179	98		
Added Vol:	14	0	0			0	0	57			11	34	3			0	172	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	186	572	45			99	586	345			122	361	160			37	1351	98		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.96	0.96	0.96			0.96	0.96	0.96			0.96	0.96	0.96			0.96	0.96	0.96		
PHF Volume:	193	595	47			103	609	359			127	375	166			38	1404	102		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	193	595	47			103	609	359			127	375	166			38	1404	102		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	193	595	47			103	609	359			127	375	166			38	1404	102		
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600			1600	1600	1600			1600	1600	1600			1600	1600	1600		
Adjustment:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Lanes:	1.00	2.00	1.00			1.00	2.00	1.00			1.00	2.08	0.92			1.00	2.80	0.20		
Final Sat.:	1600	3200	1600			1600	3200	1600			1600	3326	1474			1600	4475	325		
Capacity Analysis Module:																				
Vol/Sat:	0.12	0.19	0.03			0.06	0.19	0.22			0.08	0.11	0.11			0.02	0.31	0.31		
Crit Moves:	****							****			****						****			

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.879
Loss Time (sec):	6	Average Delay (sec/veh):	24.4
Optimal Cycle:	83	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 1	1 0	1! 0	1	0 0	2	1 0	1 0	3 0	1
Volume Module:												
Base Vol:	0	0	2	604	3	745	0	541	10	7	1225	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	2	604	3	745	0	541	10	7	1225	43
Added Vol:	0	0	0	0	0	72	0	34	0	0	100	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	2	604	3	817	0	575	10	7	1325	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.00
PHF Volume:	0	0	2	739	4	1000	0	704	12	9	1622	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	2	739	4	1000	0	704	12	9	1622	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	0	2	739	4	1000	0	704	12	9	1622	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.89	0.89	0.89	1.00	0.91	0.91	0.95	0.91	1.00
Lanes:	0.00	0.00	1.00	1.42	0.01	1.57	0.00	2.95	0.05	1.00	3.00	1.00
Final Sat.:	0	0	1644	2420	7	2674	0	5083	88	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.31	0.51	0.37	0.00	0.14	0.14	0.00	0.31	0.00
Crit Moves:					****		****				****	
Green/Cycle:	0.00	0.00	0.00	0.58	0.58	0.58	0.00	0.34	0.34	0.01	0.36	0.00
Volume/Cap:	0.00	0.00	xxxx	0.52	0.88	0.64	0.00	0.40	0.40	0.40	0.88	0.00
Delay/Veh:	0.0	0.0	0.0	12.6	22.7	14.3	0.0	25.1	25.1	61.0	35.4	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	12.6	22.7	14.3	0.0	25.1	25.1	61.0	35.4	0.0
LOS by Move:	A	A	A	B	C	B	A	C	C	E	D	A
HCM2kAvgQ:	0	0	0	13	9	11	0	6	6	1	20	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.146
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2	0 0	0 0	1	1 0	1 0	0	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	397	739	0	0	1653	181	86	0	561	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	397	739	0	0	1653	181	86	0	561	0	0	0
Added Vol:	3	30	0	0	151	0	0	0	16	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	400	769	0	0	1804	181	86	0	577	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	435	836	0	0	1961	197	93	0	627	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	435	836	0	0	1961	197	93	0	627	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	435	836	0	0	1961	197	93	0	627	0	0	0
OvlAdjVol:									410			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.82	0.18	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	2908	292	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.14	0.26	0.00	0.00	0.67	0.67	0.06	0.00	0.39	0.00	0.00	0.00
OvlAdjV/S:									0.26			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.592
Loss Time (sec): 6 Average Delay (sec/veh): 14.8
Optimal Cycle: 32 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0 0	1	0	2 1	1	0	0 3 0
Volume Module:												
Base Vol:	385	0	274	0	0	0	0	806	276	0	1599	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	385	0	274	0	0	0	0	806	276	0	1599	0
Added Vol:	72	0	0	0	0	0	0	6	14	0	29	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	457	0	274	0	0	0	0	812	290	0	1628	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.00	0.85	0.85	0.85
PHF Volume:	535	0	321	0	0	0	0	951	0	0	1906	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	535	0	321	0	0	0	0	951	0	0	1906	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	535	0	321	0	0	0	0	951	0	0	1906	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Lanes:	1.63	0.00	1.37	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.00	0.00
Final Sat.:	2827	0	2392	0	0	0	1900	5187	1729	0	5187	0
Capacity Analysis Module:												
Vol/Sat:	0.19	0.00	0.13	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.37	0.00
Crit Moves:	****										****	
Green/Cycle:	0.32	0.00	0.32	0.00	0.00	0.00	0.00	0.62	0.00	0.00	0.62	0.00
Volume/Cap:	0.59	0.00	0.42	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.59	0.00
Delay/Veh:	29.2	0.0	26.9	0.0	0.0	0.0	0.0	8.9	0.0	0.0	11.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.2	0.0	26.9	0.0	0.0	0.0	0.0	8.9	0.0	0.0	11.7	0.0
LOS by Move:	C		A	C		A	A		A	A		B A
HCM2kAvgQ:	9	0	6	0	0	0	0	5	0	0	13	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.726
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 0 1	2	0	2 0 0	0	0	0 0 0	2	0	0 0 2
Volume Module:												
Base Vol:	0	1047	437	643	1700	0	0	0	0	134	0	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1047	437	643	1700	0	0	0	0	134	0	75
Added Vol:	0	3	86	166	16	0	0	0	0	17	0	33
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1050	523	809	1716	0	0	0	0	151	0	108
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	1080	538	832	1765	0	0	0	0	155	0	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1080	538	832	1765	0	0	0	0	155	0	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1080	538	832	1765	0	0	0	0	155	0	111
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	3200	3200	0	0	0	0	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.34	0.26	0.55	0.00	0.00	0.00	0.00	0.05	0.00	0.03
OvlAdjV/S:												0.00
Crit Moves:		****			****						****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.735
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0	1	0	0 1!	0	0	1	0 2	0	1	1	0 2	1	0
Volume Module:																
Base Vol:	570	9	191		6	3	13		6	1118	481		129	960		12
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	570	9	191		6	3	13		6	1118	481		129	960		12
Added Vol:	0	0	11		0	0	0		0	17	0		6	9		0
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0		0
Initial Fut:	570	9	202		6	3	13		6	1135	481		135	969		12
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97		0.97
PHF Volume:	589	9	209		6	3	13		6	1173	497		139	1001		12
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0		0
Reduced Vol:	589	9	209		6	3	13		6	1173	497		139	1001		12
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
FinalVolume:	589	9	209		6	3	13		6	1173	497		139	1001		12
OvlAdjVol:											198					
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600		1600
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Lanes:	1.97	0.03	1.00		0.27	0.14	0.59		1.00	2.00	1.00		1.00	2.96		0.04
Final Sat.:	3150	50	1600		436	218	945		1600	3200	1600		1600	4741		59
Capacity Analysis Module:																
Vol/Sat:	0.19	0.19	0.13		0.01	0.01	0.01		0.00	0.37	0.31		0.09	0.21		0.21
OvlAdjV/S:											0.12					
Crit Moves:	****					****				****			****			

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.657
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0	1	0	1 0	0	1	1	0 1	1	0	1	0 2	0	1
Volume Module:																
Base Vol:	254	42	132		17	22	5		19	999	161		107	890		19
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	254	42	132		17	22	5		19	999	161		107	890		19
Added Vol:	0	0	20		0	0	0		0	40	0		10	20		0
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0		0
Initial Fut:	254	42	152		17	22	5		19	1039	161		117	910		19
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.98	0.98	0.98		0.98	0.98	0.98		0.98	0.98	0.98		0.98	0.98		0.98
PHF Volume:	258	43	155		17	22	5		19	1057	164		119	926		19
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0		0
Reduced Vol:	258	43	155		17	22	5		19	1057	164		119	926		19
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
FinalVolume:	258	43	155		17	22	5		19	1057	164		119	926		19
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600		1600
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Lanes:	1.72	0.28	1.00		0.44	0.56	1.00		1.00	1.73	0.27		1.00	2.00		1.00
Final Sat.:	2746	454	1600		697	903	1600		1600	2771	429		1600	3200		1600
Capacity Analysis Module:																
Vol/Sat:	0.09	0.09	0.10		0.02	0.02	0.00		0.01	0.38	0.38		0.07	0.29		0.01
Crit Moves:			****			****					****			****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.733
Loss Time (sec):	6	Average Delay (sec/veh):	25.5
Optimal Cycle:	46	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	389	1090	34	3	815	385	282	11	117	18	17	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	389	1090	34	3	815	385	282	11	117	18	17	6
Added Vol:	23	6	0	0	11	0	0	0	51	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	412	1096	34	3	826	385	282	11	168	18	17	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	436	1161	36	3	875	408	299	12	178	19	18	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	436	1161	36	3	875	408	299	12	178	19	18	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	436	1161	36	3	875	408	299	12	178	19	18	6
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.96	0.96	0.96
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.96	0.04	1.00	0.44	0.41	0.15
Final Sat.:	1805	3610	1615	1805	3610	1615	1745	68	1615	800	756	267
Capacity Analysis Module:												
Vol/Sat:	0.24	0.32	0.02	0.00	0.24	0.25	0.17	0.17	0.11	0.02	0.02	0.02
Crit Moves:	****					****	****				****	
Green/Cycle:	0.33	0.67	0.67	0.00	0.34	0.34	0.23	0.23	0.23	0.03	0.03	0.03
Volume/Cap:	0.73	0.48	0.03	0.48	0.70	0.73	0.73	0.73	0.47	0.73	0.73	0.73
Delay/Veh:	34.3	8.2	5.6	95.8	30.2	33.8	42.0	42.0	34.0	85.3	85.3	85.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.3	8.2	5.6	95.8	30.2	33.8	42.0	42.0	34.0	85.3	85.3	85.3
LOS by Move:	C	A	A	F	C	C	D	D	C	F	F	F
HCM2kAvgQ:	12	9	0	1	13	12	10	10	5	3	3	3

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

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Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.657
Loss Time (sec):	6	Average Delay (sec/veh):	19.2
Optimal Cycle:	38	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	52	1273	0	0	668	301	301	0	186	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	52	1273	0	0	668	301	301	0	186	0	0	0
Added Vol:	26	29	0	0	63	0	0	0	46	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	78	1302	0	0	731	301	301	0	232	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	83	1381	0	0	775	319	319	0	246	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1381	0	0	775	319	319	0	246	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	1381	0	0	775	319	319	0	246	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.91	0.91	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.42	0.58	1.39	0.00	0.61	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2445	1007	2409	0	1048	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.38	0.00	0.00	0.32	0.32	0.13	0.00	0.23	0.00	0.00	0.00
Crit Moves:		****		****					****			
Green/Cycle:	0.07	0.58	0.00	0.00	0.51	0.51	0.36	0.00	0.36	0.00	0.00	0.00
Volume/Cap:	0.62	0.66	0.00	0.00	0.62	0.62	0.37	0.00	0.66	0.00	0.00	0.00
Delay/Veh:	53.8	14.9	0.0	0.0	18.4	18.4	24.0	0.0	28.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.8	14.9	0.0	0.0	18.4	18.4	24.0	0.0	28.8	0.0	0.0	0.0
LOS by Move:	D	B	A	A	B	B	C	A	C	A	A	A
HCM2kAvgQ:	4	15	0	0	12	12	5	0	11	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.883
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	92	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	80	1628	109	81	1067	96	103	16	113	123	28	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	1628	109	81	1067	96	103	16	113	123	28	98
Added Vol:	0	69	17	13	34	0	0	3	0	9	1	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	1697	126	94	1101	96	103	19	113	132	29	104
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	83	1762	131	98	1143	100	107	20	117	137	30	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1762	131	98	1143	100	107	20	117	137	30	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	1762	131	98	1143	100	107	20	117	137	30	108
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.14	0.86	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	230	1370	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.55	0.08	0.06	0.36	0.06	0.07	0.09	0.09	0.09	0.02	0.07
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.804
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	327	1150	288	209	832	262	346	651	292	359	659	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	327	1150	288	209	832	262	346	651	292	359	659	326
Added Vol:	0	69	69	0	34	9	17	63	0	34	31	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	327	1219	357	209	866	271	363	714	292	393	690	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	336	1253	367	215	890	279	373	734	300	404	709	335
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	336	1253	367	215	890	279	373	734	300	404	709	335
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	336	1253	367	215	890	279	373	734	300	404	709	335
OvlAdjVol:			165						132			228
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.28	0.72	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	3656	1144	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.26	0.23	0.07	0.24	0.24	0.12	0.23	0.19	0.13	0.22	0.21
OvlAdjV/S:			0.10						0.08			0.14
Crit Moves:	****				****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.968
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	152	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	233	1535	153	7	1259	190	245	63	350	85	35	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	233	1535	153	7	1259	190	245	63	350	85	35	12
Added Vol:	0	86	0	9	43	17	34	0	0	0	0	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1621	153	16	1302	207	279	63	350	85	35	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	252	1754	166	17	1409	224	302	68	379	92	38	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	1754	166	17	1409	224	302	68	379	92	38	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	252	1754	166	17	1409	224	302	68	379	92	38	31
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.63	0.37	1.00	1.72	0.70	0.58
Final Sat.:	1600	3200	1600	1600	3200	1600	2611	589	1600	2738	1128	935
Capacity Analysis Module:												
Vol/Sat:	0.16	0.55	0.10	0.01	0.44	0.14	0.12	0.12	0.24	0.03	0.03	0.03
OvlAdjV/S:						0.00						
Crit Moves:	****				****				****	****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.942
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	126	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Added Vol:	0	63	0	0	31	11	23	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	261	1103	179	385	1073	220	689	1531	287	428	702	244
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	274	1156	0	404	1125	0	722	1605	0	449	736	256
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	274	1156	0	404	1125	0	722	1605	0	449	736	256
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	274	1156	0	404	1125	0	722	1605	0	449	736	256
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.24	0.00	0.13	0.23	0.00	0.23	0.33	0.00	0.14	0.15	0.16
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.576
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 1	1	0 3	0 1	2	0 1	0 1	1	0 1	0 1
Volume Module:												
Base Vol:	33	1261	0	0	1567	50	172	0	94	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	1261	0	0	1567	50	172	0	94	0	0	0
Added Vol:	0	40	0	0	20	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	1301	0	0	1587	50	172	0	94	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	36	1402	0	0	1710	54	185	0	101	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1402	0	0	1710	54	185	0	101	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	1402	0	0	1710	54	185	0	101	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	3200	3200	1600	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.44	0.00	0.00	0.36	0.03	0.06	0.00	0.06	0.00	0.00	0.00
Crit Moves:		****			****			****				

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.763
Loss Time (sec):	10	Average Delay (sec/veh):	23.0
Optimal Cycle:	64	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	1 1	0	1 0	0 1	0	1 0	1! 0	1
Volume Module:												
Base Vol:	1	799	283	610	1382	5	4	2	4	186	1	495
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	799	283	610	1382	5	4	2	4	186	1	495
Added Vol:	0	40	0	11	9	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	839	283	621	1391	5	4	2	4	186	1	495
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	1	935	315	692	1551	6	4	2	4	207	1	552
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	935	315	692	1551	6	4	2	4	207	1	552
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	935	315	692	1551	6	4	2	4	207	1	552
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.95	0.95	0.95	0.90	0.90	0.88	0.88	0.88
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.33	0.67	1.27	0.01	1.72
Final Sat.:	1805	3610	1615	3502	3593	13	1805	570	1140	2126	5	2882
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.20	0.20	0.43	0.43	0.00	0.00	0.00	0.10	0.23	0.19
Crit Moves:		****		****			****				****	
Green/Cycle:	0.00	0.34	0.63	0.26	0.60	0.60	0.00	0.01	0.01	0.29	0.30	0.56
Volume/Cap:	0.72	0.76	0.31	0.76	0.72	0.72	0.76	0.34	0.31	0.34	0.76	0.34
Delay/Veh:	456.9	32.4	8.7	38.1	15.5	15.5	260.0	58.8	57.2	28.0	35.4	12.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	456.9	32.4	8.7	38.1	15.5	15.5	260.0	58.8	57.2	28.0	35.4	12.2
LOS by Move:	F	C	A	D	B	B	F	E	E	C	D	B
HCM2kAvgQ:	0	14	4	10	18	18	1	1	1	4	12	5

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.827
Loss Time (sec):	10	Average Delay (sec/veh):	21.5
Optimal Cycle:	78	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2 0	1	1 0	2 0	0	2 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	933	619	380	1294	0	169	0	176	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	933	619	380	1294	0	169	0	176	0	0	0
Added Vol:	0	17	0	0	9	0	23	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	950	619	380	1303	0	192	0	176	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	1006	656	403	1380	0	203	0	186	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1006	656	403	1380	0	203	0	186	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1006	656	403	1380	0	203	0	186	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.41	0.22	0.38	0.00	0.06	0.00	0.12	0.00	0.00	0.00
Crit Moves:			****	****					****			
Green/Cycle:	0.00	0.49	0.49	0.27	0.76	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Volume/Cap:	0.00	0.57	0.83	0.83	0.50	0.00	0.42	0.00	0.83	0.00	0.00	0.00
Delay/Veh:	0.0	18.4	29.0	45.5	4.8	0.0	39.9	0.0	63.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.4	29.0	45.5	4.8	0.0	39.9	0.0	63.5	0.0	0.0	0.0
LOS by Move:	A	B	C	D	A	A	D	A	E	A	A	A
HCM2kAvgQ:	0	12	20	12	8	0	3	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.779
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0 1	0	0 1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	6	7	1	94	38	102	303	1335	189	42	609	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	7	1	94	38	102	303	1335	189	42	609	237
Added Vol:	18	0	20	20	0	18	36	60	36	40	30	40
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	7	21	114	38	120	339	1395	225	82	639	277
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	24	7	21	115	38	121	343	1411	228	83	646	280
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	7	21	115	38	121	343	1411	228	83	646	280
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	7	21	115	38	121	343	1411	228	83	646	280
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.77	0.23	1.00	0.75	0.25	1.00	1.00	1.72	0.28	1.00	2.00	1.00
Final Sat.:	1239	361	1600	1200	400	1600	1600	2756	444	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.10	0.10	0.08	0.21	0.51	0.51	0.05	0.20	0.18
OvlAdjV/S:						0.00						
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.666
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	0 1	2 0	1	0 1	2 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	103	21	75	151	9	96	153	776	54	31	1097	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	103	21	75	151	9	96	153	776	54	31	1097	200
Added Vol:	15	0	31	31	0	15	30	40	30	63	80	63
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	118	21	106	182	9	111	183	816	84	94	1177	263
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	122	22	110	188	9	115	189	843	87	97	1216	272
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	22	110	188	9	115	189	843	87	97	1216	272
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	122	22	110	188	9	115	189	843	87	97	1216	272
OvlAdjVol:						20						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.81	0.19	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	3200	2901	299	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.01	0.07	0.06	0.01	0.07	0.06	0.29	0.29	0.06	0.38	0.17
OvlAdjV/S:						0.01						
Crit Moves:			****	****				****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1!	0 0	0	0	1!	0 0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Added Vol:	0	0	0		0	0	0		0	103	0		0	206	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		0	1132	0		0	1488	14	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93	
PHF Volume:	0	0	0		0	0	0		0	1212	0		0	1593	15	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		0	1212	0		0	1593	15	
Adjusted Volume Module:																
Grade:	0%				0%				0%				0%			
% Cycle/Cars:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
% Truck/Comb:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
PCE Adj:	1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.00	1.00		1.10	1.00	1.00	
Cycl/Car PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Trck/Cmb PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Adj Vol.:	0	0	0		0	0	0		0	1212	0		0	1593	15	
Critical Gap Module:																
MoveUp Time:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Critical Gp:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Adj Cap:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Level Of Service Module:																
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				0.0				0.0			

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.776
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	C

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0		
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	2	1	0	1	0	2	1	0
Volume Module:																				
Base Vol:	234	775	63			160	550	158			163	963	214			84	684	112		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	234	775	63			160	550	158			163	963	214			84	684	112		
Added Vol:	11	0	0			0	0	46			23	69	6			0	137	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	245	775	63			160	550	204			186	1032	220			84	821	112		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.97	0.97	0.97			0.97	0.97	0.97			0.97	0.97	0.97			0.97	0.97	0.97		
PHF Volume:	254	803	65			166	570	211			193	1069	228			87	851	116		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	254	803	65			166	570	211			193	1069	228			87	851	116		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	254	803	65			166	570	211			193	1069	228			87	851	116		
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600			1600	1600	1600			1600	1600	1600			1600	1600	1600		
Adjustment:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Lanes:	1.00	2.00	1.00			1.00	2.00	1.00			1.00	2.47	0.53			1.00	2.64	0.36		
Final Sat.:	1600	3200	1600			1600	3200	1600			1600	3957	843			1600	4224	576		
Capacity Analysis Module:																				
Vol/Sat:	0.16	0.25	0.04			0.10	0.18	0.13			0.12	0.27	0.27			0.05	0.20	0.20		
Crit Moves:		****					****					****					****			

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.915
Loss Time (sec): 6 Average Delay (sec/veh): 25.8
Optimal Cycle: 103 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0 1! 0	1	0	2 1 0	1	0	3 0 1
Volume Module:												
Base Vol:	1	0	83	923	12	536	0	1796	72	18	576	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	0	83	923	12	536	0	1796	72	18	576	116
Added Vol:	0	0	0	0	0	57	0	69	0	0	80	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	83	923	12	593	0	1865	72	18	656	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00
PHF Volume:	1	0	86	957	12	615	0	1935	75	19	680	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	86	957	12	615	0	1935	75	19	680	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	1	0	86	957	12	615	0	1935	75	19	680	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	1.00	0.87	0.91	0.91	0.91	1.00	0.90	0.90	0.95	0.91	1.00
Lanes:	0.01	0.00	0.99	1.60	0.02	1.38	0.00	2.89	0.11	1.00	3.00	1.00
Final Sat.:	20	0	1628	2780	27	2407	0	4964	192	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.05	0.34	0.46	0.26	0.00	0.39	0.39	0.01	0.13	0.00
Crit Moves:					****			****		****		
Green/Cycle:	0.00	0.00	0.00	0.50	0.50	0.50	0.00	0.43	0.43	0.01	0.44	0.00
Volume/Cap:	xxxx	0.00	xxxx	0.69	0.91	0.51	0.00	0.91	0.91	0.92	0.30	0.00
Delay/Veh:	0.0	0.0	0.0	19.7	30.8	16.8	0.0	33.5	33.5	208.7	18.3	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	19.7	30.8	16.8	0.0	33.5	33.5	208.7	18.3	0.0
LOS by Move:	A	A	A	B	C	B	A	C	C	F	B	A
HCM2kAvgQ:	2	0	2	22	1	12	0	25	25	2	5	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.708
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 46 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2 0 0	0	0	1 1 0	1	0	0 0 1	0	0	0 0 0
Volume Module:												
Base Vol:	418	1243	0	0	808	115	81	0	407	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	418	1243	0	0	808	115	81	0	407	0	0	0
Added Vol:	6	60	0	0	121	0	0	0	13	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	424	1303	0	0	929	115	81	0	420	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	453	1391	0	0	991	123	86	0	448	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	453	1391	0	0	991	123	86	0	448	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	453	1391	0	0	991	123	86	0	448	0	0	0
OvlAdjVol:									222			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.78	0.22	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	2848	352	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.14	0.43	0.00	0.00	0.35	0.35	0.05	0.00	0.28	0.00	0.00	0.00
OvlAdjV/S:									0.14			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.567
Loss Time (sec):	6	Average Delay (sec/veh):	9.4
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	0	1	0	2	1 1
Volume Module:												
Base Vol:	123	0	289	0	0	0	0	2097	621	0	969	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	123	0	289	0	0	0	0	2097	621	0	969	0
Added Vol:	57	0	0	0	0	0	0	11	29	0	23	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	180	0	289	0	0	0	0	2108	650	0	992	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00	0.96	0.96	0.96
PHF Volume:	187	0	301	0	0	0	0	2194	0	0	1032	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	187	0	301	0	0	0	0	2194	0	0	1032	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	187	0	301	0	0	0	0	2194	0	0	1032	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Lanes:	1.38	0.00	1.62	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.00	0.00
Final Sat.:	2342	0	2735	0	0	0	1900	5187	1729	0	5187	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.11	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.20	0.00
Crit Moves:			****					****				
Green/Cycle:	0.19	0.00	0.19	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.75	0.00
Volume/Cap:	0.41	0.00	0.57	0.00	0.00	0.00	0.00	0.57	0.00	0.00	0.27	0.00
Delay/Veh:	35.5	0.0	37.4	0.0	0.0	0.0	0.0	5.8	0.0	0.0	4.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.5	0.0	37.4	0.0	0.0	0.0	0.0	5.8	0.0	0.0	4.1	0.0
LOS by Move:	D		A D	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	4	0	6	0	0	0	0	11	0	0	4	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.777
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 0	1	2	0	2	0	0	0	0	0 0
Volume Module:												
Base Vol:	0	1712	118	106	1120	0	0	0	0	136	0	161
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1712	118	106	1120	0	0	0	0	136	0	161
Added Vol:	0	6	69	133	13	0	0	0	0	34	0	67
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1718	187	239	1133	0	0	0	0	170	0	228
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1803	196	251	1189	0	0	0	0	178	0	239
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1803	196	251	1189	0	0	0	0	178	0	239
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1803	196	251	1189	0	0	0	0	178	0	239
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	3200	3200	0	0	0	0	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.56	0.12	0.08	0.37	0.00	0.00	0.00	0.00	0.06	0.00	0.07
OvlAdjV/S:												0.00
Crit Moves:		****		****						****		

EXISTING PLUS 2020 CUMULATIVE CONDITIONS

Mt SAC PEP EIR
Year 2020 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.783
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0	1	0	0	1! 0	0	1	0	2	0 1	1	0	2	1 0
Volume Module:																
Base Vol:	594	4	140		18	10	12		4	1170	436	78	1018		3	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
Initial Bse:	594	4	140		18	10	12		4	1170	436	78	1018		3	
Added Vol:	6	0	0		0	0	0		0	57	6	2	29		0	
PasserByVol:	0	0	0		0	0	0		0	0	0	0	0		0	
Initial Fut:	600	4	140		18	10	12		4	1227	442	80	1047		3	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
PHF Adj:	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92	0.92	0.92		0.92	
PHF Volume:	651	4	152		20	11	13		4	1332	480	87	1137		3	
Reduct Vol:	0	0	0		0	0	0		0	0	0	0	0		0	
Reduced Vol:	651	4	152		20	11	13		4	1332	480	87	1137		3	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
FinalVolume:	651	4	152		20	11	13		4	1332	480	87	1137		3	
OvlAdjVol:											152					
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600	1600	1600		1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
Lanes:	1.99	0.01	1.00		0.45	0.25	0.30		1.00	2.00	1.00	1.00	2.99		0.01	
Final Sat.:	3179	21	1600		720	400	480		1600	3200	1600	1600	4786		14	
Capacity Analysis Module:																
Vol/Sat:	0.20	0.20	0.10		0.03	0.03	0.03		0.00	0.42	0.30	0.05	0.24		0.24	
OvlAdjV/S:											0.10					
Crit Moves:	****						****			****		****				

Mt SAC PEP EIR
Year 2020 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.725
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0	1	0	1	0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	268	27	102		22	45	19		7	1045	292	53	790		14	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
Initial Bse:	268	27	102		22	45	19		7	1045	292	53	790		14	
Added Vol:	0	0	0		0	0	0		0	58	0	0	31		0	
PasserByVol:	0	0	0		0	0	0		0	0	0	0	0		0	
Initial Fut:	268	27	102		22	45	19		7	1103	292	53	821		14	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
PHF Adj:	0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94	0.94	0.94		0.94	
PHF Volume:	287	29	109		24	48	20		7	1180	312	57	878		15	
Reduct Vol:	0	0	0		0	0	0		0	0	0	0	0		0	
Reduced Vol:	287	29	109		24	48	20		7	1180	312	57	878		15	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
FinalVolume:	287	29	109		24	48	20		7	1180	312	57	878		15	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600	1600	1600		1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
Lanes:	1.82	0.18	1.00		0.33	0.67	1.00		1.00	1.58	0.42	1.00	2.00		1.00	
Final Sat.:	2907	293	1600		525	1075	1600		1600	2530	670	1600	3200		1600	
Capacity Analysis Module:																
Vol/Sat:	0.10	0.10	0.07		0.04	0.04	0.01		0.00	0.47	0.47	0.04	0.27		0.01	
Crit Moves:	****				****					****		****				

Mt SAC PEP EIR
Year 2020 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.629
Loss Time (sec):	6	Average Delay (sec/veh):	23.9
Optimal Cycle:	35	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	0	1 0	0 1	0	0 1!	0 0
Volume Module:												
Base Vol:	144	1051	17	0	812	140	437	6	310	12	3	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	144	1051	17	0	812	140	437	6	310	12	3	8
Added Vol:	34	12	0	0	12	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	178	1063	17	0	824	140	437	6	310	12	3	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	180	1075	17	0	834	142	442	6	314	12	3	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	1075	17	0	834	142	442	6	314	12	3	8
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	180	1075	17	0	834	142	442	6	314	12	3	8
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	1.00	0.95	0.85	0.95	0.95	0.85	0.93	0.93	0.93
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.99	0.01	1.00	0.52	0.13	0.35
Final Sat.:	1805	3610	1615	1900	3610	1615	1786	25	1615	921	230	614
Capacity Analysis Module:												
Vol/Sat:	0.10	0.30	0.01	0.00	0.23	0.09	0.25	0.25	0.19	0.01	0.01	0.01
Crit Moves:	****				****			****			****	
Green/Cycle:	0.16	0.53	0.53	0.00	0.37	0.37	0.39	0.39	0.39	0.02	0.02	0.02
Volume/Cap:	0.63	0.57	0.02	0.00	0.63	0.24	0.63	0.63	0.49	0.63	0.63	0.63
Delay/Veh:	43.8	16.4	11.4	0.0	27.0	22.2	26.3	26.3	23.4	78.4	78.4	78.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.8	16.4	11.4	0.0	27.0	22.2	26.3	26.3	23.4	78.4	78.4	78.4
LOS by Move:	D	B	B	A	C	C	C	C	C	E	E	E
HCM2kAvgQ:	5	11	0	0	12	3	12	12	8	2	2	2

Mt SAC PEP EIR
Year 2020 No Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2020 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.857
Loss Time (sec): 6 Average Delay (sec/veh): 28.5
Optimal Cycle: 74 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	41	873	0	0	927	223	349	0	533	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	873	0	0	927	223	349	0	533	0	0	0
Added Vol:	1	46	0	0	13	0	0	0	54	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	919	0	0	940	223	349	0	587	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	919	0	0	940	223	349	0	587	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	919	0	0	940	223	349	0	587	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	919	0	0	940	223	349	0	587	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.92	0.92	0.89	1.00	0.89	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.62	0.38	1.23	0.00	0.77	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2833	672	2078	0	1303	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.25	0.00	0.00	0.33	0.33	0.17	0.00	0.45	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.03	0.41	0.00	0.00	0.39	0.39	0.53	0.00	0.53	0.00	0.00	0.00
Volume/Cap:	0.86	0.61	0.00	0.00	0.86	0.86	0.32	0.00	0.86	0.00	0.00	0.00
Delay/Veh:	125.6	23.8	0.0	0.0	33.7	33.7	13.6	0.0	27.3	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	125.6	23.8	0.0	0.0	33.7	33.7	13.6	0.0	27.3	0.0	0.0	0.0
LOS by Move:	F	C	A	A	C	C	B	A	C	A	A	A
HCM2kAvgQ:	3	12	0	0	18	18	5	0	23	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2020 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.967
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 150 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	130	1183	442	221	1365	214	158	93	244	115	48	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1183	442	221	1365	214	158	93	244	115	48	76
Added Vol:	0	47	0	0	67	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	130	1230	442	221	1432	214	158	93	244	115	48	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	139	1314	472	236	1530	229	169	99	261	123	51	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	1314	472	236	1530	229	169	99	261	123	51	81
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	139	1314	472	236	1530	229	169	99	261	123	51	81
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.28	0.72	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	442	1158	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.41	0.30	0.15	0.48	0.14	0.11	0.23	0.23	0.08	0.03	0.05
Crit Moves:	****				****			****		****		

Mt SAC PEP EIR
Year 2020 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.910
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	105	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	236	1291	628	412	1070	187	284	757	153	110	446	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	236	1291	628	412	1070	187	284	757	153	110	446	185
Added Vol:	0	44	9	0	64	3	3	57	2	2	24	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	236	1335	637	412	1134	190	287	814	155	112	470	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	245	1383	660	427	1175	197	297	844	161	116	487	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	1383	660	427	1175	197	297	844	161	116	487	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	245	1383	660	427	1175	197	297	844	161	116	487	192
OvlAdjVol:			602						38			0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.57	0.43	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4111	689	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.29	0.41	0.13	0.29	0.29	0.09	0.26	0.10	0.04	0.15	0.12
OvlAdjV/S:			0.38						0.02			0.00
Crit Moves:			****	****				****		****		

Mt SAC PEP EIR
Year 2020 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.084
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	159	1684	70	1	1120	277	407	76	416	113	108	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	1684	70	1	1120	277	407	76	416	113	108	12
Added Vol:	0	53	0	0	68	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	159	1737	70	1	1188	277	407	76	416	113	108	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	184	2006	81	1	1372	320	470	88	480	130	125	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	2006	81	1	1372	320	470	88	480	130	125	14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	2006	81	1	1372	320	470	88	480	130	125	14
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.69	0.31	1.00	1.46	1.39	0.15
Final Sat.:	1600	3200	1600	1600	3200	1600	2696	504	1600	2331	2222	247
Capacity Analysis Module:												
Vol/Sat:	0.11	0.63	0.05	0.00	0.43	0.20	0.17	0.17	0.30	0.06	0.06	0.06
OvlAdjV/S:						0.00						
Crit Moves:		****			****				****			****

Mt SAC PEP EIR
Year 2020 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.877
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	90	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	291	1364	364	207	938	396	401	500	169	167	1116	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	291	1364	364	207	938	396	401	500	169	167	1116	139
Added Vol:	4	0	87	46	2	21	46	10	18	21	7	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	295	1364	451	253	940	417	447	510	187	188	1123	145
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	311	1439	0	267	992	0	472	538	0	198	1185	153
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	311	1439	0	267	992	0	472	538	0	198	1185	153
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	311	1439	0	267	992	0	472	538	0	198	1185	153
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.30	0.00	0.08	0.21	0.00	0.15	0.11	0.00	0.06	0.25	0.10
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Year 2020 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.858
Loss Time (sec):	6	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	71	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 0	0	0 3	0 1	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	116	2253	0	0	1002	107	39	0	36	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	116	2253	0	0	1002	107	39	0	36	0	0	0
Added Vol:	0	92	0	0	41	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	2345	0	0	1043	107	39	0	36	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	123	2479	0	0	1103	113	41	0	38	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	2479	0	0	1103	113	41	0	38	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	123	2479	0	0	1103	113	41	0	38	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	4800	1600	3200	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.77	0.00	0.00	0.23	0.07	0.01	0.00	0.02	0.00	0.00	0.00
Crit Moves:		****			****				****			

Mt SAC PEP EIR
Year 2020 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.882
Loss Time (sec):	10	Average Delay (sec/veh):	24.3
Optimal Cycle:	97	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	2	0 1	1 0	1	0 0	1 0	1	0 1!	0 1
Volume Module:												
Base Vol:	0	1796	320	349	679	2	0	1	1	262	0	572
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1796	320	349	679	2	0	1	1	262	0	572
Added Vol:	0	91	0	19	21	0	0	0	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1887	320	368	700	2	0	1	1	262	0	573
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	2003	340	391	743	2	0	1	1	278	0	608
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2003	340	391	743	2	0	1	1	278	0	608
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2003	340	391	743	2	0	1	1	278	0	608
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	0.95	1.00	0.93	0.93	0.88	1.00	0.88
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.50	0.50	1.31	0.00	1.69
Final Sat.:	1900	3610	1615	3502	3600	10	1900	879	879	2205	0	2831
Capacity Analysis Module:												
Vol/Sat:	0.00	0.55	0.21	0.11	0.21	0.21	0.00	0.00	0.00	0.13	0.00	0.21
Crit Moves:		****		****				****		****		
Green/Cycle:	0.00	0.63	0.77	0.13	0.76	0.76	0.00	0.00	0.00	0.14	0.00	0.27
Volume/Cap:	0.00	0.88	0.27	0.88	0.27	0.27	0.00	0.88	0.88	0.88	0.00	0.79
Delay/Veh:	0.0	19.9	3.4	61.3	3.8	3.8	0.0	515	514.7	51.3	0.0	37.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	19.9	3.4	61.3	3.8	3.8	0.0	515	514.7	51.3	0.0	37.8
LOS by Move:	A	B	A	E	A	A	A	F	F	D	A	D
HCM2kAvgQ:	0	26	3	7	4	4	0	1	1	9	0	12

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2020 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.893
Loss Time (sec):	10	Average Delay (sec/veh):	33.9
Optimal Cycle:	102	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 2	0 1	1	0 2	0 0	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	1177	267	312	676	0	905	0	281	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1177	267	312	676	0	905	0	281	0	0	0
Added Vol:	0	53	0	5	16	0	38	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1230	267	317	692	0	943	0	281	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	0	1259	273	324	708	0	965	0	288	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1259	273	324	708	0	965	0	288	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1259	273	324	708	0	965	0	288	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.35	0.17	0.18	0.20	0.00	0.28	0.00	0.18	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green/Cycle:	0.00	0.39	0.39	0.20	0.59	0.00	0.31	0.00	0.31	0.00	0.00	0.00
Volume/Cap:	0.00	0.89	0.43	0.89	0.33	0.00	0.89	0.00	0.58	0.00	0.00	0.00
Delay/Veh:	0.0	36.2	22.9	62.1	10.5	0.0	42.7	0.0	30.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	36.2	22.9	62.1	10.5	0.0	42.7	0.0	30.8	0.0	0.0	0.0
LOS by Move:	A	D	C	E	B	A	D	A	C	A	A	A
HCM2kAvgQ:	0	23	6	11	6	0	18	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.745
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	126	14	28	173	11	246	35	980	218	6	830	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	14	28	173	11	246	35	980	218	6	830	80
Added Vol:	0	0	0	0	0	0	0	66	0	0	26	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	126	14	28	173	11	246	35	1046	218	6	856	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	132	15	29	181	11	257	37	1092	228	6	894	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	15	29	181	11	257	37	1092	228	6	894	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	132	15	29	181	11	257	37	1092	228	6	894	84
OvlAdjVol:						220						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.90	0.10	1.00	0.94	0.06	1.00	1.00	1.66	0.34	1.00	2.00	1.00
Final Sat.:	1440	160	1600	1504	96	1600	1600	2648	552	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.02	0.12	0.12	0.16	0.02	0.41	0.41	0.00	0.28	0.05
OvlAdjV/S:						0.14						
Crit Moves:		****				****		****		****		

Mt SAC PEP EIR
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.589
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	0 1	2	0 1	0 1	2	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	21	13	21	80	18	74	381	725	130	119	952	424
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	13	21	80	18	74	381	725	130	119	952	424
Added Vol:	0	0	0	0	0	0	0	66	0	0	26	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	21	13	21	80	18	74	381	791	130	119	978	424
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	22	14	22	85	19	79	407	844	139	127	1044	453
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	14	22	85	19	79	407	844	139	127	1044	453
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	22	14	22	85	19	79	407	844	139	127	1044	453
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.72	0.28	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	3200	2748	452	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.03	0.01	0.05	0.13	0.31	0.31	0.08	0.33	0.28
OvlAdjV/S:						0.00						
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[15.6]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		4	847	0		0	1530	199	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		4	847	0		0	1530	199	
Added Vol:	0	0	0		0	0	0		0	66	0		0	26	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		4	913	0		0	1556	199	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	0	0	0		0	0	0		4	940	0		0	1602	205	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		4	940	0		0	1602	205	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	1750	2756	470		2081	2551	801		1807	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	79	20	545		47	27	332		345	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	78	20	545		47	27	332		345	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		0.01	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		15.6	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		C	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2020 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.867
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 86 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0	2	0 1	1	0	2	0 1	1	0	2	1 0	1	0	2	1 0
Volume Module:																
Base Vol:	172	572	45		99	586	288		111	327	157		37	1179	98	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	172	572	45		99	586	288		111	327	157		37	1179	98	
Added Vol:	53	10	4		0	7	54		21	57	16		23	168	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	225	582	49		99	593	342		132	384	173		60	1347	98	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.96	0.96	0.96		0.96	0.96	0.96		0.96	0.96	0.96		0.96	0.96	0.96	
PHF Volume:	234	605	51		103	616	356		137	399	180		62	1400	102	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	234	605	51		103	616	356		137	399	180		62	1400	102	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	234	605	51		103	616	356		137	399	180		62	1400	102	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.07	0.93		1.00	2.80	0.20	
Final Sat.:	1600	3200	1600		1600	3200	1600		1600	3309	1491		1600	4474	326	
Capacity Analysis Module:																
Vol/Sat:	0.15	0.19	0.03		0.06	0.19	0.22		0.09	0.12	0.12		0.04	0.31	0.31	
Crit Moves:	****						****		****					****		

Mt SAC PEP EIR
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.981
Loss Time (sec):	6	Average Delay (sec/veh):	29.3
Optimal Cycle:	180	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 1	1 0	1! 0	1	0 0	2	1 0	1 0	3 0	1
Volume Module:												
Base Vol:	0	0	2	604	3	745	0	541	10	7	1225	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	2	604	3	745	0	541	10	7	1225	43
Added Vol:	0	0	0	257	0	103	0	60	0	0	88	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	2	861	3	848	0	601	10	7	1313	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.00
PHF Volume:	0	0	2	1054	4	1038	0	736	12	9	1607	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	2	1054	4	1038	0	736	12	9	1607	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	0	2	1054	4	1038	0	736	12	9	1607	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.90	0.90	0.90	1.00	0.91	0.91	0.95	0.91	1.00
Lanes:	0.00	0.00	1.00	1.50	0.01	1.49	0.00	2.95	0.05	1.00	3.00	1.00
Final Sat.:	0	0	1644	2577	6	2564	0	5092	85	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.41	0.61	0.40	0.00	0.14	0.14	0.00	0.31	0.00
Crit Moves:					****		****				****	
Green/Cycle:	0.00	0.00	0.00	0.62	0.62	0.62	0.00	0.31	0.31	0.01	0.32	0.00
Volume/Cap:	0.00	0.00	xxxx	0.66	0.98	0.65	0.00	0.47	0.47	0.47	0.98	0.00
Delay/Veh:	0.0	0.0	0.0	12.5	33.3	12.3	0.0	28.4	28.4	67.1	51.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	12.5	33.3	12.3	0.0	28.4	28.4	67.1	51.6	0.0
LOS by Move:	A	A	A	B	C	B	A	C	C	E	D	A
HCM2kAvgQ:	0	0	0	20	1	20	0	7	7	1	24	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.107
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2	0 0	0 0	1	1 0	1 0	0	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	397	739	0	0	1653	181	86	0	561	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	397	739	0	0	1653	181	86	0	561	0	0	0
Added Vol:	0	47	0	0	67	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	397	786	0	0	1720	181	86	0	561	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	432	854	0	0	1870	197	93	0	610	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	432	854	0	0	1870	197	93	0	610	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	432	854	0	0	1870	197	93	0	610	0	0	0
OvlAdjVol:									394			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.81	0.19	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	2895	305	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.13	0.27	0.00	0.00	0.65	0.65	0.06	0.00	0.38	0.00	0.00	0.00
OvlAdjV/S:									0.25			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Year 2020 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.629
Loss Time (sec):	6	Average Delay (sec/veh):	15.6
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	0	1	0	2	1 1
Volume Module:												
Base Vol:	385	0	274	0	0	0	0	806	276	0	1599	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	385	0	274	0	0	0	0	806	276	0	1599	0
Added Vol:	80	0	114	0	0	0	0	265	28	0	44	61
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	465	0	388	0	0	0	0	1071	304	0	1643	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.00	0.85	0.85	0.85
PHF Volume:	544	0	454	0	0	0	0	1254	0	0	1924	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	544	0	454	0	0	0	0	1254	0	0	1924	71
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	544	0	454	0	0	0	0	1254	0	0	1924	71
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Lanes:	1.55	0.00	1.45	0.00	0.00	0.00	1.00	3.00	1.00	0.00	2.89	0.11
Final Sat.:	2662	0	2507	0	0	0	1900	5187	1729	0	4976	185
Capacity Analysis Module:												
Vol/Sat:	0.20	0.00	0.18	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.39	0.39
Crit Moves:	****										****	
Green/Cycle:	0.33	0.00	0.33	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.61	0.61
Volume/Cap:	0.63	0.00	0.56	0.00	0.00	0.00	0.00	0.39	0.00	0.00	0.63	0.63
Delay/Veh:	29.4	0.0	28.2	0.0	0.0	0.0	0.0	9.9	0.0	0.0	12.5	12.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.4	0.0	28.2	0.0	0.0	0.0	0.0	9.9	0.0	0.0	12.5	12.5
LOS by Move:	C		C	A	A	A	A	A	A	A	B	B
HCM2kAvgQ:	10	0	8	0	0	0	0	7	0	0	14	14

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2020 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.691
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 0 1	2	0	2 0 0	0	0	0 0 0	2	0	0 0 2
Volume Module:												
Base Vol:	0	1047	437	643	1700	0	0	0	0	134	0	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1047	437	643	1700	0	0	0	0	134	0	75
Added Vol:	0	47	0	0	67	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1094	437	643	1767	0	0	0	0	134	0	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	1126	450	662	1818	0	0	0	0	138	0	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1126	450	662	1818	0	0	0	0	138	0	77
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1126	450	662	1818	0	0	0	0	138	0	77
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	3200	3200	0	0	0	0	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.35	0.28	0.21	0.57	0.00	0.00	0.00	0.00	0.04	0.00	0.02
OvlAdjV/S:												0.00
Crit Moves:	****				****					****		

Mt SAC PEP EIR
Year 2020 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.738
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	0 1!	0 0	1	0 2	0 1	1	0 2	1 0
Volume Module:												
Base Vol:	570	9	191	6	3	13	6	1118	481	129	960	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	570	9	191	6	3	13	6	1118	481	129	960	12
Added Vol:	4	0	2	0	0	0	0	35	5	0	58	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	574	9	193	6	3	13	6	1153	486	129	1018	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	593	9	199	6	3	13	6	1191	502	133	1052	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	593	9	199	6	3	13	6	1191	502	133	1052	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	593	9	199	6	3	13	6	1191	502	133	1052	12
OvlAdjVol:									201			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.97	0.03	1.00	0.27	0.14	0.59	1.00	2.00	1.00	1.00	2.97	0.03
Final Sat.:	3151	49	1600	436	218	945	1600	3200	1600	1600	4744	56
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.12	0.01	0.01	0.01	0.00	0.37	0.31	0.08	0.22	0.22
OvlAdjV/S:									0.13			
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Year 2020 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.648
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	254	42	132	17	22	5	19	999	161	107	890	19
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	254	42	132	17	22	5	19	999	161	107	890	19
Added Vol:	0	0	0	0	0	0	0	37	1	0	58	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	254	42	132	17	22	5	19	1036	162	107	948	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	258	43	134	17	22	5	19	1054	165	109	964	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	258	43	134	17	22	5	19	1054	165	109	964	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	258	43	134	17	22	5	19	1054	165	109	964	19
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.72	0.28	1.00	0.44	0.56	1.00	1.00	1.73	0.27	1.00	2.00	1.00
Final Sat.:	2746	454	1600	697	903	1600	1600	2767	433	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.08	0.02	0.02	0.00	0.01	0.38	0.38	0.07	0.30	0.01
Crit Moves:	****				****			****			****	

Mt SAC PEP EIR
Year 2020 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.760
Loss Time (sec):	6	Average Delay (sec/veh):	26.2
Optimal Cycle:	50	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	0	1 0	0 1	0	0 1!	0 0
Volume Module:												
Base Vol:	389	1090	34	3	815	385	282	11	117	18	17	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	389	1090	34	3	815	385	282	11	117	18	17	6
Added Vol:	65	8	0	0	9	0	0	0	1	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	454	1098	34	3	824	385	282	11	118	18	17	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	481	1163	36	3	873	408	299	12	125	19	18	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	481	1163	36	3	873	408	299	12	125	19	18	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	481	1163	36	3	873	408	299	12	125	19	18	6
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.96	0.96	0.96
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.96	0.04	1.00	0.44	0.41	0.15
Final Sat.:	1805	3610	1615	1805	3610	1615	1745	68	1615	800	756	267
Capacity Analysis Module:												
Vol/Sat:	0.27	0.32	0.02	0.00	0.24	0.25	0.17	0.17	0.08	0.02	0.02	0.02
Crit Moves:	****					****	****				****	
Green/Cycle:	0.35	0.68	0.68	0.00	0.33	0.33	0.23	0.23	0.23	0.03	0.03	0.03
Volume/Cap:	0.76	0.47	0.03	0.47	0.73	0.76	0.76	0.76	0.34	0.76	0.76	0.76
Delay/Veh:	34.1	7.7	5.3	94.5	31.7	36.1	44.3	44.3	33.1	92.1	92.1	92.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.1	7.7	5.3	94.5	31.7	36.1	44.3	44.3	33.1	92.1	92.1	92.1
LOS by Move:	C	A	A	F	C	D	D	D	C	F	F	F
HCM2kAvgQ:	13	9	0	1	14	13	11	11	3	3	3	3

Mt SAC PEP EIR
Year 2020 No Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

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Mt SAC PEP EIR
Year 2020 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.662
Loss Time (sec):	6	Average Delay (sec/veh):	17.6
Optimal Cycle:	38	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 0	0	0 1	1 0	1	0 1!	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	52	1273	0	0	668	301	301	0	186	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	52	1273	0	0	668	301	301	0	186	0	0	0
Added Vol:	0	73	0	0	10	0	0	0	34	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	1346	0	0	678	301	301	0	220	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	55	1427	0	0	719	319	319	0	233	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	1427	0	0	719	319	319	0	233	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	55	1427	0	0	719	319	319	0	233	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.91	0.91	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.39	0.61	1.41	0.00	0.59	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2385	1059	2433	0	1028	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.40	0.00	0.00	0.30	0.30	0.13	0.00	0.23	0.00	0.00	0.00
Crit Moves:		****		****					****			
Green/Cycle:	0.05	0.60	0.00	0.00	0.54	0.54	0.34	0.00	0.34	0.00	0.00	0.00
Volume/Cap:	0.56	0.66	0.00	0.00	0.56	0.56	0.38	0.00	0.66	0.00	0.00	0.00
Delay/Veh:	52.9	14.2	0.0	0.0	15.4	15.4	25.0	0.0	29.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.9	14.2	0.0	0.0	15.4	15.4	25.0	0.0	29.9	0.0	0.0	0.0
LOS by Move:	D	B	A	A	B	B	C	A	C	A	A	A
HCM2kAvgQ:	3	16	0	0	10	10	5	0	11	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2020 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.868
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	86	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 0	1 0	1	0 1	0 1
Volume Module:												
Base Vol:	80	1628	109	81	1067	96	103	16	113	123	28	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	1628	109	81	1067	96	103	16	113	123	28	98
Added Vol:	0	74	0	0	44	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	1702	109	81	1111	96	103	16	113	123	28	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	83	1767	113	84	1154	100	107	17	117	128	29	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1767	113	84	1154	100	107	17	117	128	29	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	1767	113	84	1154	100	107	17	117	128	29	102
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.12	0.88	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	198	1402	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.55	0.07	0.05	0.36	0.06	0.07	0.08	0.08	0.08	0.02	0.06
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Year 2020 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.791
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	327	1150	288	209	832	262	346	651	292	359	659	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	327	1150	288	209	832	262	346	651	292	359	659	326
Added Vol:	2	70	5	0	41	3	4	30	1	9	56	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	329	1220	293	209	873	265	350	681	293	368	715	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	338	1254	301	215	897	272	360	700	301	378	735	335
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	338	1254	301	215	897	272	360	700	301	378	735	335
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	338	1254	301	215	897	272	360	700	301	378	735	335
OvlAdjVol:			112						132			228
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.30	0.70	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	3682	1118	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.26	0.19	0.07	0.24	0.24	0.11	0.22	0.19	0.12	0.23	0.21
OvlAdjV/S:			0.07						0.08			0.14
Crit Moves:	****				****		****				****	

Mt SAC PEP EIR
Year 2020 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.967
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	151	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	233	1535	153	7	1259	190	245	63	350	85	35	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	233	1535	153	7	1259	190	245	63	350	85	35	12
Added Vol:	0	76	0	0	51	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1611	153	7	1310	190	245	63	350	85	35	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	252	1744	166	8	1418	206	265	68	379	92	38	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	1744	166	8	1418	206	265	68	379	92	38	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	252	1744	166	8	1418	206	265	68	379	92	38	13
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.59	0.41	1.00	1.94	0.79	0.27
Final Sat.:	1600	3200	1600	1600	3200	1600	2545	655	1600	3098	1268	434
Capacity Analysis Module:												
Vol/Sat:	0.16	0.54	0.10	0.00	0.44	0.13	0.10	0.10	0.24	0.03	0.03	0.03
OvlAdjV/S:						0.00						
Crit Moves:	****				****				****			****

Mt SAC PEP EIR
Year 2020 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.960
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	142	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Added Vol:	18	2	26	7	1	43	27	6	10	85	9	48
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	279	1042	205	392	1043	252	693	1537	297	513	711	292
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	292	1092	0	411	1093	0	726	1611	0	538	745	306
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	292	1092	0	411	1093	0	726	1611	0	538	745	306
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	292	1092	0	411	1093	0	726	1611	0	538	745	306
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.23	0.00	0.13	0.23	0.00	0.23	0.34	0.00	0.17	0.16	0.19
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Year 2020 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.558
Loss Time (sec):	6	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 0	0	0 3	0 1	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	33	1261	0	0	1567	50	172	0	94	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	1261	0	0	1567	50	172	0	94	0	0	0
Added Vol:	0	45	0	0	96	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	1306	0	0	1663	50	172	0	94	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	36	1407	0	0	1792	54	185	0	101	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1407	0	0	1792	54	185	0	101	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	1407	0	0	1792	54	185	0	101	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	4800	1600	3200	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.44	0.00	0.00	0.37	0.03	0.06	0.00	0.06	0.00	0.00	0.00
Crit Moves:		****			****			****				

Mt SAC PEP EIR
Year 2020 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.777
Loss Time (sec):	10	Average Delay (sec/veh):	23.3
Optimal Cycle:	67	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	2	0 1	1 0	1	0 0	1 0	1	0 1!	0 1
Volume Module:												
Base Vol:	1	799	283	610	1382	5	4	2	4	186	1	495
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	799	283	610	1382	5	4	2	4	186	1	495
Added Vol:	0	40	0	44	52	0	0	0	0	0	0	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	839	283	654	1434	5	4	2	4	186	1	500
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	1	935	315	729	1599	6	4	2	4	207	1	557
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	935	315	729	1599	6	4	2	4	207	1	557
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	935	315	729	1599	6	4	2	4	207	1	557
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.95	0.95	0.95	0.90	0.90	0.88	0.88	0.88
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.33	0.67	1.27	0.01	1.72
Final Sat.:	1805	3610	1615	3502	3597	13	1805	570	1140	2123	5	2885
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.20	0.21	0.44	0.44	0.00	0.00	0.00	0.10	0.23	0.19
Crit Moves:		****		****			****				****	
Green/Cycle:	0.00	0.33	0.62	0.27	0.60	0.60	0.00	0.01	0.01	0.29	0.30	0.56
Volume/Cap:	0.74	0.78	0.31	0.78	0.74	0.74	0.78	0.34	0.32	0.34	0.78	0.34
Delay/Veh:	481.8	33.3	9.1	38.0	15.7	15.7	270.8	59.1	57.5	28.3	36.2	11.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	481.8	33.3	9.1	38.0	15.7	15.7	270.8	59.1	57.5	28.3	36.2	11.9
LOS by Move:	F	C	A	D	B	B	F	E	E	C	D	B
HCM2kAvgQ:	0	14	4	11	19	19	1	1	1	4	13	5

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2020 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.829
Loss Time (sec):	10	Average Delay (sec/veh):	21.4
Optimal Cycle:	79	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 2	0 1	1	0 2	0 0	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	933	619	380	1294	0	169	0	176	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	933	619	380	1294	0	169	0	176	0	0	0
Added Vol:	0	20	0	3	49	0	19	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	953	619	383	1343	0	188	0	176	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	1010	656	406	1423	0	199	0	186	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1010	656	406	1423	0	199	0	186	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1010	656	406	1423	0	199	0	186	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.41	0.22	0.39	0.00	0.06	0.00	0.12	0.00	0.00	0.00
Crit Moves:			****	****					****			
Green/Cycle:	0.00	0.49	0.49	0.27	0.76	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Volume/Cap:	0.00	0.57	0.83	0.83	0.52	0.00	0.41	0.00	0.83	0.00	0.00	0.00
Delay/Veh:	0.0	18.5	29.3	45.6	4.9	0.0	39.8	0.0	63.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.5	29.3	45.6	4.9	0.0	39.8	0.0	63.8	0.0	0.0	0.0
LOS by Move:	A	B	C	D	A	A	D	A	E	A	A	A
HCM2kAvgQ:	0	12	20	12	9	0	3	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2020 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.711
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 51 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	6	7	1	94	38	102	303	1335	189	42	609	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	7	1	94	38	102	303	1335	189	42	609	237
Added Vol:	0	0	0	0	0	0	0	35	0	0	65	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	7	1	94	38	102	303	1370	189	42	674	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	6	7	1	95	38	103	306	1385	191	42	681	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	7	1	95	38	103	306	1385	191	42	681	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	6	7	1	95	38	103	306	1385	191	42	681	240
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.46	0.54	1.00	0.71	0.29	1.00	1.00	1.76	0.24	1.00	2.00	1.00
Final Sat.:	738	862	1600	1139	461	1600	1600	2812	388	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.00	0.08	0.08	0.06	0.19	0.49	0.49	0.03	0.21	0.15
OvlAdjV/S:						0.00						
Crit Moves:	****			****				****		****		

Mt SAC PEP EIR
Year 2020 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.622
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	0 1	2	0 1	0 1	2	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	103	21	75	151	9	96	153	776	54	31	1097	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	103	21	75	151	9	96	153	776	54	31	1097	200
Added Vol:	0	0	0	0	0	0	0	35	0	0	65	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	103	21	75	151	9	96	153	811	54	31	1162	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	106	22	77	156	9	99	158	838	56	32	1200	207
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	22	77	156	9	99	158	838	56	32	1200	207
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	106	22	77	156	9	99	158	838	56	32	1200	207
OvlAdjVol:						20						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.88	0.12	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	3200	3000	200	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.01	0.05	0.05	0.01	0.06	0.05	0.28	0.28	0.02	0.38	0.13
OvlAdjV/S:						0.01						
Crit Moves:				****	****			****			****	

Mt SAC PEP EIR
Year 2020 No Project Conditions
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Added Vol:	0	0	0		0	0	0		0	35	0		0	65	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		0	1064	0		0	1347	14	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93	
PHF Volume:	0	0	0		0	0	0		0	1139	0		0	1442	15	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		0	1139	0		0	1442	15	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1860	2596	570		2012	2581	721		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	66	25	470		52	26	374		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	66	25	470		52	26	374		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx	

Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2020 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.813
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0		
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	2	1	0	1	0	2	1	0
Volume Module:																				
Base Vol:	234	775	63			160	550	158			163	963	214			84	684	112		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	234	775	63			160	550	158			163	963	214			84	684	112		
Added Vol:	20	6	24			0	9	25			52	159	49			4	72	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	254	781	87			160	559	183			215	1122	263			88	756	112		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.97	0.97	0.97			0.97	0.97	0.97			0.97	0.97	0.97			0.97	0.97	0.97		
PHF Volume:	263	809	90			166	579	190			223	1163	273			91	783	116		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	263	809	90			166	579	190			223	1163	273			91	783	116		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	263	809	90			166	579	190			223	1163	273			91	783	116		
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600			1600	1600	1600			1600	1600	1600			1600	1600	1600		
Adjustment:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Lanes:	1.00	2.00	1.00			1.00	2.00	1.00			1.00	2.43	0.57			1.00	2.61	0.39		
Final Sat.:	1600	3200	1600			1600	3200	1600			1600	3889	911			1600	4181	619		
Capacity Analysis Module:																				
Vol/Sat:	0.16	0.25	0.06			0.10	0.18	0.12			0.14	0.30	0.30			0.06	0.19	0.19		
Crit Moves:		****					****						****				****			

Mt SAC PEP EIR
Year 2020 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.953
Loss Time (sec):	6	Average Delay (sec/veh):	28.4
Optimal Cycle:	138	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0 1! 0	1	0	2 1 0	1	0	3 0 1
Volume Module:												
Base Vol:	1	0	83	923	12	536	0	1796	72	18	576	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	0	83	923	12	536	0	1796	72	18	576	116
Added Vol:	0	0	0	72	0	34	0	183	0	0	42	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	83	995	12	570	0	1979	72	18	618	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00
PHF Volume:	1	0	86	1032	12	591	0	2053	75	19	641	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	86	1032	12	591	0	2053	75	19	641	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	1	0	86	1032	12	591	0	2053	75	19	641	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	1.00	0.87	0.92	0.92	0.92	1.00	0.91	0.91	0.95	0.91	1.00
Lanes:	0.01	0.00	0.99	1.63	0.01	1.36	0.00	2.89	0.11	1.00	3.00	1.00
Final Sat.:	20	0	1628	2832	26	2366	0	4980	181	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.05	0.36	0.47	0.25	0.00	0.41	0.41	0.01	0.12	0.00
Crit Moves:					****			****		****		
Green/Cycle:	0.00	0.00	0.00	0.50	0.50	0.50	0.00	0.43	0.43	0.01	0.44	0.00
Volume/Cap:	xxxx	0.00	xxxx	0.73	0.95	0.50	0.00	0.95	0.95	0.95	0.28	0.00
Delay/Veh:	0.0	0.0	0.0	21.2	36.4	17.0	0.0	37.6	37.6	227.8	17.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	21.2	36.4	17.0	0.0	37.6	37.6	227.8	17.7	0.0
LOS by Move:	A	A	A	C	D	B	A	D	D	F	B	A
HCM2kAvgQ:	2	0	2	25	2	12	0	29	29	2	5	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2020 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.674
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2 0 0	0	0	1 1 0	1	0	0 0 1	0	0	0 0 0
Volume Module:												
Base Vol:	418	1243	0	0	808	115	81	0	407	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	418	1243	0	0	808	115	81	0	407	0	0	0
Added Vol:	0	74	0	0	44	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	418	1317	0	0	852	115	81	0	407	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	446	1406	0	0	909	123	86	0	434	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	446	1406	0	0	909	123	86	0	434	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	446	1406	0	0	909	123	86	0	434	0	0	0
OvlAdjVol:									211			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.76	0.24	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	2819	381	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.14	0.44	0.00	0.00	0.32	0.32	0.05	0.00	0.27	0.00	0.00	0.00
OvlAdjV/S:									0.13			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Year 2020 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.595
Loss Time (sec):	6	Average Delay (sec/veh):	9.5
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	0	0	1	0	2
Volume Module:												
Base Vol:	123	0	289	0	0	0	0	2097	621	0	969	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	123	0	289	0	0	0	0	2097	621	0	969	0
Added Vol:	31	0	42	0	0	0	0	84	98	0	139	280
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	154	0	331	0	0	0	0	2181	719	0	1108	280
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00	0.96	0.96	0.96
PHF Volume:	160	0	344	0	0	0	0	2270	0	0	1153	291
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	0	344	0	0	0	0	2270	0	0	1153	291
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	160	0	344	0	0	0	0	2270	0	0	1153	291
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.88	0.88
Lanes:	1.32	0.00	1.68	0.00	0.00	0.00	1.00	3.00	1.00	0.00	2.39	0.61
Final Sat.:	2212	0	2825	0	0	0	1900	5187	1729	0	4016	1015
Capacity Analysis Module:												
Vol/Sat:	0.07	0.00	0.12	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.29	0.29
Crit Moves:			****					****				
Green/Cycle:	0.20	0.00	0.20	0.00	0.00	0.00	0.00	0.74	0.00	0.00	0.74	0.74
Volume/Cap:	0.35	0.00	0.60	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.39	0.39
Delay/Veh:	34.2	0.0	37.2	0.0	0.0	0.0	0.0	6.5	0.0	0.0	5.0	5.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.2	0.0	37.2	0.0	0.0	0.0	0.0	6.5	0.0	0.0	5.0	5.0
LOS by Move:	C		A	D		A	A		A	A		A
HCM2kAvgQ:	3		0	7		0	0		12	0		6	6

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2020 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.745
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2	0	1	2	0	2	0	0	0	0
Volume Module:												
Base Vol:	0	1712	118	106	1120	0	0	0	0	136	0	161
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1712	118	106	1120	0	0	0	0	136	0	161
Added Vol:	0	74	0	0	44	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1786	118	106	1164	0	0	0	0	136	0	161
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1874	124	111	1221	0	0	0	0	143	0	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1874	124	111	1221	0	0	0	0	143	0	169
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1874	124	111	1221	0	0	0	0	143	0	169
OvlAdjVol:												58
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	3200	3200	0	0	0	0	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.59	0.08	0.03	0.38	0.00	0.00	0.00	0.00	0.04	0.00	0.05
OvlAdjV/S:												0.02
Crit Moves:		****			****						****	

EXISTING PLUS 2025 CUMULATIVE CONDITIONS

Mt SAC PEP EIR
Year 2025 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.804
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	0 1!	0 0	1	0 2	0 1	1	0 2	1 0
Volume Module:												
Base Vol:	594	4	140	18	10	12	4	1170	436	78	1018	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	594	4	140	18	10	12	4	1170	436	78	1018	3
Added Vol:	6	0	0	0	0	0	0	120	6	2	164	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	600	4	140	18	10	12	4	1290	442	80	1182	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	651	4	152	20	11	13	4	1401	480	87	1283	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	651	4	152	20	11	13	4	1401	480	87	1283	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	651	4	152	20	11	13	4	1401	480	87	1283	3
OvlAdjVol:									152			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.99	0.01	1.00	0.45	0.25	0.30	1.00	2.00	1.00	1.00	2.99	0.01
Final Sat.:	3179	21	1600	720	400	480	1600	3200	1600	1600	4788	12
Capacity Analysis Module:												
Vol/Sat:	0.20	0.20	0.10	0.03	0.03	0.03	0.00	0.44	0.30	0.05	0.27	0.27
OvlAdjV/S:									0.10			
Crit Moves:	****					****		****		****		

Mt SAC PEP EIR
Year 2025 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.746
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	268	27	102	22	45	19	7	1045	292	53	790	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	268	27	102	22	45	19	7	1045	292	53	790	14
Added Vol:	0	0	0	0	0	0	0	120	0	0	165	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	268	27	102	22	45	19	7	1165	292	53	955	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	287	29	109	24	48	20	7	1246	312	57	1021	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	287	29	109	24	48	20	7	1246	312	57	1021	15
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	287	29	109	24	48	20	7	1246	312	57	1021	15
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.82	0.18	1.00	0.33	0.67	1.00	1.00	1.60	0.40	1.00	2.00	1.00
Final Sat.:	2907	293	1600	525	1075	1600	1600	2559	641	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.07	0.04	0.04	0.01	0.00	0.49	0.49	0.04	0.32	0.01
Crit Moves:	****			****				****		****		

Mt SAC PEP EIR
Year 2025 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.642
Loss Time (sec):	6	Average Delay (sec/veh):	24.2
Optimal Cycle:	36	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	0	1 0	0 1	0	0 1!	0 0
Volume Module:												
Base Vol:	144	1051	17	0	812	140	437	6	310	12	3	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	144	1051	17	0	812	140	437	6	310	12	3	8
Added Vol:	56	12	0	0	12	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	200	1063	17	0	824	140	437	6	310	12	3	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	202	1075	17	0	834	142	442	6	314	12	3	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	202	1075	17	0	834	142	442	6	314	12	3	8
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	202	1075	17	0	834	142	442	6	314	12	3	8
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	1.00	0.95	0.85	0.95	0.95	0.85	0.93	0.93	0.93
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.99	0.01	1.00	0.52	0.13	0.35
Final Sat.:	1805	3610	1615	1900	3610	1615	1786	25	1615	921	230	614
Capacity Analysis Module:												
Vol/Sat:	0.11	0.30	0.01	0.00	0.23	0.09	0.25	0.25	0.19	0.01	0.01	0.01
Crit Moves:	****				****			****			****	
Green/Cycle:	0.17	0.53	0.53	0.00	0.36	0.36	0.39	0.39	0.39	0.02	0.02	0.02
Volume/Cap:	0.64	0.56	0.02	0.00	0.64	0.24	0.64	0.64	0.50	0.64	0.64	0.64
Delay/Veh:	42.8	15.8	11.0	0.0	27.8	22.7	27.1	27.1	24.1	81.7	81.7	81.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.8	15.8	11.0	0.0	27.8	22.7	27.1	27.1	24.1	81.7	81.7	81.7
LOS by Move:	D	B	B	A	C	C	C	C	C	F	F	F
HCM2kAvgQ:	6	11	0	0	12	3	12	12	8	2	2	2

Mt SAC PEP EIR
Year 2025 No Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to MMA, LONG BEACH, CA

Mt SAC PEP EIR
Year 2025 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.915
Loss Time (sec):	6	Average Delay (sec/veh):	33.0
Optimal Cycle:	103	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 0	0	0 1	1 0	1	0 1!	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	41	873	0	0	927	223	349	0	533	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	873	0	0	927	223	349	0	533	0	0	0
Added Vol:	1	68	0	0	13	0	0	0	143	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	941	0	0	940	223	349	0	676	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	941	0	0	940	223	349	0	676	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	941	0	0	940	223	349	0	676	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	941	0	0	940	223	349	0	676	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.92	0.92	0.89	1.00	0.89	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.62	0.38	1.21	0.00	0.79	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2833	672	2028	0	1338	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.26	0.00	0.00	0.33	0.33	0.17	0.00	0.51	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.03	0.39	0.00	0.00	0.36	0.36	0.55	0.00	0.55	0.00	0.00	0.00
Volume/Cap:	0.92	0.67	0.00	0.00	0.92	0.92	0.31	0.00	0.92	0.00	0.00	0.00
Delay/Veh:	149.3	26.6	0.0	0.0	40.8	40.8	12.2	0.0	31.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	149.3	26.6	0.0	0.0	40.8	40.8	12.2	0.0	31.8	0.0	0.0	0.0
LOS by Move:	F	C	A	A	D	D	B	A	C	A	A	A
HCM2kAvgQ:	3	13	0	0	19	19	5	0	28	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2025 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.996
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 0	1 0	1	0 1	0 1
Volume Module:												
Base Vol:	130	1183	442	221	1365	214	158	93	244	115	48	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1183	442	221	1365	214	158	93	244	115	48	76
Added Vol:	0	69	0	0	156	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	130	1252	442	221	1521	214	158	93	244	115	48	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	139	1338	472	236	1625	229	169	99	261	123	51	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	1338	472	236	1625	229	169	99	261	123	51	81
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	139	1338	472	236	1625	229	169	99	261	123	51	81
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.28	0.72	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	442	1158	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.42	0.30	0.15	0.51	0.14	0.11	0.23	0.23	0.08	0.03	0.05
Crit Moves:	****				****			****		****		

Mt SAC PEP EIR
Year 2025 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.930
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 118 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	236	1291	628	412	1070	187	284	757	153	110	446	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	236	1291	628	412	1070	187	284	757	153	110	446	185
Added Vol:	0	65	9	0	153	3	3	120	2	2	158	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	236	1356	637	412	1223	190	287	877	155	112	604	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	245	1405	660	427	1267	197	297	909	161	116	626	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	1405	660	427	1267	197	297	909	161	116	626	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	245	1405	660	427	1267	197	297	909	161	116	626	192
OvlAdjVol:			602						38			0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.60	0.40	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4155	645	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.29	0.41	0.13	0.31	0.31	0.09	0.28	0.10	0.04	0.20	0.12
OvlAdjV/S:			0.38						0.02			0.00
Crit Moves:			****	****				****		****		

Mt SAC PEP EIR
Year 2025 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.092
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	159	1684	70	1	1120	277	407	76	416	113	108	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	1684	70	1	1120	277	407	76	416	113	108	12
Added Vol:	0	75	0	0	158	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	159	1759	70	1	1278	277	407	76	416	113	108	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	184	2031	81	1	1476	320	470	88	480	130	125	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	2031	81	1	1476	320	470	88	480	130	125	14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	2031	81	1	1476	320	470	88	480	130	125	14
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.69	0.31	1.00	1.46	1.39	0.15
Final Sat.:	1600	3200	1600	1600	3200	1600	2696	504	1600	2331	2222	247
Capacity Analysis Module:												
Vol/Sat:	0.11	0.63	0.05	0.00	0.46	0.20	0.17	0.17	0.30	0.06	0.06	0.06
OvlAdjV/S:						0.00						
Crit Moves:		****			****				****			****

Mt SAC PEP EIR
Year 2025 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.882
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	92	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	291	1364	364	207	938	396	401	500	169	167	1116	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	291	1364	364	207	938	396	401	500	169	167	1116	139
Added Vol:	4	22	178	46	91	21	46	10	18	269	7	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	295	1386	542	253	1029	417	447	510	187	436	1123	145
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	311	1462	0	267	1085	0	472	538	0	460	1185	153
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	311	1462	0	267	1085	0	472	538	0	460	1185	153
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	311	1462	0	267	1085	0	472	538	0	460	1185	153
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.30	0.00	0.08	0.23	0.00	0.15	0.11	0.00	0.14	0.25	0.10
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Year 2025 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	1.065
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 1	1	0 3	0 1	2	0 1	0 1	1	0 1	0 1
Volume Module:												
Base Vol:	116	2253	0	0	1002	107	39	0	36	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	116	2253	0	0	1002	107	39	0	36	0	0	0
Added Vol:	168	154	353	118	176	84	17	0	34	99	0	33
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	284	2407	353	118	1178	191	56	0	70	99	0	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	300	2544	373	125	1245	202	59	0	74	105	0	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	300	2544	373	125	1245	202	59	0	74	105	0	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	300	2544	373	125	1245	202	59	0	74	105	0	35
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	3200	3200	1600	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.80	0.23	0.08	0.26	0.13	0.02	0.00	0.05	0.07	0.00	0.02
Crit Moves:		****			****					****	****	

Mt SAC PEP EIR
Year 2025 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	1.056
Loss Time (sec):	10	Average Delay (sec/veh):	50.7
Optimal Cycle:	180	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	1 1	0	1 0	0 1	0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	1796	320	349	679	2	0	1	1	262	0	572
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1796	320	349	679	2	0	1	1	262	0	572
Added Vol:	0	447	0	93	215	0	0	0	0	0	0	229
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2243	320	442	894	2	0	1	1	262	0	801
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	2381	340	469	949	2	0	1	1	278	0	850
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2381	340	469	949	2	0	1	1	278	0	850
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2381	340	469	949	2	0	1	1	278	0	850
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	0.95	1.00	0.93	0.93	0.88	1.00	0.88
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.50	0.50	1.25	0.00	1.75
Final Sat.:	1900	3610	1615	3502	3602	8	1900	879	879	2075	0	2920
Capacity Analysis Module:												
Vol/Sat:	0.00	0.66	0.21	0.13	0.26	0.26	0.00	0.00	0.00	0.13	0.00	0.29
Crit Moves:		****		****			****					****
Green/Cycle:	0.00	0.62	0.77	0.13	0.75	0.75	0.00	0.00	0.00	0.15	0.00	0.28
Volume/Cap:	0.00	1.06	0.27	1.06	0.35	0.35	0.00	0.91	0.91	0.91	0.00	1.06
Delay/Veh:	0.0	54.7	3.4	102.1	4.3	4.3	0.0	548	548.2	51.9	0.0	79.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	54.7	3.4	102.1	4.3	4.3	0.0	548	548.2	51.9	0.0	79.9
LOS by Move:	A	D	A	F	A	A	A	F	F	D	A	E
HCM2kAvgQ:	0	44	3	11	5	5	0	1	1	10	0	23

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2025 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	1.046
Loss Time (sec):	10	Average Delay (sec/veh):	56.6
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2 0	1	1 0	2 0	0	2 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	1177	267	312	676	0	905	0	281	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1177	267	312	676	0	905	0	281	0	0	0
Added Vol:	0	116	0	64	151	0	331	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1293	267	376	827	0	1236	0	281	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	0	1323	273	385	846	0	1265	0	288	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1323	273	385	846	0	1265	0	288	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1323	273	385	846	0	1265	0	288	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.17	0.21	0.23	0.00	0.36	0.00	0.18	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green/Cycle:	0.00	0.35	0.35	0.20	0.55	0.00	0.35	0.00	0.35	0.00	0.00	0.00
Volume/Cap:	0.00	1.05	0.48	1.05	0.42	0.00	1.05	0.00	0.52	0.00	0.00	0.00
Delay/Veh:	0.0	70.6	26.0	99.1	13.1	0.0	71.4	0.0	26.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	70.6	26.0	99.1	13.1	0.0	71.4	0.0	26.9	0.0	0.0	0.0
LOS by Move:	A	E	C	F	B	A	E	A	C	A	A	A
HCM2kAvgQ:	0	31	7	16	8	0	29	0	7	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2025 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.766
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	126	14	28	173	11	246	35	980	218	6	830	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	14	28	173	11	246	35	980	218	6	830	80
Added Vol:	0	0	0	0	0	0	0	129	0	0	161	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	126	14	28	173	11	246	35	1109	218	6	991	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	132	15	29	181	11	257	37	1158	228	6	1034	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	15	29	181	11	257	37	1158	228	6	1034	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	132	15	29	181	11	257	37	1158	228	6	1034	84
OvlAdjVol:						220						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.90	0.10	1.00	0.94	0.06	1.00	1.00	1.67	0.33	1.00	2.00	1.00
Final Sat.:	1440	160	1600	1504	96	1600	1600	2674	526	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.02	0.12	0.12	0.16	0.02	0.43	0.43	0.00	0.32	0.05
OvlAdjV/S:						0.14						
Crit Moves:		****				****		****		****		

Mt SAC PEP EIR
Year 2025 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.634
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	0 1	2	0 1	0 1	2	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	21	13	21	80	18	74	381	725	130	119	952	424
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	13	21	80	18	74	381	725	130	119	952	424
Added Vol:	0	0	0	0	0	0	0	129	0	0	161	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	21	13	21	80	18	74	381	854	130	119	1113	424
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	22	14	22	85	19	79	407	911	139	127	1188	453
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	14	22	85	19	79	407	911	139	127	1188	453
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	22	14	22	85	19	79	407	911	139	127	1188	453
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.74	0.26	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	3200	2777	423	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.03	0.01	0.05	0.13	0.33	0.33	0.08	0.37	0.28
OvlAdjV/S:						0.00						
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Year 2025 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[17.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		4	847	0		0	1530	199	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		4	847	0		0	1530	199	
Added Vol:	0	0	0		0	0	0		0	129	0		0	161	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		4	976	0		0	1691	199	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	0	0	0		0	0	0		4	1005	0		0	1742	205	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		4	1005	0		0	1742	205	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	1884	2960	503		2252	2755	871		1946	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Potent Cap.:	64	15	520		36	20	298		305	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Move Cap.:	63	14	520		36	20	298		305	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		0.01	xxxx	xxxx	xxxx	xxxx	xxxx		
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		17.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*		*	*	*		C	*	*	*	*	*		
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2025 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.077
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0		
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	2	1	0	1	0	2	1	0
Volume Module:																				
Base Vol:	172	572	45			99	586	288			111	327	157			37	1179	98		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	172	572	45			99	586	288			111	327	157			37	1179	98		
Added Vol:	116	38	4			0	120	117			156	461	151			23	355	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	288	610	49			99	706	405			267	788	308			60	1534	98		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.96	0.96	0.96			0.96	0.96	0.96			0.96	0.96	0.96			0.96	0.96	0.96		
PHF Volume:	299	634	51			103	734	421			278	819	320			62	1595	102		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	299	634	51			103	734	421			278	819	320			62	1595	102		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	299	634	51			103	734	421			278	819	320			62	1595	102		
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600			1600	1600	1600			1600	1600	1600			1600	1600	1600		
Adjustment:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Lanes:	1.00	2.00	1.00			1.00	2.00	1.00			1.00	2.16	0.84			1.00	2.82	0.18		
Final Sat.:	1600	3200	1600			1600	3200	1600			1600	3451	1349			1600	4512	288		
Capacity Analysis Module:																				
Vol/Sat:	0.19	0.20	0.03			0.06	0.23	0.26			0.17	0.24	0.24			0.04	0.35	0.35		
Crit Moves:	****							****			****						****			

Mt SAC PEP EIR
Year 2025 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.041
Loss Time (sec):	6	Average Delay (sec/veh):	36.5
Optimal Cycle:	180	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0 0 1	1	0	1! 0 1	0	0	2 1 0	1	0	3 0 1
Volume Module:												
Base Vol:	0	0	2	604	3	745	0	541	10	7	1225	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	2	604	3	745	0	541	10	7	1225	43
Added Vol:	0	0	0	257	0	196	0	465	0	0	182	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	2	861	3	941	0	1006	10	7	1407	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.00
PHF Volume:	0	0	2	1054	4	1152	0	1231	12	9	1722	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	2	1054	4	1152	0	1231	12	9	1722	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	0	2	1054	4	1152	0	1231	12	9	1722	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.90	0.90	0.90	1.00	0.91	0.91	0.95	0.91	1.00
Lanes:	0.00	0.00	1.00	1.47	0.01	1.52	0.00	2.97	0.03	1.00	3.00	1.00
Final Sat.:	0	0	1644	2527	6	2602	0	5131	51	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.42	0.65	0.44	0.00	0.24	0.24	0.00	0.33	0.00
Crit Moves:					****		****				****	
Green/Cycle:	0.00	0.00	0.00	0.62	0.62	0.62	0.00	0.31	0.31	0.01	0.32	0.00
Volume/Cap:	0.00	0.00	xxxx	0.67	1.04	0.71	0.00	0.77	0.77	0.77	1.04	0.00
Delay/Veh:	0.0	0.0	0.0	12.9	50.1	13.7	0.0	33.3	33.3	191.3	67.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	12.9	50.1	13.7	0.0	33.3	33.3	191.3	67.7	0.0
LOS by Move:	A	A	A	B	D	B	A	C	C	F	E	A
HCM2kAvgQ:	0	0	0	21	6	13	0	14	14	1	28	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2025 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.137
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Protected			Protected			Protected				Protected			
Rights:	Include			Include			Ovl				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	2	0	2 0 0	0	0	1 1 0	1	0	0 0 1		0	0	0 0 0	
Volume Module:														
Base Vol:	397	739	0	0	1653	181	86	0	561		0	0	0	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	397	739	0	0	1653	181	86	0	561		0	0	0	
Added Vol:	0	69	0	0	156	0	0	0	0		0	0	0	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	397	808	0	0	1809	181	86	0	561		0	0	0	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		0.92	0.92	0.92	
PHF Volume:	432	878	0	0	1966	197	93	0	610		0	0	0	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
Reduced Vol:	432	878	0	0	1966	197	93	0	610		0	0	0	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	432	878	0	0	1966	197	93	0	610		0	0	0	
OvlAdjVol:									394					
Saturation Flow Module:														
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	2.00	0.00	0.00	1.82	0.18	1.00	0.00	1.00		0.00	0.00	0.00	
Final Sat.:	3200	3200	0	0	2909	291	1600	0	1600		0	0	0	
Capacity Analysis Module:														
Vol/Sat:	0.13	0.27	0.00	0.00	0.68	0.68	0.06	0.00	0.38		0.00	0.00	0.00	
OvlAdjV/S:									0.25					
Crit Moves:	****				****				****					

Mt SAC PEP EIR
Year 2025 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.664
Loss Time (sec):	6	Average Delay (sec/veh):	17.0
Optimal Cycle:	38	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	0	1	0	2	1 1
Volume Module:												
Base Vol:	385	0	274	0	0	0	0	806	276	0	1599	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	385	0	274	0	0	0	0	806	276	0	1599	0
Added Vol:	173	0	114	0	0	0	0	265	230	0	44	61
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	558	0	388	0	0	0	0	1071	506	0	1643	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.00	0.85	0.85	0.85
PHF Volume:	653	0	454	0	0	0	0	1254	0	0	1924	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	653	0	454	0	0	0	0	1254	0	0	1924	71
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	653	0	454	0	0	0	0	1254	0	0	1924	71
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Lanes:	1.59	0.00	1.41	0.00	0.00	0.00	1.00	3.00	1.00	0.00	2.89	0.11
Final Sat.:	2754	0	2443	0	0	0	1900	5187	1729	0	4976	185
Capacity Analysis Module:												
Vol/Sat:	0.24	0.00	0.19	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.39	0.39
Crit Moves:	****										****	
Green/Cycle:	0.36	0.00	0.36	0.00	0.00	0.00	0.00	0.58	0.00	0.00	0.58	0.58
Volume/Cap:	0.66	0.00	0.52	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.66	0.66
Delay/Veh:	28.1	0.0	25.6	0.0	0.0	0.0	0.0	11.6	0.0	0.0	14.8	14.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.1	0.0	25.6	0.0	0.0	0.0	0.0	11.6	0.0	0.0	14.8	14.8
LOS by Move:	C		A C	A		A	A	B	A	A	B	B
HCM2kAvgQ:	11	0	8	0	0	0	0	8	0	0	16	16

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2025 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.720
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 0 1	2	0	2 0 0	0	0	0 0 0	2	0	0 0 2
Volume Module:												
Base Vol:	0	1047	437	643	1700	0	0	0	0	134	0	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1047	437	643	1700	0	0	0	0	134	0	75
Added Vol:	0	69	0	0	156	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1116	437	643	1856	0	0	0	0	134	0	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	1148	450	662	1909	0	0	0	0	138	0	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1148	450	662	1909	0	0	0	0	138	0	77
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1148	450	662	1909	0	0	0	0	138	0	77
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	3200	3200	0	0	0	0	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.36	0.28	0.21	0.60	0.00	0.00	0.00	0.00	0.04	0.00	0.02
OvlAdjV/S:												0.00
Crit Moves:	****				****					****		

Mt SAC PEP EIR
Year 2025 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.746
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	0 1!	0 0	1	0 2	0 1	1	0 2	1 0
Volume Module:												
Base Vol:	570	9	191	6	3	13	6	1118	481	129	960	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	570	9	191	6	3	13	6	1118	481	129	960	12
Added Vol:	4	0	2	0	0	0	0	59	5	0	116	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	574	9	193	6	3	13	6	1177	486	129	1076	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	593	9	199	6	3	13	6	1216	502	133	1112	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	593	9	199	6	3	13	6	1216	502	133	1112	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	593	9	199	6	3	13	6	1216	502	133	1112	12
OvlAdjVol:									201			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.97	0.03	1.00	0.27	0.14	0.59	1.00	2.00	1.00	1.00	2.97	0.03
Final Sat.:	3151	49	1600	436	218	945	1600	3200	1600	1600	4747	53
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.12	0.01	0.01	0.01	0.00	0.38	0.31	0.08	0.23	0.23
OvlAdjV/S:									0.13			
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Year 2025 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.655
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	254	42	132	17	22	5	19	999	161	107	890	19
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	254	42	132	17	22	5	19	999	161	107	890	19
Added Vol:	0	0	0	0	0	0	0	61	1	0	116	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	254	42	132	17	22	5	19	1060	162	107	1006	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	258	43	134	17	22	5	19	1078	165	109	1023	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	258	43	134	17	22	5	19	1078	165	109	1023	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	258	43	134	17	22	5	19	1078	165	109	1023	19
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.72	0.28	1.00	0.44	0.56	1.00	1.00	1.73	0.27	1.00	2.00	1.00
Final Sat.:	2746	454	1600	697	903	1600	1600	2776	424	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.08	0.02	0.02	0.00	0.01	0.39	0.39	0.07	0.32	0.01
Crit Moves:	****				****			****			****	

Mt SAC PEP EIR
Year 2025 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.821
Loss Time (sec):	6	Average Delay (sec/veh):	28.8
Optimal Cycle:	63	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2.0	0 1	1	0 2.0	0 1	0	1 0.0	0 1	0	0 1!	0 0
Volume Module:												
Base Vol:	389	1090	34	3	815	385	282	11	117	18	17	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	389	1090	34	3	815	385	282	11	117	18	17	6
Added Vol:	164	8	0	0	9	0	0	0	1	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	553	1098	34	3	824	385	282	11	118	18	17	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	586	1163	36	3	873	408	299	12	125	19	18	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	586	1163	36	3	873	408	299	12	125	19	18	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	586	1163	36	3	873	408	299	12	125	19	18	6
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.96	0.96	0.96
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.96	0.04	1.00	0.44	0.41	0.15
Final Sat.:	1805	3610	1615	1805	3610	1615	1745	68	1615	800	756	267
Capacity Analysis Module:												
Vol/Sat:	0.32	0.32	0.02	0.00	0.24	0.25	0.17	0.17	0.08	0.02	0.02	0.02
Crit Moves:	****					****	****				****	
Green/Cycle:	0.40	0.70	0.70	0.00	0.31	0.31	0.21	0.21	0.21	0.03	0.03	0.03
Volume/Cap:	0.82	0.46	0.03	0.46	0.79	0.82	0.82	0.82	0.37	0.82	0.82	0.82
Delay/Veh:	34.7	6.8	4.7	91.6	35.4	42.6	51.2	51.2	34.6	111.1	111	111.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.7	6.8	4.7	91.6	35.4	42.6	51.2	51.2	34.6	111.1	111	111.1
LOS by Move:	C	A	A	F	D	D	D	D	C	F	F	F
HCM2kAvgQ:	16	8	0	1	15	14	12	12	4	3	3	3

Mt SAC PEP EIR
Year 2025 No Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

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Mt SAC PEP EIR
Year 2025 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.726
Loss Time (sec):	6	Average Delay (sec/veh):	18.9
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 0	0	0 1	1 0	1	0 1!	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	52	1273	0	0	668	301	301	0	186	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	52	1273	0	0	668	301	301	0	186	0	0	0
Added Vol:	0	173	0	0	10	0	0	0	81	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	1446	0	0	678	301	301	0	267	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	55	1533	0	0	719	319	319	0	283	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	1533	0	0	719	319	319	0	283	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	55	1533	0	0	719	319	319	0	283	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.91	0.91	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.39	0.61	1.36	0.00	0.64	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2385	1059	2341	0	1101	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.42	0.00	0.00	0.30	0.30	0.14	0.00	0.26	0.00	0.00	0.00
Crit Moves:		****		****					****			
Green/Cycle:	0.05	0.59	0.00	0.00	0.53	0.53	0.35	0.00	0.35	0.00	0.00	0.00
Volume/Cap:	0.57	0.73	0.00	0.00	0.57	0.57	0.38	0.00	0.73	0.00	0.00	0.00
Delay/Veh:	53.8	16.2	0.0	0.0	16.1	16.1	24.3	0.0	31.3	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.8	16.2	0.0	0.0	16.1	16.1	24.3	0.0	31.3	0.0	0.0	0.0
LOS by Move:	D	B	A	A	B	B	C	A	C	A	A	A
HCM2kAvgQ:	3	19	0	0	11	11	5	0	13	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2025 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.901
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 0	1 0	1	0 1	0 1
Volume Module:												
Base Vol:	80	1628	109	81	1067	96	103	16	113	123	28	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	1628	109	81	1067	96	103	16	113	123	28	98
Added Vol:	0	173	0	0	91	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	1801	109	81	1158	96	103	16	113	123	28	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	83	1870	113	84	1202	100	107	17	117	128	29	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1870	113	84	1202	100	107	17	117	128	29	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	1870	113	84	1202	100	107	17	117	128	29	102
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.12	0.88	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	198	1402	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.58	0.07	0.05	0.38	0.06	0.07	0.08	0.08	0.08	0.02	0.06
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Year 2025 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.820
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	71	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	327	1150	288	209	832	262	346	651	292	359	659	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	327	1150	288	209	832	262	346	651	292	359	659	326
Added Vol:	2	169	5	0	88	3	4	54	1	9	114	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	329	1319	293	209	920	265	350	705	293	368	773	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	338	1356	301	215	946	272	360	725	301	378	794	335
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	338	1356	301	215	946	272	360	725	301	378	794	335
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	338	1356	301	215	946	272	360	725	301	378	794	335
OvlAdjVol:			112						132			228
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.33	0.67	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	3727	1073	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.28	0.19	0.07	0.25	0.25	0.11	0.23	0.19	0.12	0.25	0.21
OvlAdjV/S:			0.07						0.08			0.14
Crit Moves:	****				****		****				****	

Mt SAC PEP EIR
Year 2025 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.983
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	171	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	233	1535	153	7	1259	190	245	63	350	85	35	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	233	1535	153	7	1259	190	245	63	350	85	35	12
Added Vol:	0	176	0	0	98	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1711	153	7	1357	190	245	63	350	85	35	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	252	1852	166	8	1469	206	265	68	379	92	38	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	1852	166	8	1469	206	265	68	379	92	38	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	252	1852	166	8	1469	206	265	68	379	92	38	13
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.59	0.41	1.00	1.94	0.79	0.27
Final Sat.:	1600	3200	1600	1600	3200	1600	2545	655	1600	3098	1268	434
Capacity Analysis Module:												
Vol/Sat:	0.16	0.58	0.10	0.00	0.46	0.13	0.10	0.10	0.24	0.03	0.03	0.03
OvlAdjV/S:						0.00						
Crit Moves:	****				****				****			****

Mt SAC PEP EIR
Year 2025 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.021
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Added Vol:	18	101	179	7	48	43	27	6	10	207	9	48
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	279	1141	358	392	1090	252	693	1537	297	635	711	292
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	292	1196	0	411	1143	0	726	1611	0	666	745	306
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	292	1196	0	411	1143	0	726	1611	0	666	745	306
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	292	1196	0	411	1143	0	726	1611	0	666	745	306
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.25	0.00	0.13	0.24	0.00	0.23	0.34	0.00	0.21	0.16	0.19
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Year 2025 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	1.061
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 1	1	0 3	0 1	2	0 1	0 1	1	0 1	0 1
Volume Module:												
Base Vol:	33	1261	0	0	1567	50	172	0	94	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	1261	0	0	1567	50	172	0	94	0	0	0
Added Vol:	50	69	262	87	154	25	77	0	153	458	0	153
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	83	1330	262	87	1721	75	249	0	247	458	0	153
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	89	1433	282	94	1855	81	268	0	266	494	0	165
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	89	1433	282	94	1855	81	268	0	266	494	0	165
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	89	1433	282	94	1855	81	268	0	266	494	0	165
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	3200	3200	1600	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.45	0.18	0.06	0.39	0.05	0.08	0.00	0.17	0.31	0.00	0.10
Crit Moves:		****		****					****	****		

Mt SAC PEP EIR
Year 2025 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	1.018
Loss Time (sec):	10	Average Delay (sec/veh):	38.2
Optimal Cycle:	180	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	2	0 1	1 0	1	0 0	1 0	1	0 1!	0 1
Volume Module:												
Base Vol:	1	799	283	610	1382	5	4	2	4	186	1	495
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	799	283	610	1382	5	4	2	4	186	1	495
Added Vol:	0	234	0	384	381	0	0	0	0	0	0	146
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	1033	283	994	1763	5	4	2	4	186	1	641
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	1	1152	315	1108	1965	6	4	2	4	207	1	715
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	1152	315	1108	1965	6	4	2	4	207	1	715
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	1152	315	1108	1965	6	4	2	4	207	1	715
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.95	0.95	0.95	0.90	0.90	0.87	0.87	0.87
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.33	0.67	1.22	0.01	1.77
Final Sat.:	1805	3610	1615	3502	3600	10	1805	570	1140	2034	4	2946
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.20	0.32	0.55	0.55	0.00	0.00	0.00	0.10	0.28	0.24
Crit Moves:		****		****			****				****	
Green/Cycle:	0.00	0.31	0.58	0.31	0.62	0.62	0.00	0.01	0.01	0.27	0.27	0.58
Volume/Cap:	0.88	1.02	0.34	1.02	0.88	0.88	1.02	0.38	0.36	0.38	1.02	0.42
Delay/Veh:	690.5	65.7	11.2	66.3	19.8	19.8	487.8	62.7	60.6	30.1	70.8	11.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	690.5	65.7	11.2	66.3	19.8	19.8	487.8	62.7	60.6	30.1	70.8	11.5
LOS by Move:	F	E	B	E	B	B	F	E	E	C	E	B
HCM2kAvgQ:	0	23	5	20	26	26	1	1	1	4	21	7

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2025 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	1.006
Loss Time (sec):	10	Average Delay (sec/veh):	39.0
Optimal Cycle:	180	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 2	0 1	1	0 2	0 0	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	933	619	380	1294	0	169	0	176	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	933	619	380	1294	0	169	0	176	0	0	0
Added Vol:	0	44	0	274	107	0	190	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	977	619	654	1401	0	359	0	176	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	1035	656	693	1484	0	380	0	186	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1035	656	693	1484	0	380	0	186	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1035	656	693	1484	0	380	0	186	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.41	0.38	0.41	0.00	0.11	0.00	0.12	0.00	0.00	0.00
Crit Moves:			****	****					****			
Green/Cycle:	0.00	0.40	0.40	0.38	0.79	0.00	0.11	0.00	0.11	0.00	0.00	0.00
Volume/Cap:	0.00	0.71	1.01	1.01	0.52	0.00	0.95	0.00	1.01	0.00	0.00	0.00
Delay/Veh:	0.0	26.6	66.5	66.7	4.1	0.0	75.3	0.0	111.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	26.6	66.5	66.7	4.1	0.0	75.3	0.0	111.9	0.0	0.0	0.0
LOS by Move:	A	C	E	E	A	A	E	A	F	A	A	A
HCM2kAvgQ:	0	15	28	24	8	0	10	0	10	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2025 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.718
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0 1	0	0 1	1 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	6	7	1	94	38	102	303	1335	189	42	609	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	7	1	94	38	102	303	1335	189	42	609	237
Added Vol:	0	0	0	0	0	0	0	59	0	0	122	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	7	1	94	38	102	303	1394	189	42	731	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	6	7	1	95	38	103	306	1410	191	42	739	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	7	1	95	38	103	306	1410	191	42	739	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	6	7	1	95	38	103	306	1410	191	42	739	240
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.46	0.54	1.00	0.71	0.29	1.00	1.00	1.76	0.24	1.00	2.00	1.00
Final Sat.:	738	862	1600	1139	461	1600	1600	2818	382	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.00	0.08	0.08	0.06	0.19	0.50	0.50	0.03	0.23	0.15
OvlAdjV/S:						0.00						
Crit Moves:	****			****				****		****		

Mt SAC PEP EIR
Year 2025 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.640
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	0 1	2 0	1	0 1	2 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	103	21	75	151	9	96	153	776	54	31	1097	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	103	21	75	151	9	96	153	776	54	31	1097	200
Added Vol:	0	0	0	0	0	0	0	59	0	0	122	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	103	21	75	151	9	96	153	835	54	31	1219	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	106	22	77	156	9	99	158	863	56	32	1259	207
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	22	77	156	9	99	158	863	56	32	1259	207
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	106	22	77	156	9	99	158	863	56	32	1259	207
OvlAdjVol:						20						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.88	0.12	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	3200	3006	194	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.01	0.05	0.05	0.01	0.06	0.05	0.29	0.29	0.02	0.39	0.13
OvlAdjV/S:						0.01						
Crit Moves:			****	****			****				****	

Mt SAC PEP EIR
Year 2025 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Added Vol:	0	0	0		0	0	0		0	59	0		0	122	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		0	1088	0		0	1404	14	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93	
PHF Volume:	0	0	0		0	0	0		0	1165	0		0	1503	15	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		0	1165	0		0	1503	15	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1916	2683	582		2086	2668	752		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	61	22	461		47	23	357		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	61	22	461		47	23	357		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2025 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.905
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 102 Level Of Service: E

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0		
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	2	1	0	1	0	2	1	0
Volume Module:																				
Base Vol:	234	775	63			160	550	158			163	963	214			84	684	112		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	234	775	63			160	550	158			163	963	214			84	684	112		
Added Vol:	44	136	24			0	73	49			110	332	107			4	144	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	278	911	87			160	623	207			273	1295	321			88	828	112		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.97	0.97	0.97			0.97	0.97	0.97			0.97	0.97	0.97			0.97	0.97	0.97		
PHF Volume:	288	944	90			166	646	215			283	1342	333			91	858	116		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	288	944	90			166	646	215			283	1342	333			91	858	116		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	288	944	90			166	646	215			283	1342	333			91	858	116		
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600			1600	1600	1600			1600	1600	1600			1600	1600	1600		
Adjustment:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Lanes:	1.00	2.00	1.00			1.00	2.00	1.00			1.00	2.40	0.60			1.00	2.64	0.36		
Final Sat.:	1600	3200	1600			1600	3200	1600			1600	3847	953			1600	4228	572		
Capacity Analysis Module:																				
Vol/Sat:	0.18	0.30	0.06			0.10	0.20	0.13			0.18	0.35	0.35			0.06	0.20	0.20		
Crit Moves:		****					****						****				****			

Mt SAC PEP EIR
Year 2025 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.002
Loss Time (sec):	6	Average Delay (sec/veh):	33.6
Optimal Cycle:	180	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0 1! 0	1	0	2 1 0	1	0	3 0 1
Volume Module:												
Base Vol:	1	0	83	923	12	536	0	1796	72	18	576	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	0	83	923	12	536	0	1796	72	18	576	116
Added Vol:	0	0	0	72	0	70	0	356	0	0	78	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	83	995	12	606	0	2152	72	18	654	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00
PHF Volume:	1	0	86	1032	12	629	0	2232	75	19	678	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	86	1032	12	629	0	2232	75	19	678	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	1	0	86	1032	12	629	0	2232	75	19	678	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	1.00	0.87	0.92	0.92	0.92	1.00	0.91	0.91	0.95	0.91	1.00
Lanes:	0.01	0.00	0.99	1.62	0.01	1.37	0.00	2.90	0.10	1.00	3.00	1.00
Final Sat.:	20	0	1628	2805	26	2389	0	4994	167	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.05	0.37	0.48	0.26	0.00	0.45	0.45	0.01	0.13	0.00
Crit Moves:					****			****		****		
Green/Cycle:	0.00	0.00	0.00	0.48	0.48	0.48	0.00	0.45	0.45	0.01	0.46	0.00
Volume/Cap:	xxxx	0.00	xxxx	0.76	1.00	0.54	0.00	1.00	1.00	1.00	0.29	0.00
Delay/Veh:	0.0	0.0	0.0	22.7	48.3	18.3	0.0	46.9	46.9	259.6	17.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	22.7	48.3	18.3	0.0	46.9	46.9	259.6	17.1	0.0
LOS by Move:	A	A	A	C	D	B	A	D	D	F	B	A
HCM2kAvgQ:	2	0	2	26	2	13	0	34	34	2	5	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2025 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.690
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2 0 0	0	0	1 1 0	1	0	0 0 1	0	0	0 0 0
Volume Module:												
Base Vol:	418	1243	0	0	808	115	81	0	407	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	418	1243	0	0	808	115	81	0	407	0	0	0
Added Vol:	0	173	0	0	91	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	418	1416	0	0	899	115	81	0	407	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	446	1511	0	0	959	123	86	0	434	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	446	1511	0	0	959	123	86	0	434	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	446	1511	0	0	959	123	86	0	434	0	0	0
OvlAdjVol:									211			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.77	0.23	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	2837	363	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.14	0.47	0.00	0.00	0.34	0.34	0.05	0.00	0.27	0.00	0.00	0.00
OvlAdjV/S:									0.13			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Year 2025 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.598
Loss Time (sec):	6	Average Delay (sec/veh):	9.9
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	0	1	0	2	1 1
Volume Module:												
Base Vol:	123	0	289	0	0	0	0	2097	621	0	969	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	123	0	289	0	0	0	0	2097	621	0	969	0
Added Vol:	67	0	42	0	0	0	0	84	184	0	139	280
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	190	0	331	0	0	0	0	2181	805	0	1108	280
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00	0.96	0.96	0.96
PHF Volume:	198	0	344	0	0	0	0	2270	0	0	1153	291
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	198	0	344	0	0	0	0	2270	0	0	1153	291
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	198	0	344	0	0	0	0	2270	0	0	1153	291
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.88	0.88
Lanes:	1.36	0.00	1.64	0.00	0.00	0.00	1.00	3.00	1.00	0.00	2.39	0.61
Final Sat.:	2304	0	2761	0	0	0	1900	5187	1729	0	4016	1015
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.12	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.29	0.29
Crit Moves:			****					****				
Green/Cycle:	0.21	0.00	0.21	0.00	0.00	0.00	0.00	0.73	0.00	0.00	0.73	0.73
Volume/Cap:	0.41	0.00	0.60	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.39	0.39
Delay/Veh:	34.5	0.0	36.9	0.0	0.0	0.0	0.0	6.7	0.0	0.0	5.1	5.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.5	0.0	36.9	0.0	0.0	0.0	0.0	6.7	0.0	0.0	5.1	5.1
LOS by Move:	C		D	A		A	A		A	A		A
HCM2kAvgQ:	4	0	7	0	0	0	0	12	0	0	6	6

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Year 2025 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.777
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 0 1	2	0	2 0 0	0	0	0 0 0	2	0	0 0 2
Volume Module:												
Base Vol:	0	1712	118	106	1120	0	0	0	0	136	0	161
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1712	118	106	1120	0	0	0	0	136	0	161
Added Vol:	0	173	0	0	91	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1885	118	106	1211	0	0	0	0	136	0	161
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1978	124	111	1271	0	0	0	0	143	0	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1978	124	111	1271	0	0	0	0	143	0	169
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1978	124	111	1271	0	0	0	0	143	0	169
OvlAdjVol:												58
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	3200	3200	0	0	0	0	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.62	0.08	0.03	0.40	0.00	0.00	0.00	0.00	0.04	0.00	0.05
OvlAdjV/S:												0.02
Crit Moves:		****			****						****	

EXISTING PLUS 2020
CUMULATIVE PLUS PROJECT CONDITIONS

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.788
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:		Include				Include				Ovl				Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0	1	0	0 1!	0	0	1	0 2	0	1	1	0 2	1	0
Volume Module:																
Base Vol:	594	4	140	18	10	12	4	1170	436	78	1018	3				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	594	4	140	18	10	12	4	1170	436	78	1018	3				
Added Vol:	6	0	8	0	0	0	0	69	6	4	31	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	600	4	148	18	10	12	4	1239	442	82	1049	3				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92				
PHF Volume:	651	4	161	20	11	13	4	1345	480	89	1139	3				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	651	4	161	20	11	13	4	1345	480	89	1139	3				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
FinalVolume:	651	4	161	20	11	13	4	1345	480	89	1139	3				
OvlAdjVol:									152							
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600				
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Lanes:	1.99	0.01	1.00	0.45	0.25	0.30	1.00	2.00	1.00	1.00	2.99	0.01				
Final Sat.:	3179	21	1600	720	400	480	1600	3200	1600	1600	4786	14				
Capacity Analysis Module:																
Vol/Sat:	0.20	0.20	0.10	0.03	0.03	0.03	0.00	0.42	0.30	0.06	0.24	0.24				
OvlAdjV/S:									0.10							
Crit Moves:	****					****		****		****						

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.736
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:		Include				Include				Include				Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0	1	0	1 0	0	1	1	0 1	1	0	1	0 2	0	1
Volume Module:																
Base Vol:	268	27	102	22	45	19	7	1045	292	53	790	14				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	268	27	102	22	45	19	7	1045	292	53	790	14				
Added Vol:	0	0	13	0	0	0	0	84	0	3	36	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	268	27	115	22	45	19	7	1129	292	56	826	14				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94				
PHF Volume:	287	29	123	24	48	20	7	1207	312	60	883	15				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	287	29	123	24	48	20	7	1207	312	60	883	15				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
FinalVolume:	287	29	123	24	48	20	7	1207	312	60	883	15				
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600				
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Lanes:	1.82	0.18	1.00	0.33	0.67	1.00	1.00	1.59	0.41	1.00	2.00	1.00				
Final Sat.:	2907	293	1600	525	1075	1600	1600	2542	658	1600	3200	1600				
Capacity Analysis Module:																
Vol/Sat:	0.10	0.10	0.08	0.04	0.04	0.01	0.00	0.47	0.47	0.04	0.28	0.01				
Crit Moves:	****			****				****		****						

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.635
Loss Time (sec):	6	Average Delay (sec/veh):	24.0
Optimal Cycle:	36	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	0	1 0	0 1	0	0 1!	0 0
Volume Module:												
Base Vol:	144	1051	17	0	812	140	437	6	310	12	3	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	144	1051	17	0	812	140	437	6	310	12	3	8
Added Vol:	40	13	0	0	20	0	0	0	34	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	184	1064	17	0	832	140	437	6	344	12	3	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	186	1076	17	0	842	142	442	6	348	12	3	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	186	1076	17	0	842	142	442	6	348	12	3	8
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	186	1076	17	0	842	142	442	6	348	12	3	8
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	1.00	0.95	0.85	0.95	0.95	0.85	0.93	0.93	0.93
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.99	0.01	1.00	0.52	0.13	0.35
Final Sat.:	1805	3610	1615	1900	3610	1615	1786	25	1615	921	230	614
Capacity Analysis Module:												
Vol/Sat:	0.10	0.30	0.01	0.00	0.23	0.09	0.25	0.25	0.22	0.01	0.01	0.01
Crit Moves:	****				****			****			****	
Green/Cycle:	0.16	0.53	0.53	0.00	0.37	0.37	0.39	0.39	0.39	0.02	0.02	0.02
Volume/Cap:	0.64	0.56	0.02	0.00	0.64	0.24	0.64	0.64	0.55	0.64	0.64	0.64
Delay/Veh:	43.6	16.2	11.2	0.0	27.1	22.2	26.7	26.7	24.8	79.9	79.9	79.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.6	16.2	11.2	0.0	27.1	22.2	26.7	26.7	24.8	79.9	79.9	79.9
LOS by Move:	D	B	B	A	C	C	C	C	C	E	E	E
HCM2kAvgQ:	5	11	0	0	12	3	12	12	9	2	2	2

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Note: Queue reported is the number of cars per lane.

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Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.893
Loss Time (sec):	6	Average Delay (sec/veh):	30.7
Optimal Cycle:	89	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	41	873	0	0	927	223	349	0	533	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	873	0	0	927	223	349	0	533	0	0	0
Added Vol:	7	54	0	0	54	0	0	0	84	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	48	927	0	0	981	223	349	0	617	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	48	927	0	0	981	223	349	0	617	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	927	0	0	981	223	349	0	617	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	48	927	0	0	981	223	349	0	617	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.92	0.92	0.89	1.00	0.89	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.63	0.37	1.22	0.00	0.78	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2859	650	2059	0	1315	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.26	0.00	0.00	0.34	0.34	0.17	0.00	0.47	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.03	0.41	0.00	0.00	0.38	0.38	0.53	0.00	0.53	0.00	0.00	0.00
Volume/Cap:	0.89	0.62	0.00	0.00	0.89	0.89	0.32	0.00	0.89	0.00	0.00	0.00
Delay/Veh:	132.4	23.9	0.0	0.0	36.7	36.7	13.6	0.0	30.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	132.4	23.9	0.0	0.0	36.7	36.7	13.6	0.0	30.7	0.0	0.0	0.0
LOS by Move:	F	C	A	A	D	D	B	A	C	A	A	A
HCM2kAvgQ:	3	12	0	0	19	19	5	0	25	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.983
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	171	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	130	1183	442	221	1365	214	158	93	244	115	48	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1183	442	221	1365	214	158	93	244	115	48	76
Added Vol:	0	92	11	8	75	0	0	2	0	2	0	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	130	1275	453	229	1440	214	158	95	244	117	48	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	139	1362	484	245	1538	229	169	101	261	125	51	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	1362	484	245	1538	229	169	101	261	125	51	83
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	139	1362	484	245	1538	229	169	101	261	125	51	83
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.28	0.72	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	448	1152	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.43	0.30	0.15	0.48	0.14	0.11	0.23	0.23	0.08	0.03	0.05
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.952
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	135	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	236	1291	628	412	1070	187	284	757	153	110	446	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	236	1291	628	412	1070	187	284	757	153	110	446	185
Added Vol:	0	89	54	0	73	5	14	99	2	11	32	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	236	1380	682	412	1143	192	298	856	155	121	478	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	245	1430	707	427	1184	199	309	887	161	125	495	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	1430	707	427	1184	199	309	887	161	125	495	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	245	1430	707	427	1184	199	309	887	161	125	495	192
OvlAdjVol:			644						38			0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.57	0.43	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4110	690	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.30	0.44	0.13	0.29	0.29	0.10	0.28	0.10	0.04	0.15	0.12
OvlAdjV/S:			0.40						0.02			0.00
Crit Moves:			****	****				****		****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.108
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	159	1684	70	1	1120	277	407	76	416	113	108	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	1684	70	1	1120	277	407	76	416	113	108	12
Added Vol:	0	109	0	2	79	4	23	0	0	0	0	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	159	1793	70	3	1199	281	430	76	416	113	108	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	184	2070	81	3	1385	324	497	88	480	130	125	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	2070	81	3	1385	324	497	88	480	130	125	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	2070	81	3	1385	324	497	88	480	130	125	27
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.70	0.30	1.00	1.39	1.33	0.28
Final Sat.:	1600	3200	1600	1600	3200	1600	2719	481	1600	2223	2125	453
Capacity Analysis Module:												
Vol/Sat:	0.11	0.65	0.05	0.00	0.43	0.20	0.18	0.18	0.30	0.06	0.06	0.06
OvlAdjV/S:						0.00						
Crit Moves:		****		****					****	****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.891
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	96	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	291	1364	364	207	938	396	401	500	169	167	1116	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	291	1364	364	207	938	396	401	500	169	167	1116	139
Added Vol:	4	42	87	46	10	24	61	10	18	21	7	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	295	1406	451	253	948	420	462	510	187	188	1123	145
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	311	1483	0	267	1000	0	487	538	0	198	1185	153
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	311	1483	0	267	1000	0	487	538	0	198	1185	153
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	311	1483	0	267	1000	0	487	538	0	198	1185	153
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.31	0.00	0.08	0.21	0.00	0.15	0.11	0.00	0.06	0.25	0.10
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.867
Loss Time (sec):	6	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	75	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 0	0	0 3	0 1	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	116	2253	0	0	1002	107	39	0	36	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	116	2253	0	0	1002	107	39	0	36	0	0	0
Added Vol:	0	118	0	0	46	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	2371	0	0	1048	107	39	0	36	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	123	2506	0	0	1108	113	41	0	38	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	2506	0	0	1108	113	41	0	38	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	123	2506	0	0	1108	113	41	0	38	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	4800	1600	3200	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.78	0.00	0.00	0.23	0.07	0.01	0.00	0.02	0.00	0.00	0.00
Crit Moves:		****			****				****			

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.891
Loss Time (sec): 10 Average Delay (sec/veh): 24.8
Optimal Cycle: 101 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	2	0 1	1 0	1	0 0	1 0	1	0 1!	0 1
Volume Module:												
Base Vol:	0	1796	320	349	679	2	0	1	1	262	0	572
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1796	320	349	679	2	0	1	1	262	0	572
Added Vol:	0	117	0	22	24	0	0	0	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1913	320	371	703	2	0	1	1	262	0	573
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	2031	340	394	746	2	0	1	1	278	0	608
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2031	340	394	746	2	0	1	1	278	0	608
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2031	340	394	746	2	0	1	1	278	0	608
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	0.95	1.00	0.93	0.93	0.88	1.00	0.88
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.50	0.50	1.31	0.00	1.69
Final Sat.:	1900	3610	1615	3502	3600	10	1900	879	879	2205	0	2831
Capacity Analysis Module:												
Vol/Sat:	0.00	0.56	0.21	0.11	0.21	0.21	0.00	0.00	0.00	0.13	0.00	0.21
Crit Moves:		****		****				****		****		
Green/Cycle:	0.00	0.63	0.77	0.13	0.76	0.76	0.00	0.00	0.00	0.14	0.00	0.27
Volume/Cap:	0.00	0.89	0.27	0.89	0.27	0.27	0.00	0.89	0.89	0.89	0.00	0.80
Delay/Veh:	0.0	20.4	3.4	62.7	3.8	3.8	0.0	527	526.7	52.3	0.0	38.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	20.4	3.4	62.7	3.8	3.8	0.0	527	526.7	52.3	0.0	38.2
LOS by Move:	A	C	A	E	A	A	A	F	F	D	A	D
HCM2kAvgQ:	0	27	3	7	4	4	0	1	1	10	0	12

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.902
Loss Time (sec): 10 Average Delay (sec/veh): 34.5
Optimal Cycle: 106 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 2	0 1	1	0 2	0 0	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	1177	267	312	676	0	905	0	281	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1177	267	312	676	0	905	0	281	0	0	0
Added Vol:	0	64	0	5	19	0	53	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1241	267	317	695	0	958	0	281	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	0	1270	273	324	711	0	981	0	288	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1270	273	324	711	0	981	0	288	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1270	273	324	711	0	981	0	288	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.35	0.17	0.18	0.20	0.00	0.28	0.00	0.18	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green/Cycle:	0.00	0.39	0.39	0.20	0.59	0.00	0.31	0.00	0.31	0.00	0.00	0.00
Volume/Cap:	0.00	0.90	0.43	0.90	0.33	0.00	0.90	0.00	0.57	0.00	0.00	0.00
Delay/Veh:	0.0	37.0	22.9	63.9	10.6	0.0	43.4	0.0	30.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	37.0	22.9	63.9	10.6	0.0	43.4	0.0	30.5	0.0	0.0	0.0
LOS by Move:	A	D	C	E	B	A	D	A	C	A	A	A
HCM2kAvgQ:	0	23	6	11	6	0	19	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.774
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	126	14	28	173	11	246	35	980	218	6	830	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	14	28	173	11	246	35	980	218	6	830	80
Added Vol:	5	0	5	5	0	5	23	106	23	26	34	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	131	14	33	178	11	251	58	1086	241	32	864	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	137	15	34	186	11	262	61	1134	252	33	902	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	15	34	186	11	262	61	1134	252	33	902	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	137	15	34	186	11	262	61	1134	252	33	902	111
OvlAdjVol:						201						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.90	0.10	1.00	0.94	0.06	1.00	1.00	1.64	0.36	1.00	2.00	1.00
Final Sat.:	1446	154	1600	1507	93	1600	1600	2619	581	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.02	0.12	0.12	0.16	0.04	0.43	0.43	0.02	0.28	0.07
OvlAdjV/S:						0.13						
Crit Moves:	****					****		****		****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.626
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	0 1	2	0 1	0 1	2	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	21	13	21	80	18	74	381	725	130	119	952	424
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	13	21	80	18	74	381	725	130	119	952	424
Added Vol:	4	0	8	8	0	4	20	77	20	41	78	41
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	13	29	88	18	78	401	802	150	160	1030	465
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	27	14	31	94	19	83	428	856	160	171	1099	496
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	14	31	94	19	83	428	856	160	171	1099	496
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	14	31	94	19	83	428	856	160	171	1099	496
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.68	0.32	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	3200	2696	504	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.02	0.03	0.01	0.05	0.13	0.32	0.32	0.11	0.34	0.31
OvlAdjV/S:						0.00						
Crit Moves:				****	****			****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[17.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		4	847	0		0	1530	199	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		4	847	0		0	1530	199	
Added Vol:	0	0	0		0	0	0		0	93	0		0	161	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		4	940	0		0	1691	199	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	0	0	0		0	0	0		4	968	0		0	1742	205	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		4	968	0		0	1742	205	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	1847	2923	484		2234	2718	871		1946	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Potent Cap.:	68	16	534		37	21	298		305	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Move Cap.:	67	15	534		37	21	298		305	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		0.01	xxxx	xxxx	xxxx	xxxx	xxxx		
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		17.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*		*	*	*		C	*	*	*	*	*		
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.915
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	108	Level Of Service:	E

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0		
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	2	1	0	1	0	2	1	0
Volume Module:																				
Base Vol:	172	572	45			99	586	288			111	327	157			37	1179	98		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	172	572	45			99	586	288			111	327	157			37	1179	98		
Added Vol:	61	10	4			0	7	84			27	75	18			23	258	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	233	582	49			99	593	372			138	402	175			60	1437	98		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.96	0.96	0.96			0.96	0.96	0.96			0.96	0.96	0.96			0.96	0.96	0.96		
PHF Volume:	242	605	51			103	616	387			143	418	182			62	1494	102		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	242	605	51			103	616	387			143	418	182			62	1494	102		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	242	605	51			103	616	387			143	418	182			62	1494	102		
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600			1600	1600	1600			1600	1600	1600			1600	1600	1600		
Adjustment:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Lanes:	1.00	2.00	1.00			1.00	2.00	1.00			1.00	2.09	0.91			1.00	2.81	0.19		
Final Sat.:	1600	3200	1600			1600	3200	1600			1600	3344	1456			1600	4494	306		
Capacity Analysis Module:																				
Vol/Sat:	0.15	0.19	0.03			0.06	0.19	0.24			0.09	0.12	0.12			0.04	0.33	0.33		
Crit Moves:	****							****			****						****			

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.009
Loss Time (sec):	6	Average Delay (sec/veh):	32.1
Optimal Cycle:	180	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	1	1	0	1! 0	1	0	0	2	1	0	1	0	3	0	1
Volume Module:												
Base Vol:	0	0	2	604	3	745	0	541	10	7	1225	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	2	604	3	745	0	541	10	7	1225	43
Added Vol:	0	0	0	257	0	140	0	78	0	0	141	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	2	861	3	885	0	619	10	7	1366	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.00
PHF Volume:	0	0	2	1054	4	1083	0	758	12	9	1672	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	2	1054	4	1083	0	758	12	9	1672	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	0	2	1054	4	1083	0	758	12	9	1672	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.90	0.90	0.90	1.00	0.91	0.91	0.95	0.91	1.00
Lanes:	0.00	0.00	1.00	1.49	0.01	1.50	0.00	2.95	0.05	1.00	3.00	1.00
Final Sat.:	0	0	1644	2556	6	2579	0	5094	82	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.41	0.63	0.42	0.00	0.15	0.15	0.00	0.32	0.00
Crit Moves:					****		****				****	
Green/Cycle:	0.00	0.00	0.00	0.62	0.62	0.62	0.00	0.31	0.31	0.01	0.32	0.00
Volume/Cap:	0.00	0.00	xxxx	0.66	1.01	0.68	0.00	0.48	0.48	0.48	1.01	0.00
Delay/Veh:	0.0	0.0	0.0	12.8	40.6	13.0	0.0	28.2	28.2	68.1	58.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	12.8	40.6	13.0	0.0	28.2	28.2	68.1	58.2	0.0
LOS by Move:	A	A	A	B	D	B	A	C	C	E	E	A
HCM2kAvgQ:	0	0	0	21	3	12	0	7	7	1	26	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.139
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	0	0	0	1	1	0	1	0	0	0	1	0	0	0	0	0
Volume Module:												
Base Vol:	397	739	0	0	1653	181	86	0	561	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	397	739	0	0	1653	181	86	0	561	0	0	0
Added Vol:	2	62	0	0	146	0	0	0	8	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	399	801	0	0	1799	181	86	0	569	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	434	871	0	0	1955	197	93	0	618	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	434	871	0	0	1955	197	93	0	618	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	434	871	0	0	1955	197	93	0	618	0	0	0
OvlAdjVol:									402			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.82	0.18	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	2907	293	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.14	0.27	0.00	0.00	0.67	0.67	0.06	0.00	0.39	0.00	0.00	0.00
OvlAdjV/S:									0.25			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.646
Loss Time (sec):	6	Average Delay (sec/veh):	16.1
Optimal Cycle:	37	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	1	0	2	1	1
Volume Module:												
Base Vol:	385	0	274	0	0	0	0	806	276	0	1599	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	385	0	274	0	0	0	0	806	276	0	1599	0
Added Vol:	117	0	114	0	0	0	0	268	35	0	59	61
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	502	0	388	0	0	0	0	1074	311	0	1658	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.00	0.85	0.85	0.85
PHF Volume:	588	0	454	0	0	0	0	1258	0	0	1941	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	588	0	454	0	0	0	0	1258	0	0	1941	71
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	588	0	454	0	0	0	0	1258	0	0	1941	71
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Lanes:	1.56	0.00	1.44	0.00	0.00	0.00	1.00	3.00	1.00	0.00	2.89	0.11
Final Sat.:	2704	0	2482	0	0	0	1900	5187	1729	0	4978	183
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.18	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.39	0.39
Crit Moves:	****										****	
Green/Cycle:	0.34	0.00	0.34	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.60	0.60
Volume/Cap:	0.65	0.00	0.54	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.65	0.65
Delay/Veh:	29.1	0.0	27.3	0.0	0.0	0.0	0.0	10.5	0.0	0.0	13.4	13.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.1	0.0	27.3	0.0	0.0	0.0	0.0	10.5	0.0	0.0	13.4	13.4
LOS by Move:	C		A	C		A	A		A	A	B	B
HCM2kAvgQ:	11		0	8		0	0		7	0	15	15

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.713
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 0	1	2	0	2	0	0	0	0	0
Volume Module:												
Base Vol:	0	1047	437	643	1700	0	0	0	0	134	0	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1047	437	643	1700	0	0	0	0	134	0	75
Added Vol:	0	48	45	87	75	0	0	0	0	9	0	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1095	482	730	1775	0	0	0	0	143	0	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	1127	496	751	1826	0	0	0	0	147	0	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1127	496	751	1826	0	0	0	0	147	0	95
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1127	496	751	1826	0	0	0	0	147	0	95
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	3200	3200	0	0	0	0	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.35	0.31	0.23	0.57	0.00	0.00	0.00	0.00	0.05	0.00	0.03
OvlAdjV/S:												0.00
Crit Moves:		****			****						****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.743
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	0 1!	0 0	1	0 2	0 1	1	0 2	1 0
Volume Module:												
Base Vol:	570	9	191	6	3	13	6	1118	481	129	960	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	570	9	191	6	3	13	6	1118	481	129	960	12
Added Vol:	4	0	8	0	0	0	0	44	5	3	62	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	574	9	199	6	3	13	6	1162	486	132	1022	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	593	9	206	6	3	13	6	1200	502	136	1056	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	593	9	206	6	3	13	6	1200	502	136	1056	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	593	9	206	6	3	13	6	1200	502	136	1056	12
OvlAdjVol:									201			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.97	0.03	1.00	0.27	0.14	0.59	1.00	2.00	1.00	1.00	2.97	0.03
Final Sat.:	3151	49	1600	436	218	945	1600	3200	1600	1600	4744	56
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.13	0.01	0.01	0.01	0.00	0.38	0.31	0.09	0.22	0.22
OvlAdjV/S:									0.13			
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.658
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	254	42	132	17	22	5	19	999	161	107	890	19
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	254	42	132	17	22	5	19	999	161	107	890	19
Added Vol:	0	0	11	0	0	0	0	58	1	5	68	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	254	42	143	17	22	5	19	1057	162	112	958	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	258	43	145	17	22	5	19	1075	165	114	975	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	258	43	145	17	22	5	19	1075	165	114	975	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	258	43	145	17	22	5	19	1075	165	114	975	19
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.72	0.28	1.00	0.44	0.56	1.00	1.00	1.73	0.27	1.00	2.00	1.00
Final Sat.:	2746	454	1600	697	903	1600	1600	2775	425	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.02	0.02	0.00	0.01	0.39	0.39	0.07	0.30	0.01
Crit Moves:	****				****			****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.767
Loss Time (sec):	6	Average Delay (sec/veh):	26.6
Optimal Cycle:	52	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	0	1 0	0 1	0	0 1!	0 0
Volume Module:												
Base Vol:	389	1090	34	3	815	385	282	11	117	18	17	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	389	1090	34	3	815	385	282	11	117	18	17	6
Added Vol:	77	11	0	0	15	0	0	0	28	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	466	1101	34	3	830	385	282	11	145	18	17	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	494	1166	36	3	879	408	299	12	154	19	18	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	494	1166	36	3	879	408	299	12	154	19	18	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	494	1166	36	3	879	408	299	12	154	19	18	6
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.96	0.96	0.96
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.96	0.04	1.00	0.44	0.41	0.15
Final Sat.:	1805	3610	1615	1805	3610	1615	1745	68	1615	800	756	267
Capacity Analysis Module:												
Vol/Sat:	0.27	0.32	0.02	0.00	0.24	0.25	0.17	0.17	0.10	0.02	0.02	0.02
Crit Moves:	****					****	****				****	
Green/Cycle:	0.36	0.68	0.68	0.00	0.33	0.33	0.22	0.22	0.22	0.03	0.03	0.03
Volume/Cap:	0.77	0.47	0.03	0.47	0.74	0.77	0.77	0.77	0.43	0.77	0.77	0.77
Delay/Veh:	34.0	7.6	5.2	94.4	32.3	36.7	45.0	45.0	34.2	94.2	94.2	94.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.0	7.6	5.2	94.4	32.3	36.7	45.0	45.0	34.2	94.2	94.2	94.2
LOS by Move:	C	A	A	F	C	D	D	D	C	F	F	F
HCM2kAvgQ:	13	9	0	1	14	13	11	11	4	3	3	3

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Note: Queue reported is the number of cars per lane.

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Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.683
Loss Time (sec):	6	Average Delay (sec/veh):	18.9
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	52	1273	0	0	668	301	301	0	186	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	52	1273	0	0	668	301	301	0	186	0	0	0
Added Vol:	14	88	0	0	43	0	0	0	58	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	66	1361	0	0	711	301	301	0	244	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	70	1443	0	0	754	319	319	0	259	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	1443	0	0	754	319	319	0	259	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	1443	0	0	754	319	319	0	259	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.91	0.91	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.41	0.59	1.38	0.00	0.62	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2422	1025	2383	0	1067	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.40	0.00	0.00	0.31	0.31	0.13	0.00	0.24	0.00	0.00	0.00
Crit Moves:		****		****					****			
Green/Cycle:	0.06	0.59	0.00	0.00	0.52	0.52	0.35	0.00	0.35	0.00	0.00	0.00
Volume/Cap:	0.60	0.68	0.00	0.00	0.60	0.60	0.38	0.00	0.68	0.00	0.00	0.00
Delay/Veh:	53.8	15.3	0.0	0.0	17.3	17.3	24.2	0.0	29.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.8	15.3	0.0	0.0	17.3	17.3	24.2	0.0	29.8	0.0	0.0	0.0
LOS by Move:	D	B	A	A	B	B	C	A	C	A	A	A
HCM2kAvgQ:	3	17	0	0	12	12	5	0	12	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.889
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	95	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	80	1628	109	81	1067	96	103	16	113	123	28	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	1628	109	81	1067	96	103	16	113	123	28	98
Added Vol:	0	110	9	7	62	0	0	2	0	4	1	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	1738	118	88	1129	96	103	18	113	127	29	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	83	1805	123	91	1172	100	107	19	117	132	30	105
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1805	123	91	1172	100	107	19	117	132	30	105
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	1805	123	91	1172	100	107	19	117	132	30	105
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.14	0.86	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	220	1380	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.56	0.08	0.06	0.37	0.06	0.07	0.09	0.09	0.08	0.02	0.07
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.804
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 68 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	327	1150	288	209	832	262	346	651	292	359	659	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	327	1150	288	209	832	262	346	651	292	359	659	326
Added Vol:	2	106	41	0	59	7	13	63	1	27	72	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	329	1256	329	209	891	269	359	714	293	386	731	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	338	1291	338	215	916	276	369	734	301	397	751	335
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	338	1291	338	215	916	276	369	734	301	397	751	335
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	338	1291	338	215	916	276	369	734	301	397	751	335
OvlAdjVol:			140						132			228
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.30	0.70	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	3687	1113	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.27	0.21	0.07	0.25	0.25	0.12	0.23	0.19	0.12	0.23	0.21
OvlAdjV/S:			0.09						0.08			0.14
Crit Moves:	****				****		****				****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.977
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 162 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	233	1535	153	7	1259	190	245	63	350	85	35	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	233	1535	153	7	1259	190	245	63	350	85	35	12
Added Vol:	0	121	0	4	73	9	18	0	0	0	0	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1656	153	11	1332	199	263	63	350	85	35	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	252	1792	166	12	1442	215	285	68	379	92	38	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	1792	166	12	1442	215	285	68	379	92	38	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	252	1792	166	12	1442	215	285	68	379	92	38	23
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.61	0.39	1.00	1.82	0.74	0.44
Final Sat.:	1600	3200	1600	1600	3200	1600	2582	618	1600	2901	1188	711
Capacity Analysis Module:												
Vol/Sat:	0.16	0.56	0.10	0.01	0.45	0.13	0.11	0.11	0.24	0.03	0.03	0.03
OvlAdjV/S:						0.00						
Crit Moves:	****				****				****			****

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.967
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	150	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Added Vol:	18	35	26	7	18	49	39	6	10	85	9	48
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	279	1075	205	392	1060	258	705	1537	297	513	711	292
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	292	1127	0	411	1111	0	739	1611	0	538	745	306
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	292	1127	0	411	1111	0	739	1611	0	538	745	306
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	292	1127	0	411	1111	0	739	1611	0	538	745	306
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.23	0.00	0.13	0.23	0.00	0.23	0.34	0.00	0.17	0.16	0.19
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.565
Loss Time (sec):	6	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 0	0	0 3	0 1	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	33	1261	0	0	1567	50	172	0	94	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	1261	0	0	1567	50	172	0	94	0	0	0
Added Vol:	0	66	0	0	107	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	1327	0	0	1674	50	172	0	94	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	36	1430	0	0	1804	54	185	0	101	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1430	0	0	1804	54	185	0	101	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	1430	0	0	1804	54	185	0	101	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	4800	1600	3200	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.45	0.00	0.00	0.38	0.03	0.06	0.00	0.06	0.00	0.00	0.00
Crit Moves:		****			****			****				

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.786
Loss Time (sec):	10	Average Delay (sec/veh):	23.4
Optimal Cycle:	68	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	2	0 1	1 0	1	0 0	1 0	1	0 1!	0 1
Volume Module:												
Base Vol:	1	799	283	610	1382	5	4	2	4	186	1	495
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	799	283	610	1382	5	4	2	4	186	1	495
Added Vol:	0	61	0	50	56	0	0	0	0	0	0	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	860	283	660	1438	5	4	2	4	186	1	500
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	1	959	315	736	1603	6	4	2	4	207	1	557
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	959	315	736	1603	6	4	2	4	207	1	557
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	959	315	736	1603	6	4	2	4	207	1	557
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.95	0.95	0.95	0.90	0.90	0.88	0.88	0.88
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.33	0.67	1.27	0.01	1.72
Final Sat.:	1805	3610	1615	3502	3597	13	1805	570	1140	2123	5	2885
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.20	0.21	0.45	0.45	0.00	0.00	0.00	0.10	0.23	0.19
Crit Moves:		****		****			****				****	
Green/Cycle:	0.00	0.34	0.62	0.27	0.60	0.60	0.00	0.01	0.01	0.28	0.29	0.56
Volume/Cap:	0.74	0.79	0.31	0.79	0.74	0.74	0.79	0.34	0.32	0.34	0.79	0.35
Delay/Veh:	478.5	33.3	9.1	38.5	15.5	15.5	278.4	59.4	57.7	28.5	36.8	12.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	478.5	33.3	9.1	38.5	15.5	15.5	278.4	59.4	57.7	28.5	36.8	12.1
LOS by Move:	F	C	A	D	B	B	F	E	E	C	D	B
HCM2kAvgQ:	0	14	4	11	19	19	1	1	1	4	13	5

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.829
Loss Time (sec):	10	Average Delay (sec/veh):	21.5
Optimal Cycle:	79	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 2	0 1	1	0 2	0 0	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	933	619	380	1294	0	169	0	176	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	933	619	380	1294	0	169	0	176	0	0	0
Added Vol:	0	29	0	3	54	0	31	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	962	619	383	1348	0	200	0	176	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	1019	656	406	1428	0	212	0	186	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1019	656	406	1428	0	212	0	186	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1019	656	406	1428	0	212	0	186	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.41	0.22	0.40	0.00	0.06	0.00	0.12	0.00	0.00	0.00
Crit Moves:			****	****					****			
Green/Cycle:	0.00	0.49	0.49	0.27	0.76	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Volume/Cap:	0.00	0.58	0.83	0.83	0.52	0.00	0.43	0.00	0.83	0.00	0.00	0.00
Delay/Veh:	0.0	18.6	29.3	45.6	4.9	0.0	40.1	0.0	63.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.6	29.3	45.6	4.9	0.0	40.1	0.0	63.8	0.0	0.0	0.0
LOS by Move:	A	B	C	D	A	A	D	A	E	A	A	A
HCM2kAvgQ:	0	12	20	12	9	0	4	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.752
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0 1	0	0 1	1 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	6	7	1	94	38	102	303	1335	189	42	609	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	7	1	94	38	102	303	1335	189	42	609	237
Added Vol:	9	0	10	10	0	9	19	67	19	21	80	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	7	11	104	38	111	322	1402	208	63	689	258
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	15	7	11	105	38	112	326	1418	210	64	697	261
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	7	11	105	38	112	326	1418	210	64	697	261
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	15	7	11	105	38	112	326	1418	210	64	697	261
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.68	0.32	1.00	0.73	0.27	1.00	1.00	1.74	0.26	1.00	2.00	1.00
Final Sat.:	1091	509	1600	1172	428	1600	1600	2787	413	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.09	0.09	0.07	0.20	0.51	0.51	0.04	0.22	0.16
OvlAdjV/S:						0.00						
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.656
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	0 1	2 0	1	0 1	2 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	103	21	75	151	9	96	153	776	54	31	1097	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	103	21	75	151	9	96	153	776	54	31	1097	200
Added Vol:	8	0	16	16	0	8	16	56	16	33	107	33
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	111	21	91	167	9	104	169	832	70	64	1204	233
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	115	22	94	173	9	107	175	860	72	66	1244	241
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	115	22	94	173	9	107	175	860	72	66	1244	241
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	115	22	94	173	9	107	175	860	72	66	1244	241
OvlAdjVol:						20						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.84	0.16	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	3200	2952	248	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.01	0.06	0.05	0.01	0.07	0.05	0.29	0.29	0.04	0.39	0.15
OvlAdjV/S:						0.01						
Crit Moves:			****	****				****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Added Vol:	0	0	0		0	0	0		0	89	0		0	173	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		0	1118	0		0	1455	14	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93	
PHF Volume:	0	0	0		0	0	0		0	1197	0		0	1558	15	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		0	1197	0		0	1558	15	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1976	2770	599		2156	2755	779		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	55	20	450		42	20	343		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	55	20	450		42	20	343		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.814
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 70 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0	2	0 1	1	0	2	0 1	1	0	2	1 0	1	0	2	1 0
Volume Module:																
Base Vol:	234	775	63		160	550	158		163	963	214		84	684	112	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	234	775	63		160	550	158		163	963	214		84	684	112	
Added Vol:	26	6	24		0	9	49		64	195	52		4	144	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	260	781	87		160	559	207		227	1158	266		88	828	112	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	269	809	90		166	579	215		235	1200	276		91	858	116	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	269	809	90		166	579	215		235	1200	276		91	858	116	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	269	809	90		166	579	215		235	1200	276		91	858	116	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.44	0.56		1.00	2.64	0.36	
Final Sat.:	1600	3200	1600		1600	3200	1600		1600	3903	897		1600	4228	572	
Capacity Analysis Module:																
Vol/Sat:	0.17	0.25	0.06		0.10	0.18	0.13		0.15	0.31	0.31		0.06	0.20	0.20	
Crit Moves:	****					****				****			****			

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.971
Loss Time (sec): 6 Average Delay (sec/veh): 29.9
Optimal Cycle: 165 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0 1! 0	1	0	2 1 0	1	0	3 0 1
Volume Module:												
Base Vol:	1	0	83	923	12	536	0	1796	72	18	576	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	0	83	923	12	536	0	1796	72	18	576	116
Added Vol:	0	0	0	72	0	64	0	219	0	0	84	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	83	995	12	600	0	2015	72	18	660	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00
PHF Volume:	1	0	86	1032	12	622	0	2090	75	19	685	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	86	1032	12	622	0	2090	75	19	685	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	1	0	86	1032	12	622	0	2090	75	19	685	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	1.00	0.87	0.92	0.92	0.92	1.00	0.91	0.91	0.95	0.91	1.00
Lanes:	0.01	0.00	0.99	1.62	0.01	1.37	0.00	2.90	0.10	1.00	3.00	1.00
Final Sat.:	20	0	1628	2809	26	2385	0	4983	178	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.05	0.37	0.48	0.26	0.00	0.42	0.42	0.01	0.13	0.00
Crit Moves:					****			****		****		
Green/Cycle:	0.00	0.00	0.00	0.50	0.50	0.50	0.00	0.43	0.43	0.01	0.44	0.00
Volume/Cap:	xxxx	0.00	xxxx	0.74	0.97	0.52	0.00	0.97	0.97	0.97	0.30	0.00
Delay/Veh:	0.0	0.0	0.0	21.3	39.8	17.3	0.0	40.7	40.7	238.1	18.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	21.3	39.8	17.3	0.0	40.7	40.7	238.1	18.0	0.0
LOS by Move:	A	A	A	C	D	B	A	D	D	F	B	A
HCM2kAvgQ:	2	0	2	25	2	13	0	30	30	2	5	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.700
Loss Time (sec): 8 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2 0 0	0	0	1 1 0	1	0	0 0 1	0	0	0 0 0
Volume Module:												
Base Vol:	418	1243	0	0	808	115	81	0	407	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	418	1243	0	0	808	115	81	0	407	0	0	0
Added Vol:	3	105	0	0	107	0	0	0	7	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	421	1348	0	0	915	115	81	0	414	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	449	1439	0	0	977	123	86	0	442	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	449	1439	0	0	977	123	86	0	442	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	449	1439	0	0	977	123	86	0	442	0	0	0
OvlAdjVol:									217			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.78	0.22	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	2843	357	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.14	0.45	0.00	0.00	0.34	0.34	0.05	0.00	0.28	0.00	0.00	0.00
OvlAdjV/S:									0.14			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.599
Loss Time (sec):	6	Average Delay (sec/veh):	9.8
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	0	1	0	2	1 1
Volume Module:												
Base Vol:	123	0	289	0	0	0	0	2097	621	0	969	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	123	0	289	0	0	0	0	2097	621	0	969	0
Added Vol:	61	0	42	0	0	0	0	90	113	0	151	280
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	184	0	331	0	0	0	0	2187	734	0	1120	280
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00	0.96	0.96	0.96
PHF Volume:	191	0	344	0	0	0	0	2276	0	0	1165	291
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	191	0	344	0	0	0	0	2276	0	0	1165	291
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	191	0	344	0	0	0	0	2276	0	0	1165	291
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.88	0.88
Lanes:	1.36	0.00	1.64	0.00	0.00	0.00	1.00	3.00	1.00	0.00	2.40	0.60
Final Sat.:	2289	0	2771	0	0	0	1900	5187	1729	0	4025	1006
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.12	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.29	0.29
Crit Moves:			****					****				
Green/Cycle:	0.21	0.00	0.21	0.00	0.00	0.00	0.00	0.73	0.00	0.00	0.73	0.73
Volume/Cap:	0.40	0.00	0.60	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.40	0.40
Delay/Veh:	34.5	0.0	37.0	0.0	0.0	0.0	0.0	6.6	0.0	0.0	5.1	5.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.5	0.0	37.0	0.0	0.0	0.0	0.0	6.6	0.0	0.0	5.1	5.1
LOS by Move:	C		A D	A		A	A		A	A		A
HCM2kAvgQ:	4	0	7	0	0	0	0	13	0	0	6	6

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.775
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 0 1	2	0	2 0 0	0	0	0 0 0	2	0	0 0 2
Volume Module:												
Base Vol:	0	1712	118	106	1120	0	0	0	0	136	0	161
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1712	118	106	1120	0	0	0	0	136	0	161
Added Vol:	0	77	36	70	50	0	0	0	0	18	0	35
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1789	154	176	1170	0	0	0	0	154	0	196
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1877	162	185	1228	0	0	0	0	162	0	206
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1877	162	185	1228	0	0	0	0	162	0	206
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1877	162	185	1228	0	0	0	0	162	0	206
OvlAdjVol:												21
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	3200	3200	0	0	0	0	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.59	0.10	0.06	0.38	0.00	0.00	0.00	0.00	0.05	0.00	0.06
OvlAdjV/S:												0.01
Crit Moves:		****			****						****	

EXISTING PLUS 2025 CUMULATIVE PLUS PROJECT CONDITIONS

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.813
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	0 1!	0 0	1	0 2	0 1	1	0 2	1 0
Volume Module:												
Base Vol:	594	4	140	18	10	12	4	1170	436	78	1018	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	594	4	140	18	10	12	4	1170	436	78	1018	3
Added Vol:	6	0	15	0	0	0	0	141	6	5	168	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	600	4	155	18	10	12	4	1311	442	83	1186	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	651	4	168	20	11	13	4	1423	480	90	1288	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	651	4	168	20	11	13	4	1423	480	90	1288	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	651	4	168	20	11	13	4	1423	480	90	1288	3
OvlAdjVol:									152			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.99	0.01	1.00	0.45	0.25	0.30	1.00	2.00	1.00	1.00	2.99	0.01
Final Sat.:	3179	21	1600	720	400	480	1600	3200	1600	1600	4788	12
Capacity Analysis Module:												
Vol/Sat:	0.20	0.20	0.11	0.03	0.03	0.03	0.00	0.44	0.30	0.06	0.27	0.27
OvlAdjV/S:									0.10			
Crit Moves:	****					****		****		****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.766
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	268	27	102	22	45	19	7	1045	292	53	790	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	268	27	102	22	45	19	7	1045	292	53	790	14
Added Vol:	0	0	25	0	0	0	0	170	0	5	175	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	268	27	127	22	45	19	7	1215	292	58	965	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	287	29	136	24	48	20	7	1299	312	62	1032	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	287	29	136	24	48	20	7	1299	312	62	1032	15
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	287	29	136	24	48	20	7	1299	312	62	1032	15
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.82	0.18	1.00	0.33	0.67	1.00	1.00	1.61	0.39	1.00	2.00	1.00
Final Sat.:	2907	293	1600	525	1075	1600	1600	2580	620	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.08	0.04	0.04	0.01	0.00	0.50	0.50	0.04	0.32	0.01
Crit Moves:	****			****				****		****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.653
Loss Time (sec):	6	Average Delay (sec/veh):	24.6
Optimal Cycle:	37	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2.0	1	1	0 2.0	0 1	0	1 0.0	0 1	0	0 1.0	0 0
Volume Module:												
Base Vol:	144	1051	17	0	812	140	437	6	310	12	3	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	144	1051	17	0	812	140	437	6	310	12	3	8
Added Vol:	67	15	0	0	27	0	0	0	64	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	211	1066	17	0	839	140	437	6	374	12	3	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	213	1078	17	0	849	142	442	6	378	12	3	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	213	1078	17	0	849	142	442	6	378	12	3	8
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	213	1078	17	0	849	142	442	6	378	12	3	8
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	1.00	0.95	0.85	0.95	0.95	0.85	0.93	0.93	0.93
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.99	0.01	1.00	0.52	0.13	0.35
Final Sat.:	1805	3610	1615	1900	3610	1615	1786	25	1615	921	230	614
Capacity Analysis Module:												
Vol/Sat:	0.12	0.30	0.01	0.00	0.24	0.09	0.25	0.25	0.23	0.01	0.01	0.01
Crit Moves:	****				****			****			****	
Green/Cycle:	0.18	0.54	0.54	0.00	0.36	0.36	0.38	0.38	0.38	0.02	0.02	0.02
Volume/Cap:	0.65	0.55	0.02	0.00	0.65	0.24	0.65	0.65	0.62	0.65	0.65	0.65
Delay/Veh:	42.7	15.4	10.7	0.0	28.0	22.7	27.9	27.9	27.1	84.6	84.6	84.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.7	15.4	10.7	0.0	28.0	22.7	27.9	27.9	27.1	84.6	84.6	84.6
LOS by Move:	D	B	B	A	C	C	C	C	C	F	F	F
HCM2kAvgQ:	6	11	0	0	12	3	12	12	10	2	2	2

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Note: Queue reported is the number of cars per lane.

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Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.983
Loss Time (sec):	6	Average Delay (sec/veh):	41.3
Optimal Cycle:	180	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 0	0	0 1	1 0	1	0 1!	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	41	873	0	0	927	223	349	0	533	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	873	0	0	927	223	349	0	533	0	0	0
Added Vol:	14	82	0	0	91	0	0	0	200	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	55	955	0	0	1018	223	349	0	733	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	55	955	0	0	1018	223	349	0	733	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	955	0	0	1018	223	349	0	733	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	55	955	0	0	1018	223	349	0	733	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.92	0.92	0.88	1.00	0.88	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.64	0.36	1.19	0.00	0.81	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2881	631	2002	0	1356	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.26	0.00	0.00	0.35	0.35	0.17	0.00	0.54	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.03	0.39	0.00	0.00	0.36	0.36	0.55	0.00	0.55	0.00	0.00	0.00
Volume/Cap:	0.98	0.68	0.00	0.00	0.98	0.98	0.32	0.00	0.98	0.00	0.00	0.00
Delay/Veh:	162.5	26.6	0.0	0.0	53.0	53.0	12.3	0.0	45.1	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	162.5	26.6	0.0	0.0	53.0	53.0	12.3	0.0	45.1	0.0	0.0	0.0
LOS by Move:	F	C	A	A	D	D	B	A	D	A	A	A
HCM2kAvgQ:	4	14	0	0	23	23	5	0	34	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.012
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 0	1 0	1	0 1	0 1
Volume Module:												
Base Vol:	130	1183	442	221	1365	214	158	93	244	115	48	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1183	442	221	1365	214	158	93	244	115	48	76
Added Vol:	0	154	21	16	173	0	0	4	0	4	1	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	130	1337	463	237	1538	214	158	97	244	119	49	79
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	139	1428	495	253	1643	229	169	104	261	127	52	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	1428	495	253	1643	229	169	104	261	127	52	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	139	1428	495	253	1643	229	169	104	261	127	52	84
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.28	0.72	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	455	1145	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.45	0.31	0.16	0.51	0.14	0.11	0.23	0.23	0.08	0.03	0.05
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.011
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	236	1291	628	412	1070	187	284	757	153	110	446	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	236	1291	628	412	1070	187	284	757	153	110	446	185
Added Vol:	0	151	95	0	170	7	25	198	2	19	174	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	236	1442	723	412	1240	194	309	955	155	129	620	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	245	1494	749	427	1285	201	320	990	161	134	642	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	1494	749	427	1285	201	320	990	161	134	642	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	245	1494	749	427	1285	201	320	990	161	134	642	192
OvlAdjVol:			682						38			0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.59	0.41	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3200	4800	1600	3200	4151	649	3200	3200	1600	3200	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.31	0.47	0.13	0.31	0.31	0.10	0.31	0.10	0.04	0.20	0.12
OvlAdjV/S:			0.43						0.02			0.00
Crit Moves:			****	****				****		****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.138
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	159	1684	70	1	1120	277	407	76	416	113	108	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	1684	70	1	1120	277	407	76	416	113	108	12
Added Vol:	0	182	0	4	179	9	43	0	0	0	0	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	159	1866	70	5	1299	286	450	76	416	113	108	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	184	2155	81	6	1500	330	520	88	480	130	125	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	2155	81	6	1500	330	520	88	480	130	125	38
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	2155	81	6	1500	330	520	88	480	130	125	38
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.71	0.29	1.00	1.34	1.27	0.39
Final Sat.:	1600	3200	1600	1600	3200	1600	2738	462	1600	2138	2040	622
Capacity Analysis Module:												
Vol/Sat:	0.11	0.67	0.05	0.00	0.47	0.21	0.19	0.19	0.30	0.06	0.06	0.06
OvlAdjV/S:						0.00						
Crit Moves:		****		****					****			****

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.909
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	105	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	291	1364	364	207	938	396	401	500	169	167	1116	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	291	1364	364	207	938	396	401	500	169	167	1116	139
Added Vol:	4	101	178	46	107	26	75	10	18	269	7	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	295	1465	542	253	1045	422	476	510	187	436	1123	145
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	311	1545	0	267	1102	0	502	538	0	460	1185	153
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	311	1545	0	267	1102	0	502	538	0	460	1185	153
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	311	1545	0	267	1102	0	502	538	0	460	1185	153
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.32	0.00	0.08	0.23	0.00	0.16	0.11	0.00	0.14	0.25	0.10
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	1.082
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 1	1	0 3	0 1	2	0 1	0 1	1	0 1	0 1
Volume Module:												
Base Vol:	116	2253	0	0	1002	107	39	0	36	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	116	2253	0	0	1002	107	39	0	36	0	0	0
Added Vol:	168	205	353	118	186	84	17	0	34	99	0	33
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	284	2458	353	118	1188	191	56	0	70	99	0	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	300	2598	373	125	1256	202	59	0	74	105	0	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	300	2598	373	125	1256	202	59	0	74	105	0	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	300	2598	373	125	1256	202	59	0	74	105	0	35
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	3200	3200	1600	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.81	0.23	0.08	0.26	0.13	0.02	0.00	0.05	0.07	0.00	0.02
Crit Moves:		****			****					****	****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 1.073
Loss Time (sec): 10 Average Delay (sec/veh): 54.9
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Ovl				Include				Ovl				Ovl			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	0	1	2	0 1	1	0	1	0 0	1	0	1	0	1! 0	1
Volume Module:																
Base Vol:	0	1796	320		349	679	2		0	1	1		262	0	572	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	1796	320		349	679	2		0	1	1		262	0	572	
Added Vol:	0	497	0		99	219	0		0	0	0		0	0	229	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	2293	320		448	898	2		0	1	1		262	0	801	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94	
PHF Volume:	0	2434	340		476	953	2		0	1	1		278	0	850	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	2434	340		476	953	2		0	1	1		278	0	850	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	2434	340		476	953	2		0	1	1		278	0	850	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.95	0.85		0.92	0.95	0.95		1.00	0.93	0.93		0.88	1.00	0.88	
Lanes:	1.00	2.00	1.00		2.00	1.99	0.01		1.00	0.50	0.50		1.25	0.00	1.75	
Final Sat.:	1900	3610	1615		3502	3602	8		1900	879	879		2075	0	2920	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.67	0.21		0.14	0.26	0.26		0.00	0.00	0.00		0.13	0.00	0.29	
Crit Moves:		****			****				****						****	
Green/Cycle:	0.00	0.63	0.77		0.13	0.76	0.76		0.00	0.00	0.00		0.14	0.00	0.27	
Volume/Cap:	0.00	1.07	0.27		1.07	0.35	0.35		0.00	0.93	0.93		0.93	0.00	1.07	
Delay/Veh:	0.0	60.5	3.4		107.3	4.2	4.2		0.0	580	580.1		55.3	0.0	85.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	60.5	3.4		107.3	4.2	4.2		0.0	580	580.1		55.3	0.0	85.9	
LOS by Move:	A	E	A		F	A	A		A	F	F		E	A	F	
HCM2kAvgQ:	0	47	3		11	5	5		0	1	1		11	0	24	

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 1.062
Loss Time (sec): 10 Average Delay (sec/veh): 60.3
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0	0 2	0	1	1	0 2	0	0	2	0 0	0	1	0	0	0 0	0
Volume Module:																
Base Vol:	0	1177	267		312	676	0		905	0	281		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	1177	267		312	676	0		905	0	281		0	0	0	
Added Vol:	0	137	0		64	155	0		360	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	1314	267		376	831	0		1265	0	281		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.98	0.98	0.98		0.98	0.98	0.98		0.98	0.98	0.98		0.98	0.98	0.98	
PHF Volume:	0	1345	273		385	851	0		1295	0	288		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	1345	273		385	851	0		1295	0	288		0	0	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	0	1345	273		385	851	0		1295	0	288		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.95	0.85		0.95	0.95	1.00		0.92	1.00	0.85		1.00	1.00	1.00	
Lanes:	0.00	2.00	1.00		1.00	2.00	0.00		2.00	0.00	1.00		0.00	0.00	0.00	
Final Sat.:	0	3610	1615		1805	3610	0		3502	0	1615		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.37	0.17		0.21	0.24	0.00		0.37	0.00	0.18		0.00	0.00	0.00	
Crit Moves:		****			****				****							
Green/Cycle:	0.00	0.35	0.35		0.20	0.55	0.00		0.35	0.00	0.35		0.00	0.00	0.00	
Volume/Cap:	0.00	1.06	0.48		1.06	0.43	0.00		1.06	0.00	0.51		0.00	0.00	0.00	
Delay/Veh:	0.0	75.9	26.0		104.5	13.3	0.0		76.4	0.0	26.6		0.0	0.0	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	75.9	26.0		104.5	13.3	0.0		76.4	0.0	26.6		0.0	0.0	0.0	
LOS by Move:	A	E	C		F	B	A		E	A	C		A	A	A	
HCM2kAvgQ:	0	32	7		17	8	0		30	0	7		0	0	0	

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.832
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	75	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Ovl				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0	1 0	0	1	0	1 0	0	1	1	0 1	1	0	1	0 2	0	1
Volume Module:																
Base Vol:	126	14	28		173	11	246		35	980	218		6	830	80	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	126	14	28		173	11	246		35	980	218		6	830	80	
Added Vol:	9	0	10		10	0	9		45	204	45		50	176	50	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	135	14	38		183	11	255		80	1184	263		56	1006	130	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.96	0.96	0.96		0.96	0.96	0.96		0.96	0.96	0.96		0.96	0.96	0.96	
PHF Volume:	141	15	40		191	11	266		84	1236	275		58	1050	136	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	141	15	40		191	11	266		84	1236	275		58	1050	136	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	141	15	40		191	11	266		84	1236	275		58	1050	136	
OvlAdjVol:							183									
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.91	0.09	1.00		0.94	0.06	1.00		1.00	1.64	0.36		1.00	2.00	1.00	
Final Sat.:	1450	150	1600		1509	91	1600		1600	2618	582		1600	3200	1600	
Capacity Analysis Module:																
Vol/Sat:	0.10	0.10	0.02		0.13	0.13	0.17		0.05	0.47	0.47		0.04	0.33	0.08	
OvlAdjV/S:							0.11									
Crit Moves:		****				****				****				****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.701
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Ovl				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	0	1	2	0 1	0	1	2	0 1	1	0	1	0 2	0	1
Volume Module:																
Base Vol:	21	13	21		80	18	74		381	725	130		119	952	424	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	21	13	21		80	18	74		381	725	130		119	952	424	
Added Vol:	8	0	16		16	0	8		38	149	38		79	261	79	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	29	13	37		96	18	82		419	874	168		198	1213	503	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94	
PHF Volume:	31	14	39		102	19	88		447	933	179		211	1295	537	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	31	14	39		102	19	88		447	933	179		211	1295	537	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	31	14	39		102	19	88		447	933	179		211	1295	537	
OvlAdjVol:							0									
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	1.00	1.00		2.00	1.00	1.00		2.00	1.68	0.32		1.00	2.00	1.00	
Final Sat.:	1600	1600	1600		3200	1600	1600		3200	2684	516		1600	3200	1600	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.01	0.02		0.03	0.01	0.05		0.14	0.35	0.35		0.13	0.40	0.34	
OvlAdjV/S:							0.00									
Crit Moves:			****		****					****				****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[20.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		4	847	0		0	1530	199	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		4	847	0		0	1530	199	
Added Vol:	0	0	0		0	0	0		0	180	0		0	418	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		4	1027	0		0	1948	199	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	0	0	0		0	0	0		4	1058	0		0	2006	205	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		4	1058	0		0	2006	205	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	2069	3277	529		2543	3072	1003		2211	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Potent Cap.:	48	9	500		23	12	244		240	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Move Cap.:	47	9	500		22	12	244		240	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		0.02	xxxx	xxxx	xxxx	xxxx	xxxx		
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		20.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*		*	*	*		C	*	*	*	*	*		
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.168
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0		
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	2	1	0	1	0	2	1	0
Volume Module:																				
Base Vol:	172	572	45			99	586	288			111	327	157			37	1179	98		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	172	572	45			99	586	288			111	327	157			37	1179	98		
Added Vol:	130	38	4			0	120	174			168	496	154			23	527	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	302	610	49			99	706	462			279	823	311			60	1706	98		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.96	0.96	0.96			0.96	0.96	0.96			0.96	0.96	0.96			0.96	0.96	0.96		
PHF Volume:	314	634	51			103	734	480			290	856	323			62	1773	102		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	314	634	51			103	734	480			290	856	323			62	1773	102		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	314	634	51			103	734	480			290	856	323			62	1773	102		
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600			1600	1600	1600			1600	1600	1600			1600	1600	1600		
Adjustment:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Lanes:	1.00	2.00	1.00			1.00	2.00	1.00			1.00	2.18	0.82			1.00	2.84	0.16		
Final Sat.:	1600	3200	1600			1600	3200	1600			1600	3484	1316			1600	4539	261		
Capacity Analysis Module:																				
Vol/Sat:	0.20	0.20	0.03			0.06	0.23	0.30			0.18	0.25	0.25			0.04	0.39	0.39		
Crit Moves:	****							****			****							****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.095
Loss Time (sec):	6	Average Delay (sec/veh):	43.7
Optimal Cycle:	180	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0 0 1	1	0	1! 0 1	0	0	2 1 0	1	0	3 0 1
Volume Module:												
Base Vol:	0	0	2	604	3	745	0	541	10	7	1225	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	2	604	3	745	0	541	10	7	1225	43
Added Vol:	0	0	0	257	0	268	0	499	0	0	282	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	2	861	3	1013	0	1040	10	7	1507	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.00
PHF Volume:	0	0	2	1054	4	1240	0	1273	12	9	1845	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	2	1054	4	1240	0	1273	12	9	1845	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	0	2	1054	4	1240	0	1273	12	9	1845	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.90	0.90	0.90	1.00	0.91	0.91	0.95	0.91	1.00
Lanes:	0.00	0.00	1.00	1.45	0.01	1.54	0.00	2.97	0.03	1.00	3.00	1.00
Final Sat.:	0	0	1644	2490	5	2628	0	5132	49	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.42	0.67	0.47	0.00	0.25	0.25	0.00	0.36	0.00
Crit Moves:					****		****				****	
Green/Cycle:	0.00	0.00	0.00	0.62	0.62	0.62	0.00	0.32	0.32	0.01	0.32	0.00
Volume/Cap:	0.00	0.00	xxxx	0.69	1.09	0.77	0.00	0.78	0.78	0.78	1.10	0.00
Delay/Veh:	0.0	0.0	0.0	13.4	70.3	15.2	0.0	33.3	33.3	198.9	86.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	13.4	70.3	15.2	0.0	33.3	33.3	198.9	86.6	0.0
LOS by Move:	A	A	A	B	E	B	A	C	C	F	F	A
HCM2kAvgQ:	0	0	0	22	11	16	0	15	15	1	32	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.199
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2 0 0	0	0	1 1 0	1	0	0 0 1	0	0	0 0 0
Volume Module:												
Base Vol:	397	739	0	0	1653	181	86	0	561	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	397	739	0	0	1653	181	86	0	561	0	0	0
Added Vol:	3	99	0	0	307	0	0	0	16	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	400	838	0	0	1960	181	86	0	577	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	435	911	0	0	2130	197	93	0	627	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	435	911	0	0	2130	197	93	0	627	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	435	911	0	0	2130	197	93	0	627	0	0	0
OvlAdjVol:									410			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.83	0.17	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	3200	0	0	2929	271	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.14	0.28	0.00	0.00	0.73	0.73	0.06	0.00	0.39	0.00	0.00	0.00
OvlAdjV/S:									0.26			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.697
Loss Time (sec):	6	Average Delay (sec/veh):	18.0
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	1	0	2	1	1	0	0	2	1	0
Volume Module:												
Base Vol:	385	0	274	0	0	0	0	806	276	0	1599	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	385	0	274	0	0	0	0	806	276	0	1599	0
Added Vol:	245	0	114	0	0	0	0	271	244	0	73	61
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	630	0	388	0	0	0	0	1077	520	0	1672	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.00	0.85	0.85	0.85
PHF Volume:	738	0	454	0	0	0	0	1261	0	0	1958	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	738	0	454	0	0	0	0	1261	0	0	1958	71
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	738	0	454	0	0	0	0	1261	0	0	1958	71
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Lanes:	1.62	0.00	1.38	0.00	0.00	0.00	1.00	3.00	1.00	0.00	2.89	0.11
Final Sat.:	2813	0	2400	0	0	0	1900	5187	1729	0	4979	182
Capacity Analysis Module:												
Vol/Sat:	0.26	0.00	0.19	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.39	0.39
Crit Moves:	****										****	
Green/Cycle:	0.38	0.00	0.38	0.00	0.00	0.00	0.00	0.56	0.00	0.00	0.56	0.56
Volume/Cap:	0.70	0.00	0.50	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.70	0.70
Delay/Veh:	27.7	0.0	24.2	0.0	0.0	0.0	0.0	12.7	0.0	0.0	16.4	16.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.7	0.0	24.2	0.0	0.0	0.0	0.0	12.7	0.0	0.0	16.4	16.4
LOS by Move:	C		C	A	A	A	A	B	A	A	B	B
HCM2kAvgQ:	13	0	8	0	0	0	0	8	0	0	17	17

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.748
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2	0	1	2	0	2	0	0	0	0	0	0	2	0	0	0	2
Volume Module:												
Base Vol:	0	1047	437	643	1700	0	0	0	0	134	0	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1047	437	643	1700	0	0	0	0	134	0	75
Added Vol:	0	72	86	166	172	0	0	0	0	17	0	33
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1119	523	809	1872	0	0	0	0	151	0	108
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	1151	538	832	1926	0	0	0	0	155	0	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1151	538	832	1926	0	0	0	0	155	0	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1151	538	832	1926	0	0	0	0	155	0	111
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	3200	3200	0	0	0	0	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.36	0.34	0.26	0.60	0.00	0.00	0.00	0.00	0.05	0.00	0.03
OvlAdjV/S:												0.00
Crit Moves:		****		****						****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.755
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	0 1!	0 0	1	0 2	0 1	1	0 2	1 0
Volume Module:												
Base Vol:	570	9	191	6	3	13	6	1118	481	129	960	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	570	9	191	6	3	13	6	1118	481	129	960	12
Added Vol:	4	0	14	0	0	0	0	76	5	6	124	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	574	9	205	6	3	13	6	1194	486	135	1084	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	593	9	212	6	3	13	6	1233	502	139	1120	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	593	9	212	6	3	13	6	1233	502	139	1120	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	593	9	212	6	3	13	6	1233	502	139	1120	12
OvlAdjVol:									201			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.97	0.03	1.00	0.27	0.14	0.59	1.00	2.00	1.00	1.00	2.97	0.03
Final Sat.:	3151	49	1600	436	218	945	1600	3200	1600	1600	4747	53
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.13	0.01	0.01	0.01	0.00	0.39	0.31	0.09	0.24	0.24
OvlAdjV/S:									0.13			
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.677
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	254	42	132	17	22	5	19	999	161	107	890	19
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	254	42	132	17	22	5	19	999	161	107	890	19
Added Vol:	0	0	20	0	0	0	0	101	1	10	136	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	254	42	152	17	22	5	19	1100	162	117	1026	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	258	43	155	17	22	5	19	1119	165	119	1044	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	258	43	155	17	22	5	19	1119	165	119	1044	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	258	43	155	17	22	5	19	1119	165	119	1044	19
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.72	0.28	1.00	0.44	0.56	1.00	1.00	1.74	0.26	1.00	2.00	1.00
Final Sat.:	2746	454	1600	697	903	1600	1600	2789	411	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.10	0.02	0.02	0.00	0.01	0.40	0.40	0.07	0.33	0.01
Crit Moves:			****		****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.828
Loss Time (sec):	6	Average Delay (sec/veh):	30.2
Optimal Cycle:	65	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	0	1 0	0 1	0	0 1!	0 0
Volume Module:												
Base Vol:	389	1090	34	3	815	385	282	11	117	18	17	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	389	1090	34	3	815	385	282	11	117	18	17	6
Added Vol:	187	14	0	0	20	0	0	0	52	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	576	1104	34	3	835	385	282	11	169	18	17	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	610	1169	36	3	885	408	299	12	179	19	18	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	610	1169	36	3	885	408	299	12	179	19	18	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	610	1169	36	3	885	408	299	12	179	19	18	6
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.96	0.96	0.96
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.96	0.04	1.00	0.44	0.41	0.15
Final Sat.:	1805	3610	1615	1805	3610	1615	1745	68	1615	800	756	267
Capacity Analysis Module:												
Vol/Sat:	0.34	0.32	0.02	0.00	0.25	0.25	0.17	0.17	0.11	0.02	0.02	0.02
Crit Moves:	****				****		****				****	
Green/Cycle:	0.41	0.70	0.70	0.00	0.30	0.30	0.21	0.21	0.21	0.03	0.03	0.03
Volume/Cap:	0.83	0.46	0.03	0.46	0.83	0.85	0.83	0.83	0.54	0.83	0.83	0.83
Delay/Veh:	34.2	6.8	4.6	91.9	38.3	47.0	52.1	52.1	37.1	113.3	113	113.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.2	6.8	4.6	91.9	38.3	47.0	52.1	52.1	37.1	113.3	113	113.3
LOS by Move:	C	A	A	F	D	D	D	D	D	F	F	F
HCM2kAvgQ:	17	8	0	1	16	15	12	12	6	3	3	3

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Note: Queue reported is the number of cars per lane.

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Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.766
Loss Time (sec):	6	Average Delay (sec/veh):	21.5
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 0	0	0 1	1 0	1	0 1!	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	52	1273	0	0	668	301	301	0	186	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	52	1273	0	0	668	301	301	0	186	0	0	0
Added Vol:	26	201	0	0	73	0	0	0	127	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	78	1474	0	0	741	301	301	0	313	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	83	1563	0	0	786	319	319	0	332	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1563	0	0	786	319	319	0	332	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	1563	0	0	786	319	319	0	332	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.91	0.91	0.90	1.00	0.90	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.42	0.58	1.32	0.00	0.68	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2457	998	2270	0	1157	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.43	0.00	0.00	0.32	0.32	0.14	0.00	0.29	0.00	0.00	0.00
Crit Moves:		****		****					****			
Green/Cycle:	0.07	0.57	0.00	0.00	0.49	0.49	0.37	0.00	0.37	0.00	0.00	0.00
Volume/Cap:	0.65	0.77	0.00	0.00	0.65	0.65	0.38	0.00	0.77	0.00	0.00	0.00
Delay/Veh:	56.2	18.4	0.0	0.0	19.7	19.7	22.9	0.0	31.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.2	18.4	0.0	0.0	19.7	19.7	22.9	0.0	31.6	0.0	0.0	0.0
LOS by Move:	E	B	A	A	B	B	C	A	C	A	A	A
HCM2kAvgQ:	4	21	0	0	13	13	5	0	15	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.939
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	124	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 0	1 0	1	0 1	0 1
Volume Module:												
Base Vol:	80	1628	109	81	1067	96	103	16	113	123	28	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	1628	109	81	1067	96	103	16	113	123	28	98
Added Vol:	0	242	17	13	125	0	0	3	0	9	1	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	1870	126	94	1192	96	103	19	113	132	29	104
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	83	1942	131	98	1238	100	107	20	117	137	30	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1942	131	98	1238	100	107	20	117	137	30	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	1942	131	98	1238	100	107	20	117	137	30	108
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.14	0.86	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	230	1370	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.61	0.08	0.06	0.39	0.06	0.07	0.09	0.09	0.09	0.02	0.07
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.844
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 78 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Ovl				Include				Ovl				Ovl			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0 3	0	1	2	0 2	1	0	2	0 2	0	1	2	0 2	0	1
Volume Module:																
Base Vol:	327	1150	288		209	832	262		346	651	292		359	659	326	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	327	1150	288		209	832	262		346	651	292		359	659	326	
Added Vol:	2	238	74		0	123	11		21	117	1		43	145	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	329	1388	362		209	955	273		367	768	293		402	804	326	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	338	1427	372		215	982	281		377	789	301		413	826	335	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	338	1427	372		215	982	281		377	789	301		413	826	335	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	338	1427	372		215	982	281		377	789	301		413	826	335	
OvlAdjVol:			165								132				228	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	3.00	1.00		2.00	2.33	0.67		2.00	2.00	1.00		2.00	2.00	1.00	
Final Sat.:	3200	4800	1600		3200	3733	1067		3200	3200	1600		3200	3200	1600	
Capacity Analysis Module:																
Vol/Sat:	0.11	0.30	0.23		0.07	0.26	0.26		0.12	0.25	0.19		0.13	0.26	0.21	
OvlAdjV/S:			0.10								0.08				0.14	
Crit Moves:	****					****				****				****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.001
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Ovl				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	0	1	1	0 2	0	1	1	1 0	0	1	1	1 0	1	0
Volume Module:																
Base Vol:	233	1535	153		7	1259	190		245	63	350		85	35	12	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	233	1535	153		7	1259	190		245	63	350		85	35	12	
Added Vol:	0	262	0		9	141	17		34	0	0		0	0	17	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	233	1797	153		16	1400	207		279	63	350		85	35	29	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92	
PHF Volume:	252	1945	166		17	1515	224		302	68	379		92	38	31	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	252	1945	166		17	1515	224		302	68	379		92	38	31	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	252	1945	166		17	1515	224		302	68	379		92	38	31	
OvlAdjVol:							0									
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.63	0.37	1.00		1.72	0.70	0.58	
Final Sat.:	1600	3200	1600		1600	3200	1600		2611	589	1600		2738	1128	935	
Capacity Analysis Module:																
Vol/Sat:	0.16	0.61	0.10		0.01	0.47	0.14		0.12	0.12	0.24		0.03	0.03	0.03	
OvlAdjV/S:							0.00									
Crit Moves:	****					****					****		****			

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.035
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Added Vol:	18	164	179	7	80	54	49	6	10	207	9	48
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	279	1204	358	392	1122	263	715	1537	297	635	711	292
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	292	1262	0	411	1176	0	749	1611	0	666	745	306
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	292	1262	0	411	1176	0	749	1611	0	666	745	306
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	292	1262	0	411	1176	0	749	1611	0	666	745	306
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3200	4800	1600	3200	4800	1600	3200	4800	1600	3200	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.26	0.00	0.13	0.25	0.00	0.23	0.34	0.00	0.21	0.16	0.19
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	1.075
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 1	1	0 3	0 1	2	0 1	0 1	1	0 1	0 1
Volume Module:												
Base Vol:	33	1261	0	0	1567	50	172	0	94	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	1261	0	0	1567	50	172	0	94	0	0	0
Added Vol:	50	109	262	87	174	25	77	0	153	458	0	153
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	83	1370	262	87	1741	75	249	0	247	458	0	153
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	89	1476	282	94	1876	81	268	0	266	494	0	165
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	89	1476	282	94	1876	81	268	0	266	494	0	165
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	89	1476	282	94	1876	81	268	0	266	494	0	165
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	3200	3200	1600	1600	4800	1600	3200	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.46	0.18	0.06	0.39	0.05	0.08	0.00	0.17	0.31	0.00	0.10
Crit Moves:		****		****					****	****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 1.036
Loss Time (sec): 10 Average Delay (sec/veh): 40.4
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	2	0 1	1 0	1	0 0	1 0	1	0 1!	0 1
Volume Module:												
Base Vol:	1	799	283	610	1382	5	4	2	4	186	1	495
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	799	283	610	1382	5	4	2	4	186	1	495
Added Vol:	0	275	0	395	389	0	0	0	0	0	0	146
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	1074	283	1005	1771	5	4	2	4	186	1	641
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	1	1197	315	1120	1974	6	4	2	4	207	1	715
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	1197	315	1120	1974	6	4	2	4	207	1	715
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	1197	315	1120	1974	6	4	2	4	207	1	715
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.95	0.95	0.95	0.90	0.90	0.87	0.87	0.87
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.33	0.67	1.22	0.01	1.77
Final Sat.:	1805	3610	1615	3502	3600	10	1805	570	1140	2034	4	2946
Capacity Analysis Module:												
Vol/Sat:	0.00	0.33	0.20	0.32	0.55	0.55	0.00	0.00	0.00	0.10	0.28	0.24
Crit Moves:		****		****			****				****	
Green/Cycle:	0.00	0.32	0.58	0.31	0.63	0.63	0.00	0.01	0.01	0.26	0.27	0.58
Volume/Cap:	0.87	1.04	0.34	1.04	0.87	0.87	1.04	0.39	0.36	0.39	1.04	0.42
Delay/Veh:	686.0	70.2	11.1	71.6	19.3	19.3	499.5	63.3	61.0	30.5	76.4	11.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	686.0	70.2	11.1	71.6	19.3	19.3	499.5	63.3	61.0	30.5	76.4	11.9
LOS by Move:	F	E	B	E	B	B	F	E	E	C	E	B
HCM2kAvgQ:	0	24	5	21	26	26	1	1	1	5	22	7

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 1.006
Loss Time (sec): 10 Average Delay (sec/veh): 40.5
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 2	0 1	1	0 2	0 0	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	933	619	380	1294	0	169	0	176	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	933	619	380	1294	0	169	0	176	0	0	0
Added Vol:	0	62	0	274	115	0	213	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	995	619	654	1409	0	382	0	176	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	1054	656	693	1493	0	405	0	186	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1054	656	693	1493	0	405	0	186	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1054	656	693	1493	0	405	0	186	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.41	0.38	0.41	0.00	0.12	0.00	0.12	0.00	0.00	0.00
Crit Moves:			****	****			****					
Green/Cycle:	0.00	0.40	0.40	0.38	0.79	0.00	0.11	0.00	0.11	0.00	0.00	0.00
Volume/Cap:	0.00	0.72	1.01	1.01	0.53	0.00	1.01	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	0.0	26.9	66.6	66.7	4.1	0.0	90.6	0.0	111.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	26.9	66.6	66.7	4.1	0.0	90.6	0.0	111.6	0.0	0.0	0.0
LOS by Move:	A	C	E	E	A	A	F	A	F	A	A	A
HCM2kAvgQ:	0	15	28	24	8	0	11	0	10	0	0	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.798
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	6	7	1	94	38	102	303	1335	189	42	609	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	7	1	94	38	102	303	1335	189	42	609	237
Added Vol:	18	0	20	20	0	18	36	119	36	40	152	40
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	7	21	114	38	120	339	1454	225	82	761	277
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	24	7	21	115	38	121	343	1470	228	83	769	280
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	7	21	115	38	121	343	1470	228	83	769	280
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	7	21	115	38	121	343	1470	228	83	769	280
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.77	0.23	1.00	0.75	0.25	1.00	1.00	1.73	0.27	1.00	2.00	1.00
Final Sat.:	1239	361	1600	1200	400	1600	1600	2771	429	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.10	0.10	0.08	0.21	0.53	0.53	0.05	0.24	0.18
OvlAdjV/S:						0.00						
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.706
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	0 1	2	0 1	0 1	2	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	103	21	75	151	9	96	153	776	54	31	1097	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	103	21	75	151	9	96	153	776	54	31	1097	200
Added Vol:	15	0	31	31	0	15	30	99	30	63	202	63
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	118	21	106	182	9	111	183	875	84	94	1299	263
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	122	22	110	188	9	115	189	904	87	97	1342	272
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	22	110	188	9	115	189	904	87	97	1342	272
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	122	22	110	188	9	115	189	904	87	97	1342	272
OvlAdjVol:						20						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.82	0.18	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	3200	1600	1600	3200	2920	280	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.01	0.07	0.06	0.01	0.07	0.06	0.31	0.31	0.06	0.42	0.17
OvlAdjV/S:						0.01						
Crit Moves:			****	****				****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Added Vol:	0	0	0		0	0	0		0	162	0		0	328	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		0	1191	0		0	1610	14	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93	
PHF Volume:	0	0	0		0	0	0		0	1275	0		0	1724	15	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		0	1275	0		0	1724	15	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	2137	3014	638		2361	2999	862		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	43	14	424		30	14	302		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	43	14	424		30	14	302		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.922
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 112 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0	2	0 1	1	0	2	0 1	1	0	2	1 0	1	0	2	1 0
Volume Module:																
Base Vol:	234	775	63		160	550	158		163	963	214		84	684	112	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	234	775	63		160	550	158		163	963	214		84	684	112	
Added Vol:	56	136	24		0	73	95		132	401	112		4	281	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	290	911	87		160	623	253		295	1364	326		88	965	112	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	301	944	90		166	646	262		306	1413	338		91	1000	116	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	301	944	90		166	646	262		306	1413	338		91	1000	116	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	301	944	90		166	646	262		306	1413	338		91	1000	116	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.42	0.58		1.00	2.69	0.31	
Final Sat.:	1600	3200	1600		1600	3200	1600		1600	3874	926		1600	4301	499	
Capacity Analysis Module:																
Vol/Sat:	0.19	0.30	0.06		0.10	0.20	0.16		0.19	0.36	0.36		0.06	0.23	0.23	
Crit Moves:		****				****				****					****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.036
Loss Time (sec):	6	Average Delay (sec/veh):	38.3
Optimal Cycle:	180	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0 1! 0	1	0	2 1 0	1	0	3 0 1
Volume Module:												
Base Vol:	1	0	83	923	12	536	0	1796	72	18	576	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	0	83	923	12	536	0	1796	72	18	576	116
Added Vol:	0	0	0	72	0	127	0	425	0	0	158	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	83	995	12	663	0	2221	72	18	734	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00
PHF Volume:	1	0	86	1032	12	688	0	2304	75	19	761	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	86	1032	12	688	0	2304	75	19	761	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	1	0	86	1032	12	688	0	2304	75	19	761	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	1.00	0.87	0.91	0.91	0.91	1.00	0.91	0.91	0.95	0.91	1.00
Lanes:	0.01	0.00	0.99	1.60	0.01	1.39	0.00	2.91	0.09	1.00	3.00	1.00
Final Sat.:	20	0	1628	2760	25	2418	0	4999	162	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.05	0.37	0.50	0.28	0.00	0.46	0.46	0.01	0.15	0.00
Crit Moves:					****			****		****		
Green/Cycle:	0.00	0.00	0.00	0.49	0.49	0.49	0.00	0.44	0.44	0.01	0.45	0.00
Volume/Cap:	xxxx	0.00	xxxx	0.77	1.04	0.59	0.00	1.04	1.04	1.03	0.32	0.00
Delay/Veh:	0.0	0.0	0.0	22.8	57.8	18.8	0.0	56.8	56.8	272.9	17.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	22.8	57.8	18.8	0.0	56.8	56.8	272.9	17.5	0.0
LOS by Move:	A	A	A	C	E	B	A	E	E	F	B	A
HCM2kAvgQ:	2	0	2	27	2	15	0	37	37	2	5	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.739
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Protected			Protected			Protected				Protected			
Rights:	Include			Include			Ovl				Include			
Min. Green:	0	0	0	0	0	0	0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	2 0 0	0	0	1 1 0	1	0	0 0 1		0	0	0 0 0	
Volume Module:														
Base Vol:	418	1243	0	0	808	115	81	0	407		0	0	0	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	418	1243	0	0	808	115	81	0	407		0	0	0	
Added Vol:	6	233	0	0	212	0	0	0	13		0	0	0	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	424	1476	0	0	1020	115	81	0	420		0	0	0	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94		0.94	0.94	0.94	
PHF Volume:	453	1575	0	0	1089	123	86	0	448		0	0	0	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
Reduced Vol:	453	1575	0	0	1089	123	86	0	448		0	0	0	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	453	1575	0	0	1089	123	86	0	448		0	0	0	
OvlAdjVol:									222					
Saturation Flow Module:														
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	2.00	0.00	0.00	1.80	0.20	1.00	0.00	1.00		0.00	0.00	0.00	
Final Sat.:	3200	3200	0	0	2876	324	1600	0	1600		0	0	0	
Capacity Analysis Module:														
Vol/Sat:	0.14	0.49	0.00	0.00	0.38	0.38	0.05	0.00	0.28		0.00	0.00	0.00	
OvlAdjV/S:									0.14					
Crit Moves:	****				****				****					

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.605
Loss Time (sec):	6	Average Delay (sec/veh):	10.4
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	0	0	1	0	2
Volume Module:												
Base Vol:	123	0	289	0	0	0	0	2097	621	0	969	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	123	0	289	0	0	0	0	2097	621	0	969	0
Added Vol:	124	0	42	0	0	0	0	96	213	0	162	280
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	247	0	331	0	0	0	0	2193	834	0	1131	280
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00	0.96	0.96	0.96
PHF Volume:	257	0	344	0	0	0	0	2282	0	0	1177	291
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	257	0	344	0	0	0	0	2282	0	0	1177	291
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	257	0	344	0	0	0	0	2282	0	0	1177	291
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.88	0.88
Lanes:	1.43	0.00	1.57	0.00	0.00	0.00	1.00	3.00	1.00	0.00	2.40	0.60
Final Sat.:	2427	0	2674	0	0	0	1900	5187	1729	0	4033	998
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.13	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.29	0.29
Crit Moves:			****					****				
Green/Cycle:	0.21	0.00	0.21	0.00	0.00	0.00	0.00	0.73	0.00	0.00	0.73	0.73
Volume/Cap:	0.50	0.00	0.61	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.40	0.40
Delay/Veh:	35.0	0.0	36.6	0.0	0.0	0.0	0.0	6.9	0.0	0.0	5.3	5.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.0	0.0	36.6	0.0	0.0	0.0	0.0	6.9	0.0	0.0	5.3	5.3
LOS by Move:	C		A	D		A	A		A	A		A
HCM2kAvgQ:	5	0	7	0	0	0	0	13	0	0	6	6

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.834
Loss Time (sec):	8	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2	0	1	2	0	2	0	0	0	0
Volume Module:												
Base Vol:	0	1712	118	106	1120	0	0	0	0	136	0	161
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1712	118	106	1120	0	0	0	0	136	0	161
Added Vol:	0	179	69	133	104	0	0	0	0	34	0	67
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1891	187	239	1224	0	0	0	0	170	0	228
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1984	196	251	1284	0	0	0	0	178	0	239
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1984	196	251	1284	0	0	0	0	178	0	239
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1984	196	251	1284	0	0	0	0	178	0	239
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	3200	3200	0	0	0	0	3200	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.62	0.12	0.08	0.40	0.00	0.00	0.00	0.00	0.06	0.00	0.07
OvlAdjV/S:												0.00
Crit Moves:		****			****					****		

APPENDIX C:
CUMULATIVE PROJECT TRIP GENERATION

Mt SAC PEP EIR - Cumulative Project Trip Generation 2020															
								AM peak Hour Trips			PM Peak Hour Trips			
Agency	ID	Project Name	ITE Code	Land Use	Size	Unit		In	Out	Total	In	Out	Total	Daily
Walnut	1	Shea Homes Project	210	Single-Family Detached		Rates		0.19	0.56	0.75	0.63	0.37	1.00	9.52
					37	du		7	21	28	23	14	37	352
			230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					61	du		4	23	27	21	11	32	354
	2	Salamone Subdivision	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					6	du		0	3	3	2	1	3	35
			412	County Park		Rates		0.01	0.01	0.02	0.05	0.04	0.09	2.28
					1.55	acres		0	0	0	0	0	0	4
	3	Gregorian Subdivision	210	Single-Family Detached		Rates		0.19	0.56	0.75	0.63	0.37	1.00	9.52
					7	du		1	4	5	4	3	7	67
	4	The Olson Company Project	210	Single-Family Detached		Rates		0.19	0.56	0.75	0.63	0.37	1.00	9.52
					8	du		2	4	6	5	3	8	76
Pomona	5	22122 W. Valley Blvd.	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					141	tsf		114	16	130	17	120	137	983
	6	2001 W. Mission Blvd.	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					432.843	tsf		351	47	398	52	368	420	3,017
	7	2-16 Village Loop Rd.	210	Single-Family Detached		Rates		0.19	0.56	0.75	0.63	0.37	1.00	9.52
					124	du		24	69	93	78	46	124	1,180
			820	Shopping Center		Rates		0.60	0.36	0.96	1.78	1.93	3.71	42.70
					6	tsf		4	2	6	11	11	22	256
	8	92 Rio Rancho Rd.	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					56	du		4	21	25	20	9	29	325
	9	1943 S Towne Ave	210	Single-Family Detached		Rates		0.19	0.56	0.75	0.63	0.37	1.00	9.52
					48	du		9	27	36	30	18	48	457
	10	715 E Phillips Rd	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					4	du		0	2	2	1	1	2	23
	11	1041 S White Ave	210	Single-Family Detached		Rates		0.19	0.56	0.75	0.63	0.37	1.00	9.52
					20	du		4	11	15	13	7	20	190
	12	701 S Garvey Ave	820	Shopping Center		Rates		0.60	0.36	0.96	1.78	1.93	3.71	42.70
					37	tsf		22	14	36	66	71	137	1,580
	13	1439 S Palomares St	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					6	du		0	3	3	2	1	3	35
	14	1390 S Palomares St	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					12	du		1	4	5	4	2	6	70
	15	Rio Rancho Towne Center Phase II	820	Shopping Center		Rates		0.60	0.36	0.96	1.78	1.93	3.71	42.70
					64.717	tsf		39	23	62	115	125	240	2,763
	16	600 Dudley Ave	252	Senior Adult Housing - Attached		Rates		0.18	0.21	0.39	0.19	0.16	0.35	3.44
					84	du		15	18	33	16	13	29	289
	17	855 E Phillips Blvd	210	Single-Family Detached		Rates		0.19	0.56	0.75	0.63	0.37	1.00	9.52
					37	du		7	21	28	23	14	37	352
	18	675 E Mission Blvd	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					38	du		3	14	17	13	7	20	221
	19	22 Rio Rancho Rd	841	Automobile Sales		Rates		0.89	1.33	2.22	1.32	1.48	2.80	32.30
					5.75	tsf		5	8	13	8	8	16	186
	20	888 W Mission Blvd	820	Shopping Center		Rates		0.60	0.36	0.96	1.78	1.93	3.71	42.70
					20.239	tsf		12	7	19	36	39	75	864
	21	1368 W Mission Blvd	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					36	du		3	13	16	13	6	19	209
	22	1932/1936 S Garvey Ave	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					17	du		1	6	7	6	3	9	99
	23	1300 W Mission Blvd	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					33	du		2	13	15	12	5	17	192
	24	1365/1367 S Garvey Ave	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					2	du		0	1	1	1	0	1	12
	25	1940 S Garvey Ave	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					10	du		1	3	4	4	1	5	58
	26	424-446 W Commercial St	252	Senior Adult Housing - Attached		Rates		0.18	0.21	0.39	0.19	0.16	0.35	3.44
					61	du		11	13	24	12	9	21	210
	27	952 E 9th St	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					11	du		1	4	5	4	2	6	64
	28	1344 W Grand Ave	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					7	du		0	3	3	2	2	4	41
	29	1363 S Buena Vista Ave	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					3	du		0	1	1	1	1	2	17
	30	1480 W Mission Blvd	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					24	du		2	9	11	8	4	12	139
	31	1455 S White Ave	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					2	du		0	1	1	1	0	1	12
	32	1302 Hansen Ave	210	Single-Family Detached		Rates		0.19	0.56	0.75	0.63	0.37	1.00	9.52
					2	du		0	2	2	1	1	2	19
	33	Rio Rancho Towne Center Hotel (White & Rancho Valley)	310	Hotel		Rates		0.31	0.22	0.53	0.31	0.29	0.60	8.17
					149	Rooms		46	33	79	46	43	89	1,217
	34	1145 W 10th St	560	Church		Rates		0.48	0.39	0.87	0.51	0.43	0.94	9.11
					6.019	tsf		3	2	5	3	3	6	55
	35	40 Rio Rancho Rd	932	High-Turnover (Sit-Down) Restaurant		Rates		5.41	5.40	10.81	5.91	3.94	9.85	127.15
					1.608	tsf		9	8	17	10	6	16	204
	36	1491 E 9th St	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					193.5	tsf		157	21	178	23	165	188	1,349
Diamond Bar	37	TR 63623	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					99	du		7	37	44	35	16	51	575
	38	TR 72295	210	Single-Family Detached		Rates		0.19	0.56	0.75	0.63	0.37	1.00	9.52
					47	du		9	26	35	30	17	47	447
			230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					135	du		9	50	59	47	23	70	784
Industry	39	15000 Nelson: DP 15-7	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					125.344	tsf		102	13	115	15	107	122	874
	40	489 & 499 Parriott Place: DP 15-10 & ZE 15-2	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					130.17	tsf		105	15	120	16	110	126	907
	41	SE corner Azusa and Chestnut	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					614.597	tsf		498	67	565	74	522	596	4,284
	42	18421 Railroad Ave.: DP 15-13 & ZE 15-3	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					8.85	tsf		7	1	8	1	8	9	62
	43	12851 Crossroads Parkway South: DP 15-14 & ZE 15-4	710	General Office Building		Rates		1.37	0.19	1.56	0.25	1.24	1.49	11.03
					77.25	tsf		106	15	121	19	96	115	852
	44	3718 Capitol Ave.: DP 15-15 & ZE TBD	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					36.666	tsf		30	4	34	4	32	36	256
	45	Echelon	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					326.7	tsf		265	36	301	39	278	317	2,277
	46	14700 Nelson	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					232.45	tsf		188	26	214	28	197	225	1,620
	47	19782 Walnut Drive North: DP-15-17	934	Fast-food With Drive-Thru		Rates		23.16	22.26	45.42	16.98	15.67	32.65	496.12
					2.662	tsf		62	59	121	45	42	87	1,321
	48	1552 Azusa Ave.: DP 15-18	820	Shopping Center		Rates		0.60	0.36	0.96	1.78	1.93	3.71	42.70
					20.621	tsf		12	8	20	37	40	77	881
	49	17225 Arenth Avenue: DP 15-19	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					6.76	tsf		5	1	6	1	6	7	47
	50	Castleton: DP 15-20/CUP 15-19	934	Fast-food With Drive-Thru		Rates		23.16	22.26	45.42	16.98	15.67	32.65	496.12
					2.492	tsf		58	55	113	42	39	81	1,236
	51	16801 Gale Ave: DP 15-21	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					39.15	tsf		32	4	36	5	33	38	273
Cal Poly Pomona	52	Cal Poly Enrollment Increase	550	University/College		Rates		0.13	0.04	0.17	0.05	0.12	0.17	1.71
					4,089	student		532	163	695	204	491	695	6,992
							Total	**2,891**	**1,075**	**3,966**	**1,349**	**3,200**	**4,549**	**41,264**

Mt SAC PEP EIR - Cumulative Project Trip Generation 2025

Agency	ID	Project Name	ITE Code	Land Use	Size	Unit	AM peak Hour Trips			PM Peak Hour Trips			Daily
							In	Out	Total	In	Out	Total	
Walnut	1	Shea Homes Project	210	Single-Family Detached		Rates	0.19	0.56	0.75	0.63	0.37	1.00	9.52
					37	du	7	21	28	23	14	37	352
			230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					61	du	4	23	27	21	11	32	354
	2	Salamone Subdivision	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					6	du	0	3	3	2	1	3	35
			412	County Park		Rates	0.01	0.01	0.02	0.05	0.04	0.09	2.28
					1.55	acres	0	0	0	0	0	0	4
	3	Gregorian Subdivision	210	Single-Family Detached		Rates	0.19	0.56	0.75	0.63	0.37	1.00	9.52
					7	du	1	4	5	4	3	7	67
	4	The Olson Company Project	210	Single-Family Detached		Rates	0.19	0.56	0.75	0.63	0.37	1.00	9.52
					8	du	2	4	6	5	3	8	76
Pomona	5	22122 W. Valley Blvd.	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					141	tsf	114	16	130	17	120	137	983
	6	2001 W. Mission Blvd.	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					432.843	tsf	351	47	398	52	368	420	3,017
	7	2-16 Village Loop Rd.	210	Single-Family Detached		Rates	0.19	0.56	0.75	0.63	0.37	1.00	9.52
					124	du	24	69	93	78	46	124	1,180
			820	Shopping Center		Rates	0.60	0.36	0.96	1.78	1.93	3.71	42.70
					6	tsf	4	2	6	11	11	22	256
	8	92 Rio Rancho Rd.	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					56	du	4	21	25	20	9	29	325
	9	1943 S Towne Ave	210	Single-Family Detached		Rates	0.19	0.56	0.75	0.63	0.37	1.00	9.52
					48	du	9	27	36	30	18	48	457
	10	715 E Phillips Rd	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					4	du	0	2	2	1	1	2	23
	11	1041 S White Ave	210	Single-Family Detached		Rates	0.19	0.56	0.75	0.63	0.37	1.00	9.52
					20	du	4	11	15	13	7	20	190
	12	701 S Garvey Ave	820	Shopping Center		Rates	0.60	0.36	0.96	1.78	1.93	3.71	42.70
					37	tsf	22	14	36	66	71	137	1,580
	13	1439 S Palomares St	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					6	du	0	3	3	2	1	3	35
	14	1390 S Palomares St	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					12	du	1	4	5	4	2	6	70
	15	Rio Rancho Towne Center Phase II	820	Shopping Center		Rates	0.60	0.36	0.96	1.78	1.93	3.71	42.70
					64.717	tsf	39	23	62	115	125	240	2,763
	16	600 Dudley Ave	252	Senior Adult Housing - Attached		Rates	0.18	0.21	0.39	0.19	0.16	0.35	3.44
					84	du	15	18	33	16	13	29	289
	17	855 E Phillips Blvd	210	Single-Family Detached		Rates	0.19	0.56	0.75	0.63	0.37	1.00	9.52
					37	du	7	21	28	23	14	37	352
	18	675 E Mission Blvd	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					38	du	3	14	17	13	7	20	221
	19	22 Rio Rancho Rd	841	Automobile Sales		Rates	0.89	1.33	2.22	1.32	1.48	2.80	32.30
					5.75	tsf	5	8	13	8	8	16	186
	20	888 W Mission Blvd	820	Shopping Center		Rates	0.60	0.36	0.96	1.78	1.93	3.71	42.70
					20.239	tsf	12	7	19	36	39	75	864
	21	1368 W Mission Blvd	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					36	du	3	13	16	13	6	19	209
	22	1932/1936 S Garvey Ave	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					17	du	1	6	7	6	3	9	99
	23	1300 W Mission Blvd	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					33	du	2	13	15	12	5	17	192
	24	1365/1367 S Garvey Ave	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					2	du	0	1	1	1	0	1	12
	25	1940 S Garvey Ave	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					10	du	1	3	4	4	1	5	58
	26	424-446 W Commercial St	252	Senior Adult Housing - Attached		Rates	0.18	0.21	0.39	0.19	0.16	0.35	3.44
					61	du	11	13	24	12	9	21	210
	27	952 E 9th St	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					11	du	1	4	5	4	2	6	64
	28	1344 W Grand Ave	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					7	du	0	3	3	2	2	4	41
	29	1363 S Buena Vista Ave	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					3	du	0	1	1	1	1	2	17
	30	1480 W Mission Blvd	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					24	du	2	9	11	8	4	12	139
	31	1455 S White Ave	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					2	du	0	1	1	1	0	1	12
	32	1302 Hansen Ave	210	Single-Family Detached		Rates	0.19	0.56	0.75	0.63	0.37	1.00	9.52
					2	du	0	2	2	1	1	2	19
	33	Rio Rancho Towne Center Hotel (White & Rancho Valley)	310	Hotel		Rates	0.31	0.22	0.53	0.31	0.29	0.60	8.17
					149	Rooms	46	33	79	46	43	89	1,217
	34	1145 W 10th St	560	Church		Rates	0.48	0.39	0.87	0.51	0.43	0.94	9.11
					6.019	tsf	3	2	5	3	3	6	55
	35	40 Rio Rancho Rd	932	High-Turnover (Sit-Down) Restaurant		Rates	5.41	5.40	10.81	5.91	3.94	9.85	127.15
					1.608	tsf	9	8	17	10	6	16	204
	36	1491 E 9th St	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					193.5	tsf	157	21	178	23	165	188	1,349
Diamond Bar	37	TR 63623	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					99	du	7	37	44	35	16	51	575
	38	TR 72295	210	Single-Family Detached		Rates	0.19	0.56	0.75	0.63	0.37	1.00	9.52
					47	du	9	26	35	30	17	47	447
			230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					135	du	9	50	59	47	23	70	784
Industry	39	15000 Nelson: DP 15-7	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					125.344	tsf	102	13	115	15	107	122	874
	40	489 & 499 Parriott Place: DP 15-10 & ZE 15-2	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					130.17	tsf	105	15	120	16	110	126	907
	41	SE corner Azusa and Chestnut	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					614.597	tsf	498	67	565	74	522	596	4,284
	42	18421 Railroad Ave.: DP 15-13 & ZE 15-3	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					8.85	tsf	7	1	8	1	8	9	62
	43	12851 Crossroads Parkway South: DP 15-14 & ZE 15-4	710	General Office Building		Rates	1.37	0.19	1.56	0.25	1.24	1.49	11.03
					77.25	tsf	106	15	121	19	96	115	852
	44	3718 Capitol Ave.: DP 15-15 & ZE TBD	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					36.666	tsf	30	4	34	4	32	36	256
	45	Echelon	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					326.7	tsf	265	36	301	39	278	317	2,277
	46	14700 Nelson	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					232.45	tsf	188	26	214	28	197	225	1,620
	47	19782 Walnut Drive North: DP-15-17	934	Fast-food With Drive-Thru		Rates	23.16	22.26	45.42	16.98	15.67	32.65	496.12
					2.662	tsf	62	59	121	45	42	87	1,321
	48	1552 Azusa Ave.: DP 15-18	820	Shopping Center		Rates	0.60	0.36	0.96	1.78	1.93	3.71	42.70
					20.621	tsf	12	8	20	37	40	77	881
	49	17225 Arenth Avenue: DP 15-19	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					6.76	tsf	5	1	6	1	6	7	47
	50	Castleton: DP 15-20/CUP 15-19	934	Fast-food With Drive-Thru		Rates	23.16	22.26	45.42	16.98	15.67	32.65	496.12
					2.492	tsf	58	55	113	42	39	81	1,236
	51	16801 Gale Ave: DP 15-21	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					39.15	tsf	32	4	36	5	33	38	273
	52	Industry Business Center East	110	Warehousing & Distribution		Rates							
						tsf	421	85	506	124	383	507	4,593
	53	Industry Business Center Weset	110	Warehousing & Distribution		Rates							
						tsf	471	132	603	349	610	958	9,005
Cal Poly Pomona	54	Cal Poly Enrollment Increase	550	University/College		Rates	0.13	0.04	0.17	0.05	0.12	0.17	1.71
					8,889	student	1156	355	1511	444	1067	1,511	15,200
						Total	**4,407**	**1,484**	**5,891**	**2,061**	**4,769**	**6,830**	**63,071**

APPENDIX D:
FAIR-SHARE CALCULATIONS

Existing (2015) AM Peak Hour

ID	Intersection	Total
1	Nogales St/Amar Rd	3,487
2	Lemon Ave/Amar Rd	2,684
3	Grand Ave/I-10 WB Ramp	2,940
4	Grand Ave/I-10 EB Ramp	2,946
5	Grand Ave/Cameron Ave	3,617
6	Grand Ave/Mountaineer Rd	4,036
7	Grand Ave/San Jose Hills Rd	4,289
8	Grand Ave/Temple Ave	5,759
9	Grand Ave/La Puente Rd	4,443
10	Grand Ave/Valley Blvd	6,052
11	Grand Ave/Baker Pkwy	3,553
12	Grand Ave/SR-60 WB Ramps	3,982
13	Grand Ave/SR-60 EB Ramps	3,618
14	Mt. SAC Wy/Temple Ave	2,747
15	Bonita Ave/Temple Ave	2,958
16	Lot F/Temple Ave	2,580
17	Valley Blvd/Temple Ave	3,671
18	SR-57 SB Ramps/Temple Ave	3,180
19	SR-57 NB Ramps/Temple Ave	3,340

2020 Cumulative w/o Project AM Peak Hour Trips

ID	Intersection	Total
1	Nogales St/Amar Rd	3,587
2	Lemon Ave/Amar Rd	2,773
3	Grand Ave/I-10 WB Ramp	2,998
4	Grand Ave/I-10 EB Ramp	3,060
5	Grand Ave/Cameron Ave	3,731
6	Grand Ave/Mountaineer Rd	4,150
7	Grand Ave/San Jose Hills Rd	4,403
8	Grand Ave/Temple Ave	5,967
9	Grand Ave/La Puente Rd	4,564
10	Grand Ave/Valley Blvd	6,320
11	Grand Ave/Baker Pkwy	3,686
12	Grand Ave/SR-60 WB Ramps	4,114
13	Grand Ave/SR-60 EB Ramps	3,730
14	Mt. SAC Wy/Temple Ave	2,839
15	Bonita Ave/Temple Ave	3,050
16	Lot F/Temple Ave	2,672
17	Valley Blvd/Temple Ave	4,084
18	SR-57 SB Ramps/Temple Ave	3,688
19	SR-57 NB Ramps/Temple Ave	3,932

2020 Cumulative With Project AM Peak Hour Trips

ID	Intersection	Total
1	Nogales St/Amar Rd	3,609
2	Lemon Ave/Amar Rd	2,820
3	Grand Ave/I-10 WB Ramp	3,047
4	Grand Ave/I-10 EB Ramp	3,145
5	Grand Ave/Cameron Ave	3,836
6	Grand Ave/Mountaineer Rd	4,318
7	Grand Ave/San Jose Hills Rd	4,482
8	Grand Ave/Temple Ave	6,137
9	Grand Ave/La Puente Rd	4,671
10	Grand Ave/Valley Blvd	6,387
11	Grand Ave/Baker Pkwy	3,717
12	Grand Ave/SR-60 WB Ramps	4,145
13	Grand Ave/SR-60 EB Ramps	3,758
14	Mt. SAC Wy/Temple Ave	3,004
15	Bonita Ave/Temple Ave	3,259
16	Lot F/Temple Ave	2,834
17	Valley Blvd/Temple Ave	4,237
18	SR-57 SB Ramps/Temple Ave	3,797
19	SR-57 NB Ramps/Temple Ave	3,995

Equitable Share Responsibility	Impacted?
18%	
35%	
46%	
43%	
48%	Yes
60%	Yes
41%	Yes
45%	Yes
47%	Yes
20%	Yes
19%	Yes
19%	
20%	
64%	Yes
69%	
64%	
27%	Yes
18%	
10%	

Existing (2015) PM Peak Hour

ID	Intersection	Total
1	Nogales St/Amar Rd	3,498
2	Lemon Ave/Amar Rd	2,667
3	Grand Ave/I-10 WB Ramp	3,167
4	Grand Ave/I-10 EB Ramp	2,781
5	Grand Ave/Cameron Ave	3,072
6	Grand Ave/Mountaineer Rd	3,353
7	Grand Ave/San Jose Hills Rd	3,542
8	Grand Ave/Temple Ave	5,701
9	Grand Ave/La Puente Rd	4,167
10	Grand Ave/Valley Blvd	6,974
11	Grand Ave/Baker Pkwy	3,177
12	Grand Ave/SR-60 WB Ramps	3,772
13	Grand Ave/SR-60 EB Ramps	3,571
14	Mt. SAC Wy/Temple Ave	2,963
15	Bonita Ave/Temple Ave	2,766
16	Lot F/Temple Ave	2,325
17	Valley Blvd/Temple Ave	4,160
18	SR-57 SB Ramps/Temple Ave	4,133
19	SR-57 NB Ramps/Temple Ave	4,099

2020 Cumulative w/o Project PM Peak Hour Trips

ID	Intersection	Total
1	Nogales St/Amar Rd	3,602
2	Lemon Ave/Amar Rd	2,763
3	Grand Ave/I-10 WB Ramp	3,250
4	Grand Ave/I-10 EB Ramp	2,898
5	Grand Ave/Cameron Ave	3,190
6	Grand Ave/Mountaineer Rd	3,471
7	Grand Ave/San Jose Hills Rd	3,660
8	Grand Ave/Temple Ave	5,922
9	Grand Ave/La Puente Rd	4,294
10	Grand Ave/Valley Blvd	7,256
11	Grand Ave/Baker Pkwy	3,318
12	Grand Ave/SR-60 WB Ramps	3,913
13	Grand Ave/SR-60 EB Ramps	3,662
14	Mt. SAC Wy/Temple Ave	3,063
15	Bonita Ave/Temple Ave	2,866
16	Lot F/Temple Ave	2,425
17	Valley Blvd/Temple Ave	4,580
18	SR-57 SB Ramps/Temple Ave	4,464
19	SR-57 NB Ramps/Temple Ave	4,773

2020 Cumulative With Project PM Peak Hour Trips

ID	Intersection	Total
1	Nogales St/Amar Rd	3,624
2	Lemon Ave/Amar Rd	2,810
3	Grand Ave/I-10 WB Ramp	3,298
4	Grand Ave/I-10 EB Ramp	2,983
5	Grand Ave/Cameron Ave	3,294
6	Grand Ave/Mountaineer Rd	3,640
7	Grand Ave/San Jose Hills Rd	3,740
8	Grand Ave/Temple Ave	6,092
9	Grand Ave/La Puente Rd	4,401
10	Grand Ave/Valley Blvd	7,323
11	Grand Ave/Baker Pkwy	3,349
12	Grand Ave/SR-60 WB Ramps	3,944
13	Grand Ave/SR-60 EB Ramps	3,687
14	Mt. SAC Wy/Temple Ave	3,229
15	Bonita Ave/Temple Ave	3,075
16	Lot F/Temple Ave	2,587
17	Valley Blvd/Temple Ave	4,733
18	SR-57 SB Ramps/Temple Ave	4,572
19	SR-57 NB Ramps/Temple Ave	4,836

Equitable Share Responsibility	Impacted?
17%	
33%	
37%	
42%	
47%	
59%	Yes
40%	Yes
43%	Yes
46%	Yes
19%	Yes
18%	
18%	
22%	
62%	Yes
68%	
62%	
27%	Yes
25%	
9%	

Existing (2015) AM Peak Hour

ID	Intersection	Total
1	Nogales St/Amar Rd	3,487
2	Lemon Ave/Amar Rd	2,684
3	Grand Ave/I-10 WB Ramp	2,940
4	Grand Ave/I-10 EB Ramp	2,946
5	Grand Ave/Cameron Ave	3,617
6	Grand Ave/Mountaineer Rd	4,036
7	Grand Ave/San Jose Hills Rd	4,289
8	Grand Ave/Temple Ave	5,759
9	Grand Ave/La Puente Rd	4,443
10	Grand Ave/Valley Blvd	6,052
11	Grand Ave/Baker Pkwy	3,553
12	Grand Ave/SR-60 WB Ramps	3,982
13	Grand Ave/SR-60 EB Ramps	3,618
14	Mt. SAC Wy/Temple Ave	2,747
15	Bonita Ave/Temple Ave	2,958
16	Lot F/Temple Ave	2,580
17	Valley Blvd/Temple Ave	3,671
18	SR-57 SB Ramps/Temple Ave	3,180
19	SR-57 NB Ramps/Temple Ave	3,340

2025 Cumulative w/o Project AM Peak Hour Trips

ID	Intersection	Total
1	Nogales St/Amar Rd	3,785
2	Lemon Ave/Amar Rd	2,969
3	Grand Ave/I-10 WB Ramp	3,020
4	Grand Ave/I-10 EB Ramp	3,171
5	Grand Ave/Cameron Ave	3,842
6	Grand Ave/Mountaineer Rd	4,261
7	Grand Ave/San Jose Hills Rd	4,514
8	Grand Ave/Temple Ave	6,274
9	Grand Ave/La Puente Rd	4,676
10	Grand Ave/Valley Blvd	6,770
11	Grand Ave/Baker Pkwy	4,789
12	Grand Ave/SR-60 WB Ramps	4,966
13	Grand Ave/SR-60 EB Ramps	4,280
14	Mt. SAC Wy/Temple Ave	3,037
15	Bonita Ave/Temple Ave	3,248
16	Lot F/Temple Ave	2,870
17	Valley Blvd/Temple Ave	5,212
18	SR-57 SB Ramps/Temple Ave	4,280
19	SR-57 NB Ramps/Temple Ave	4,227

2025 Cumulative With Project AM Peak Hour Trips

ID	Intersection	Total
1	Nogales St/Amar Rd	3,827
2	Lemon Ave/Amar Rd	3,059
3	Grand Ave/I-10 WB Ramp	3,112
4	Grand Ave/I-10 EB Ramp	3,334
5	Grand Ave/Cameron Ave	4,042
6	Grand Ave/Mountaineer Rd	4,582
7	Grand Ave/San Jose Hills Rd	4,666
8	Grand Ave/Temple Ave	6,600
9	Grand Ave/La Puente Rd	4,881
10	Grand Ave/Valley Blvd	6,900
11	Grand Ave/Baker Pkwy	4,849
12	Grand Ave/SR-60 WB Ramps	5,026
13	Grand Ave/SR-60 EB Ramps	4,334
14	Mt. SAC Wy/Temple Ave	3,355
15	Bonita Ave/Temple Ave	3,650
16	Lot F/Temple Ave	3,178
17	Valley Blvd/Temple Ave	5,503
18	SR-57 SB Ramps/Temple Ave	4,486
19	SR-57 NB Ramps/Temple Ave	4,348

Equitable Share Responsibility	Impacted?
12%	Yes
24%	Yes
53%	
42%	
47%	Yes
59%	Yes
40%	Yes
39%	Yes
47%	Yes
15%	Yes
5%	Yes
6%	Yes
8%	
52%	Yes
58%	Yes
52%	
16%	Yes
16%	
12%	

Existing (2015) PM Peak Hour

ID	Intersection	Total
1	Nogales St/Amar Rd	3,498
2	Lemon Ave/Amar Rd	2,667
3	Grand Ave/I-10 WB Ramp	3,167
4	Grand Ave/I-10 EB Ramp	2,781
5	Grand Ave/Cameron Ave	3,072
6	Grand Ave/Mountaineer Rd	3,353
7	Grand Ave/San Jose Hills Rd	3,542
8	Grand Ave/Temple Ave	5,701
9	Grand Ave/La Puente Rd	4,167
10	Grand Ave/Valley Blvd	6,974
11	Grand Ave/Baker Pkwy	3,177
12	Grand Ave/SR-60 WB Ramps	3,772
13	Grand Ave/SR-60 EB Ramps	3,571
14	Mt. SAC Wy/Temple Ave	2,963
15	Bonita Ave/Temple Ave	2,766
16	Lot F/Temple Ave	2,325
17	Valley Blvd/Temple Ave	4,160
18	SR-57 SB Ramps/Temple Ave	4,133
19	SR-57 NB Ramps/Temple Ave	4,099

2025 Cumulative w/o Project PM Peak Hour Trips

ID	Intersection	Total
1	Nogales St/Amar Rd	3,684
2	Lemon Ave/Amar Rd	2,845
3	Grand Ave/I-10 WB Ramp	3,349
4	Grand Ave/I-10 EB Ramp	3,045
5	Grand Ave/Cameron Ave	3,336
6	Grand Ave/Mountaineer Rd	3,617
7	Grand Ave/San Jose Hills Rd	3,806
8	Grand Ave/Temple Ave	6,150
9	Grand Ave/La Puente Rd	4,441
10	Grand Ave/Valley Blvd	7,677
11	Grand Ave/Baker Pkwy	4,665
12	Grand Ave/SR-60 WB Ramps	4,917
13	Grand Ave/SR-60 EB Ramps	4,186
14	Mt. SAC Wy/Temple Ave	3,144
15	Bonita Ave/Temple Ave	2,947
16	Lot F/Temple Ave	2,506
17	Valley Blvd/Temple Ave	5,183
18	SR-57 SB Ramps/Temple Ave	4,709
19	SR-57 NB Ramps/Temple Ave	4,895

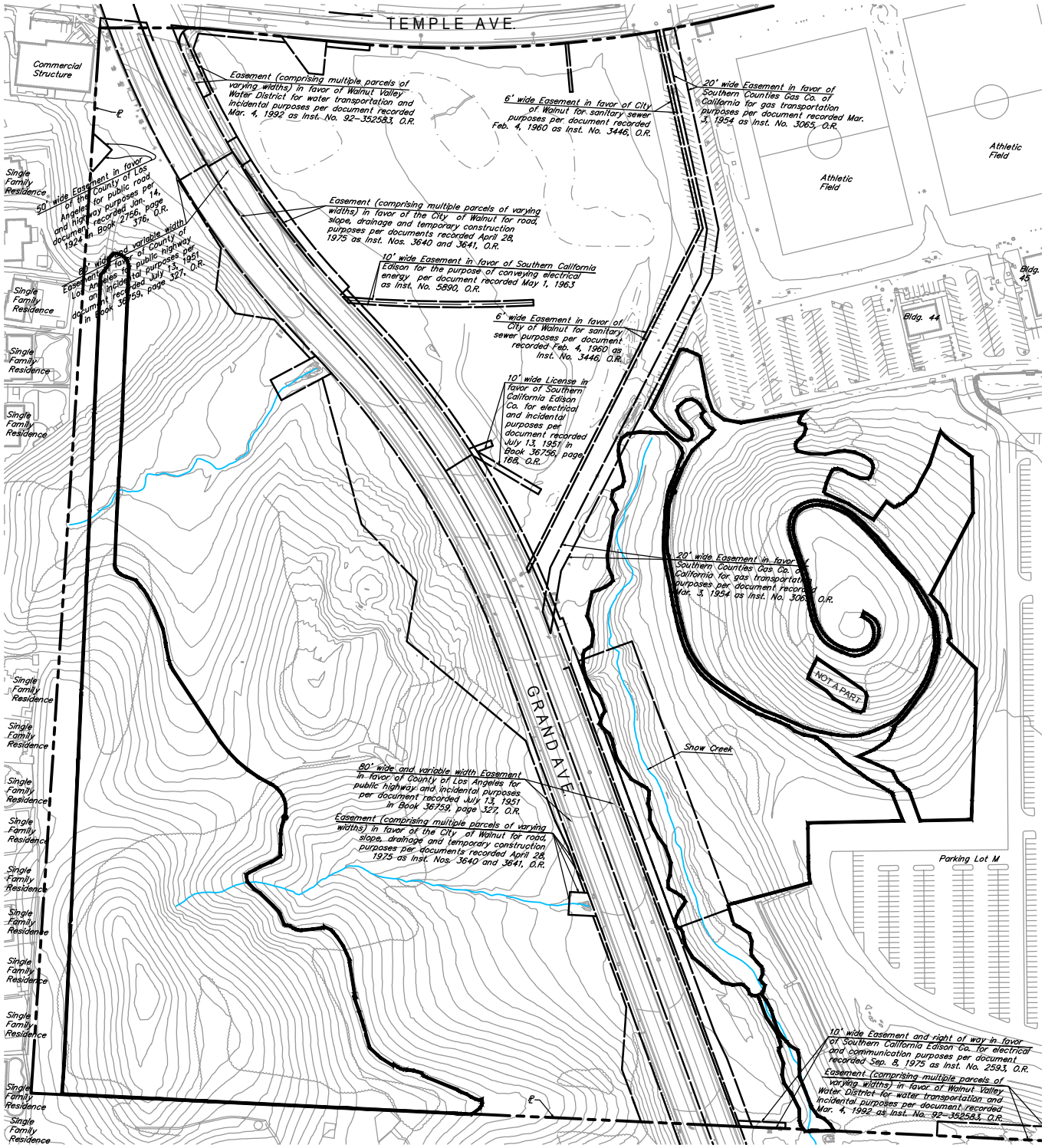
2025 Cumulative With Project PM Peak Hour Trips

ID	Intersection	Total
1	Nogales St/Amar Rd	3,727
2	Lemon Ave/Amar Rd	2,935
3	Grand Ave/I-10 WB Ramp	3,440
4	Grand Ave/I-10 EB Ramp	3,209
5	Grand Ave/Cameron Ave	3,536
6	Grand Ave/Mountaineer Rd	3,939
7	Grand Ave/San Jose Hills Rd	3,958
8	Grand Ave/Temple Ave	6,476
9	Grand Ave/La Puente Rd	4,647
10	Grand Ave/Valley Blvd	7,805
11	Grand Ave/Baker Pkwy	4,725
12	Grand Ave/SR-60 WB Ramps	4,977
13	Grand Ave/SR-60 EB Ramps	4,235
14	Mt. SAC Wy/Temple Ave	3,462
15	Bonita Ave/Temple Ave	3,345
16	Lot F/Temple Ave	2,815
17	Valley Blvd/Temple Ave	5,475
18	SR-57 SB Ramps/Temple Ave	4,915
19	SR-57 NB Ramps/Temple Ave	5,015

Equitable Share Responsibility	Impacted?
19%	
34%	
33%	
38%	
43%	Yes
55%	Yes
37%	Yes
42%	Yes
43%	Yes
15%	Yes
4%	Yes
5%	
7%	
64%	Yes
69%	Yes
63%	
22%	Yes
26%	
13%	

Fair Share Calculations Summary

ID	Intersection	2020		2025		Max.
		AM	PM	AM	PM	
1	Nogales St/Amar Rd			12%		**12%**
2	Lemon Ave/Amar Rd			24%		**24%**
3	Grand Ave/I-10 WB Ramp					
4	Grand Ave/I-10 EB Ramp					
5	Grand Ave/Cameron Ave	48%		47%	43%	**48%**
6	Grand Ave/Mountaineer Rd	60%	59%	59%	55%	**60%**
7	Grand Ave/San Jose Hills Rd	41%	40%	40%	37%	**41%**
8	Grand Ave/Temple Ave	45%	43%	39%	42%	**45%**
9	Grand Ave/La Puente Rd	47%	46%	47%	43%	**47%**
10	Grand Ave/Valley Blvd	20%	19%	15%	15%	**20%**
11	Grand Ave/Baker Pkwy	19%		5%	4%	**19%**
12	Grand Ave/SR-60 EB Ramps			6%		**6%**
13	Grand Ave/SR-60 WB Ramps					
14	Mt. SAC Wy/Temple Ave	64%	62%	52%	64%	**64%**
15	Bonita Ave/Temple Ave			58%	69%	**69%**
16	Lot F/Temple Ave					
17	Valley Blvd/Temple Ave	27%	27%	16%	22%	**27%**
18	SR-57 SB Ramps/Temple Ave					
19	SR-57 NB Ramps/Temple Ave					



LEGEND

- FLOWLINE
- EASEMENT
- APPROXIMATE METES AND BOUNDS SURVEY BOUNDARY
- APN 8709-023-917 BOUNDARY

500' 250' 0' 500'

GRAPHIC SCALE

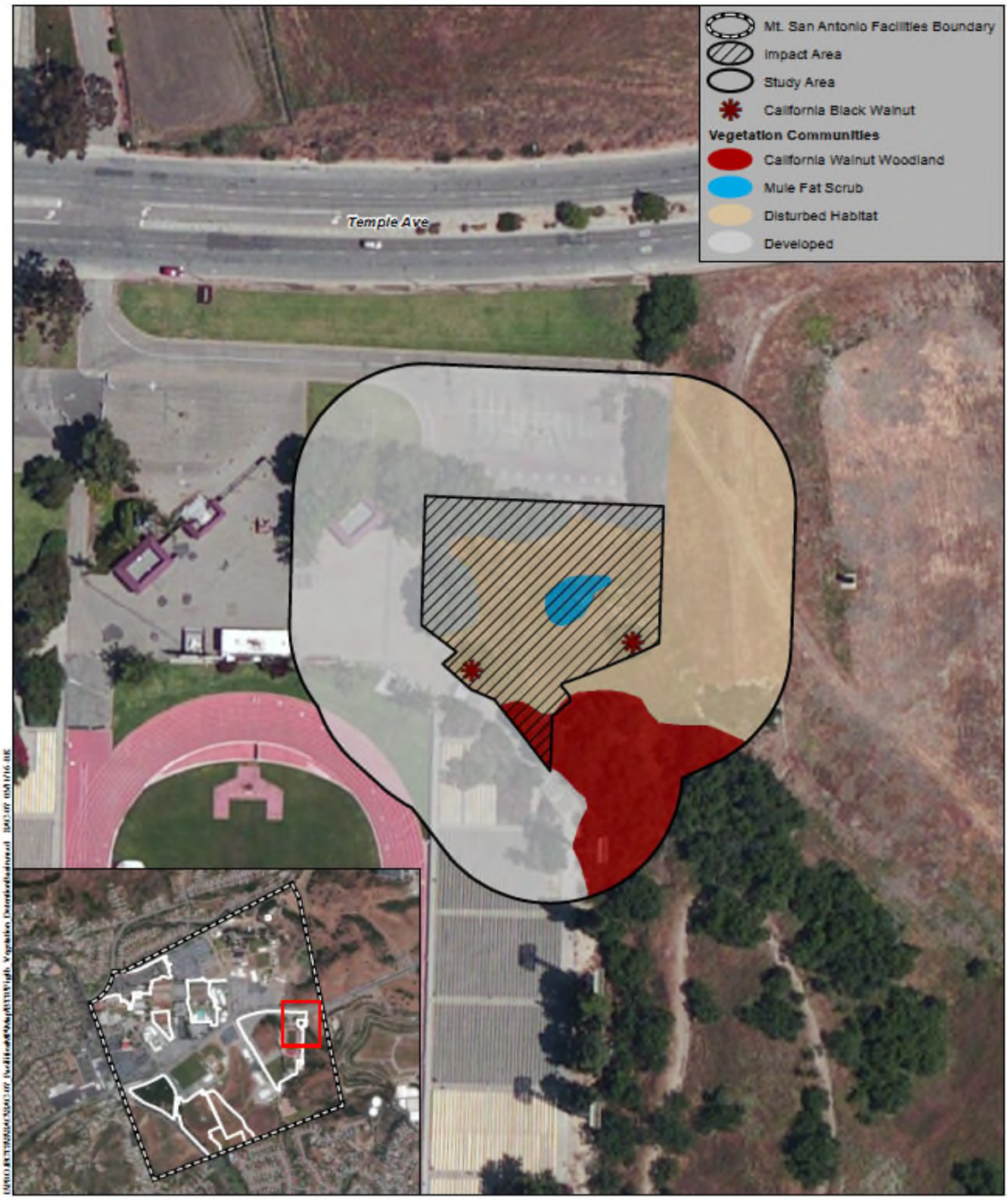
Note: For reduced sized prints, original scale is in inches

MT. SAC
Mt. San Antonio College

EXHIBIT E
DEPICTION OF HABITAT AREAS

27.July.2016

PSOMAS



Source: Esri, i-cubed, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community (May 2014)

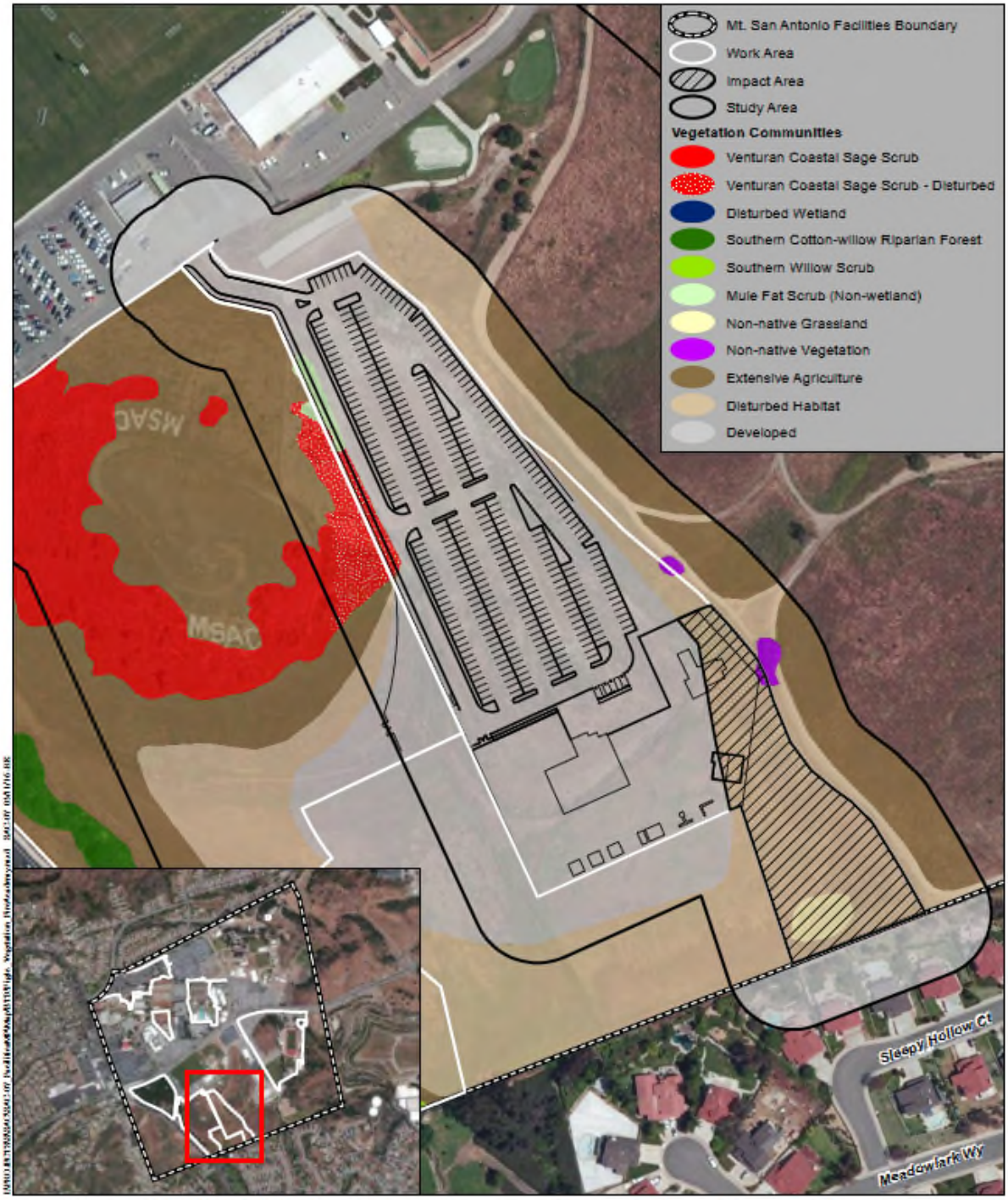
Vegetation Map - Detention Basin

MT. SAN ANTONIO COLLEGE 2015 FACILITIES MASTER PLAN UPDATE

HELIX Environmental Planning

0 100 Feet

Figure 4b



Source: Esri, i-cubed, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community (May 2014)

Vegetation Map - Fire Academy

MT. SAN ANTONIO COLLEGE 2015 FACILITIES MASTER PLAN UPDATE

HELIX Environmental Planning

0 200 Feet

Figure 4c

Source: Esri, i-cubed, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community (May 2014)

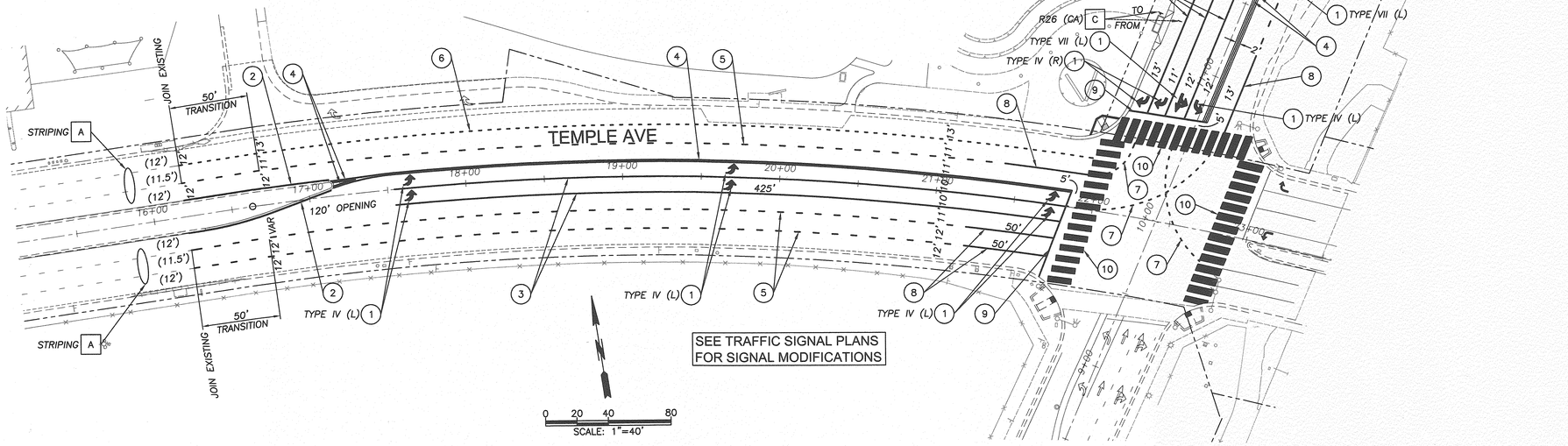
Vegetation Map - Wildlife Sanctuary

MT. SAN ANTONIO COLLEGE 2015 FACILITIES MASTER PLAN UPDATE

HELIX Environmental Planning

0 250 Feet

Figure 4d



SIGNING AND STRIPING GENERAL NOTES:

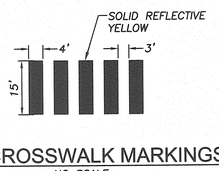
1. SIGNING AND STRIPING INSTALLATIONS SHALL CONFORM TO THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD), THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD PLANS AND SPECIFICATIONS (2012 EDITION), AND ALL ADDENDUM THERETO.
2. ALL STRIPING, MARKINGS, AND LEGENDS SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PROVIDE AND INSTALL RAISED PAVEMENT MARKERS FOR ALL STRIPING. STRIPING, MARKING, AND LEGENDS SHALL CONFORM TO THE LATEST CALTRANS STANDARD PLANS A20A THRU A2D AND A24D THRU A24E.
3. ALL MARKINGS AND LEGENDS SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED.
4. PRIOR TO FINAL ACCEPTANCE OF STREET IMPROVEMENTS, ALL PAVEMENT STRIPING AND STENCILING WITHIN THE PERIMETER OF THE CONSTRUCTION AREA SHALL BE RESTORED TO LIKE NEW CONDITION, IN MANNER MEETING THE APPROVAL OF THE CITY ENGINEER.
5. THE CONTRACTOR SHALL RESTRIPE EXISTING AND CURB MARKINGS OBLITERATED BY NEW CONSTRUCTION WHETHER OR NOT SHOWN ON PLANS AT NO COST TO THE CITY.
6. TEMPORARY STRIPING & MARKINGS SHALL BE APPLIED ON STREET WITH PAVEMENT SURFACE COURSE REPLACEMENTS PRIOR TO OPENING STREET TO THE PUBLIC. IN NO CASE SHALL A NEWLY PAVED STREET OPEN TO THE PUBLIC BE LEFT UNSTRIPED OVER A WEEKEND OR HOLIDAY. PERMANENT STRIPING & MARKING SHALL BE INSTALLED WITHIN (5) CALENDAR DAYS AFTER INSTALLING THE FINAL PAVEMENT SURFACE.
7. ALL CONFLICTING STRIPING, PAVEMENT MARKINGS, LEGENDS AND RAISED PAVEMENT MARKERS SHALL BE REMOVED BY WET SAND BLASTING OR GRINDING. BLACK OUT IS NOT PERMITTED. ALL DAMAGED PAVEMENT DUE TO REMOVALS SHALL BE REPAIRED AS NECESSARY TO MAINTAIN A SMOOTH AND UNIFORM SURFACE OR AS DIRECTED BY THE ENGINEER.
8. ALL TEMPORARY PAVEMENT MARKERS/TABS SHALL BE REMOVED AT THE CONCLUSION OF THE PROJECT.
9. TRAFFIC SIGNAL LOOPS SHALL BE INSTALLED AND FUNCTIONAL WITHIN 5 CALENDAR DAYS OF INSTALLING FINAL PAVEMENT SURFACE.
10. THE CONTRACTOR SHALL FURNISH & INSTALL 2-WAY BLUE REFLECTIVE PAVEMENT MARKERS AT ALL FIRE HYDRANTS WITHIN THE PROJECT LIMITS.

DISPOSITION NOTES:

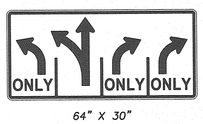
- A — PROTECT IN PLACE (ITEM PER PLAN)
- B — REMOVE (ITEM PER PLAN)
- C — RELOCATE (ITEM PER PLAN)

SIGNING AND STRIPING NOTES:

1. INSTALL PAVEMENT MARKING (TYPE PER PLAN)
2. INSTALL THERMOPLASTIC YELLOW MEDIAN LINE (DETAIL 25)
3. INSTALL THERMOPLASTIC WHITE CHANNELIZER LINE (DETAIL 38)
4. INSTALL THERMOPLASTIC DOUBLE YELLOW MEDIAN LINE (DETAIL 29)
5. INSTALL THERMOPLASTIC WHITE LANE LINE (DETAIL 9)
6. INSTALL THERMOPLASTIC WHITE LANE DROP LINE (DETAIL 37B)
7. INSTALL THERMOPLASTIC WHITE LANE LINE EXTENSIONS (DETAIL 27C)
8. INSTALL THERMOPLASTIC 4" WIDE WHITE LEAD LINE AND INSTALL TYPE G REFLECTIVE MARKERS AT EACH END PER DETAIL 3 HEREON
9. INSTALL THERMOPLASTIC 12" WHITE LIMIT LINE
10. INSTALL THERMOPLASTIC 'BAR' CROSSWALK PER DETAIL 1 HEREON
11. INSTALL R61-15 (CA) MOD SIGN PER DETAIL 2 ON EXISTING POSTS

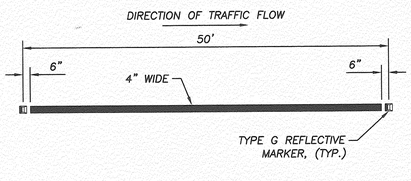


'BAR' CROSSWALK MARKINGS (1)
NO SCALE



64" X 30"

R61-15 (CA) MOD (2)
NO SCALE



TYPICAL LEAD LINE LAYOUT (3)
NO SCALE

Know what's below. Call before you dig.

ATTENTION:
All utilities shown on this plan are based on available records. It shall be the sole responsibility of the contractor to verify all existing utilities by contacting utility agencies and to avoid damaging existing utilities during excavation.

FOR UNDERGROUND SERVICE ALERT CALL: 811

REGISTERED PROFESSIONAL ENGINEER MARIE MARSTON RCE 38798 Exp. 03/31/17 CIVIL STATE OF CALIFORNIA

PLANS PREPARED UNDER THE SUPERVISION OF:

MARIE MARSTON RCE 38798 12-15-15 DATE

CIVIL WORKS Engineers, Inc.
3151 Airway Avenue, Suite T-1
Costa Mesa, CA 92626
(714) 966-9060

△	REVISIONS	DATE	INITIAL

ACCEPTED
BY: _____ DATE: 12/22/15
PUBLIC WORKS DIRECTOR

RECOMMENDED
BY: _____ DATE: 12/22/15
RENE GUERRERO, P.E., RCE NO. 66263, CITY ENGINEER

CITY OF POMONA
PUBLIC WORKS DEPARTMENT/ENGINEERING DIVISION

STREET IMPROVEMENT
SIGNING AND STRIPING

TEMPLE AVE AND SOUTH CAMPUS DRIVE

SCALE AS SHOWN
DESIGNED: PVT. ENG.
DRAWN: PVT. ENG.
CHECKED:
REVIEWED:
SHT. 1 OF 1 SHTS

FJ-159

J:\320.08.14\Codfiles\Sheets\Temple-Campus\Sheet 5 - Striping.dwg 12/15/15 12:15

P.O. Box 682, Walnut, CA 91788-0682
21201 La Puente Road
Walnut, CA 91789-2018
Telephone (909) 595-7543
FAX (909) 595-6095
www.ci.walnut.ca.us

CITY OF WALNUT

August 25, 2016

Gary Nellesen, Director, Facilities Planning & Management
Mt. San Antonio Community College District
1100 North Grand Avenue
Walnut, CA 91789-5611
facilitiesplanning@mtsac.edu
(909) 274-4850

VIA E-MAIL and U.S. MAIL

Re: *Comments to the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects Draft Subsequent Program/Project EIR (SCH 2002041161) Traffic Impact Study Technical Appendices A, B, C and D to Appendix B.1*

Dear Mr. Nellesen,

On behalf of the City of Walnut (the "City"), we appreciate this opportunity to review and provide comments to the District's circulation of the Traffic Impact Study Technical Appendices A, B, C, and D (the "Technical Appendices") to Appendix B.1 to the 2015 Facilities Master Plan Update and Physical Education Projects (the "Project") Draft Subsequent Program and Project Environmental Impact Report, State Clearinghouse No. 2002041161 (the "DEIR").

The DEIR was circulated for a 45-day review period that began June 13, 2016 and ended July 28, 2016. As noted by the City's traffic consultant Kunzman Associates, Inc. in Exhibit B to the City of Walnut comment letter submitted July 28, 2016,

> "The Traffic Impact Study appendices only contain partial information as provided in the 2015 Facilities Master Plan Update and Physical Education Projects, Appendices – Volume 2 of 2 (June 2016). The complete set of appendices for the Traffic Impact Study should be included in the publicly available documentation."

The District is now circulating the previously-omitted Technical Appendices for public review and comment for a period of 21 days ending September 9, 2016. Kunzman Associates, Inc. has reviewed the Technical Appendices and provided comments in the letter attached hereto as Exhibit A. The City now submits and incorporates that letter as part of these comments.

Although the City will not restate the entirety of the attached comment letter here, a few important points should be called to the District's attention. First, certain of the Traffic Impact Study's Level of Service ("LOS") calculations were based upon incorrect reporting and measurements. Second, the LOS calculations for all non-freeway ramp intersections should be revised to conform with the Los Angeles County Traffic Impact Analysis Report Guidelines. Lastly, Intersections #12 and #13 are mislabeled and switched in several sections of the Technical Appendices, which necessitates correction throughout the Technical Appendices and the Traffic Impact Study.

As the attached comment letter concludes, the necessary revisions to the LOS Calculations contained within the Technical Appendices have the potential to alter the DEIR's findings of significance regarding the Project's impacts. Therefore, the Traffic Impact Study should be revised to ensure the District's findings are accurate. California courts have repeatedly stated that "[a]n accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR." (*County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 192-93.) The City urges the District to implement the changes requested herein and revise the DEIR as necessary.

Thank you for your consideration of these comments.

Sincerely,

Tom Weiner
Community Development Director
City of Walnut

Attachments:

Exhibit A: Kunzman Associates, Inc. comment letter to the Traffic Impact Study Technical Appendices A, B, C, and D to Appendix B.1 to the Mt. SAC 2015 Facilities Master Plan Update

cc: Mayor Ching and City Council Members
City Manager Wishner
City Attorney Leibold
City Clerk DeDios

KUNZMAN ASSOCIATES, INC.
OVER 40 YEARS OF EXCELLENT SERVICE

August 22, 2016

Mr. Justin Carlson, City Planner
CITY OF WALNUT
21201 La Puente Road
Walnut, CA 91789

Dear Mr. Carlson:

INTRODUCTION

The firm of Kunzman Associates, Inc. is pleased to provide this letter summarizing our peer review of the Traffic Impact Study Technical Appendices A, B, C, and D to Appendix B.1 to the Mt. SAC 2015 Facilities Master Plan Update project in the City of Walnut. Our initial review comments noted that these appendices were referred to, but not included, in Appendix B.1 to the Draft EIR. Based on the review of Technical Appendices A, B, C, and D, we offer the following comments:

COMMENT 1

Appendix B - LOS Calculation Sheets: The morning peak hour volume-to-capacity (V/C) ratio at Intersection #11 (Grand Avenue/Baker Parkway) is incorrectly reported in the peak hour Level of Service tables for each analysis scenario based on the LOS (Level of Service) calculation worksheets contained in Appendix B.

COMMENT 2

Appendix B - LOS Calculation Sheets: All non-freeway ramp intersection Level of Service calculations should be revised to utilize a 10-percent yellow clearance (i.e., loss time of 10 seconds) and a maximum lane capacity of 2,880 vehicles per hour per lane for dual left-turn lanes, in accordance with the Los Angeles County Traffic Impact Analysis Report Guidelines.

COMMENT 3

Appendix B - LOS Calculation Sheets: Peak hour factors are typically not required for Intersection Capacity Utilization or volume-to-capacity calculations.

COMMENT 4

Appendix B - LOS Calculation Worksheets: The measured peak hour factor should be applied at Intersection #4 (Grand Avenue/I-10 EB Ramps) during the AM peak hour since this intersection is analyzed using the Highway Capacity Manual delay methodology.

COMMENT 5

Appendix B - LOS Calculation Worksheets: Intersections #12 and #13 are mislabeled; Intersection #12 should be Grand Avenue/SR-60 *WB* Ramps and Intersection #13 should be Grand Avenue/SR-60 *EB* Ramps.

COMMENT 6

Appendix B - LOS Calculation Worksheets: Intersection #12 (Grand Avenue/SR-60 WB Ramps) incorrectly shows right-turn overlap signal phasing for the eastbound approach.

COMMENT 7

Appendix D – Fair Share Calculations: On the second page, an impact is incorrectly identified at Intersection #12 (Grand Avenue/SR-60 WB Ramps) during the AM peak hour instead of Intersection #13 (Grand Avenue/SR-60 EB Ramps). On the third page, Intersections #12 and #13 are switched; the fair share percentage at Intersection #13 (Grand Avenue/SR-60 EB Ramps) should be 8%. This should also be corrected in Table 18 of the report.

CONCLUSIONS

Revisions to the Level of Service calculations have the potential to alter the findings of significance. The Mt. SAC 2015 Facilities Master Plan Update & Physical Education Projects Traffic Impact Study (Iteris, April 2016) should be revised to ensure accuracy of the findings based on the comments provided.

It has been a pleasure to service your needs on this project. Should you have any questions or if we can be of further assistance, please do not hesitate to call at (714) 973-8383.

Sincerely,

KUNZMAN ASSOCIATES, INC.

Giancarlo Ganddini, T.E.
Manager of Traffic Engineering

JN 6619

KUNZMAN ASSOCIATES, INC.

Carl Ballard, LEED GA
Principal

August 31, 2016

Ms. Mikaela Klein
Mt. San Antonio College
1100 North Grand Avenue
Walnut, CA 91789

RE: Responses to Comments on Mt. SAC 2015 Facilities Master Plan Update (FMPU) and Physical Education Projects Traffic Impact Study Traffic Technical Appendices A through D

Dear Ms. Klein:

I have reviewed the comments provided by the City of Walnut letter dated August 22, 2016. The responses are provided in the following table.

City of Walnut (Kunzman letter)		
Comment		**Response**
6-8.1	Appendix B – LOS Calculation Sheets: The morning peak hour volume-to-capacity (V/C) ratio at Intersection #11 (Grand Avenue/Baker Parkway) is incorrectly reported in the peak hour Level of Service tables for each analysis scenario based on the LOS calculation worksheets contained in Appendix B.	This modification has been made in the Traffic Impact Study (September 1, 2016). Incorporating the modification, the overall results of the analysis remain unchanged. This intersection is significantly impacted in three of the four "with project" scenarios, and would remain so. No new significant effect would result if the comment were incorporated in the traffic study.
6-8.2	Appendix B – LOS Calculation Sheets: All non-freeway ramp intersection LOS calculations should be revised to utilize a 10-percent yellow clearance (ie loss time of 10 seconds) and a maximum lane capacity of 2,880 vehicles per hour per lane for dual left-turn lanes, in accordance with the Los Angeles County Traffic Impact Analysis Report Guidelines.	This modification has been made in the Traffic Impact Study (September 1, 2016). Incorporating the modification, the overall results of the analysis remain unchanged. No new significant effect would result if the comment were incorporated in the traffic study.
6-8.3	Appendix B – LOS Calculation Sheets: Peak hour factors are typically not required for Intersection Capacity Utilization or volume-to-capacity calculations.	The comments are informational and do not discuss new significant effects of the project. No additional response is required.
6-8.4	Appendix B – LOS Calculation Sheets: The measured peak hour factor should be applied at Intersection #4 (Grand Ave/I-10 EB Ramps) during the AM peak hour since this intersection is analyzed using the Highway Capacity Manual delay methodology.	This peak hour factor modification has been made in the Traffic Impact Study (September 1, 2016). Incorporating the modification, the overall results of the analysis remain unchanged. No new significant effect would result if the comment were incorporated in the traffic study.

6-8.5	Appendix B – LOS Calculation Sheets: Intersections #12 and #13 are mislabeled; Intersection #12 should be Grand Avenue/SR-60 *WB* Ramps and Intersection #13 should be Grand Avenue/SR-60 *EB* Ramps.	This modification has been made in the Traffic Impact Study (September 1, 2016). Incorporating the modification, the overall results of the analysis remain unchanged. No new significant effect would result if the comment were incorporated in the traffic study.
6-8.6	Appendix B – LOS Calculation Sheets: Intersection #12 (Grand Ave/SR-60 WB Ramps) incorrectly shows right-turn overlap signal phasing for the eastbound approach.	This modification has been made in the Traffic Impact Study (September 1, 2016). By incorporating the modification, no change in the overall intersection delay occurs due to the low volume at this approach. No new significant effect would result upon incorporating this comment into the traffic study.
6-8.7	Appendix D – Fair Share Calculations: On the second page, an impact is incorrectly identified at Intersection #12 (Grand Ave/SR-60 EB Ramps). On the third page, Intersections #12 and #13 are switched; the fair share percentage at Intersection #13 (Grand Ave/SR-60 EB Ramps) should be 8%. This should also be corrected in Table 18 of the report.	These modifications have been made in the Traffic Impact Study (September 1, 2016). Incorporating the modifications, the overall results of the analysis remain unchanged. No new significant effect would result upon incorporating this comment into the traffic study.
6-8.8	Revisions to the Level of Service calculations have the potential to alter the findings of significance. The Mt. SAC 2015 Facilities Master Plan Update & Physical Education Projects Traffic Impact Study (Iteris, April 2016) should be revised to ensure accuracy of the findings based on the comments provided.	See Responses 6-2.36 – 6-2.53 to the comments dated July 28, 2016 from the City of Walnut, as well as Responses 6-8.1– 6-8.7 in this letter. As shown in the responses cited, the revisions requested to the LOS calculations do not result in any new significant effects and resulted in minor changes in the v/c data in the traffic study. When appropriate, the Comments in the July 28 and August 22 correspondence were completed in the September 1, 2016 traffic study, which is included as Appendix A38 herein.

If any additional information is required, please feel free to contact me at 213.802.1715.

Sincerely,

Iteris, Inc.

Deepak Kaushik
Senior Transportation Engineer

Submitted by:

ITERIS

MT. SAC 2015 FACILITIES MASTER PLAN UPDATE & PHYSICAL EDUCATION PROJECTS

Traffic Impact Study

Final Report

Submitted to:

Mt. San Antonio College

September 1, 2016

17J16-17A8

TABLE OF CONTENTS

APPENDICES

LIST OF TABLES

LIST OF FIGURES

1.0 INTRODUCTION

This traffic impact study has been prepared for the proposed 2015 Facilities Master Plan Update (FMPU) and Physical Education Projects (PEP) of Mount San Antonio College (Mt. SAC). This report provides detailed information concerning the methodology, findings, and conclusions of the traffic analysis.

1.1 PROJECT DESCRIPTION

Mt. San Antonio College is located in the City of Walnut on over 420 acres. It has an estimated 2014-2015 fall enrollment of 35,986 students (headcount). The college has proposed a 2015 Facilities Master Plan Update. The major change from the 2012 FMP is the re-design of the athletic facilities south of Temple Avenue and east of Bonita Avenue. The existing stadium will be demolished and a new stadium built on the site. Other changes for the 2015 FMPU include the relocation of the Public Transportation Center to Lot D3, and expanded Wildlife Sanctuary and Open Space area, and a pedestrian bridge across Temple Avenue connecting the Physical Education Complex to Lot F. The net increase in square footage at 2015 FMPU buildout is approximately 500,000 gross square feet. Special annual events will continue to be held on campus that include the Mt. SAC/Brooks Relays and the Mt. SAC Cross-Country Invitational (XC Invite). The District is also filing an application to host the 8-day 2020 Olympic Track & Field Trials in late July or August 2020. **Figure 1** shows the location of Mt. SAC in relation to the surrounding street network.

1.2 STUDY AREA

A total of nineteen (19) intersections were selected for analysis. The 19 intersections represent locations that may potentially be impacted by traffic due to the proposed project. The study intersections are illustrated in the previously referenced **Figure 1** and are as follows:

1. Nogales Street/Amar Road;
2. Lemon Avenue/Amar Road;
3. Grand Avenue/I-10 Westbound Ramp;
4. Grand Avenue/I-10 Eastbound Ramp;
5. Grand Avenue/Cameron Avenue;
6. Grand Avenue/Mountaineer Road;
7. Grand Avenue/San Jose Hills Road;
8. Grand Avenue/Temple Avenue;
9. Grand Avenue/La Puente Road;
10. Grand Avenue/Valley Boulevard;
11. Grand Avenue/Baker Parkway;
12. Grand Avenue/SR-60 Westbound Ramps;
13. Grand Avenue/SR-60 Eastbound Ramps;
14. Mt. SAC Way/Temple Avenue;
15. Bonita Avenue/Temple Avenue;
16. Lot F/Temple Avenue;
17. Valley Boulevard/Temple Avenue;
18. SR-57 Southbound Ramps/Temple Avenue; and
19. SR-57 Northbound Ramps/Temple Avenue.

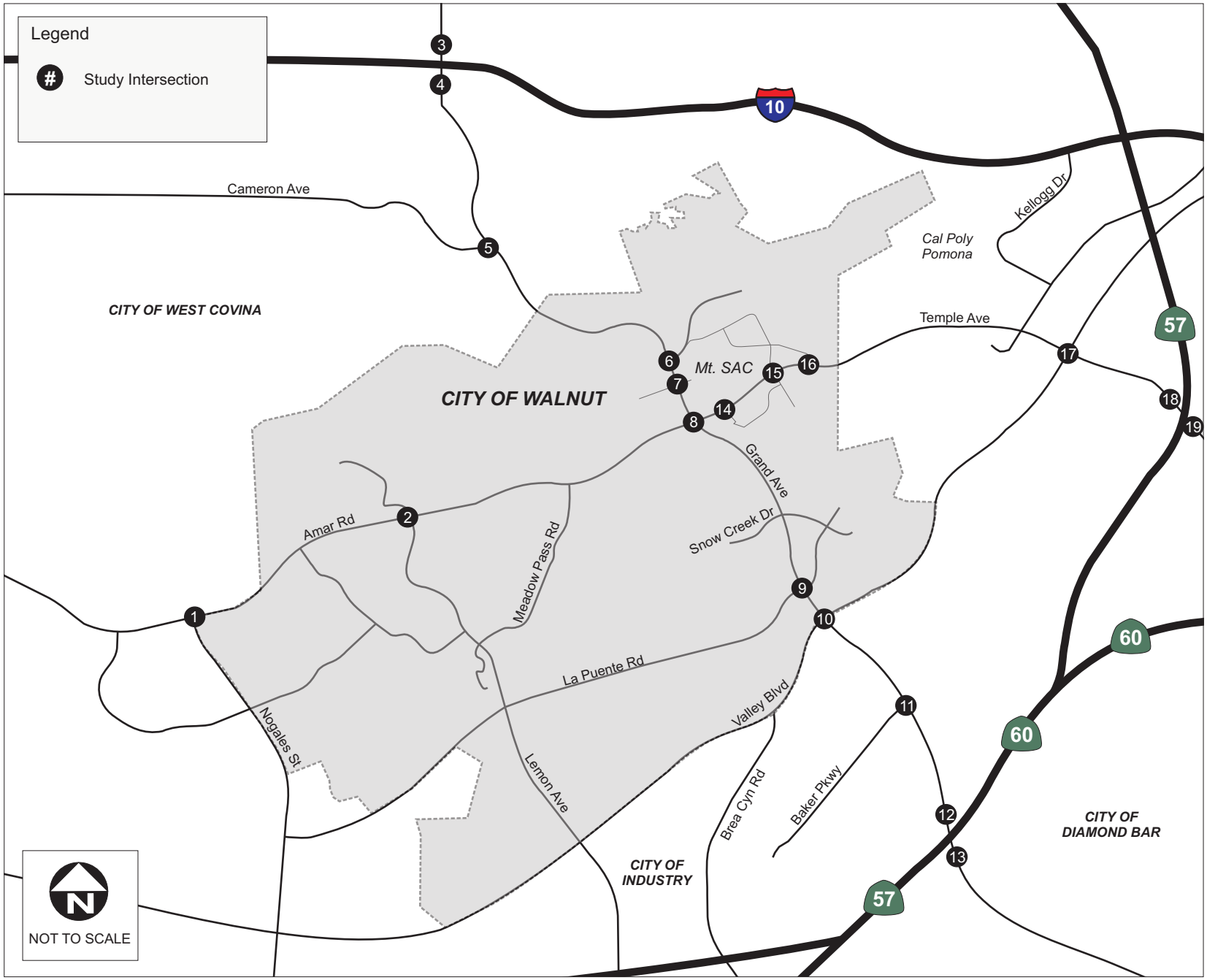


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FIGURE 1
Project Location and Study Intersections

1.3 STUDY PERIODS

Traffic operations were evaluated for each of the following scenarios during the weekday a.m. and p.m. peak hours:

- Existing Conditions (2015);
- Existing Plus 2020 Project Conditions;
- Existing Plus 2025 Project Conditions;
- Existing Plus 2020 Cumulative Conditions;
- Existing Plus 2025 Cumulative Conditions;
- Existing Plus 2020 Cumulative Plus Project Conditions; and
- Existing Plus 2025 Cumulative Plus Project Conditions.

The official buildout date of the 2015 FMPU and of the PEP is 2020. A year 2025 scenario is included in this analysis in order to coincide with the City and County General Plans.

2.0 ENVIRONMENTAL SETTING

This section presents an overview of the existing roadway and transit system within the study area, and the methodology used to determine existing traffic volumes.

2.1 ROADWAY CONFIGURATIONS

The existing configurations of the roadways within the study area are described as follows:

Grand Avenue oriented in a north-south direction, is a four-lane divided roadway with connection to the Interstate 10 and State Route 57/60 freeways. On-street parking is prohibited along Grand Avenue and the posted speed limit is 45 miles per hour within the study area.

Amar Road/Temple Avenue, oriented in an east-west direction, is a four-lane divided to six lane divided roadway with a raised median. On-street parking is prohibited along Amar Road/Temple Avenue, with the exception of the segment between Mt. SAC Way and Bonita Avenue, and the posted speed limit is 45 miles per hour within the study area. Amar Road/Temple Avenue also provides access to State Route 57.

Lemon Avenue, oriented in a north-south direction, is a four-lane divided roadway with a raised median. On-street parking is prohibited through the study area and the posted speed limit is 45 miles per hour. Lemon Avenue mostly provides access to residential areas.

Cameron Avenue, is a four-lane undivided roadway, oriented in an east-west direction, with a posted speed limit of 45 miles per hour within the study area. Cameron Avenue terminates at Grand Avenue on the west end.

Mountaineer Road is a four-lane divided roadway, oriented in an east-west direction providing local access to residential areas and Mt. SAC. On street parking is prohibited and the posted speed limit is 35 miles per hour within the study area. Mountaineer Road terminates at Grand Avenue on the west end.

Baker Parkway is a four-lane divided roadway currently terminating at Grand Avenue on the east end. Baker Parkway would be extended east of Grand Avenue to provide direct access to the Industry Business Complex.

La Puente Road, oriented in an east-west direction, is a four-lane divided roadway, with a posted speed limit of 40 miles per hour. La Puente Road mostly provides access to residential areas.

Nogales Street is a two-lane undivided to four-lane divided roadway, oriented in a north-south direction. On street parking is prohibited and the posted speed limit is 50 miles per hour within the study area.

Valley Boulevard, oriented in an east-west direction, is a four to six-lane divided roadway with connection to the Interstate 10 and State Route 57/60 freeways. On-street parking is prohibited along Valley Boulevard within the study area.

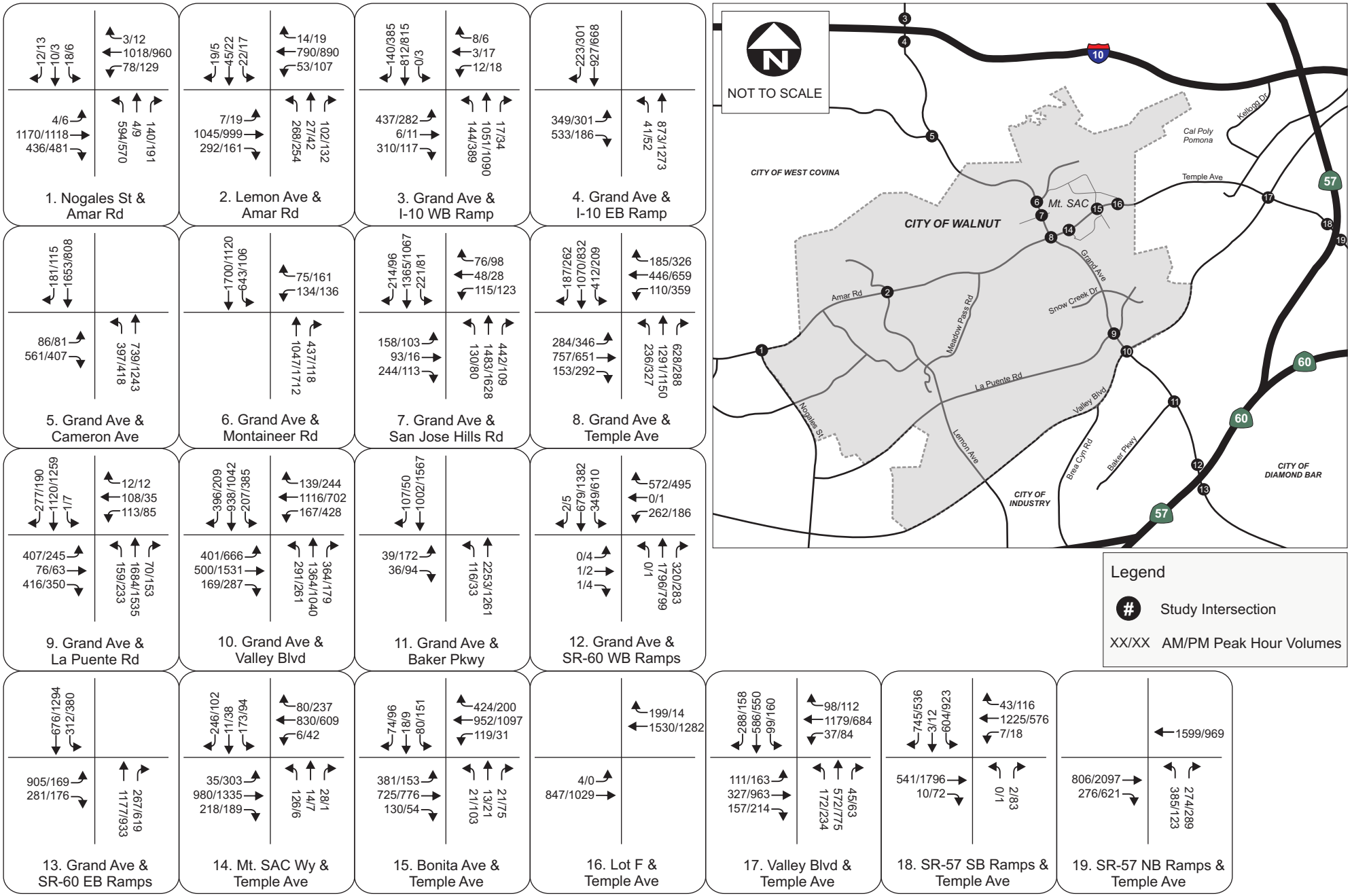
2.2 EXISTING PUBLIC TRANSIT

Metro bus lines 190/194 travel north-south along Grand Avenue and east-west along Valley Boulevard through the study area.

Foothill Transit lines 195, 289, 480, 482, and 486 travel east-west along Amar Road/Temple Avenue through the study area.

2.3 EXISTING TRAFFIC VOLUMES

Existing traffic counts at all 19 intersections were conducted in October 2015. All counts were conducted during the a.m. peak period (7:00 – 9:00) and p.m. peak period (4:00 – 6:00). The traffic impact analysis is based on the highest single hour of traffic during each time period at each location. Detailed vehicle turning movement data are included in **Appendix A**. **Figure 2** shows the existing peak hour volumes at the study intersections.



Mt San Antonio College
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FIGURE 2
Existing Peak Hour Intersection Volumes

3.0 TRAFFIC OPERATIONS ANALYSIS METHODOLOGY

The quality of traffic operations is characterized using the concept of level of service (LOS). Level of service is defined by a range of grades from A (best) to F (worst). At intersections, LOS "A" represents relatively free operating conditions with little or no delay. LOS "F" is characterized by extremely unstable flow conditions and severe congestion with volumes at or near the intersection's design capacity. This results in long queues backing up from all approaches to intersections.

In this report, analysis of traffic operations was conducted according to the Los Angeles County traffic impact analysis guidelines for non-freeway ramp intersections located within the City of Walnut and City of Pomona. Utilizing these guidelines, intersection operating conditions were quantified using the Intersection Capacity Utilization (ICU) method. Volume-to-capacity (V/C) ratios and corresponding levels of service (LOS) were calculated at study intersections during the weekday a.m. and p.m. peak hours. LOS analyses for all study intersections were conducted using TRAFFIX software. **Table 1** presents a brief description of each level of service letter grade, as well as the range of V/C ratios associated with each grade for signalized intersections.

TABLE 1: INTERSECTION LEVEL OF SERVICE DEFINITIONS – ICU METHODOLOGY

Level of Service	Description	Intersection Volume to Capacity (V/C) Ratio
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	0.000-0.600
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	>0.600-0.700
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	>0.700-0.800
D	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues.	>0.800-0.900
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	>0.900-1.000
F	Forced flow. Represents jammed conditions. Backups form locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	> 1.000

For intersections operated under Caltrans' jurisdiction, analysis of traffic operations were conducted utilizing the Highway Capacity Manual (HCM) methodology for evaluation of intersection operating conditions. **Table 2** presents a brief description of each level of service letter grade, as well as the range of HCM average intersection delay associated with each grade for signalized intersections.

TABLE 2: INTERSECTION LEVEL OF SERVICE DEFINITIONS – HCM METHODOLOGY

Level of Service	Description	Signalized Intersection Delay (seconds per vehicle)	Unsignalized Intersection Delay (seconds per vehicle)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	≤ 10	≤ 10
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	>10 and ≤ 20	>10 and ≤ 15
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	>20 and ≤ 35	>15 and ≤ 25
D	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues.	>35 and ≤ 55	>25 and ≤ 35
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	>55 and ≤ 80	>35 and ≤ 50
F	Forced flow. Represents jammed conditions. Backups form locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	> 80	> 50

Source: Highway Capacity Manual 2000, Transportation Research Board, Washington, D.C., 2000.

3.1 THRESHOLDS OF SIGNIFICANCE

This analysis conservatively utilizes the Los Angeles County Public Works traffic impact review guidelines, which state that a project's traffic impact is evaluated based on ICU and is considered significant if the change in volume to capacity ratio (V/C) relative to the "without project" signalized intersection level of service (LOS) meets or exceeds the thresholds contained in **Table 3**. These guidelines are more stringent than the Los Angeles County Metropolitan Transportation Authority (LACMTA) guidelines which were used in the 2008 traffic impact analysis for the Mt. SAC Master Plan Update EIR.

TABLE 3: INTERSECTION SIGNIFICANT IMPACT CRITERIA

Intersection LOS in Pre-Project Conditions	V/C	Project V/C Increase
C	0.701 to 0.800	0.040 or more
D	0.801 to 0.900	0.020 or more
E / F	0.901 or more	0.010 or more

In addition, a project impact is considered significant to a Caltrans facility if the project traffic results in a worsening level of service from LOS D or better to LOS E or F. In addition, a project impact is considered significant if a Caltrans facility is currently operating at LOS E or F and the project traffic results in an increase in average vehicle delay.

4.0 EXISTING CONDITIONS

A level of service analysis was conducted to evaluate existing (2015) intersection operations during the a.m. and p.m. peak hours at the study intersections. **Table 4** summarizes the existing LOS at the study intersections. LOS calculations sheets are provided in **Appendix B**. **Figure 3** summarizes the existing intersection lane configurations.

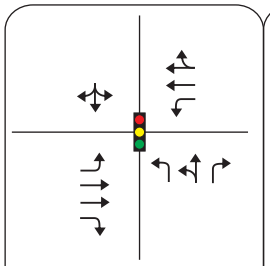
TABLE 4: EXISTING INTERSECTION PEAK HOUR LEVEL OF SERVICE

Intersection		Control Type	AM Peak Hour			PM Peak Hour		
			Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS
1	Nogales St/Amar Rd	Signalized	-	0.780	C	-	0.745	C
2	Lemon Ave/Amar Rd	Signalized	-	0.726	C	-	0.656	B
3	Grand Ave/I-10 WB Ramp*	Signalized	23.4	-	C	24.8	-	C
4	Grand Ave/I-10 EB Ramp*	Signalized	28.5	-	C	16.7	-	B
5	Grand Ave/Cameron Ave	Signalized	-	1.104	F	-	0.679	B
6	Grand Ave/Mountaineer Rd	Signalized	-	0.714	C	-	0.750	C
7	Grand Ave/San Jose Hills Rd	Signalized	-	0.944	E	-	0.844	D
8	Grand Ave/Temple Ave	Signalized	-	0.900	E	-	0.788	C
9	Grand Ave/La Puente Rd	Signalized	-	1.065	F	-	0.950	E
10	Grand Ave/Valley Blvd	Signalized	-	0.868	D	-	0.957	E
11	Grand Ave/Baker Pkwy	Signalized	-	0.859	D	-	0.589	A
12	Grand Ave/SR-60 WB Ramps*	Signalized	22.8	-	C	22.8	-	C
13	Grand Ave/SR-60 EB Ramps*	Signalized	31.9	-	C	21.4	-	C
14	Mt. SAC Wy/Temple Ave	Signalized	-	0.724	C	-	0.700	B
15	Bonita Ave/Temple Ave	Signalized	-	0.597	A	-	0.612	B
16	Lot F/Temple Ave	Stop-control	15.3	-	C	0.0	-	A
17	Valley Blvd/Temple Ave	Signalized	-	0.751	C	-	0.763	C
18	SR-57 SB Ramps/Temple Ave*	Signalized	22.9	-	C	24.5	-	C
19	SR-57 NB Ramps/Temple Ave*	Signalized	13.6	-	B	8.8	-	A

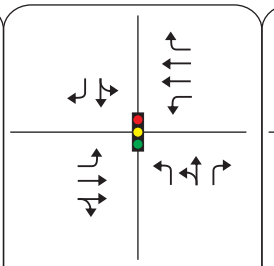
* Caltrans intersection, utilizing HCM delay-based methodology to evaluate intersection operations.
Notes:
V/C = Volume to Capacity Ratio, LOS = Level of Service.

As shown in **Table 4**, the following intersections are currently operating at LOS E or worse:

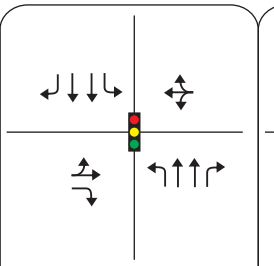
- Grand Avenue/Cameron Avenue (a.m. peak hour);
- Grand Avenue/San Jose Hills Road (a.m. peak hour);
- Grand Avenue/La Puente Road (a.m. and p.m. peak hour); and
- Grand Avenue/Valley Boulevard (p.m. peak hour).



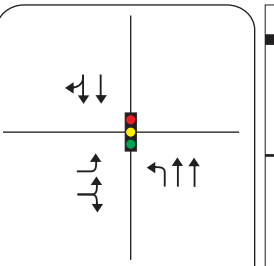
1. Nogales St & Amar Rd



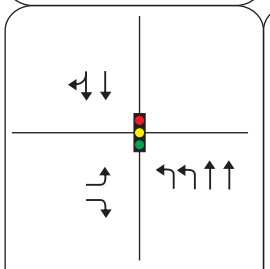
2. Lemon Ave & Amar Rd



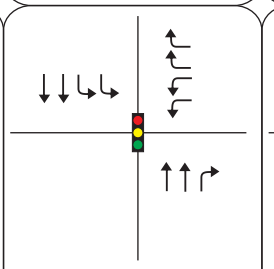
3. Grand Ave & I-10 WB Ramp



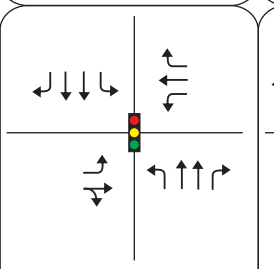
4. Grand Ave & I-10 EB Ramp



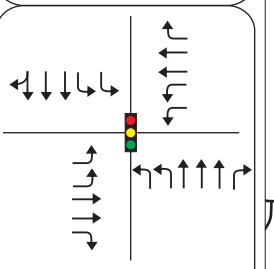
5. Grand Ave & Cameron Ave



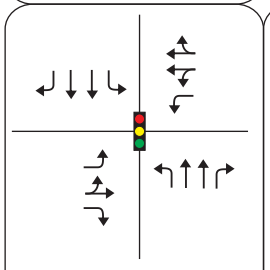
6. Grand Ave & Montaineer Rd



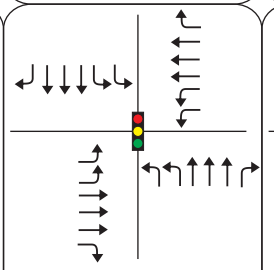
7. Grand Ave & San Jose Hills Rd



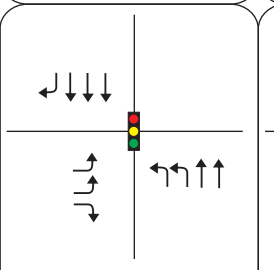
8. Grand Ave & Temple Ave



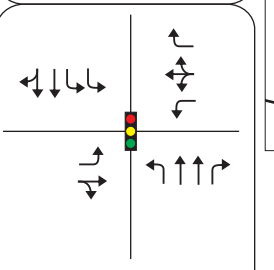
9. Grand Ave & La Puente Rd



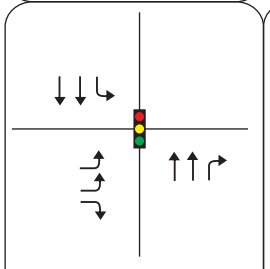
10. Grand Ave & Valley Blvd



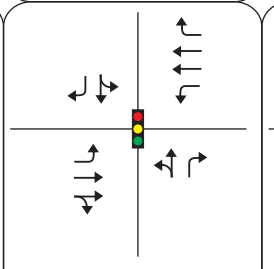
11. Grand Ave & Baker Pkwy



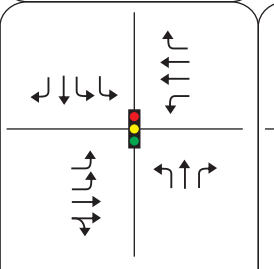
12. Grand Ave & SR-60 WB Ramps



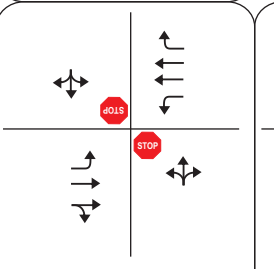
13. Grand Ave & SR-60 EB Ramps



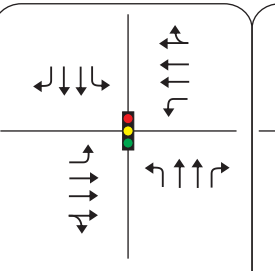
14. Mt. SAC Wy & Temple Ave



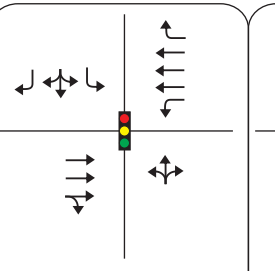
15. Bonita Ave & Temple Ave



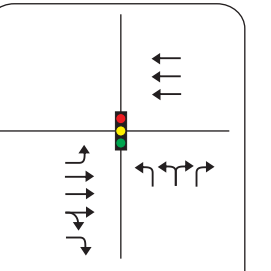
16. Lot F & Temple Ave



17. Valley Blvd & Temple Ave



18. SR-57 SB Ramps & Temple Ave



19. SR-57 NB Ramps & Temple Ave

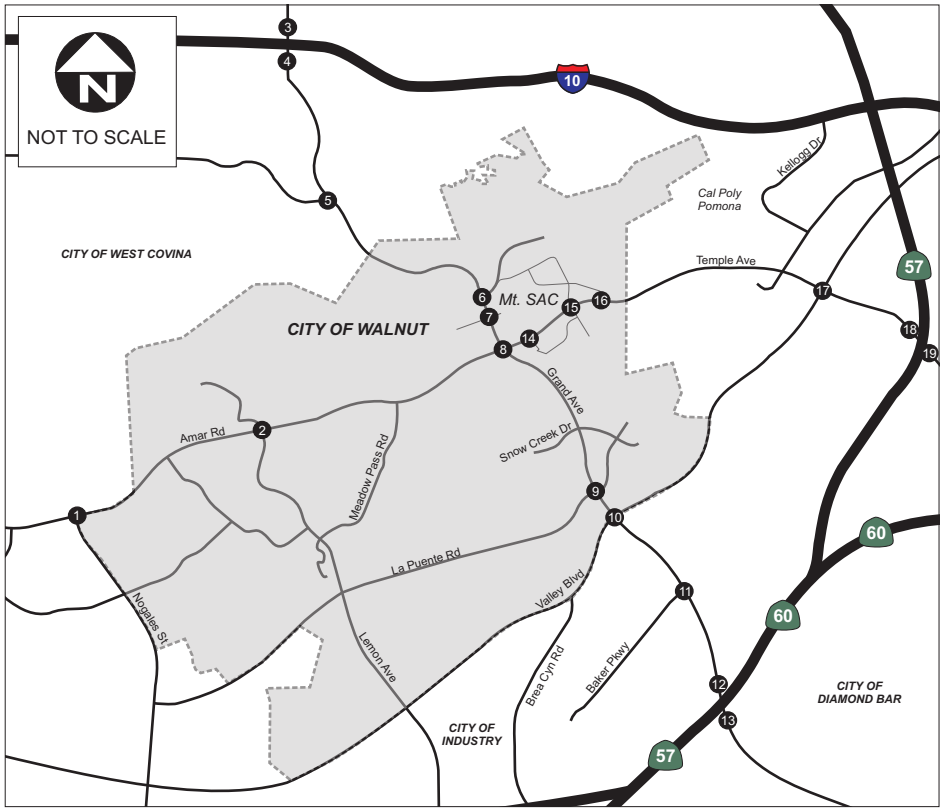


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FIGURE 3
Existing Intersection Configurations

5.0 PROPOSED PROJECT TRAFFIC

This section defines the traffic generated by the proposed buildout of the Facilities Master Plan project in a three-step process including trip generation, trip distribution and trip assignment. The college has proposed a 2015 Facilities Master Plan Update. The major change from the 2012 FMP is the re-design of the athletic facilities south of Temple Avenue and east of Bonita Avenue. The existing stadium will be demolished and a new stadium built on the site. Other changes for the 2015 FMPU include the relocation of the Public Transportation Center to Lot D3, and expanded Wildlife Sanctuary and Open Space area, and a pedestrian bridge across Temple Avenue connecting the Physical Education Complex to Lot F. The net increase in square footage at 2015 FMPU buildout is approximately 500,000 gross square feet.

5.1 PROJECT TRIP GENERATION

Trip generation rates for the proposed project were calculated based on those published in the Institute *of Transportation Engineers (ITE), Trip Generation*, 9th Edition. The land use category representing the proposed project was identified as Junior/Community College. The increase in traffic is based on student headcount. In year 2020, it is anticipated that an additional 3,745 students would be enrolled at the college. In year 2025, it is anticipated that an additional 7,153 students would be enrolled at the college when compared to existing conditions. The results of this calculation are shown for 2020 and 2025 in **Tables 5** and **6**, respectively.

As shown in **Table 5**, the buildout of the 2015 FMPU project in 2020 is forecast to generate 449 new a.m. peak hour trips, 449 new p.m. peak hour trips, and 4,606 new daily trips when compared to existing conditions. As shown in **Table 6**, by 2025 the project is forecast to generate 858 new a.m. peak hour trips, 858 new p.m. peak hour trips, and 8,798 new daily trips when compared to existing conditions.

TABLE 5: 2020 PROJECT TRIP GENERATION

ITE Code	Land Use	Size	Unit	AM Peak Hour Rates			PM Peak Hour Rates			Daily Rates	AM Peak Hour Trips			PM Peak Hour Trips			Daily Trips
				In	Out	Total	In	Out	Total		In	Out	Total	In	Out	Total	
New Project Land Use																	
540	Junior/Community College	3,745	Students	84%	16%	0.12	63%	37%	0.12	1.23	375	74	449	300	149	449	4,606
										Total	**375**	**74**	**449**	**300**	**149**	**449**	**4,606**

Source: ITE Trip Generation, 9th Edition

TABLE 6: 2025 PROJECT TRIP GENERATION

ITE Code	Land Use	Size	Unit	AM Peak Hour Rates			PM Peak Hour Rates			Daily Rates	AM Peak Hour Trips			PM Peak Hour Trips			Daily Trips
				In	Out	Total	In	Out	Total		In	Out	Total	In	Out	Total	
New Project Land Use																	
540	Junior/Community College	7,153	Students	84%	16%	0.12	63%	37%	0.12	1.23	715	143	858	572	286	858	8,798
										Total	**715**	**143**	**858**	**572**	**286**	**858**	**8,798**

Source: ITE Trip Generation, 9th Edition

5.2 PROJECT TRIP DISTRIBUTION

Trip distribution assumptions are used to determine the origin and destination of new vehicle trips associated with the project. The geographic distribution of project trips is based on the locations of local activity centers and the street system that serves the site. The trip distribution routes utilized in this analysis were determined based on the patterns of existing campus traffic and the distribution of student residences provided by Mt SAC. The distribution pattern developed for the project is shown in **Figure 4**.

5.3 PROJECT TRIP ASSIGNMENT

Trips generated by the project, as shown in **Tables 5** and **6**, were assigned to the surrounding roadway system based on the distribution patterns to estimate the project-related peak-hour traffic at each of the study intersections. The project trips were assigned based on distribution inputs to the TRAFFIX network. **Figure 5** illustrates the a.m. and p.m. peak hour 2020 project trip assignment. **Figure 6** illustrates the a.m. and p.m. peak hour 2025 project trip assignment.

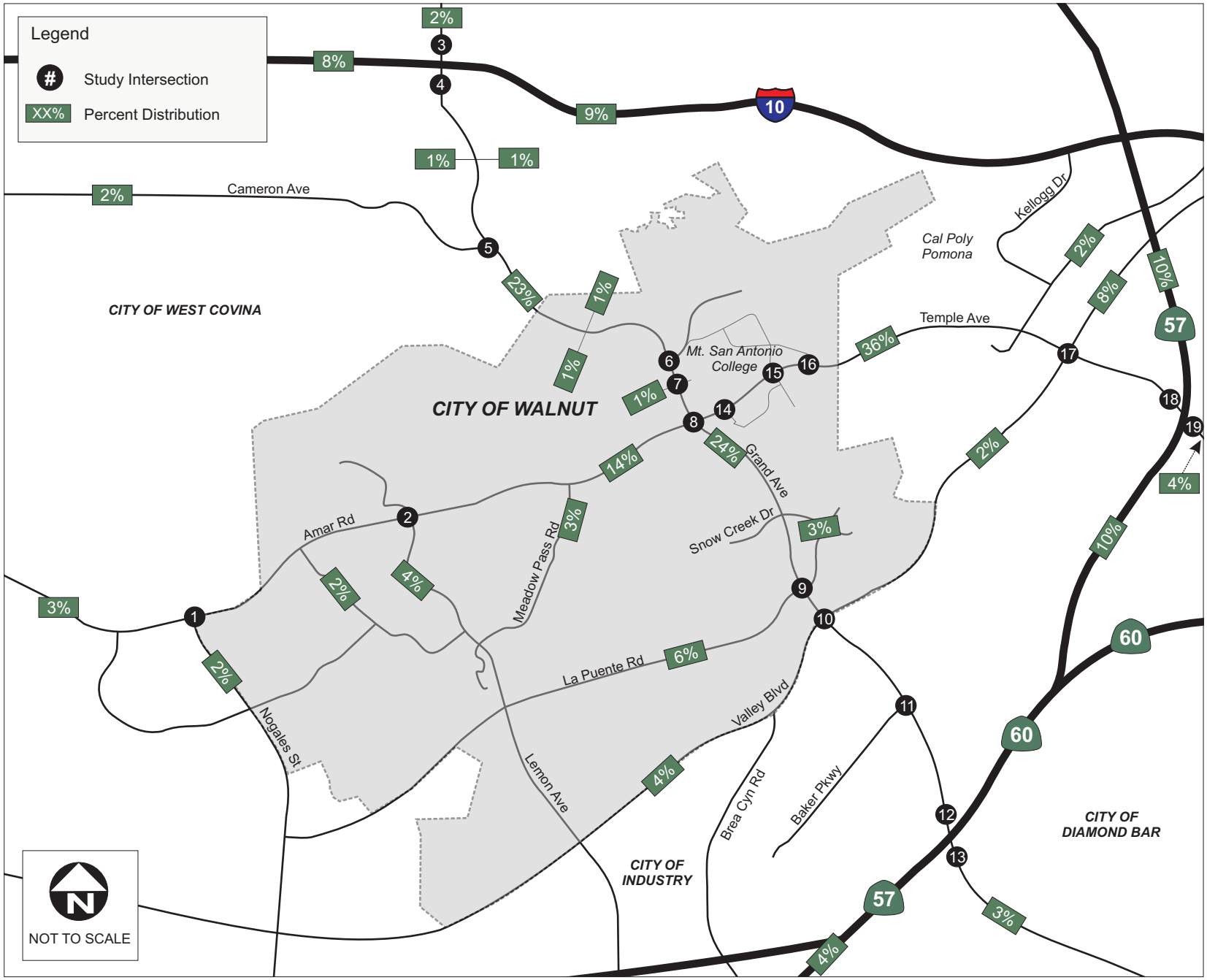

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FIGURE 4
Project Trip Distribution

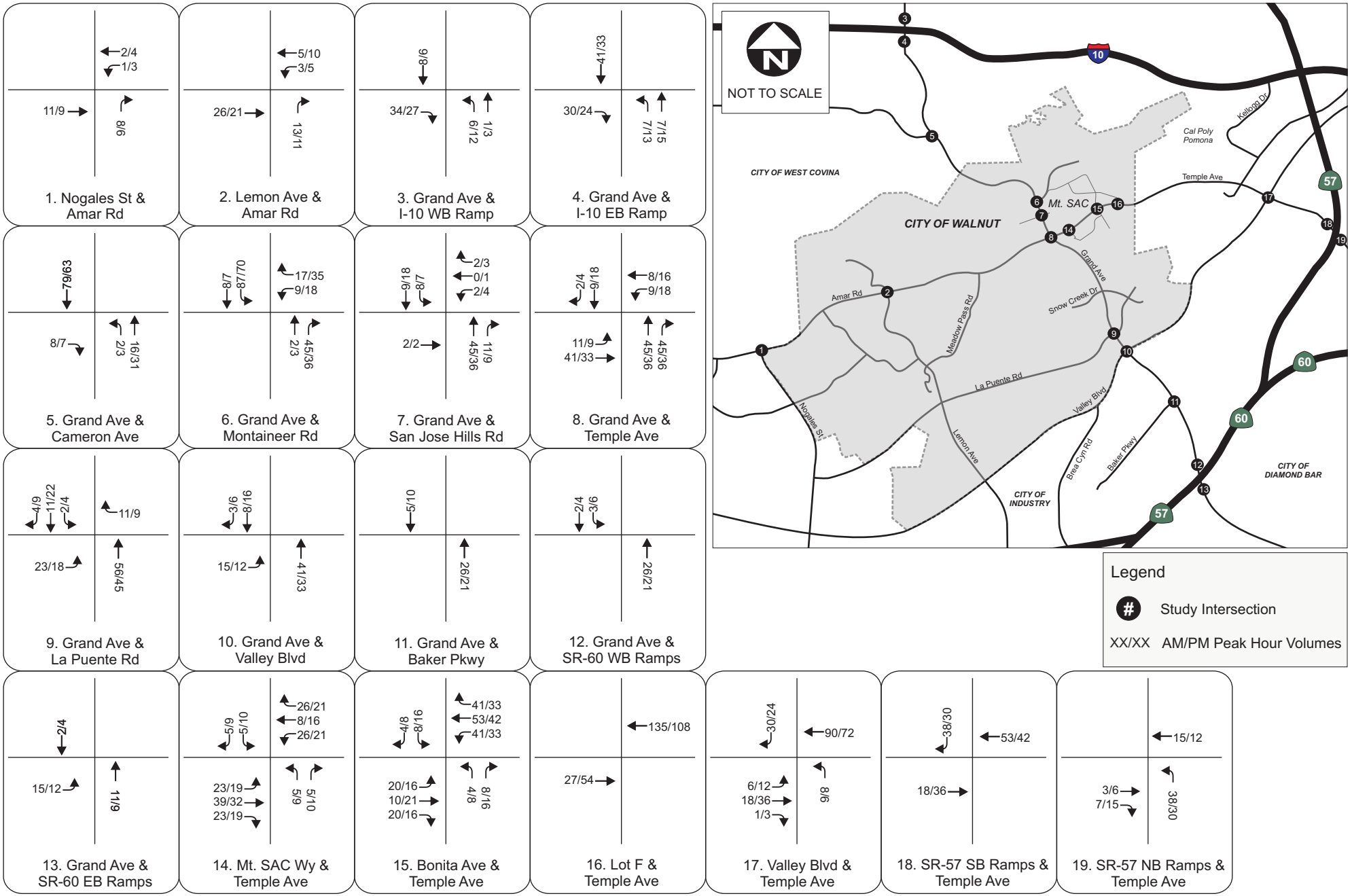

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FIGURE 5
2020 Project Trip Assignment

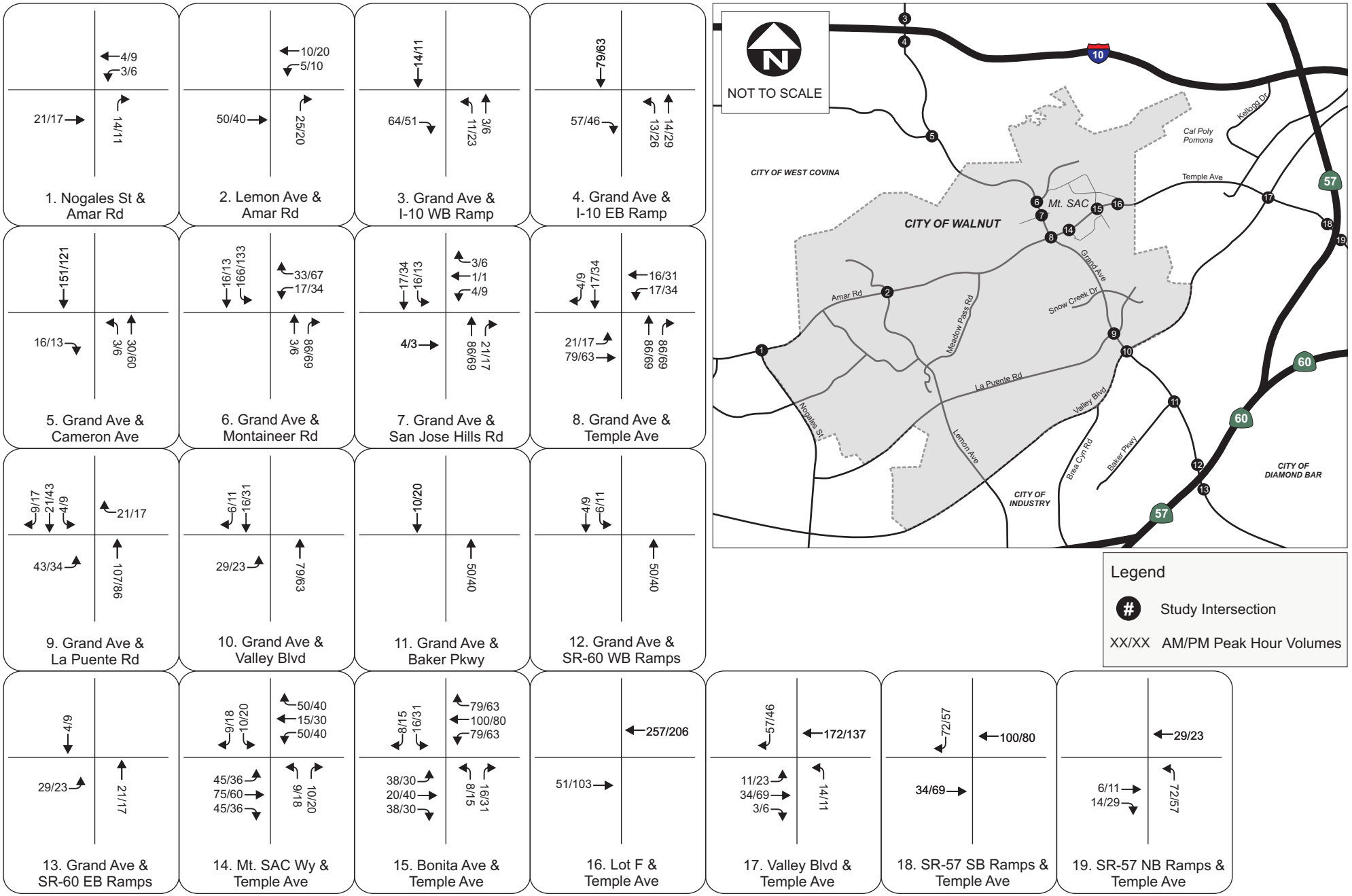

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FIGURE 6
2025 Project Trip Assignment

6.0 EXISTING PLUS 2020 PROJECT CONDITIONS

The official buildout date of the 2015 FMPU and of the PEP is 2020. Existing plus 2020 project conditions were developed by adding trips generated by the proposed 2020 project buildout to the existing volumes. **Figure 7** illustrates the existing plus 2020 project traffic volumes at the study intersections.

6.1 EXISTING PLUS 2020 PROJECT INTERSECTION LEVELS OF SERVICE

A level of service analysis was conducted to evaluate existing plus 2020 project intersection operations during the a.m. and p.m. peak hours at the study intersections. **Table 7** summarizes the existing plus 2020 project level of service at the study intersections. Level of service calculation worksheets are included in **Appendix B**.

TABLE 7: EXISTING PLUS 2020 PROJECT INTERSECTION PEAK HOUR LEVEL OF SERVICE

	Intersection	Existing Conditions						Existing Plus 2020 Project Conditions						Change in AM V/C or Delay	Change in PM V/C or Delay	Significant Impact?
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour					
		Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS			
1	Nogales St/ Amar Rd	-	0.780	C	-	0.745	C	-	0.784	C	-	0.750	C	0.004	0.005	No
2	Lemon Ave/ Amar Rd	-	0.726	C	-	0.656	B	-	0.736	C	-	0.666	B	0.010	0.010	No
3	Grand Ave/ I-10 WB Ramp*	23.4	-	C	24.8	-	C	23.5	-	C	25.1	-	C	0.1	0.3	No
4	Grand Ave/ I-10 EB Ramp*	28.5	-	C	16.7	-	B	31.0	-	C	18.0	-	B	2.5	1.3	No
5	Grand Ave/ Cameron Ave	-	1.104	F	-	0.679	B	-	1.136	F	-	0.705	C	0.032	0.026	**Yes**
6	Grand Ave/ Mountaineer Rd	-	0.714	C	-	0.750	C	-	0.749	C	-	0.783	C	0.035	0.033	No
7	Grand Ave/ San Jose Hills Rd	-	0.944	E	-	0.844	D	-	0.967	E	-	0.865	D	0.023	0.021	**Yes**
8	Grand Ave/ Temple Ave	-	0.900	E	-	0.788	C	-	0.943	E	-	0.799	C	0.043	0.011	**Yes**
9	Grand Ave/ La Puente Rd	-	1.065	F	-	0.950	E	-	1.089	F	-	0.960	E	0.024	0.010	**Yes**
10	Grand Ave/ Valley Blvd	-	0.868	D	-	0.957	E	-	0.882	D	-	0.965	E	0.014	0.008	No
11	Grand Ave/ Baker Pkwy	-	0.859	D	-	0.589	A	-	0.867	D	-	0.596	A	0.008	0.007	No
12	Grand Ave/ SR-60 WB Ramps*	22.8	-	C	22.8	-	C	23.1	-	C	22.9	-	C	0.3	0.1	No
13	Grand Ave/ SR-60 EB Ramps*	31.9	-	C	21.4	-	C	32.4	-	C	21.4	-	C	0.5	0	No
14	Mt. SAC Wy/ Temple Ave	-	0.724	C	-	0.700	B	-	0.752	C	-	0.741	C	0.028	0.041	No
15	Bonita Ave/ Temple Ave	-	0.597	A	-	0.612	B	-	0.636	B	-	0.647	B	0.039	0.035	No
16	Lot F/ Temple Ave	15.3	-	C	0.0	-	A	16.7	-	C	0.0	-	A	1.4	0.0	No

Intersection		Existing Conditions						Existing Plus 2020 Project Conditions						Change in AM V/C or Delay	Change in PM V/C or Delay	Significant Impact?
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour					
		Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS			
17	Valley Blvd/ Temple Ave	-	0.751	C	-	0.763	C	-	0.796	C	-	0.772	C	0.045	0.009	**Yes**
18	SR-57 SB Ramps/ Temple Ave*	22.9	-	C	24.5	-	C	23.6	-	C	25.2	-	C	0.7	0.7	No
19	SR-57 NB Ramps/ Temple Ave*	13.6	-	B	8.8	-	A	14.3	-	B	9.1	-	A	0.7	0.3	No

* Caltrans intersection, utilizing HCM delay-based methodology to evaluate intersection operations.

Notes:

V/C = Volume to Capacity Ratio, LOS = Level of Service.

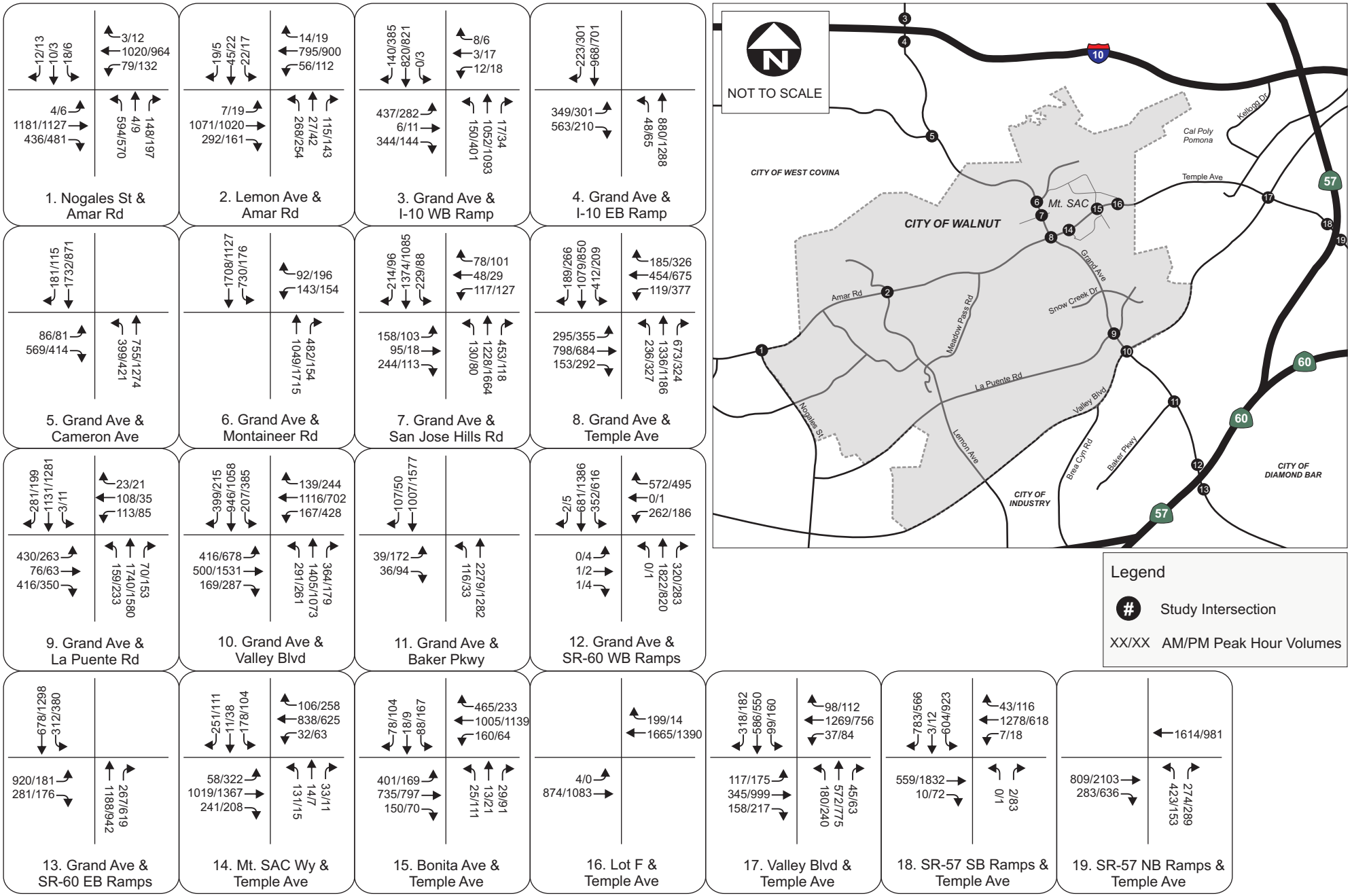

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FIGURE 7
Existing Plus 2020 Project
Peak Hour Intersection Volumes

As shown in **Table 7**, based on the thresholds of significance described in Section 3.1, the following intersections are forecast to be significantly impacted by the proposed 2020 project traffic:

- Grand Avenue/Cameron Avenue (a.m. peak hour);
- Grand Avenue/San Jose Hills Road (a.m. and p.m. peak hour);
- Grand Avenue/Temple Avenue (a.m. peak hour);
- Grand Avenue/La Puente Road (a.m. and p.m. peak hour); and
- Valley Boulevard/Temple Avenue (a.m. peak hour).

6.2 Existing Plus 2020 Project Mitigation Measures

In order to reduce significant traffic impacts to a level considered less than significant in existing plus 2020 project conditions, a list of mitigation measures have been developed. The following mitigation measures would be required to reduce the level of impact:

- **Grand Avenue/Cameron Avenue** – Add a second eastbound right-turn lane.
- **Grand Avenue/San Jose Hills Road** – A second eastbound right-turn lane is required to mitigate the project impact at this intersection. However, sufficient ROW is not available due to adjacent land uses at the southwest and northwest corners of the intersection. As a result, improvements needed to mitigate this intersection are not considered feasible. A statement of overriding considerations is required.
- **Grand Avenue/Temple Avenue** – Convert the existing eastbound right-turn lane to a through/right-turn lane.
- **Grand Avenue/La Puente Road** – Modify the traffic signal to include an eastbound right-turn overlap phase.
- **Valley Boulevard/Temple Avenue** – A second northbound left-turn lane is required to mitigate the project impact at this intersection. However, the improvement needed to mitigate this intersection is not considered feasible due to the ROW constraints near the adjacent railroad. A statement of overriding considerations is required.

At the locations where mitigation measures are deemed feasible, if it is determined by the lead agency that the necessary right-of-way is not available and the proposed lane additions cannot be developed within the available right-of-way, then the impacts may not be mitigated. **Table 8** summarizes the LOS results at the impacted intersections with implementation of the proposed mitigation measures that were determined to be feasible.

TABLE 8: MITIGATED EXISTING PLUS 2020 PROJECT INTERSECTION PEAK HOUR LEVEL OF SERVICE

Intersection		Existing Conditions						Mitigated Existing Plus 2020 Project Conditions						Change in AM V/C or Delay	Change in PM V/C or Delay	Significant Impact with Mitigation?
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour					
		Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS			
5	Grand Ave/ Cameron Ave	-	1.104	F	-	0.679	B	-	0.959	E	-	0.639	B	-0.145	-0.040	No
8	Grand Ave/ Temple Ave	-	0.900	E	-	0.788	C	-	0.894	D	-	0.799	C	-0.006	0.011	No
9	Grand Ave/ La Puente Rd	-	1.065	F	-	0.950	E	-	0.974	E	-	0.833	D	-0.091	-0.117	No

Notes:
V/C = Volume to Capacity Ratio, LOS = Level of Service.

As shown in **Table 8**, at locations where improvements were considered feasible, project impacts are reduced to less than significant.

7.0 EXISTING PLUS 2025 PROJECT CONDITIONS

A year 2025 scenario is included in this analysis in order to coincide with the City and County General Plans. Existing plus 2025 project conditions were developed by adding trips generated by the proposed 2025 project to the existing volumes. **Figure 8** illustrates the existing plus 2025 project traffic volumes at the study intersections.

7.1 EXISTING PLUS 2025 PROJECT INTERSECTION LEVELS OF SERVICE

A level of service analysis was conducted to evaluate existing plus 2025 project intersection operations during the a.m. and p.m. peak hours at the study intersections. **Table 9** summarizes the existing plus 2025 project level of service at the study intersections. Level of service calculation worksheets are included in **Appendix B**.

TABLE 9: EXISTING PLUS 2025 PROJECT INTERSECTION PEAK HOUR LEVEL OF SERVICE

	Intersection	Existing Conditions						Existing Plus 2025 Project Conditions						Change in AM V/C or Delay	Change in PM V/C or Delay	Significant Impact?
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour					
		Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS			
1	Nogales St/ Amar Rd	-	0.780	C	-	0.745	C	-	0.789	C	-	0.755	C	0.009	0.010	No
2	Lemon Ave/ Amar Rd	-	0.726	C	-	0.656	B	-	0.746	C	-	0.677	B	0.020	0.021	No
3	Grand Ave/ I-10 WB Ramp*	23.4	-	C	24.8	-	C	23.7	-	C	25.5	-	C	0.3	0.7	No
4	Grand Ave/ I-10 EB Ramp*	28.5	-	C	16.7	-	B	34.1	-	C	19.2	-	B	5.6	2.5	No
5	Grand Ave/ Cameron Ave	-	1.104	F	-	0.679	B	-	1.166	F	-	0.728	C	0.062	0.049	**Yes**
6	Grand Ave/ Mountaineer Rd	-	0.714	C	-	0.750	C	-	0.781	C	-	0.812	D	0.067	0.062	**Yes**
7	Grand Ave/ San Jose Hills Rd	-	0.944	E	-	0.844	D	-	0.989	E	-	0.883	D	0.045	0.039	**Yes**
8	Grand Ave/ Temple Ave	-	0.900	E	-	0.788	C	-	0.981	E	-	0.830	D	0.081	0.042	**Yes**
9	Grand Ave/ La Puente Rd	-	1.065	F	-	0.950	E	-	1.111	F	-	0.968	E	0.046	0.018	**Yes**
10	Grand Ave/ Valley Blvd	-	0.868	D	-	0.957	E	-	0.896	D	-	0.971	E	0.028	0.014	**Yes**
11	Grand Ave/ Baker Pkwy	-	0.859	D	-	0.589	A	-	0.875	D	-	0.602	B	0.016	0.013	No
12	Grand Ave/ SR-60 WB Ramps*	22.8	-	C	22.8	-	C	23.5	-	C	23.0	-	C	0.7	0.2	No
13	Grand Ave/ SR-60 EB Ramps*	31.9	-	C	21.4	-	C	32.8	-	C	21.5	-	C	0.9	0.1	No
14	Mt. SAC Wy/ Temple Ave	-	0.724	C	-	0.700	B	-	0.790	C	-	0.779	C	0.066	0.079	**Yes**
15	Bonita Ave/ Temple Ave	-	0.597	A	-	0.612	B	-	0.666	B	-	0.679	B	0.069	0.067	No
16	Lot F/ Temple Ave	15.3	-	C	0.0	-	A	18.1	-	C	0.0	-	A	2.8	0.0	No

Intersection		Existing Conditions						Existing Plus 2025 Project Conditions						Change in AM V/C or Delay	Change in PM V/C or Delay	Significant Impact?
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour					
		Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS			
17	Valley Blvd/ Temple Ave	-	0.751	C	-	0.763	C	-	0.838	D	-	0.776	C	0.087	0.013	**Yes**
18	SR-57 SB Ramps/ Temple Ave*	22.9	-	C	24.5	-	C	24.4	-	C	25.8	-	C	1.5	1.3	No
19	SR-57 NB Ramps/ Temple Ave*	13.6	-	B	8.8	-	A	14.8	-	B	9.4	-	A	1.2	0.6	No

* Caltrans intersection, utilizing HCM delay-based methodology to evaluate intersection operations.

Notes:

V/C = Volume to Capacity Ratio, LOS = Level of Service.

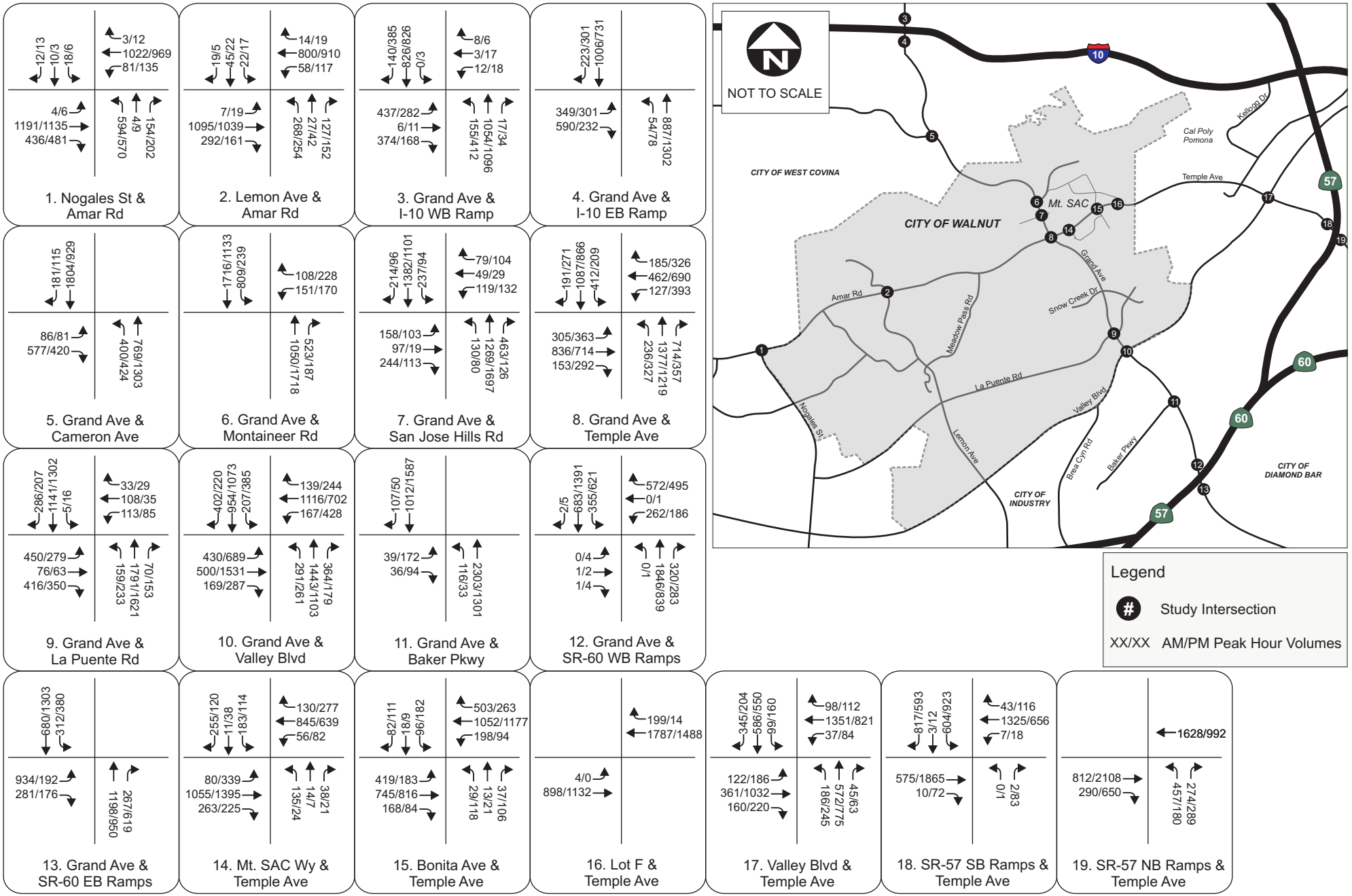

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FIGURE 8
Existing Plus 2025 Project
Peak Hour Intersection Volumes

As shown in **Table 9**, based on the thresholds of significance described in Section 3.1, the following intersections are forecast to be significantly impacted by the proposed 2025 project traffic:

- Grand Avenue/Cameron Avenue (a.m. peak hour);
- Grand Avenue/Mountaineer Road (a.m. and p.m. peak hour);
- Grand Avenue/San Jose Hills Road (a.m. and p.m. peak hour);
- Grand Avenue/Temple Avenue (a.m. and p.m. peak hour);
- Grand Avenue/La Puente Road (a.m. and p.m. peak hour);
- Grand Avenue/Valley Boulevard (a.m. and p.m. peak hour);
- Mt. SAC Way/Temple Avenue (a.m. peak hour); and
- Valley Boulevard/Temple Avenue (a.m. peak hour).

7.2 Existing Plus 2025 Project Mitigation Measures

In order to reduce significant traffic impacts to a level considered less than significant in existing plus 2025 project conditions, a list of mitigation measures have been developed. The following additional mitigation measures would be required in 2025 to reduce the level of impact beyond those required in 2020:

- **Grand Avenue/Mountaineer Road** – A third northbound through lane is required to mitigate the project impact at this intersection. However, sufficient ROW is not available within the current curb width. As a result, improvements needed to mitigate this intersection are not considered feasible. A statement of overriding considerations is required.
- **Grand Avenue/Valley Boulevard** – This intersection is considered to be fully built out since it currently consists of dual left-turn lanes at all approaches and dedicated free right-turn lanes at three approaches. In addition, no improvements at this intersection are considered feasible due to ROW constraints. A statement of overriding considerations is required.
- **Mt. SAC Way/Temple Avenue** – Restripe the eastbound approach to include a dedicated right-turn lane.

At the locations where mitigation measures are deemed feasible, if it is determined by the lead agency that the necessary right-of-way is not available and the proposed lane additions cannot be developed within the available right-of-way, then the impacts may not be mitigated. **Table 10** summarizes the LOS results at the impacted intersections with implementation of the proposed mitigation measures that were determined to be feasible.

TABLE 10: MITIGATED EXISTING PLUS 2025 PROJECT INTERSECTION PEAK HOUR LEVEL OF SERVICE

Intersection		Existing Conditions						Mitigated Existing Plus 2025 Project Conditions						Change in AM V/C or Delay	Change in PM V/C or Delay	Significant Impact with Mitigation?
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour					
		Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS			
5	Grand Ave/ Cameron Ave	-	1.104	F	-	0.679	B	-	0.984	E	-	0.659	B	-0.120	-0.020	No
8	Grand Ave/ Temple Ave	-	0.900	E	-	0.788	C	-	0.924	E	-	0.816	D	0.024	0.028	**Yes**
9	Grand Ave/ La Puente Rd	-	1.065	F	-	0.950	E	-	1.001	F	-	0.847	D	-0.064	-0.103	No
14	Mt. SAC Wy/ Temple Ave	-	0.724	C	-	0.700	B	-	0.704	C	-	0.708	C	-0.020	0.008	No

Notes:
V/C = Volume to Capacity Ratio, LOS = Level of Service.

As shown in **Table 10**, at locations where improvements were considered feasible, project impacts are reduced to less than significant at three intersections.

8.0 CUMULATIVE PROJECT CONDITIONS

This section summarizes the forecast increase in traffic due to specific, known development projects in the area surrounding the study locations that may affect traffic circulation. The projected buildout year of the FMPU is 2020 and the County General Plan buildout is 2025. Therefore, year 2020 and 2025 cumulative traffic conditions are assessed.

8.1 CUMULATIVE PROJECT GROWTH

A list of cumulative projects within the region, expected to be built by 2020, was provided by the Cities of Walnut, Pomona, Diamond Bar, and Industry, as shown in **Table 11**. An additional list of 2025 added cumulative projects within the region is shown in **Table 12**. Detailed trip generation data for these 54 cumulative projects within the vicinity of the project site is provided in **Appendix C**. The general location of each of the cumulative projects is shown in **Figure 9**. The peak hour vehicle trips expected to be generated by these developments within the study area in year 2020 are shown in **Figure 10**. The peak hour vehicle trips expected to be generated by these developments within the study area in year 2025 are shown in **Figure 11**. Trip distribution for the cumulative projects were assigned depending on the type of development, residential or non-residential, and location with respect to freeways and major arterials.

TABLE 11: 2020 CUMULATIVE DEVELOPMENT PROJECTS

#	Agency	Project Title	Location	Description
1	**Walnut**	Shea Homes Project	North of Valley Blvd between Pierre Rd and Suzanne Rd	37 single-family detached homes and 61 single-family townhomes
2		Salamone Subdivision	Off of Meadowpass Rd	6 residential lots
3		Gregorian Subdivision	1521 Meadowpass Rd	7 single-family residential lots
4		The Olsen Company Project	650 Camino De Rosa	8 single-family residences
5	**Pomona**	22122 W. Valley Blvd.	22122 W. Valley Blvd.	Warehouse - 141,000 SF
6		2001 W. Mission Blvd.	2001 W. Mission Blvd.	Warehouse - 432,843 SF
7		2-16 Village Loop Rd.	2-16 Village Loop Rd.	Single Family Detached – 124 DU and Retail - 6,000 SF
8		92 Rio Rancho Rd.	92 Rio Rancho Rd.	Condominium/Townhome - 56 DU
9		1943 S. Towne Ave.	1943 S. Towne Ave.	Single Family Detached - 48,000 DU
10		715 E. Phillips Rd.	715 E. Phillips Rd.	Condominium/Townhome - 4 DU
11		1041 S. White Ave.	1041 S. White Ave.	Single Family Detached - 20 DU

12		701 S. Garey Ave.	701 S. Garey Ave.	Retail - 37,000 SF
13		1439 S. Palomares St.	1439 S. Palomares St.	Condominium/Townhome - 6 DU
14		1390 S. Palomares St.	1390 S. Palomares St.	Condominium/Townhome - 12 DU
15		Rio Rancho Towne Center Phase II	Rio Rancho Towne Center	Retail - 64,717 SF
16		600 Dudley Ave.	600 Dudley Ave.	Senior Housing - 84 DU
17		855 E. Phillips Blvd.	855 E. Phillips Blvd.	Single Family Detached - 37 DU
18		675 E. Mission Blvd.	675 E. Mission Blvd.	Condominium/Townhome - 38 DU
19		22 Rio Rancho Rd.	22 Rio Rancho Rd.	Automobile Sales - 5,750 SF
20		888 W. Mission Blvd.	888 W. Mission Blvd.	Retail - 20,239 SF
21		1368 W. Mission Blvd.	1368 W. Mission Blvd.	Condominium/Townhome - 36 DU
22		1932/1936 S. Garey Ave.	1932/1936 S. Garey Ave.	Condominium/Townhome - 17 DU
23		1300 W. Mission Blvd.	1300 W. Mission Blvd.	Condominium/Townhome - 33 DU
24		1365/1367 S. Garey Ave.	1365/1367 S. Garey Ave.	Condominium/Townhome - 2 DU
25		1940 S. Garey Ave.	1940 S. Garey Ave.	Condominium/Townhome - 10 DU
26		424-446 W. Commercial St.	424-446 W. Commercial St.	Senior Housing - 61 DU
27		952 E. Ninth St.	952 E. Ninth St.	Condominium/Townhome - 11 DU
28		1344 W. Grand Ave.	1344 W. Grand Ave.	Condominium/Townhome - 7 DU
29		1363 S. Buena Vista Ave.	1363 S. Buena Vista Ave.	Condominium/Townhome - 3 DU
30		1480 W. Mission Blvd.	1480 W. Mission Blvd.	Condominium/Townhome - 24 DU
31		1455 S. White Ave.	1455 S. White Ave.	Condominium/Townhome - 2 DU
32		1302 Hansen Ave.	1302 Hansen Ave.	Single Family Detached - 2 DU
33		Rio Rancho Towne Center Hotel (White & Rancho Valley)	White & Rancho Valley	Hotel - 149 Rooms
34		1145 W. 10th St.	1145 W. 10th St.	Religious Facility - 6,019 SF
35		40 Rio Rancho Rd.	40 Rio Rancho Rd.	Restaurant - 1,608 SF
36		1491 E. Ninth St.	1491 E. Ninth St.	Warehouse/Office - 193,500 SF
37	**Diamond Bar**	TR 63623	Larkstone Drive south of Southpointe Middle School	99 detached condominium units
38		TR 72295	Brea Canyon Road and Diamond Bar Blvd	47 single-family lots, 73 detached condominiums, 62 attached condominiums
39	**Industry**	15000 Nelson	15000 Nelson	125,344 sf industrial building
40		489 & 499 Parriott Plce	489 & 499 Parriott Plce	130,170 sf industrial building
41		SE Corner of Azusa and Chestnut	SE Corner of Azusa and Chestnut	614,597 sf industrial building
42		18421 Railroad Ave.	18421 Railroad Ave.	8,850 sf industrial building

43		12851 Crossroads Parkway South	12851 Crossroads Parkway South	77,250 sf office building
44		3718 Capitol Ave.	3718 Capitol Ave.	36,666 sf warehouse
45		Echelon	Echelon	326,700 sf building
46		14700 Nelson	14700 Nelson	232,450 sf building
47		19782 Walnut Drive North	19782 Walnut Drive North	2,662 sf Carl's Jr. restaurant with drive-thru
48		1552 Azusa Ave.	1552 Azusa Ave.	20,621 sf retail building
49		1722 Arenth Avenue	1722 Arenth Avenue	6,760 sf Union Pacific railroad maintenance building
50		Castleton	Castleton	2,492 sf fast-food with drive-thru
51		16801 Gale Ave.	16801 Gale Ave.	39,150 sf warehouse building
52	**California State Polytechnic University, Pomona**	Future Enrollment Increase (2020)	3801 W Temple Ave, Pomona, CA 91768	4,089 students by 2020

Notes:
tsf = thousand square feet
du = dwelling unit

TABLE 12: 2025 ADDITIONAL CUMULATIVE DEVELOPMENT PROJECTS

#	Agency	Project Title	Location	Description
53	**Industry**	Industry Business Center East	Southeast corner of Grand Ave. and Baker Pkwy.	Warehousing and Distribution
54		Industry Business Center West	Southwest corner of Grand Ave. and Baker Pkwy.	Warehousing and Distribution
52 (revised)	**California State Polytechnic University, Pomona**	Future Enrollment Increase (2025)	3801 W Temple Ave, Pomona, CA 91768	8,889 students by 2025

Notes:
tsf = thousand square feet

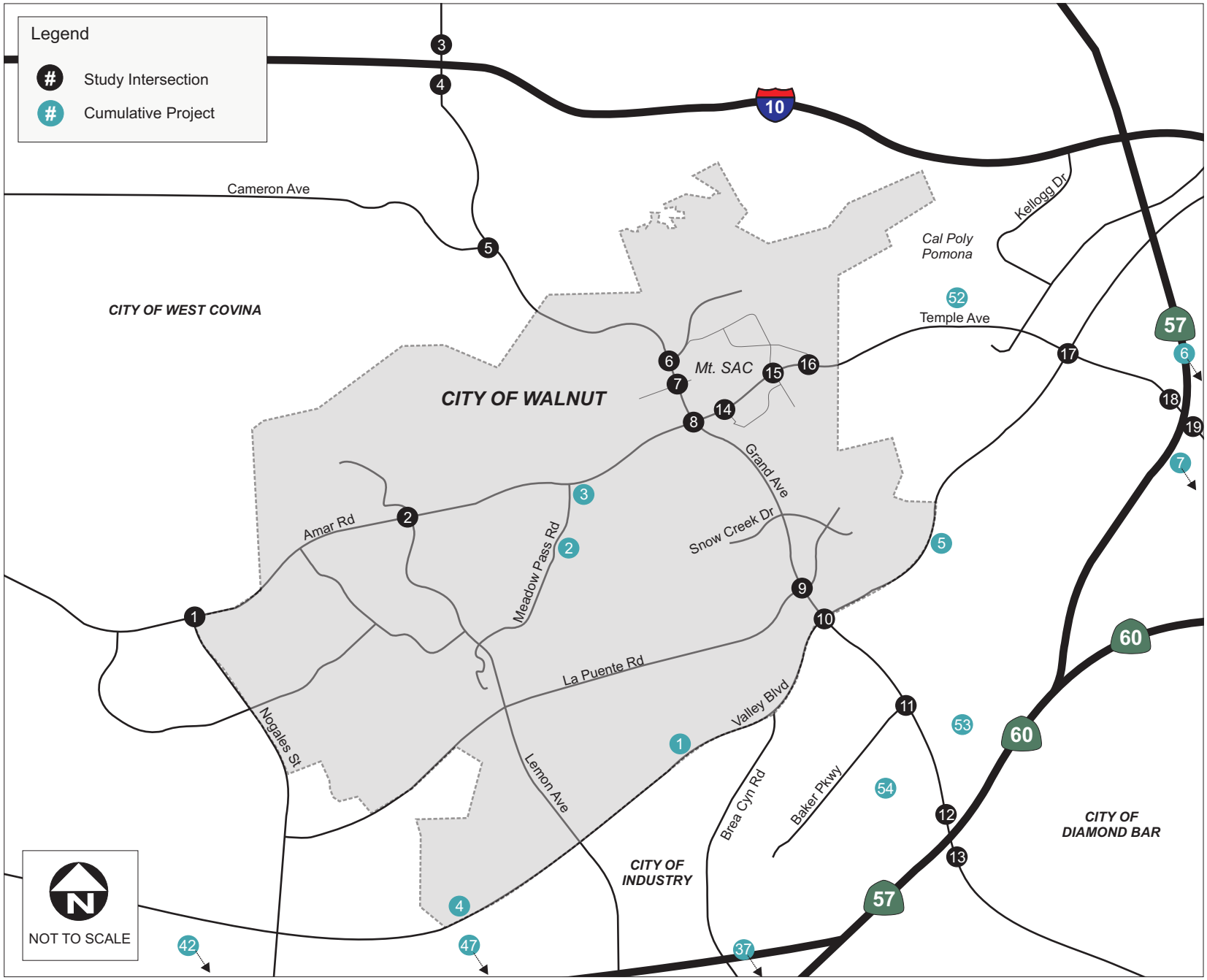

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FIGURE 9
Location of Cumulative Projects

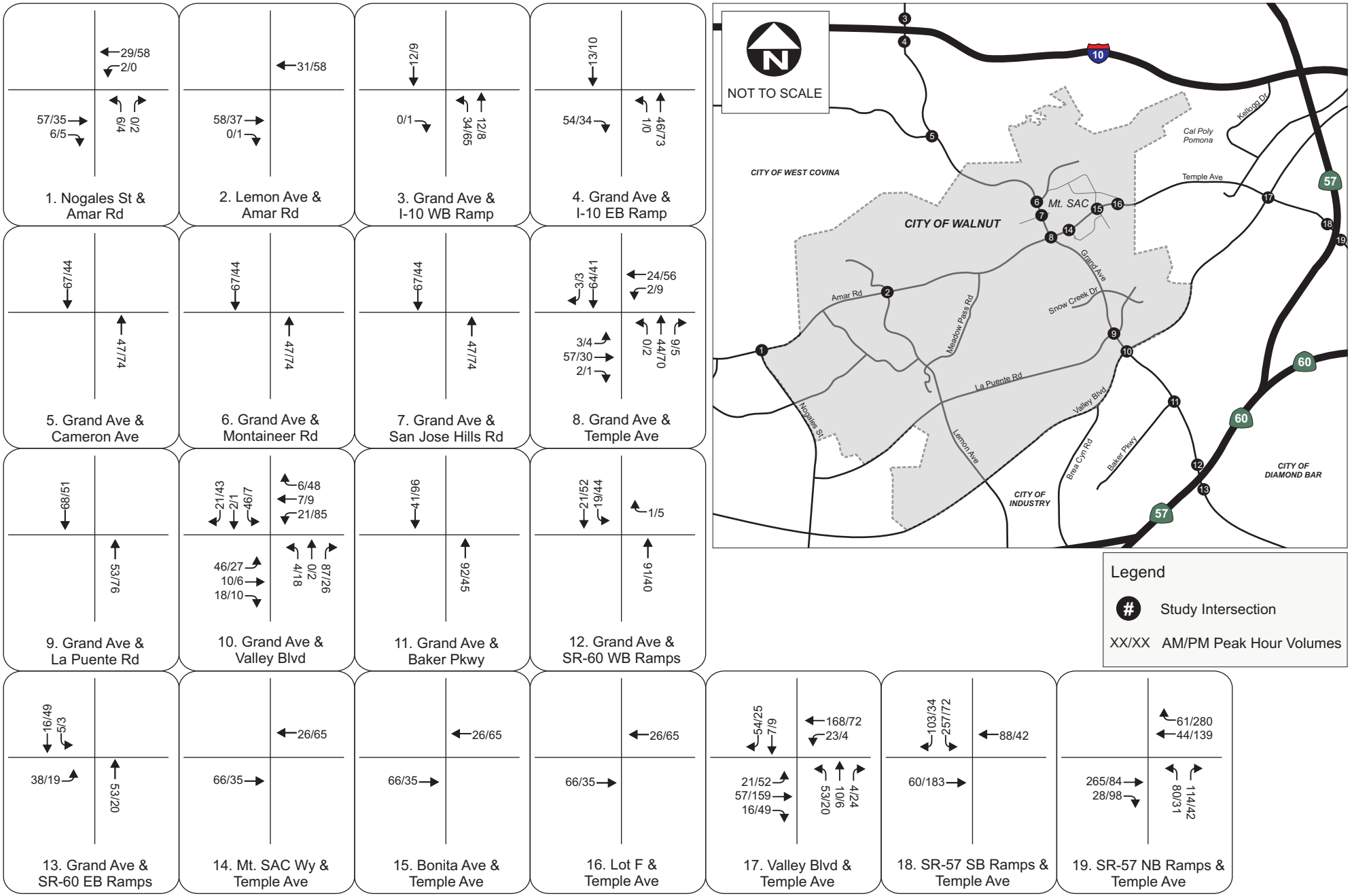

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FIGURE 10
Trips Generated by
2020 Cumulative Projects

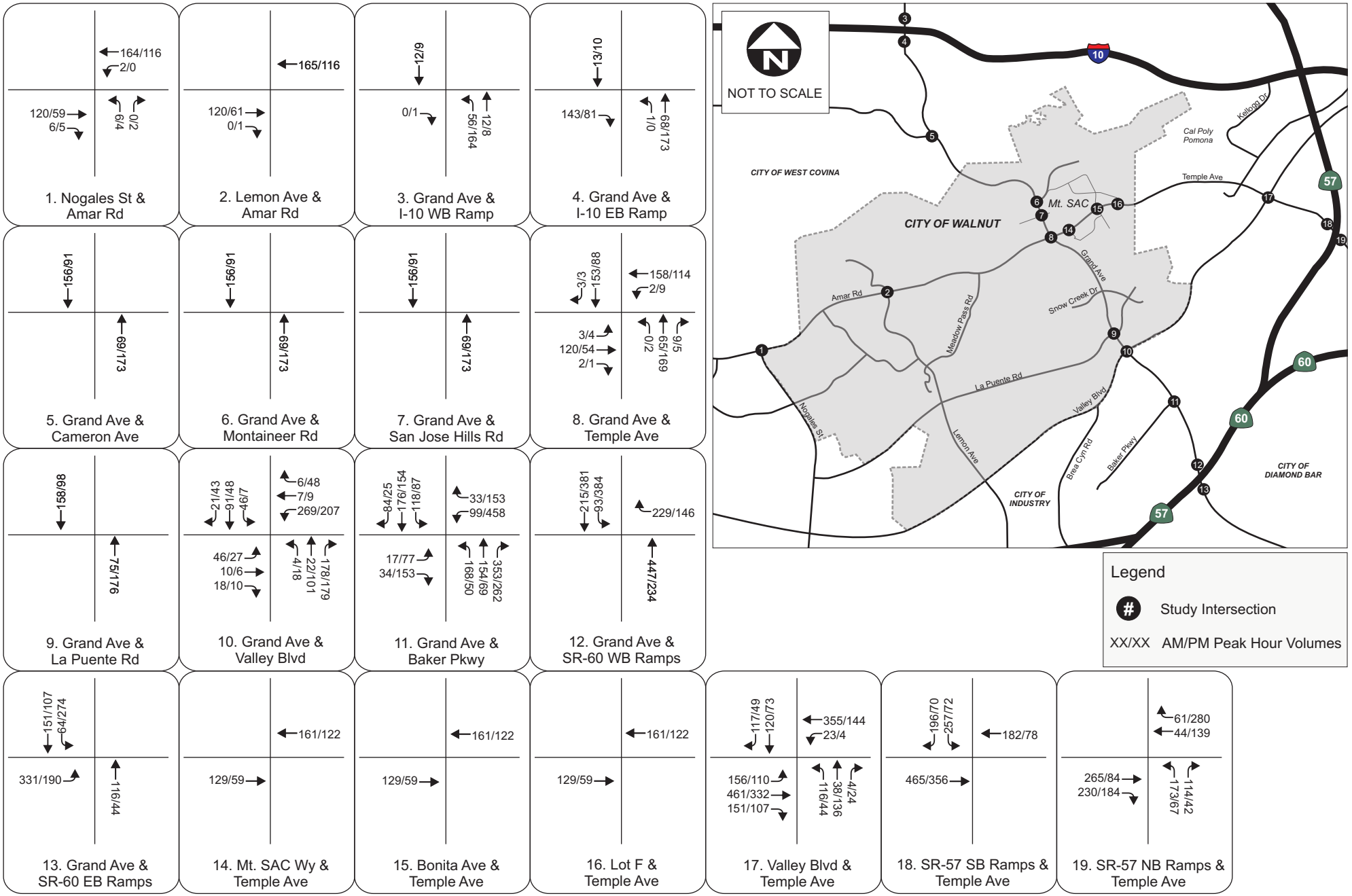

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FIGURE 11
Trips Generated by
2025 Cumulative Projects

Using the trip generation and trip distribution for each cumulative project, a summary of the total cumulative project trips in the study area is presented and compared to the total 2015 FMPU trips forecast to be generated in 2020 and 2025. **Table 13** summarizes the p.m. peak hour and daily cumulative trip totals for each lead agency and shows the share of total trip growth in the area that the 2015 FMPU accounts for.

TABLE 13: SUMMARY OF FUTURE TRIP GROWTH WITHIN STUDY AREA

Lead Agency	Trip Growth Within Study Area			
	2020 PM Peak Hour Trips	2020 ADT Peak Hour Trips	2025 PM Peak Hour Trips	2025 ADT Peak Hour Trips
Walnut	87	888	87	888
Industry[1]	96	1,383	1,561	14,982
Pomona	703	5,436	703	5,436
Diamond Bar	51	575	51	575
Cal Poly	695	6,992	1,511	15,200
Sub Total	*1,632*	*15,274*	*3,913*	*37,081*
2015 FMPU	449	4,606	858	8,798
TOTAL	**2,081**	**19,880**	**4,771**	**45,879**
2015 FMPU Percent of Total Growth	21.6%	23.2%	18.0%	19.2%

1 = Includes Industry Business Complex (IBC) partial buildout in 2025 only (20 percent of 4,779,000 gsf and 67,993 daily trip buildout total).

As shown in **Table 13**, the 2015 FMPU trips are forecast to account for approximately 22% of the overall p.m. peak hour traffic growth in the study in year 2020. In year 2025, the FMPU trips are forecast to account for approximately 18% of the overall p.m. peak hour traffic growth in the study area.

9.0 EXISTING PLUS 2020 CUMULATIVE CONDITIONS

The official FMPU buildout year is 2020, therefore 2020 conditions are assessed assuming cumulative traffic growth. Existing plus 2020 cumulative volumes were developed by adding the 2020 cumulative trips generated by the cumulative development projects as described in Section 8, to existing volumes. It should be noted that this scenario was used only to develop traffic volumes, not for LOS analysis, as traffic impacts are measured against existing LOS operations. **Figure 12** shows the existing plus 2020 cumulative peak hour volumes at the study intersections.

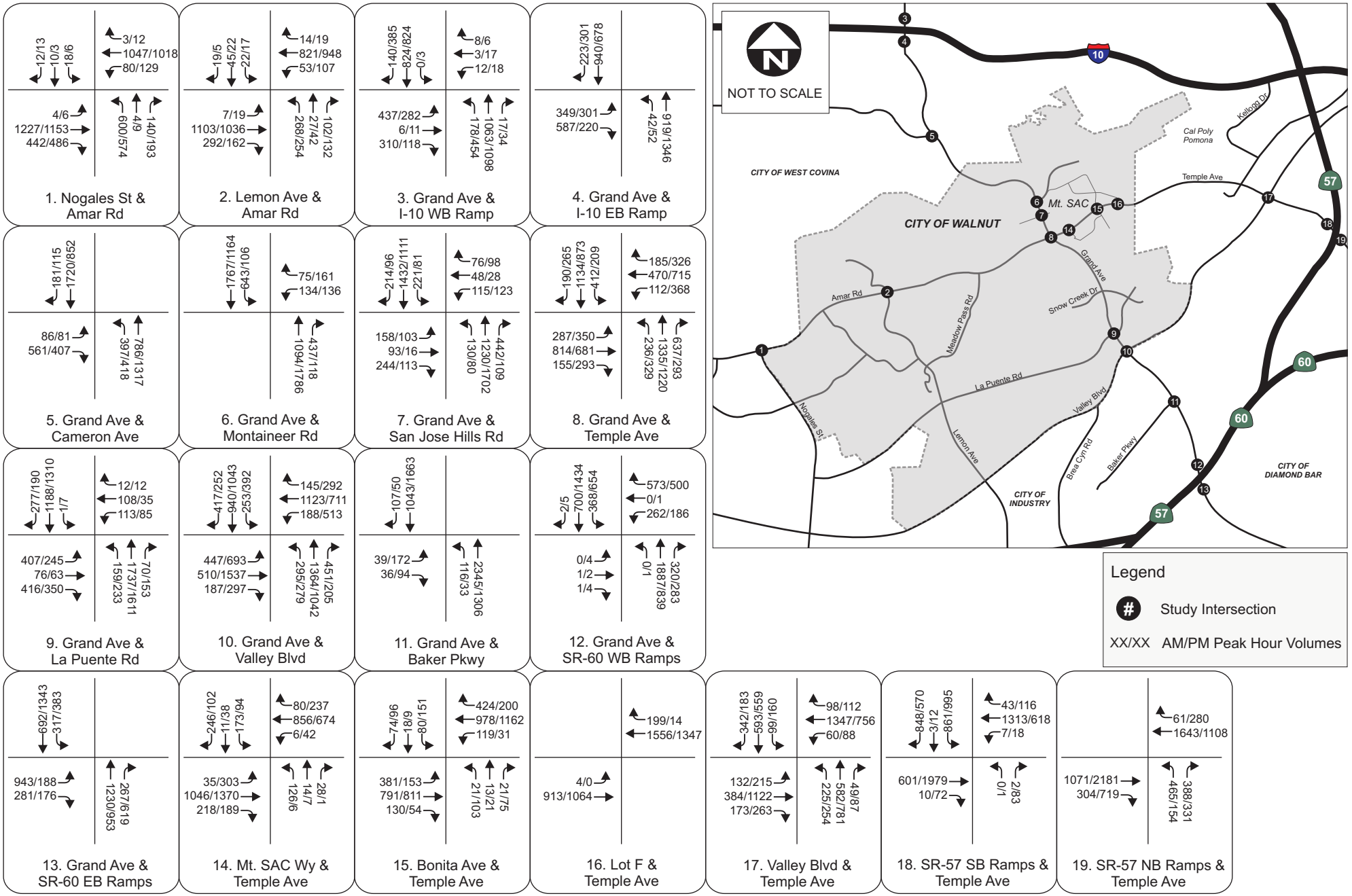

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FIGURE 12
Existing Plus 2020 Cumulative
Peak Hour Intersection Volumes

10.0 EXISTING PLUS 2020 PROJECT PLUS CUMULATIVE CONDITIONS

Existing plus 2020 project plus cumulative volumes were developed by adding the trips generated by proposed 2020 project, as described in Section 5, to existing plus 2020 cumulative volumes (without project), as described in Section 9. **Figure 13** shows the existing plus 2020 project plus cumulative peak hour volumes at the study intersections.

10.1 EXISTING PLUS 2020 PROJECT PLUS CUMULATIVE INTERSECTION LEVELS OF SERVICE

A level of service analysis was conducted to evaluate existing plus 2020 project plus cumulative intersection operations during the a.m. and p.m. peak hours. **Table 14** summarizes the existing plus 2020 project plus cumulative levels of service at the study intersections. Level of service calculation worksheets are included in **Appendix B**.

TABLE 14: EXISTING PLUS 2020 PROJECT PLUS CUMULATIVE INTERSECTION PEAK HOUR LEVEL OF SERVICE

	Intersection	Existing Conditions						Existing Plus 2020 Project Plus Cumulative Conditions						Change in AM V/C or Delay	Change in PM V/C or Delay	Significant Impact?
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour					
		Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS			
1	Nogales St/ Amar Rd	-	0.780	C	-	0.745	C	-	0.808	D	-	0.763	C	0.028	0.018	No
2	Lemon Ave/ Amar Rd	-	0.726	C	-	0.656	B	-	0.756	C	-	0.678	B	0.030	0.022	No
3	Grand Ave/ I-10 WB Ramp*	23.4	-	C	24.8	-	C	24.0	-	C	26.6	-	C	0.6	1.8	No
4	Grand Ave/ I-10 EB Ramp*	28.5	-	C	16.7	-	B	35.2	-	D	18.9	-	B	6.7	2.2	No
5	Grand Ave/ Cameron Ave	-	1.104	F	-	0.679	B	-	1.159	F	-	0.720	C	0.055	0.041	**Yes**
6	Grand Ave/ Mountaineer Rd	-	0.714	C	-	0.750	C	-	0.764	C	-	0.807	D	0.050	0.057	**Yes**
7	Grand Ave/ San Jose Hills Rd	-	0.944	E	-	0.844	D	-	0.983	E	-	0.889	D	0.039	0.045	**Yes**
8	Grand Ave/ Temple Ave	-	0.900	E	-	0.788	C	-	0.967	E	-	0.833	D	0.067	0.045	**Yes**
9	Grand Ave/ La Puente Rd	-	1.065	F	-	0.950	E	-	1.108	F	-	0.977	E	0.043	0.027	**Yes**
10	Grand Ave/ Valley Blvd	-	0.868	D	-	0.957	E	-	0.918	E	-	1.000	E	0.050	0.043	**Yes**
11	Grand Ave/ Baker Pkwy	-	0.859	D	-	0.589	A	-	0.898	D	-	0.611	B	0.039	0.022	**Yes**
12	Grand Ave/ SR-60 WB Ramps*	22.8	-	C	22.8	-	C	24.8	-	C	23.4	-	C	2.0	0.6	No
13	Grand Ave/ SR-60 EB Ramps*	31.9	-	C	21.4	-	C	34.5	-	C	21.5	-	C	2.6	0.1	No
14	Mt. SAC Wy/ Temple Ave	-	0.724	C	-	0.700	B	-	0.774	C	-	0.752	C	0.050	0.052	**Yes**
15	Bonita Ave/ Temple Ave	-	0.597	A	-	0.612	B	-	0.644	B	-	0.668	B	0.047	0.056	No
16	Lot F/ Temple Ave	15.3	-	C	0.0	-	A	17.0	-	C	0.0	-	A	1.7	0.0	No

Intersection		Existing Conditions						Existing Plus 2020 Project Plus Cumulative Conditions						Change in AM V/C or Delay	Change in PM V/C or Delay	Significant Impact?
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour					
		Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS			
17	Valley Blvd/ Temple Ave	-	0.751	C	-	0.763	C	-	0.915	E	-	0.814	D	0.164	0.051	**Yes**
18	SR-57 SB Ramps/ Temple Ave*	22.9	-	C	24.5	-	C	32.1	-	C	29.9	-	C	9.2	5.4	No
19	SR-57 NB Ramps/ Temple Ave*	13.6	-	B	8.8	-	A	16.1	-	B	9.8	-	A	2.5	1.0	No

* Caltrans intersection, utilizing HCM delay-based methodology to evaluate intersection operations.
Notes:
V/C = Volume to Capacity Ratio, LOS = Level of Service.

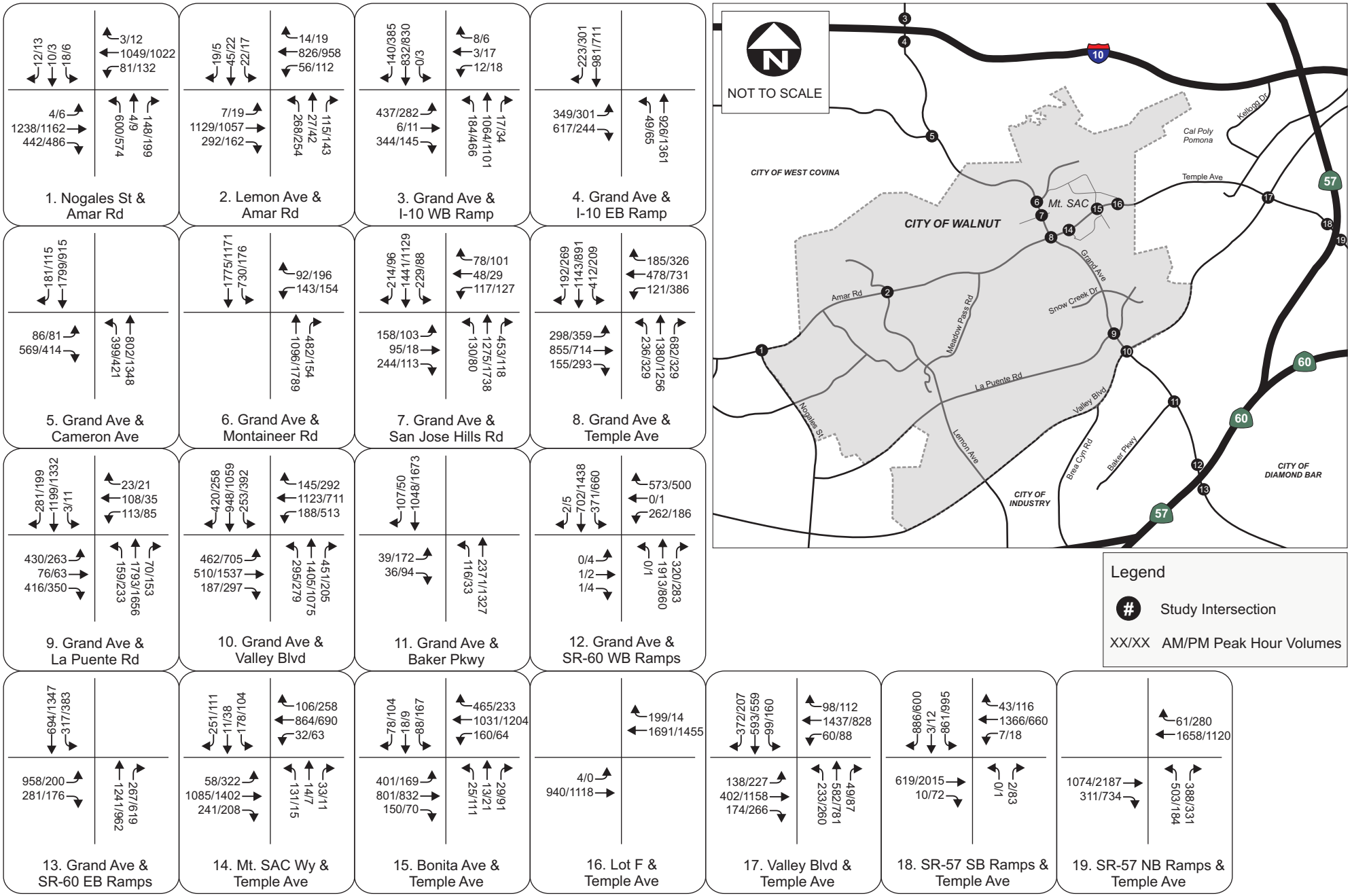

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FIGURE 13
Existing Plus 2020 Project Plus Cumulative
Peak Hour Intersection Volumes

As shown in **Table 14**, based on the thresholds of significance described in Section 3.1, the following intersections are forecast to be significantly impacted by the proposed 2020 project traffic plus cumulative conditions:

- Grand Avenue/Cameron Avenue (a.m. peak hour);
- Grand Avenue/Mountaineer Avenue (a.m. and p.m. peak hour);
- Grand Avenue/San Jose Hills Road (a.m. and p.m. peak hour);
- Grand Avenue/Temple Avenue (a.m. and p.m. peak hour);
- Grand Avenue/La Puente Road (a.m. and p.m. peak hour);
- Grand Avenue/Valley Boulevard (a.m. and p.m. peak hour);
- Grand Avenue/Baker Parkway (a.m. peak hour);
- Mt. SAC Way/Temple Avenue (a.m. peak hour); and
- Valley Boulevard/Temple Avenue (a.m. and p.m. peak hour).

10.2 Existing Plus 2020 Project Plus Cumulative Mitigation Measures

In order to reduce significant traffic impacts to a level considered less than significant in existing plus 2020 project plus cumulative conditions, a list of mitigation measures have been developed. The following mitigation measures would be required to reduce the level of impact:

- **Grand Avenue/Cameron Avenue** – Add a second eastbound right-turn lane.
- **Grand Avenue/Mountaineer Road** – A third northbound through lane is required to mitigate the project impact at this intersection. However, sufficient ROW is not available within the current curb width. As a result, improvements needed to mitigate this intersection are not considered feasible. A statement of overriding considerations is required.
- **Grand Avenue/San Jose Hills Road** – A second eastbound right-turn lane is required to mitigate the project impact at this intersection. However, sufficient ROW is not available due to adjacent land uses at the southwest and northwest corners of the intersection. As a result, improvements needed to mitigate this intersection are not considered feasible. A statement of overriding considerations is required.
- **Grand Avenue/Temple Avenue** – Convert the existing eastbound right-turn lane to a through/right-turn lane.
- **Grand Avenue/La Puente Road** – Modify the traffic signal to include an eastbound right-turn overlap phase.
- **Grand Avenue/Valley Boulevard** – This intersection is considered to be fully built out since it currently consists of dual left-turn lanes at all approaches and dedicated free right-turn lanes at three approaches. In addition, no improvements at this intersection are considered feasible due to ROW constraints. A statement of overriding considerations is required.
- **Grand Avenue/Baker Parkway** – Restripe the northbound approach to include a third through lane.
- **Mt. SAC Way/Temple Avenue** – Restripe the eastbound approach to include a dedicated right-turn lane.
- **Valley Boulevard/Temple Avenue** – A second northbound left-turn lane, a second southbound left-turn lane, a third southbound through lane, and a second eastbound left-turn lane are required to mitigate the project impact at this intersection. Improvements needed to mitigate

this intersection are not considered feasible due to the ROW constraints near the adjacent railroad. A statement of overriding considerations is required.

At the locations where mitigation measures are deemed feasible, if it is determined by the lead agency that the necessary right-of-way is not available and the proposed lane additions cannot be developed within the available right-of-way, then the impacts may not be mitigated. **Table 15** summarizes the LOS results at the impacted intersections with implementation of the proposed mitigation measures that were determined to be feasible. It should be noted that project conditions with cumulative growth are compared to existing conditions, for significant impact determination, for the purposes of California Environmental Quality Act (CEQA) clearance.

TABLE 15: MITIGATED EXISTING PLUS 2020 PROJECT PLUS CUMULATIVE INTERSECTION PEAK HOUR LEVEL OF SERVICE

Intersection		Existing Conditions						Mitigated Existing Plus 2020 Project Plus Cumulative Conditions						Change in AM V/C or Delay	Change in PM V/C or Delay	Significant Impact with Mitigation?
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour					
		Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS			
5	Grand Ave/ Cameron Ave	-	1.104	F	-	0.679	B	-	0.982	E	-	0.654	B	-0.122	-0.025	No
8	Grand Ave/ Temple Ave	-	0.900	E	-	0.788	C	-	0.908	E	-	0.819	D	0.008	0.031	**Yes**
9	Grand Ave/ La Puente Rd	-	1.065	F	-	0.950	E	-	0.993	E	-	0.850	D	-0.072	-0.100	No
11	Grand Ave/ Baker Pkwy	-	0.859	D	-	0.589	A	-	0.636	B	-	0.553	A	-0.223	-0.036	No
14	Mt. SAC Wy/ Temple Ave	-	0.724	C	-	0.700	B	-	0.696	B	-	0.686	B	-0.028	-0.014	No

Notes:
V/C = Volume to Capacity Ratio, LOS = Level of Service.

As shown in **Table 15**, at locations where improvements were considered feasible, project impacts are reduced to less than significant at three intersections.

11.0 EXISTING PLUS 2025 CUMULATIVE CONDITIONS

For consistency with the County General Plan, the project's level of impact in year 2025 is assessed assuming cumulative traffic growth. Similar to existing plus 2020 cumulative conditions, existing plus 2025 cumulative traffic volumes were developed by considering traffic increases due to specific planned or approved development projects in the study area, without consideration of the proposed project. It should be noted that this scenario was used only to develop traffic volumes, not for LOS analysis, as traffic impacts are measured against existing LOS operations. **Figure 14** shows the existing plus 2025 cumulative peak hour volumes at the study intersections.

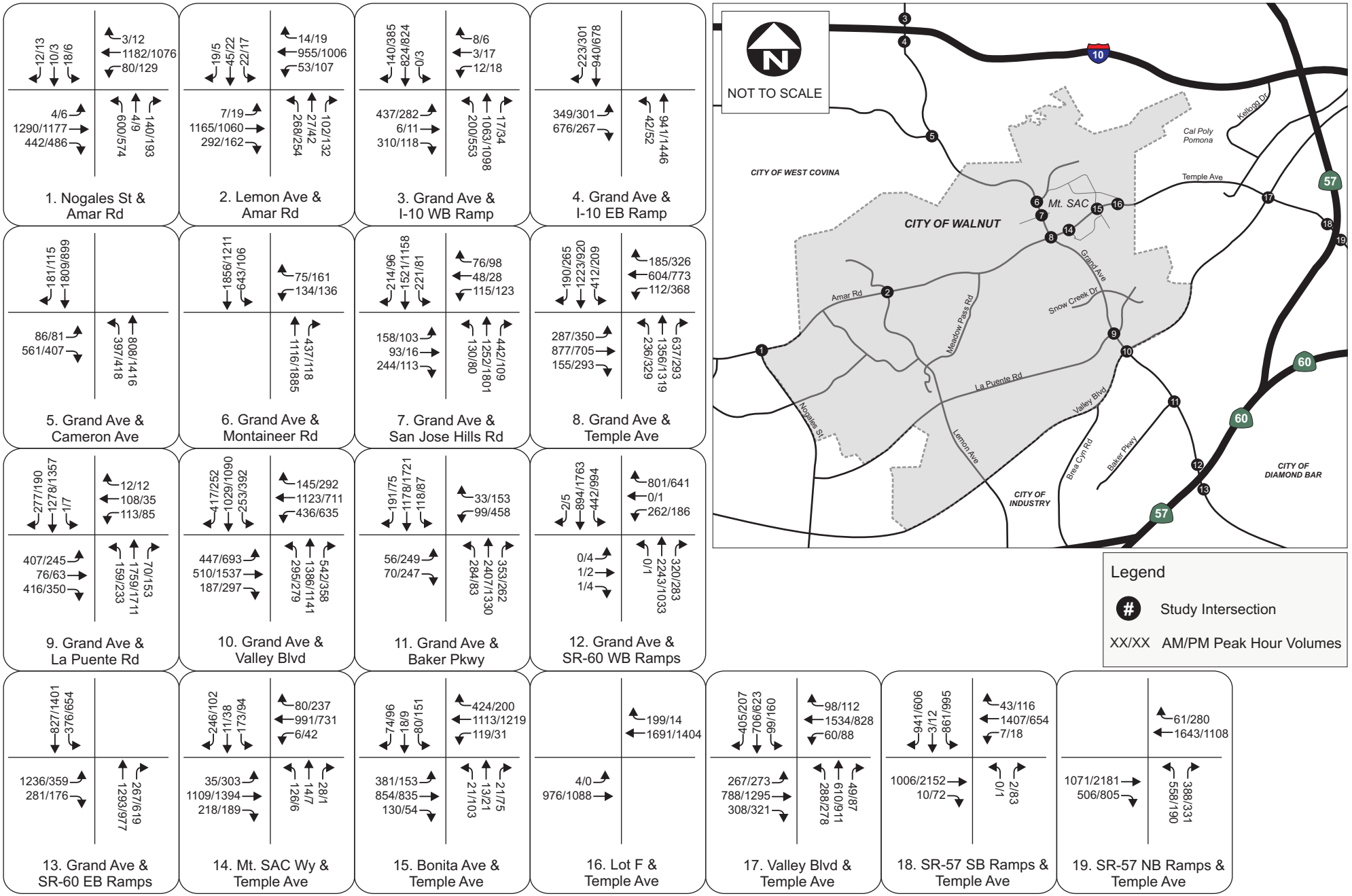

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FIGURE 14
Existing Plus 2025 Cumulative
Peak Hour Intersection Volumes

12.0 EXISTING PLUS 2025 PROJECT PLUS CUMULATIVE CONDITIONS

Existing plus 2025 project plus cumulative volumes were developed by adding the trips generated by proposed 2025 project as described in Section 5, to existing plus 2025 cumulative (without project) volumes, as described in Section 11. **Figure 15** shows the existing plus 2025 project plus cumulative peak hour volumes at the study intersections.

12.1 EXISTING PLUS 2025 PROJECT PLUS CUMULATIVE INTERSECTION LEVELS OF SERVICE

A level of service analysis was conducted to evaluate existing plus 2025 project plus cumulative intersection operations during the a.m. and p.m. peak hours. **Table 16** summarizes the existing plus 2025 project plus cumulative levels of service at the study intersections. Level of service calculation worksheets are included in **Appendix B**.

TABLE 16: EXISTING PLUS 2025 PROJECT PLUS CUMULATIVE INTERSECTION PEAK HOUR LEVEL OF SERVICE

	Intersection	Existing Conditions						Existing Plus 2025 Project Plus Cumulative Conditions						Change in AM V/C or Delay	Change in PM V/C or Delay	Significant Impact?
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour					
		Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS			
1	Nogales St/ Amar Rd	-	0.780	C	-	0.745	C	-	0.833	D	-	0.775	C	0.053	0.030	**Yes**
2	Lemon Ave/ Amar Rd	-	0.726	C	-	0.656	B	-	0.786	C	-	0.697	B	0.060	0.041	**Yes**
3	Grand Ave/ I-10 WB Ramp*	23.4	-	C	24.8	-	C	24.6	-	C	30.2	-	C	1.2	5.4	No
4	Grand Ave/ I-10 EB Ramp*	28.5	-	C	16.7	-	B	51.3	-	D	21.5	-	C	22.8	4.8	No
5	Grand Ave/ Cameron Ave	-	1.104	F	-	0.679	B	-	1.219	F	-	0.759	C	0.115	0.080	**Yes**
6	Grand Ave/ Mountaineer Rd	-	0.714	C	-	0.750	C	-	0.803	D	-	0.869	D	0.089	0.119	**Yes**
7	Grand Ave/ San Jose Hills Rd	-	0.944	E	-	0.844	D	-	1.012	F	-	0.939	E	0.068	0.095	**Yes**
8	Grand Ave/ Temple Ave	-	0.900	E	-	0.788	C	-	1.026	F	-	0.870	D	0.126	0.082	**Yes**
9	Grand Ave/ La Puente Rd	-	1.065	F	-	0.950	E	-	1.138	F	-	1.001	F	0.073	0.051	**Yes**
10	Grand Ave/ Valley Blvd	-	0.868	D	-	0.957	E	-	0.936	E	-	1.072	F	0.068	0.115	**Yes**
11	Grand Ave/ Baker Pkwy	-	0.859	D	-	0.589	A	-	1.055	F	-	0.928	E	0.196	0.339	**Yes**
12	Grand Ave/ SR-60 WB Ramps*	22.8	-	C	22.8	-	C	54.9	-	D	40.5	-	D	32.1	17.7	No
13	Grand Ave/ SR-60 EB Ramps*	31.9	-	C	21.4	-	C	60.3	-	E	40.5	-	D	28.4	19.1	**Yes**
14	Mt. SAC Wy/ Temple Ave	-	0.724	C	-	0.700	B	-	0.832	D	-	0.798	C	0.108	0.098	**Yes**
15	Bonita Ave/ Temple Ave	-	0.597	A	-	0.612	B	-	0.720	C	-	0.719	C	0.123	0.107	No
16	Lot F/ Temple Ave	15.3	-	C	0.0	-	A	20.2	-	C	0.0	-	A	4.9	0.0	No

Intersection		Existing Conditions						Existing Plus 2025 Project Plus Cumulative Conditions						Change in AM V/C or Delay	Change in PM V/C or Delay	Significant Impact?
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour					
		Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS			
17	Valley Blvd/ Temple Ave	-	0.751	C	-	0.763	C	-	1.168	F	-	0.922	E	0.417	0.159	**Yes**
18	SR-57 SB Ramps/ Temple Ave*	22.9	-	C	24.5	-	C	43.7	-	D	38.3	-	D	20.8	13.8	No
19	SR-57 NB Ramps/ Temple Ave*	13.6	-	B	8.8	-	A	18.0	-	B	10.4	-	B	4.4	1.6	No

* Caltrans intersection, utilizing HCM delay-based methodology to evaluate intersection operations.
Notes:
V/C = Volume to Capacity Ratio, LOS = Level of Service.

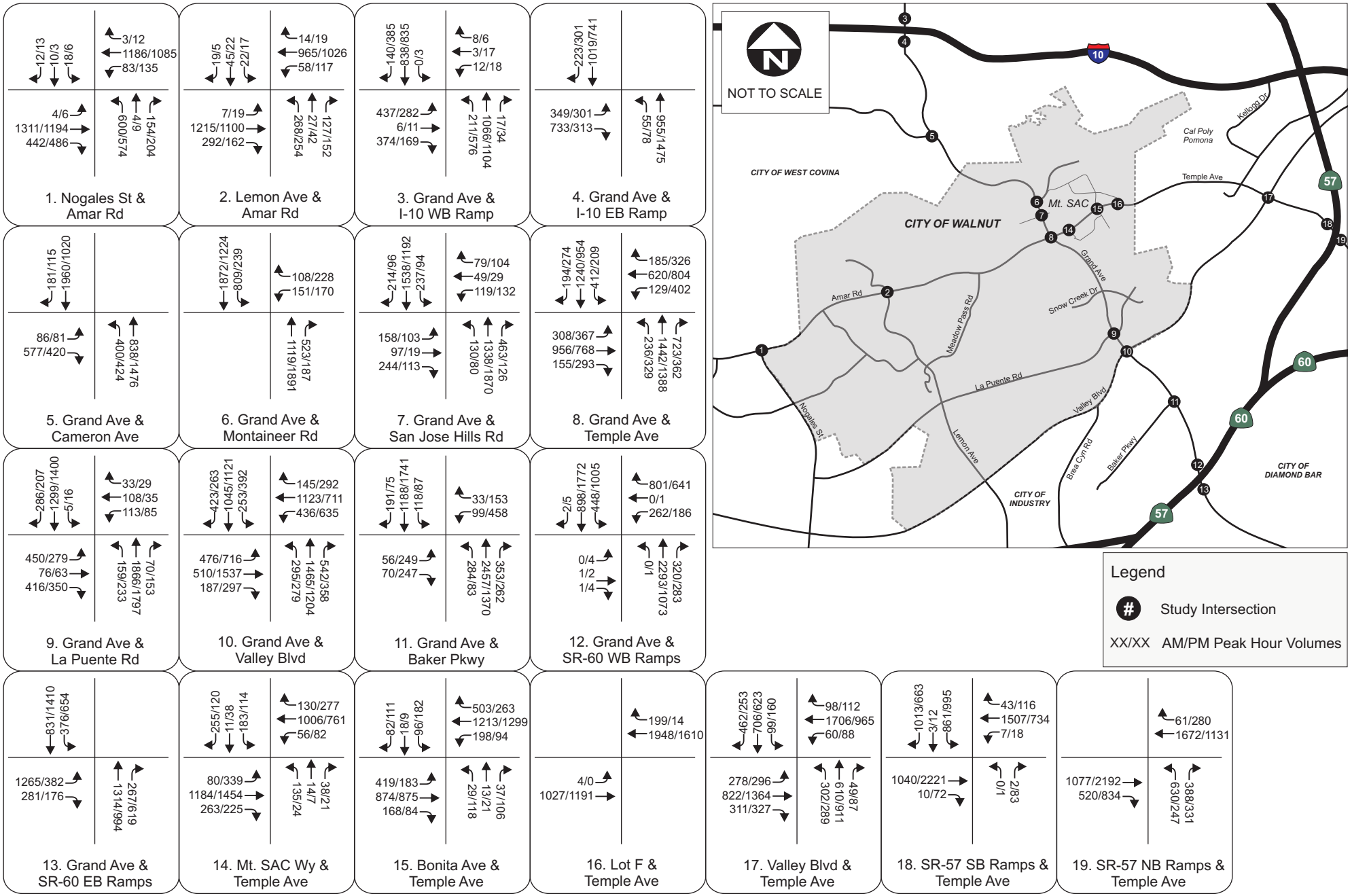

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FIGURE 15
Existing Plus 2025 Project Plus Cumulative
Peak Hour Intersection Volumes

As shown in **Table 16**, based on the thresholds of significance described in Section 3.1, the following intersections are forecast to be significantly impacted by the proposed 2025 project traffic plus cumulative conditions:

- Nogales Street/Amar Road (a.m. peak hour);
- Lemon Avenue/Amar Road (a.m. peak hour);
- Grand Avenue/Cameron Avenue (a.m. peak hour);
- Grand Avenue/Mountaineer Road (a.m. and p.m. peak hour);
- Grand Avenue/San Jose Hills Road (a.m. and p.m. peak hour);
- Grand Avenue/Temple Avenue (a.m. and p.m. peak hour);
- Grand Avenue/La Puente Road (a.m. and p.m. peak hour);
- Grand Avenue/Valley Boulevard (a.m. and p.m. peak hour);
- Grand Avenue/Baker Parkway (a.m. peak hour);
- Grand Avenue/SR-60 Eastbound Ramps (a.m. peak hour);
- Mt. SAC Way/Temple Avenue (a.m. peak hour); and
- Valley Boulevard/Temple Avenue (a.m. and p.m. peak hour).

12.2 Existing Plus 2025 Project Plus Cumulative Mitigation Measures

In order to reduce significant traffic impacts to a level considered less than significant in existing plus 2025 project plus cumulative conditions, a list of mitigation measures have been developed. The following additional mitigation measures would be required in 2025 to reduce the level of impact beyond those required in 2020:

- **Nogales Street/Amar Road** – Convert the existing eastbound right-turn lane to a through/right-turn lane. There is sufficient roadway width at the intersection departure in the eastbound direction to accommodate the third through lane.
- **Lemon Avenue/Amar Road** – Restripe the eastbound approach to include a dedicated right-turn lane.
- **Grand Avenue/SR-60 Eastbound Ramps** – Convert the existing northbound right-turn lane to a shared through/right-turn lane. There is sufficient roadway width at the intersection departure in the northbound direction to accommodate the third through lane.

At the locations where mitigation measures are deemed feasible, if it is determined by the lead agency that the necessary right-of-way is not available and the proposed lane additions cannot be developed within the available right-of-way, then the impacts may not be mitigated. **Table 17** summarizes the LOS results at the impacted intersections with implementation of the proposed mitigation measures that were determined to be feasible. As mentioned earlier, project conditions with cumulative growth are compared to existing conditions, for significant impact determination, for the purposes of CEQA clearance.

TABLE 17: MITIGATED EXISTING PLUS 2025 PROJECT PLUS CUMULATIVE INTERSECTION PEAK HOUR LEVEL OF SERVICE

Intersection		Existing Conditions						Mitigated Existing Plus 2025 Project Plus Cumulative Conditions						Change in AM V/C or Delay	Change in PM V/C or Delay	Significant Impact with Mitigation?
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour					
		Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS	Delay (s)	V/C or ICU	LOS			
1	Nogales St/ Amar Rd	-	0.780	C	-	0.745	C	-	0.785	C	-	0.751	C	0.005	0.006	No
2	Lemon Ave/ Amar Rd	-	0.726	C	-	0.656	B	-	0.688	B	-	0.646	B	-0.038	-0.010	No
5	Grand Ave/ Cameron Ave	-	1.104	F	-	0.679	B	-	1.037	F	-	0.690	B	-0.067	0.011	No
8	Grand Ave/ Temple Ave	-	0.900	E	-	0.788	C	-	0.982	E	-	0.870	D	0.082	0.082	**Yes**
9	Grand Ave/ La Puente Rd	-	1.065	F	-	0.950	E	-	1.028	F	-	0.880	D	-0.037	-0.070	No
11	Grand Ave/ Baker Pkwy	-	0.859	D	-	0.589	A	-	0.862	D	-	0.833	D	0.003	0.244	No
13	Grand Ave/ SR-60 EB Ramps*	31.9	-	C	21.4	-	C	49.5	-	D	38.6	-	D	17.6	17.2	No
14	Mt. SAC Wy/ Temple Ave	-	0.724	C	-	0.700	B	-	0.747	C	-	0.727	C	0.023	0.027	No

* Caltrans intersection, utilizing HCM delay-based methodology to evaluate intersection operations.

Notes:

V/C = Volume to Capacity Ratio, LOS = Level of Service.

As shown in **Table 17**, at locations where improvements were considered feasible, project impacts are reduced to less than significant at seven intersections.

12.3 Fair Share Contribution

It is anticipated that the proposed project would pay a fair share towards the cost of the mitigation measures described for the cumulative scenarios. The project fair share is equal to the total project trips at an impacted intersection divided by the total growth at an intersection, which includes both FMPU project trips and cumulative project trips. **Table 18** summarizes the calculation of the proposed project's fair share at each of the impacted intersections for 2020 and 2025 project conditions during the a.m. and p.m. peak hours. Detailed fair-share calculations are provided in **Appendix D**.

Table 18: Project Fair Share Contribution

Intersection		Fair Share Contribution (%)			
		Existing Plus 2020 Project Plus Cumulative		Existing Plus 2025 Project Plus Cumulative	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1	Nogales St/Amar Rd	N/I	N/I	12%	N/I
2	Lemon Ave/Amar Rd	N/I	N/I	24%	N/I
5	Grand Ave/Cameron Ave	48%	N/I	47%	N/I
6	Grand Ave/Mountaineer Rd	60%	59%	59%	55%
7	Grand Ave/San Jose Hills Rd	41%	40%	40%	37%
8	Grand Ave/Temple Ave	45%	43%	39%	42%
9	Grand Ave/La Puente Rd	47%	46%	47%	43%
10	Grand Ave/Valley Blvd	20%	19%	15%	15%
11	Grand Ave/Baker Pkwy	19%	N/I	5%	N/I
13	Grand Ave/SR-60 EB Ramps	N/I	N/I	8%	N/I
14	Mt. SAC Wy/Temple Ave	64%	N/I	52%	N/I
17	Valley Blvd/Temple Ave	27%	27%	16%	22%

N/I = Not impacted during this time period

13.0 CONGESTION MANAGEMENT PROGRAM ANALYSIS (CMP)

The Congestion Management Program (CMP) was created statewide as a result of Proposition 111 and has been implemented locally by the Los Angeles County Metropolitan Transportation Authority (Metro). The CMP for Los Angeles County requires that the traffic impact of individual development projects of potential regional significance be analyzed. A specific system of arterial roadways plus all freeways comprise the CMP system. A total of 164 intersections are identified for monitoring on the system in Los Angeles County. This section describes the analysis of project-related impacts on the CMP system. The analysis has been conducted according to the guidelines set forth in the 2004 Congestion Management Program for Los Angeles County.

According to the CMP Traffic Impact Analysis (TIA) Guidelines developed by Metro, a CMP traffic impact analysis is required given the following conditions:

- CMP arterial monitoring intersections, including freeway on- or off-ramps, where the proposed project would add 50 or more trips during either the a.m. or p.m. weekday peak hours.
- CMP freeway monitoring locations where the proposed project would add 150 or more trips, in either direction, during either the a.m. or p.m. weekday peak hours.

The nearest freeway segments are the I-10, SR-60, and SR-57. Based on the project trip generation estimates, the proposed project would add less than 150 new peak hour trips in either direction at the three freeway segments. Therefore, no CMP mainline freeway segment analysis was conducted in this report.

13.1 TRANSIT IMPACT ANALYSIS

Section D.8.4 of the 2010 CMP outlines the methodology for estimating the number of transit trips expected to result from the proposed project. This methodology assumes an average vehicle ridership (AVR) factor of 1.4 to estimate the number of person trips generated by the project. Using this person trip estimate, a transit ridership rate of 3.5% is applied to determine the total new transit trips resulting from the proposed project, shown in the following calculations:

2020: 449 peak hour vehicle trips * 1.4 persons per vehicle * 3.5% transit usage = 22 peak transit trips

2025: 858 peak hour vehicle trips * 1.4 persons per vehicle * 3.5% transit usage = 42 peak transit trips

It is not anticipated that the increase in peak hour transit trips would result in a significant effect to transit operations. MTA and Foothill Transit buses serve the campus daily, and both providers have ample resources and equipment to adjust and expand transit resources if demand increases.

14.0 CONCLUSIONS

Mt. SAC has proposed a 2015 Facilities Master Plan Update, for which the major change from the 2012 FMP is the re-design of the athletic facilities south of Temple Avenue and east of Bonita Avenue. The existing stadium will be demolished and a new stadium built on the site. Other changes for the 2015

FMPU include the relocation of the Public Transportation Center to Lot D3, and expanded Wildlife Sanctuary and Open Space area, and a pedestrian bridge across Temple Avenue connecting the Physical Education Complex to Lot F. The net increase in square footage at 2015 FMPU buildout is approximately 500,000 gross square feet.

Traffic operations were assessed for existing conditions, 2020 conditions, and 2025 conditions. Under existing conditions, the following four intersections are operating at LOS E or worse:

- Grand Avenue/Cameron Avenue (a.m. peak hour);
- Grand Avenue/San Jose Hills Road (a.m. peak hour);
- Grand Avenue/La Puente Road (a.m. and p.m. peak hour); and
- Grand Avenue/Valley Boulevard (p.m. peak hour).

The buildout of the 2015 FMPU project in 2020 is forecast to generate 449 new a.m. peak hour trips, 449 new p.m. peak hour trips, and 4,606 new daily trips when compared to existing conditions. By 2025 the project is forecast to generate 858 new a.m. peak hour trips, 858 new p.m. peak hour trips, and 8,798 new daily trips when compared to existing conditions.

The 2015 FMPU trips are forecast to account for approximately 22% of the overall p.m. peak hour traffic growth in the study in year 2020, when considering other cumulative project developments. In year 2025, the FMPU trips are forecast to account for approximately 18% of the overall p.m. peak hour traffic growth in the study area.

In order to reduce significant traffic impacts to a level considered less than significant, a list of feasible mitigation measures were developed. At locations where mitigation measures were not considered feasible, a statement of overriding considerations is required. **Table 19** summarizes the overall number of impacted study intersections per scenario, as well as the number of locations that would continue to be impacted with potential mitigation.

TABLE 19: SUMMARY OF SIGNIFICANT IMPACTS PER SCENARIO

Scenario		Number of Locations with Significant Impacts without Mitigation	Number of Locations with Feasible Improvements	Less than Significant Impacts with Mitigation	Number of Locations with Significant Impacts with Mitigation	Locations with Significant Impacts with Mitigation
1	Existing Plus 2020 Project	5	3	No	2	Grand Ave/San Jose Hills Rd Valley Blvd/Temple Ave
2	Existing Plus 2025 Project	8	4	No	5	Above locations plus: Grand Ave/Mountaineer Rd Grand Ave/Valley Pkwy Grand Ave/Temple Ave
3	Existing Plus 2020 Project Plus Cumulative	9	5	No	5	All above locations
4	Existing Plus 2025 Project Plus Cumulative	12	8	No	5	All above locations

Submitted by:

ITERIS

MT. SAC 2015 FACILITIES MASTER PLAN UPDATE & PHYSICAL EDUCATION PROJECTS

Traffic Impact Study

Technical Appendix

Submitted to:

Mt. San Antonio College

September 1, 2016

17J16-17A8

APPENDIX A:
TRAFFIC COUNT DATA

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

City of Walnut
N/S: Nogales Street
E/W: Amar Road
Weather: Clear

File Name : WNTNOAMAM
Site Code : 04215551
Start Date : 10/1/2015

Groups Printed- Total Volume

	Nogales Street Southbound					Amar Road Westbound					Nogales Street Northbound					Amar Road Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	1	0	4	0	5	16	304	1	0	321	91	1	35	0	127	2	188	48	0	238	691
07:15 AM	5	4	3	0	12	10	280	0	0	290	111	1	31	0	143	2	303	111	1	417	862
07:30 AM	4	1	6	0	11	31	257	0	0	288	151	1	32	0	184	1	317	146	2	466	949
07:45 AM	3	2	1	0	6	14	249	2	0	265	184	1	41	0	226	0	293	80	3	376	873
Total	13	7	14	0	34	71	1090	3	0	1164	537	4	139	0	680	5	1101	385	6	1497	3375
08:00 AM	6	3	2	0	11	23	232	1	1	257	148	1	36	1	186	1	257	99	3	360	814
08:15 AM	3	2	5	0	10	23	253	0	0	276	133	2	47	0	182	0	226	88	1	315	783
08:30 AM	3	0	6	0	9	39	242	1	0	282	110	2	27	0	139	2	168	88	1	259	689
08:45 AM	0	2	2	0	4	32	215	1	1	249	92	0	26	0	118	1	178	97	0	276	647
Total	12	7	15	0	34	117	942	3	2	1064	483	5	136	1	625	4	829	372	5	1210	2933
Grand Total	25	14	29	0	68	188	2032	6	2	2228	1020	9	275	1	1305	9	1930	757	11	2707	6308
Apprch %	36.8	20.6	42.6	0		8.4	91.2	0.3	0.1		78.2	0.7	21.1	0.1		0.3	71.3	28	0.4		
Total %	0.4	0.2	0.5	0	1.1	3	32.2	0.1	0	35.3	16.2	0.1	4.4	0	20.7	0.1	30.6	12	0.2	42.9	

	Nogales Street Southbound				Amar Road Westbound				Nogales Street Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	5	**4**	3	**12**	10	**280**	0	**290**	111	**1**	31	143	**2**	303	111	416	861
07:30 AM	4	1	**6**	11	**31**	257	0	288	151	1	32	184	1	**317**	**146**	**464**	**947**
07:45 AM	3	2	1	6	14	249	**2**	265	**184**	1	**41**	**226**	0	293	80	373	870
08:00 AM	**6**	3	2	11	23	232	1	256	148	1	36	185	1	257	99	357	809
Total Volume	18	10	12	40	78	1018	3	1099	594	4	140	738	4	1170	436	1610	3487
% App. Total	45	25	30		7.1	92.6	0.3		80.5	0.5	19		0.2	72.7	27.1		
PHF	.750	.625	.500	.833	.629	.909	.375	.947	.807	1.00	.854	.816	.500	.923	.747	.867	.921

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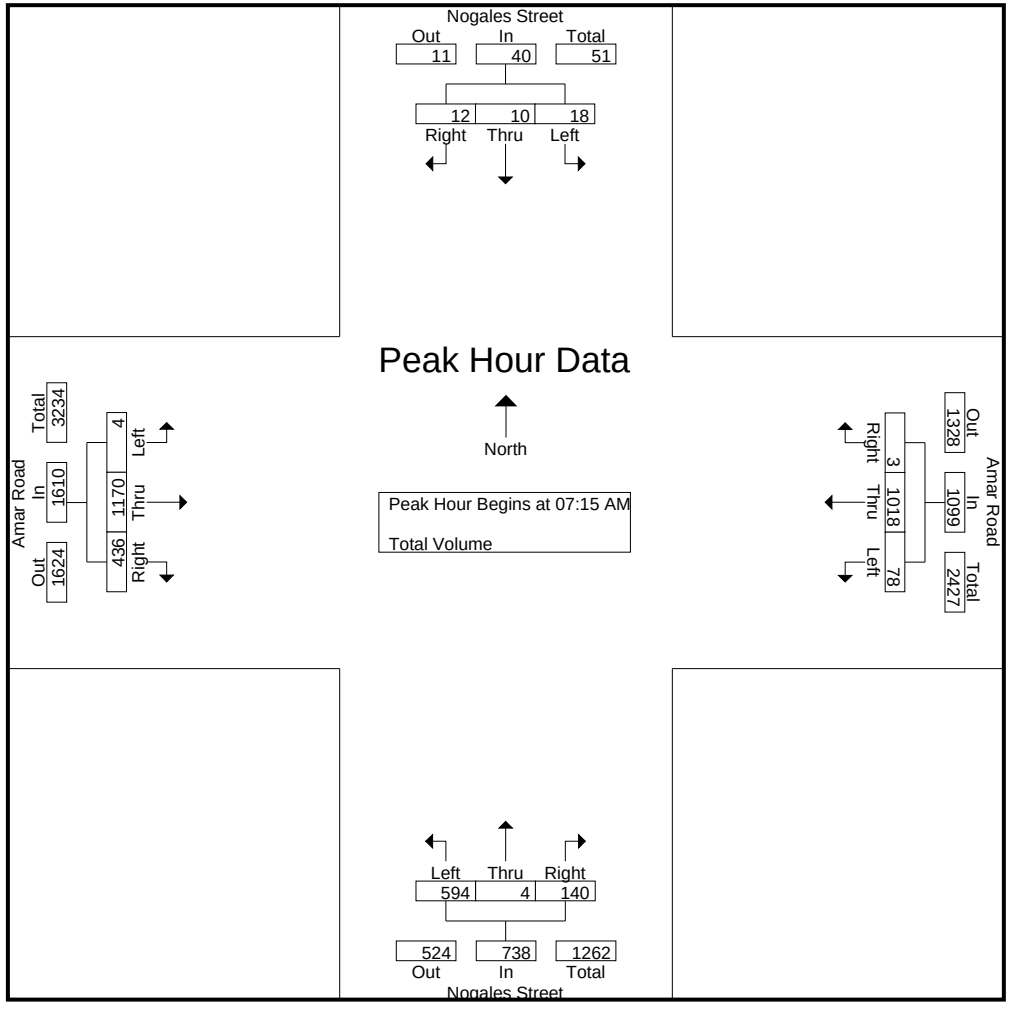
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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	Nogales Street Southbound				Amar Road Westbound				Nogales Street Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:00 AM				07:30 AM				07:15 AM				
+0 mins.	5	**4**	3	**12**	16	**304**	1	**321**	151	1	32	184	**2**	303	111	416	
+15 mins.	4	1	**6**	11	10	280	0	290	**184**	1	41	**226**	1	**317**	**146**	**464**	
+30 mins.	3	2	1	6	**31**	257	0	288	148	1	36	185	0	293	80	373	
+45 mins.	**6**	3	2	11	14	249	**2**	265	133	**2**	**47**	182	1	257	99	357	
Total Volume	18	10	12	40	71	1090	3	1164	616	5	156	777	4	1170	436	1610	
% App. Total	45	25	30		6.1	93.6	0.3		79.3	0.6	20.1		0.2	72.7	27.1		
PHF	.750	.625	.500	.833	.573	.896	.375	.907	.837	.625	.830	.860	.500	.923	.747	.867	

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Groups Printed- Total Volume

	Nogales Street Southbound					Amar Road Westbound					Nogales Street Northbound					Amar Road Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	1	0	4	0	5	25	145	0	0	170	108	2	43	1	154	3	277	83	5	368	697
04:15 PM	3	0	4	0	7	33	172	3	0	208	121	2	40	0	163	1	276	111	4	392	770
04:30 PM	2	2	4	0	8	36	167	3	1	207	114	3	47	0	164	2	279	111	2	394	773
04:45 PM	7	1	3	0	11	43	200	2	0	245	128	5	38	0	171	2	254	96	0	352	779
Total	13	3	15	0	31	137	684	8	1	830	471	12	168	1	652	8	1086	401	11	1506	3019
05:00 PM	0	0	5	0	5	29	213	2	1	245	119	1	42	0	162	0	306	129	3	438	850
05:15 PM	1	1	3	0	5	32	265	5	0	302	154	2	46	0	202	2	259	115	1	377	886
05:30 PM	1	2	2	0	5	32	205	3	2	242	168	5	61	0	234	2	268	115	3	388	869
05:45 PM	4	0	3	0	7	36	277	2	0	315	129	1	42	0	172	2	285	122	4	413	907
Total	6	3	13	0	22	129	960	12	3	1104	570	9	191	0	770	6	1118	481	11	1616	3512
Grand Total	19	6	28	0	53	266	1644	20	4	1934	1041	21	359	1	1422	14	2204	882	22	3122	6531
Apprch %	35.8	11.3	52.8	0		13.8	85	1	0.2		73.2	1.5	25.2	0.1		0.4	70.6	28.3	0.7		
Total %	0.3	0.1	0.4	0	0.8	4.1	25.2	0.3	0.1	29.6	15.9	0.3	5.5	0	21.8	0.2	33.7	13.5	0.3	47.8	

	Nogales Street Southbound				Amar Road Westbound				Nogales Street Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	**5**	5	29	213	2	244	119	1	42	162	0	**306**	**129**	**435**	846
05:15 PM	1	1	3	5	32	265	**5**	302	154	2	46	202	**2**	259	115	376	885
05:30 PM	1	**2**	2	5	32	205	3	240	**168**	**5**	**61**	**234**	2	268	115	385	864
05:45 PM	**4**	0	3	**7**	**36**	**277**	2	**315**	129	1	42	172	2	285	122	409	**903**
Total Volume	6	3	13	22	129	960	12	1101	570	9	191	770	6	1118	481	1605	3498
% App. Total	27.3	13.6	59.1		11.7	87.2	1.1		74	1.2	24.8		0.4	69.7	30		
PHF	.375	.375	.650	.786	.896	.866	.600	.874	.848	.450	.783	.823	.750	.913	.932	.922	.968

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Site Code : 04215551
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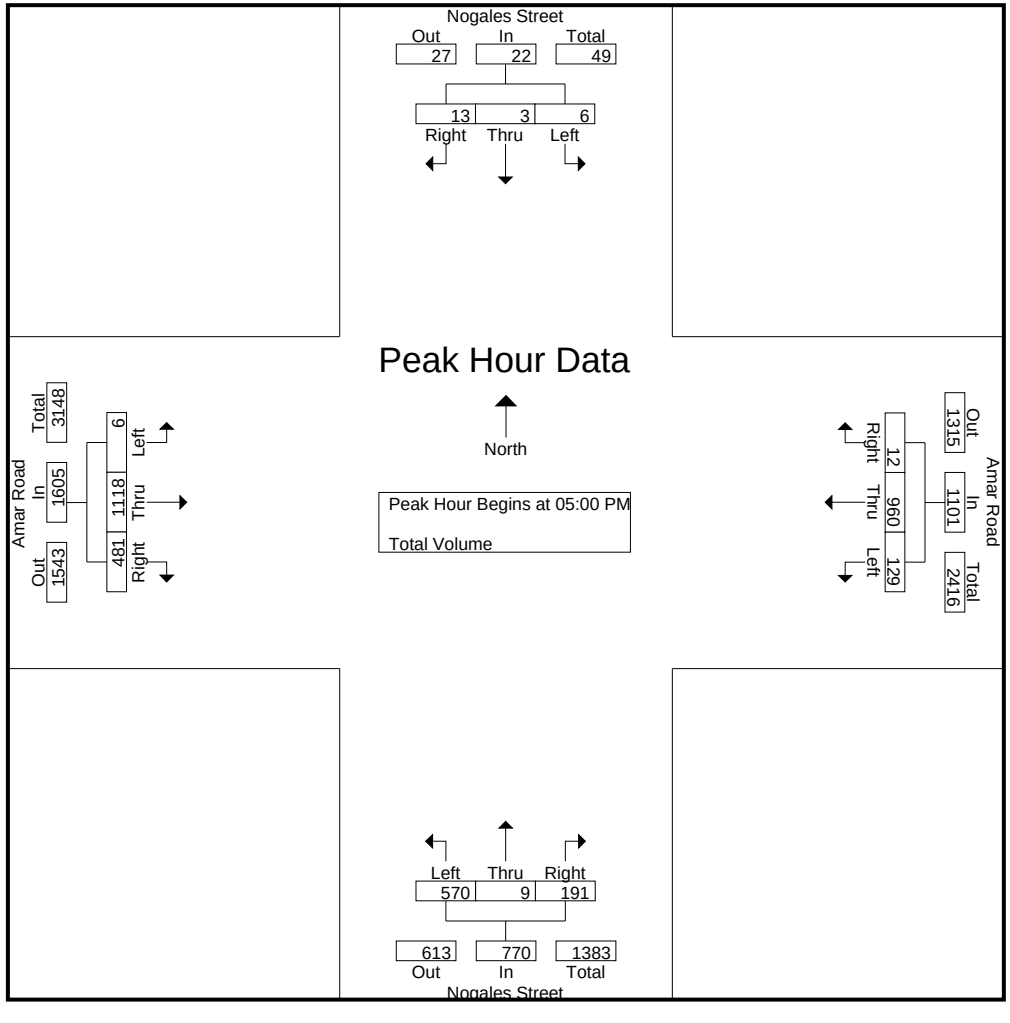

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	Nogales Street Southbound				Amar Road Westbound				Nogales Street Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	1	0	**4**	5	29	213	2	244	119	1	42	162	0	**306**	**129**	**435**	
+15 mins.	3	0	4	7	32	265	**5**	302	154	2	46	202	**2**	259	115	376	
+30 mins.	2	**2**	4	8	32	205	3	240	**168**	**5**	**61**	**234**	2	268	115	385	
+45 mins.	**7**	1	3	**11**	**36**	**277**	2	**315**	129	1	42	172	2	285	122	409	
Total Volume	13	3	15	31	129	960	12	1101	570	9	191	770	6	1118	481	1605	
% App. Total	41.9	9.7	48.4		11.7	87.2	1.1		74	1.2	24.8		0.4	69.7	30		
PHF	.464	.375	.938	.705	.896	.866	.600	.874	.848	.450	.783	.823	.750	.913	.932	.922	

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City of Walnut
N/S: Lemon Avenue
E/W: Amar Road
Weather: Clear

File Name : WNTLEAMAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Lemon Avenue Southbound					Amar Road Westbound					Lemon Avenue Northbound					Amar Road Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	3	7	6	0	16	7	248	5	0	260	24	5	16	1	46	2	199	58	0	259	581
07:15 AM	6	17	6	0	29	15	220	2	0	237	62	6	20	1	89	1	281	82	0	364	719
07:30 AM	9	13	4	0	26	10	180	4	0	194	93	11	30	4	138	2	274	69	0	345	703
07:45 AM	4	8	3	0	15	21	142	3	0	166	89	5	36	2	132	2	291	83	0	376	689
Total	22	45	19	0	86	53	790	14	0	857	268	27	102	8	405	7	1045	292	0	1344	2692
08:00 AM	6	6	11	0	23	26	178	3	0	207	53	9	32	1	95	3	186	59	0	248	573
08:15 AM	14	9	13	0	36	29	177	2	1	209	50	5	41	1	97	9	229	55	0	293	635
08:30 AM	17	11	8	0	36	36	239	9	2	286	30	7	25	0	62	1	176	42	0	219	603
08:45 AM	3	9	6	0	18	20	167	5	1	193	42	4	17	3	66	3	161	45	0	209	486
Total	40	35	38	0	113	111	761	19	4	895	175	25	115	5	320	16	752	201	0	969	2297
Grand Total	62	80	57	0	199	164	1551	33	4	1752	443	52	217	13	725	23	1797	493	0	2313	4989
Apprch %	31.2	40.2	28.6	0		9.4	88.5	1.9	0.2		61.1	7.2	29.9	1.8		1	77.7	21.3	0		
Total %	1.2	1.6	1.1	0	4	3.3	31.1	0.7	0.1	35.1	8.9	1	4.3	0.3	14.5	0.5	36	9.9	0	46.4	

	Lemon Avenue Southbound				Amar Road Westbound				Lemon Avenue Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	3	7	**6**	16	7	**248**	**5**	**260**	24	5	16	45	**2**	199	58	259	580
07:15 AM	6	**17**	6	**29**	15	220	2	237	62	6	20	88	1	281	82	364	**718**
07:30 AM	**9**	13	4	26	10	180	4	194	**93**	**11**	30	**134**	2	274	69	345	699
07:45 AM	4	8	3	15	**21**	142	3	166	89	5	**36**	130	2	**291**	**83**	**376**	687
Total Volume	22	45	19	86	53	790	14	857	268	27	102	397	7	1045	292	1344	2684
% App. Total	25.6	52.3	22.1		6.2	92.2	1.6		67.5	6.8	25.7		0.5	77.8	21.7		
PHF	.611	.662	.792	.741	.631	.796	.700	.824	.720	.614	.708	.741	.875	.898	.880	.894	.935

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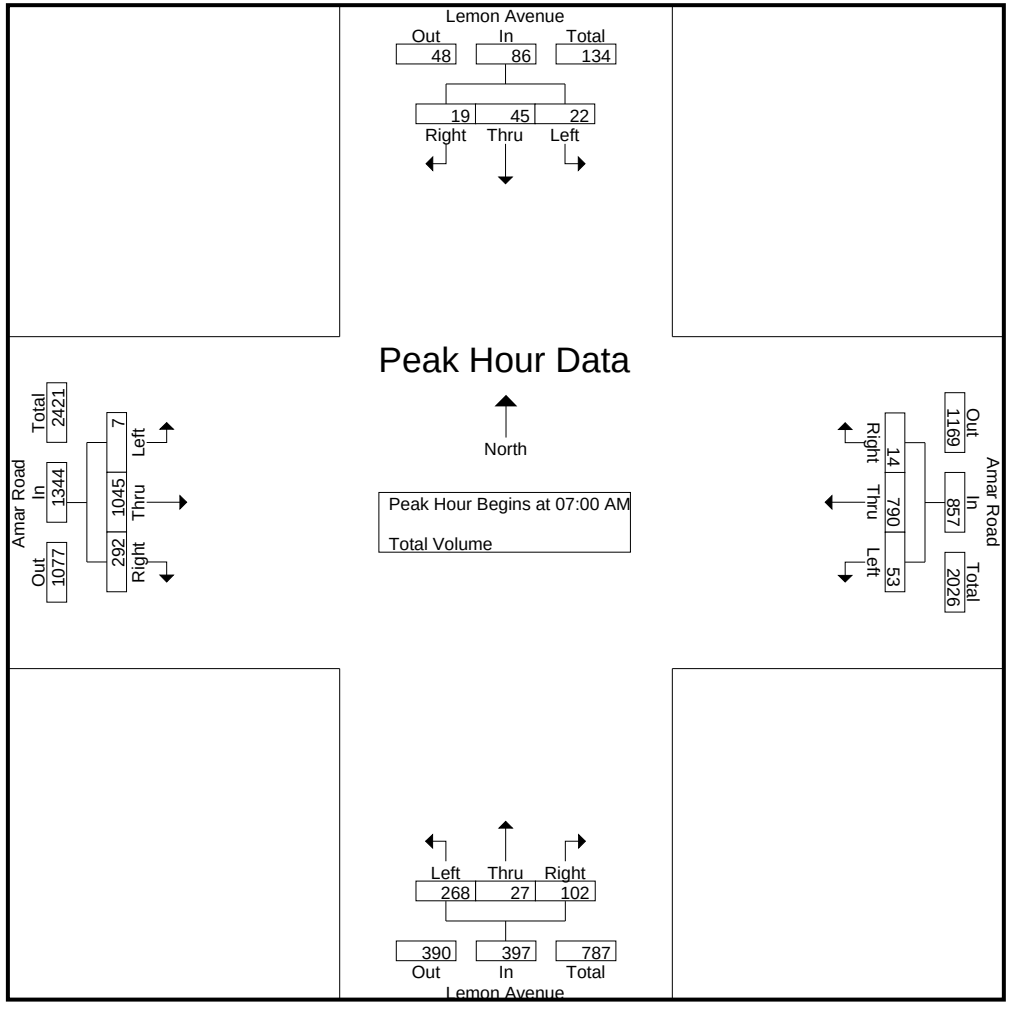

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Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	08:00 AM				08:00 AM				07:30 AM				07:00 AM				
+0 mins.	6	6	11	23	26	178	3	207	**93**	**11**	30	**134**	**2**	199	58	259	
+15 mins.	14	9	**13**	**36**	29	177	2	208	89	5	36	130	1	281	82	364	
+30 mins.	**17**	**11**	8	36	**36**	**239**	**9**	**284**	53	9	32	94	2	274	69	345	
+45 mins.	3	9	6	18	20	167	5	192	50	5	**41**	96	2	**291**	**83**	**376**	
Total Volume	40	35	38	113	111	761	19	891	285	30	139	454	7	1045	292	1344	
% App. Total	35.4	31	33.6		12.5	85.4	2.1		62.8	6.6	30.6		0.5	77.8	21.7		
PHF	.588	.795	.731	.785	.771	.796	.528	.784	.766	.682	.848	.847	.875	.898	.880	.894	

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Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	1	2	6	0	9	22	154	5	0	181	42	3	21	0	66	6	258	38	0	302	0	558	558
04:15 PM	1	5	3	0	9	24	165	2	0	191	43	5	21	1	70	6	254	48	0	308	0	578	578
04:30 PM	3	6	4	0	13	24	187	2	0	213	57	5	23	0	85	6	282	47	2	335	2	646	648
04:45 PM	4	6	4	0	14	23	182	2	0	207	57	5	20	0	82	8	242	39	0	289	0	592	592
Total	9	19	17	0	45	93	688	11	0	792	199	18	85	1	303	26	1036	172	2	1234	2	2374	2376
05:00 PM	6	2	1	0	9	28	214	5	0	247	71	10	29	0	110	6	247	46	1	299	1	665	666
05:15 PM	5	9	1	0	15	26	234	2	0	262	48	11	31	0	90	1	261	43	1	305	1	672	673
05:30 PM	5	3	1	0	9	28	213	9	1	251	67	13	35	1	116	6	263	35	0	304	0	680	680
05:45 PM	1	8	2	0	11	25	229	3	0	257	68	8	37	3	116	6	228	37	1	271	1	655	656
Total	17	22	5	0	44	107	890	19	1	1017	254	42	132	4	432	19	999	161	3	1179	3	2672	2675
Grand Total	26	41	22	0	89	200	1578	30	1	1809	453	60	217	5	735	45	2035	333	5	2413	5	5046	5051
Apprch %	29.2	46.1	24.7	0		11.1	87.2	1.7	0.1		61.6	8.2	29.5	0.7		1.9	84.3	13.8					
Total %	0.5	0.8	0.4	0	1.8	4	31.3	0.6	0	35.9	9	1.2	4.3	0.1	14.6	0.9	40.3	6.6		47.8	0.1	99.9	

	Lemon Avenue Southbound				Amar Road Westbound				Lemon Avenue Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**6**	2	1	9	**28**	214	5	247	**71**	10	29	110	**6**	247	**46**	299	665
05:15 PM	5	**9**	1	**15**	26	**234**	2	**262**	48	11	31	90	1	261	43	**305**	672
05:30 PM	5	3	1	9	28	213	**9**	250	67	**13**	35	**115**	6	**263**	35	304	**678**
05:45 PM	1	8	**2**	11	25	229	3	257	68	8	**37**	113	6	228	37	271	652
Total Volume	17	22	5	44	107	890	19	1016	254	42	132	428	19	999	161	1179	2667
% App. Total	38.6	50	11.4		10.5	87.6	1.9		59.3	9.8	30.8		1.6	84.7	13.7		
PHF	.708	.611	.625	.733	.955	.951	.528	.969	.894	.808	.892	.930	.792	.950	.875	.966	.983

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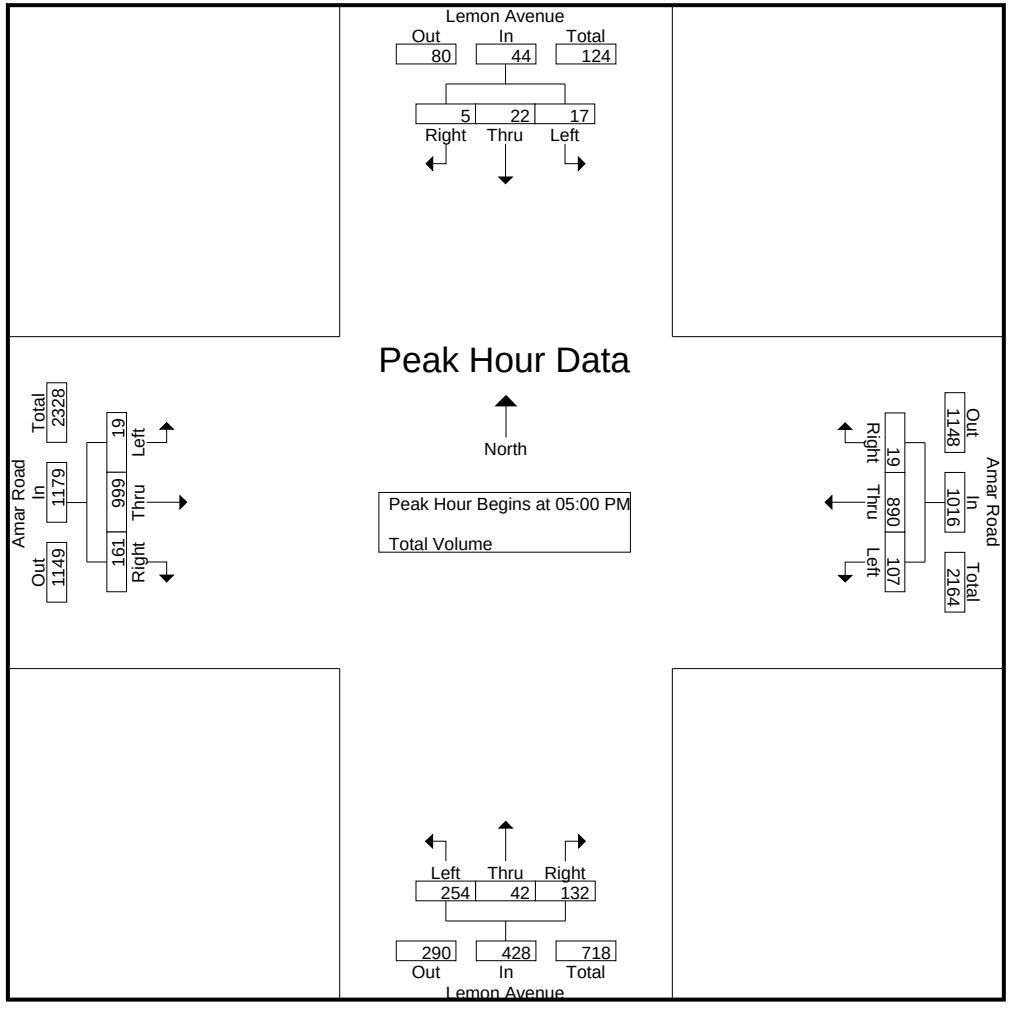
City of Walnut
N/S: Lemon Avenue
E/W: Amar Road
Weather: Clear

File Name : WNTLEAMPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Lemon Avenue
E/W: Amar Road
Weather: Clear

File Name : WNTLEAMPM
Site Code : 04215551
Start Date : 10/1/2015

	Lemon Avenue Southbound				Amar Road Westbound				Lemon Avenue Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				05:00 PM				05:00 PM				04:00 PM				
+0 mins.	3	6	**4**	13	**28**	214	5	247	**71**	10	29	110	6	258	38	302	
+15 mins.	4	6	4	14	26	**234**	2	**262**	48	11	31	90	6	254	**48**	308	
+30 mins.	**6**	2	1	9	28	213	**9**	250	67	**13**	35	**115**	6	**282**	47	**335**	
+45 mins.	5	**9**	1	**15**	25	229	3	257	68	8	**37**	113	**8**	242	39	289	
Total Volume	18	23	10	51	107	890	19	1016	254	42	132	428	26	1036	172	1234	
% App. Total	35.3	45.1	19.6		10.5	87.6	1.9		59.3	9.8	30.8		2.1	84	13.9		
PHF	.750	.639	.625	.850	.955	.951	.528	.969	.894	.808	.892	.930	.813	.918	.896	.921	

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City of Walnut
N/S: Grand Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : WNTGR10WAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound					Driveway Westbound					Grand Avenue Northbound					I-10 Westbound Ramps Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	0	220	38	0	258	2	0	2	0	4	32	164	2	0	198	110	1	44	0	155	615
07:15 AM	0	233	17	0	250	4	2	2	0	8	27	217	5	0	249	116	0	60	0	176	683
07:30 AM	0	209	22	0	231	4	2	1	0	7	25	282	2	1	310	100	0	99	0	199	747
07:45 AM	0	202	31	0	233	3	0	1	0	4	41	258	0	0	299	113	3	73	0	189	725
Total	0	864	108	0	972	13	4	6	0	23	125	921	9	1	1056	439	4	276	0	719	2770
08:00 AM	0	202	45	0	247	1	0	2	0	3	38	229	10	0	277	126	2	77	0	205	732
08:15 AM	0	199	42	0	241	4	1	4	0	9	40	282	5	1	328	98	1	61	0	160	738
08:30 AM	1	214	50	0	265	3	2	1	0	6	48	250	4	0	302	104	3	40	0	147	720
08:45 AM	1	175	50	0	226	4	1	1	0	6	55	272	6	0	333	108	2	32	0	142	707
Total	2	790	187	0	979	12	4	8	0	24	181	1033	25	1	1240	436	8	210	0	654	2897
Grand Total	2	1654	295	0	1951	25	8	14	0	47	306	1954	34	2	2296	875	12	486	0	1373	5667
Apprch %	0.1	84.8	15.1	0		53.2	17	29.8	0		13.3	85.1	1.5	0.1		63.7	0.9	35.4	0		
Total %	0	29.2	5.2	0	34.4	0.4	0.1	0.2	0	0.8	5.4	34.5	0.6	0	40.5	15.4	0.2	8.6	0	24.2	

	Grand Avenue Southbound				Driveway Westbound				Grand Avenue Northbound				I-10 Westbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**209**	22	231	**4**	**2**	1	7	25	**282**	2	309	100	0	**99**	199	**746**
07:45 AM	0	202	31	233	3	0	1	4	**41**	258	0	299	113	**3**	73	189	725
08:00 AM	0	202	**45**	**247**	1	0	2	3	38	229	**10**	277	**126**	2	77	**205**	732
08:15 AM	0	199	42	241	4	1	**4**	**9**	40	282	5	**327**	98	1	61	160	737
Total Volume	0	812	140	952	12	3	8	23	144	1051	17	1212	437	6	310	753	2940
% App. Total	0	85.3	14.7		52.2	13	34.8		11.9	86.7	1.4		58	0.8	41.2		
PHF	.000	.971	.778	.964	.750	.375	.500	.639	.878	.932	.425	.927	.867	.500	.783	.918	.985

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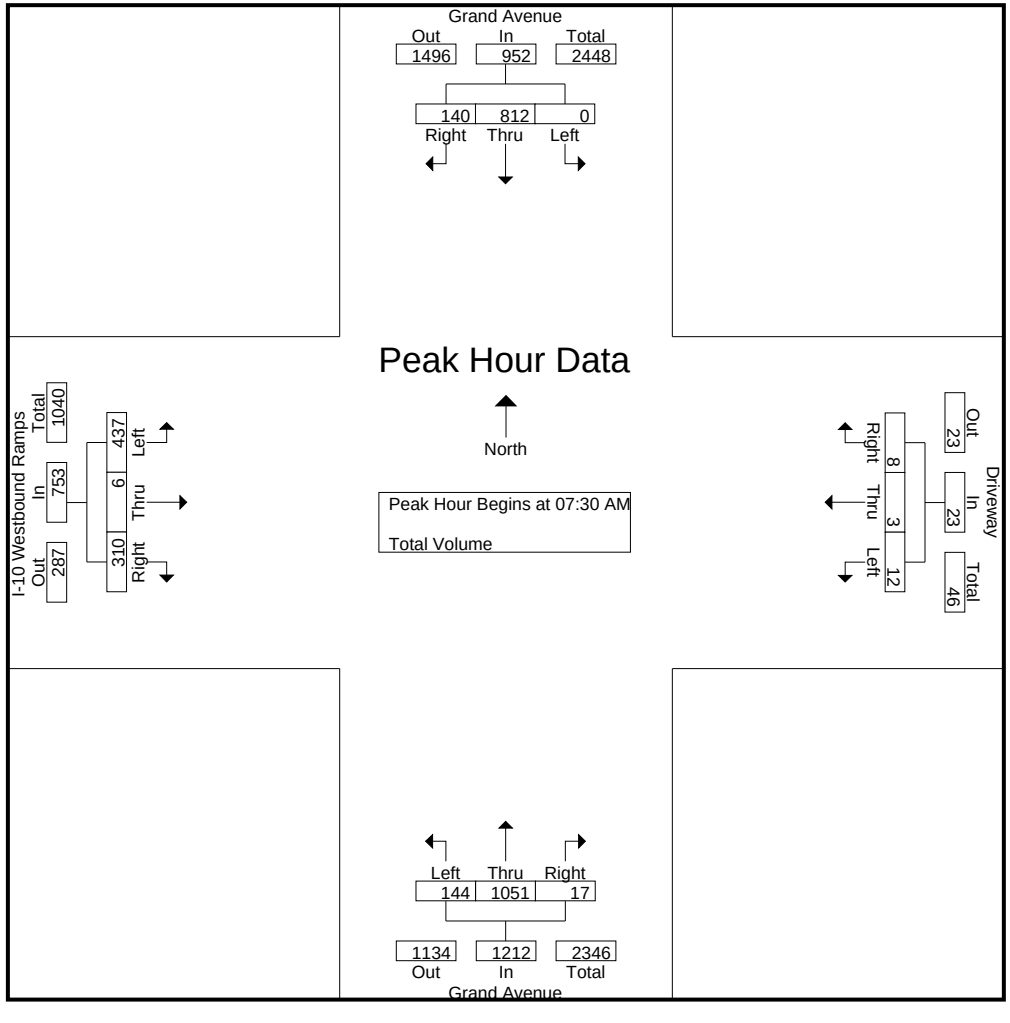
City of Walnut
N/S: Grand Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : WNTGR10WAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Grand Avenue
E/W: I-10 Westbound Ramps
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File Name : WNTGR10WAM
Site Code : 04215551
Start Date : 10/1/2015

	Grand Avenue Southbound				Driveway Westbound				Grand Avenue Northbound				I-10 Westbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				08:00 AM				08:00 AM				07:15 AM				
+0 mins.	0	202	31	233	1	0	2	3	38	229	**10**	277	116	0	60	176	
+15 mins.	0	202	45	247	**4**	1	**4**	**9**	40	**282**	5	327	100	0	**99**	199	
+30 mins.	0	199	42	241	3	**2**	1	6	48	250	4	302	113	**3**	73	189	
+45 mins.	**1**	**214**	**50**	**265**	4	1	1	6	**55**	272	6	**333**	**126**	2	77	**205**	
Total Volume	1	817	168	986	12	4	8	24	181	1033	25	1239	455	5	309	769	
% App. Total	0.1	82.9	17		50	16.7	33.3		14.6	83.4	2		59.2	0.7	40.2		
PHF	.250	.954	.840	.930	.750	.500	.500	.667	.823	.916	.625	.930	.903	.417	.780	.938	

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City of Walnut
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Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound					Driveway Westbound					Grand Avenue Northbound					I-10 Westbound Ramps Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	1	219	111	0	331	10	2	0	0	12	72	193	2	0	267	47	6	14	0	67	677
04:15 PM	0	245	87	0	332	4	2	6	0	12	99	241	7	0	347	47	4	13	0	64	755
04:30 PM	1	235	113	0	349	3	1	3	0	7	94	257	10	0	361	55	2	16	0	73	790
04:45 PM	1	215	111	0	327	10	0	5	0	15	85	274	1	1	361	46	3	20	0	69	772
Total	3	914	422	0	1339	27	5	14	0	46	350	965	20	1	1336	195	15	63	0	273	2994
05:00 PM	2	191	98	0	291	2	5	0	0	7	89	270	10	0	369	53	3	25	0	81	748
05:15 PM	0	197	116	0	313	6	1	0	0	7	101	252	6	0	359	81	2	27	0	110	789
05:30 PM	0	207	83	1	291	2	6	1	0	9	102	270	11	0	383	77	2	30	0	109	792
05:45 PM	1	220	88	1	310	8	5	5	0	18	97	298	7	0	402	71	4	35	0	110	840
Total	3	815	385	2	1205	18	17	6	0	41	389	1090	34	0	1513	282	11	117	0	410	3169
Grand Total	6	1729	807	2	2544	45	22	20	0	87	739	2055	54	1	2849	477	26	180	0	683	6163
Apprch %	0.2	68	31.7	0.1		51.7	25.3	23	0		25.9	72.1	1.9	0		69.8	3.8	26.4	0		
Total %	0.1	28.1	13.1	0	41.3	0.7	0.4	0.3	0	1.4	12	33.3	0.9	0	46.2	7.7	0.4	2.9	0	11.1	

	Grand Avenue Southbound				Driveway Westbound				Grand Avenue Northbound				I-10 Westbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**2**	191	98	291	2	5	0	7	89	270	10	369	53	3	25	81	748
05:15 PM	0	197	**116**	**313**	6	1	0	7	101	252	6	359	**81**	2	27	**110**	789
05:30 PM	0	207	83	290	2	**6**	1	9	**102**	270	**11**	383	77	2	30	109	791
05:45 PM	1	**220**	88	309	**8**	5	**5**	**18**	97	**298**	7	**402**	71	**4**	**35**	110	**839**
Total Volume	3	815	385	1203	18	17	6	41	389	1090	34	1513	282	11	117	410	3167
% App. Total	0.2	67.7	32		43.9	41.5	14.6		25.7	72	2.2		68.8	2.7	28.5		
PHF	.375	.926	.830	.961	.563	.708	.300	.569	.953	.914	.773	.941	.870	.688	.836	.932	.944

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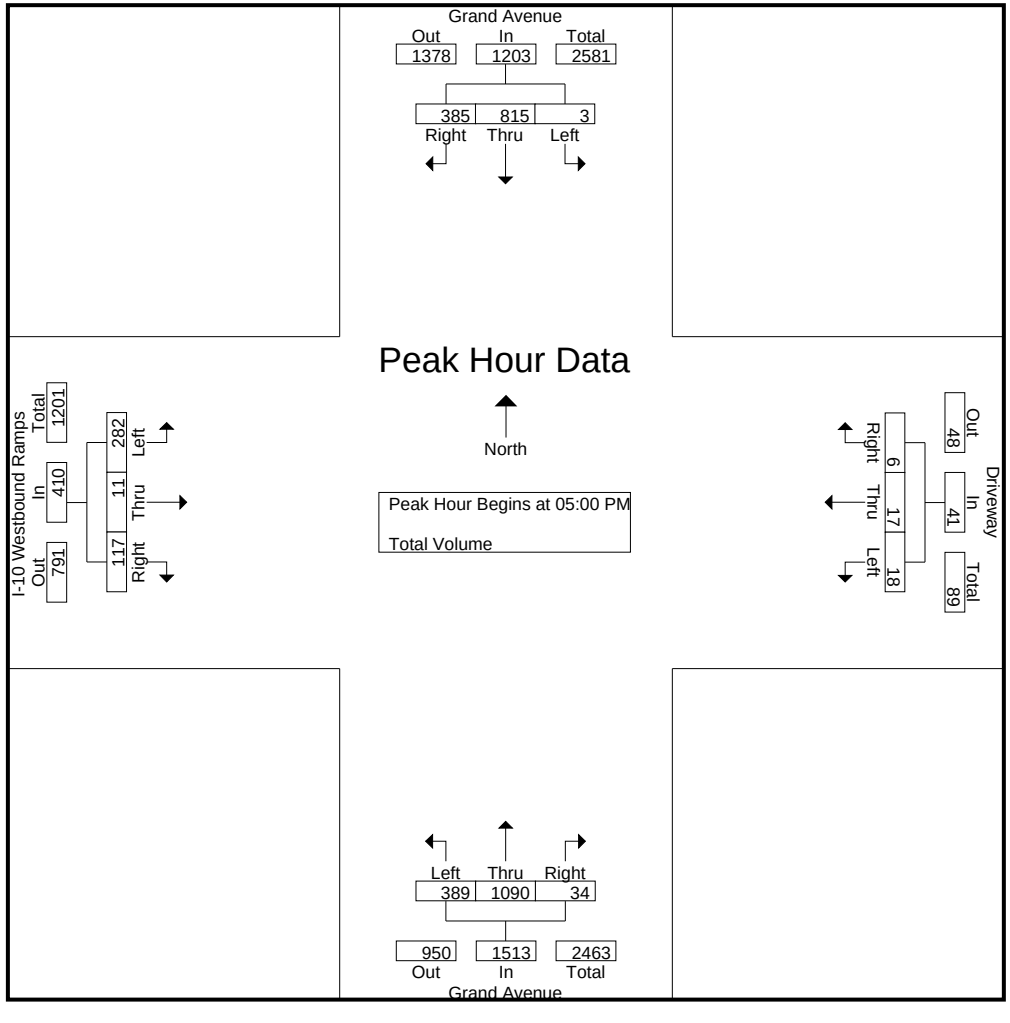
City of Walnut
N/S: Grand Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : WNTGR10WPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Grand Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : WNTGR10WPM
Site Code : 04215551
Start Date : 10/1/2015

	Grand Avenue Southbound				Driveway Westbound				Grand Avenue Northbound				I-10 Westbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				05:00 PM				05:00 PM				
+0 mins.	**1**	219	111	331	**10**	**2**	0	12	89	270	10	369	53	3	25	81	
+15 mins.	0	**245**	87	332	4	2	**6**	12	101	252	6	359	**81**	2	27	**110**	
+30 mins.	1	235	**113**	**349**	3	1	3	7	**102**	270	**11**	383	77	2	30	109	
+45 mins.	1	215	111	327	10	0	5	**15**	97	**298**	7	**402**	71	**4**	**35**	110	
Total Volume	3	914	422	1339	27	5	14	46	389	1090	34	1513	282	11	117	410	
% App. Total	0.2	68.3	31.5		58.7	10.9	30.4		25.7	72	2.2		68.8	2.7	28.5		
PHF	.750	.933	.934	.959	.675	.625	.583	.767	.953	.914	.773	.941	.870	.688	.836	.932	

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City of Walnut
N/S: Grand Avenue
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : WNTGR10EAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound				Grand Avenue Northbound				I-10 Eastbound Ramps Eastbound				
Start Time	Thru	Right	U-Turns	App. Total	Left	Thru	U-Turns	App. Total	Left	Right	U-Turns	App. Total	Int. Total
07:00 AM	218	43	0	261	9	141	0	150	55	166	0	221	632
07:15 AM	224	59	0	283	8	165	0	173	83	152	0	235	691
07:30 AM	237	56	0	293	5	209	0	214	102	142	0	244	751
07:45 AM	241	48	0	289	11	228	0	239	91	161	0	252	780
Total	920	206	0	1126	33	743	0	776	331	621	0	952	2854
08:00 AM	249	52	0	301	10	199	0	209	87	123	0	210	720
08:15 AM	200	67	1	268	15	237	0	252	69	107	0	176	696
08:30 AM	190	48	0	238	8	220	0	228	83	120	0	203	669
08:45 AM	163	58	0	221	7	240	0	247	100	130	0	230	698
Total	802	225	1	1028	40	896	0	936	339	480	0	819	2783
Grand Total	1722	431	1	2154	73	1639	0	1712	670	1101	0	1771	5637
Apprch %	79.9	20	0		4.3	95.7	0		37.8	62.2	0		
Total %	30.5	7.6	0	38.2	1.3	29.1	0	30.4	11.9	19.5	0	31.4	

	Grand Avenue Southbound			Grand Avenue Northbound			I-10 Eastbound Ramps Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	237	56	293	5	209	214	**102**	142	244	751
07:45 AM	241	48	289	11	228	239	91	**161**	**252**	**780**
08:00 AM	**249**	52	**301**	10	199	209	87	123	210	720
08:15 AM	200	**67**	267	**15**	**237**	**252**	69	107	176	695
Total Volume	927	223	1150	41	873	914	349	533	882	2946
% App. Total	80.6	19.4		4.5	95.5		39.6	60.4		
PHF	.931	.832	.955	.683	.921	.907	.855	.828	.875	.944

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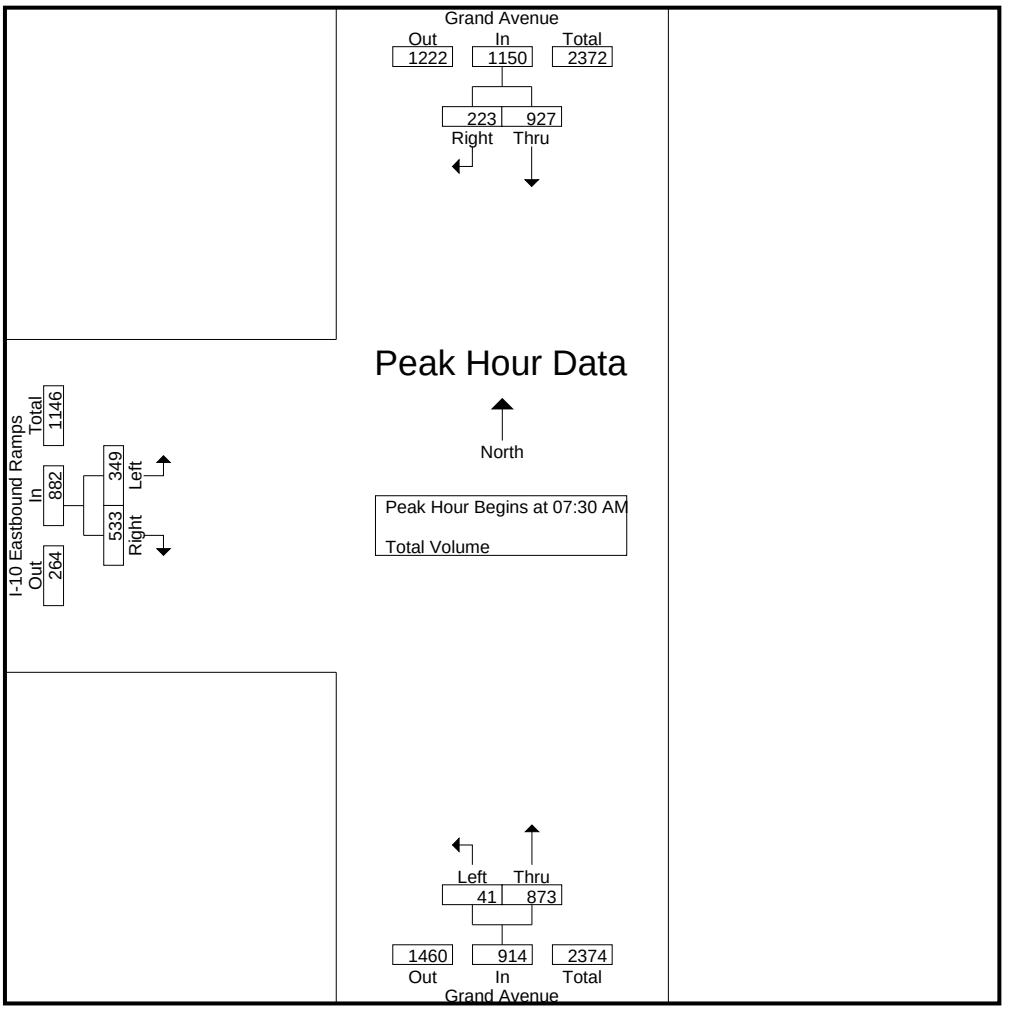
City of Walnut
N/S: Grand Avenue
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : WNTGR10EAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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

	07:15 AM			08:00 AM			07:00 AM		
+0 mins.	224	**59**	283	10	199	209	55	**166**	221
+15 mins.	237	56	293	**15**	237	**252**	83	152	235
+30 mins.	241	48	289	8	220	228	**102**	142	244
+45 mins.	**249**	52	**301**	7	**240**	247	91	161	**252**
Total Volume	951	215	1166	40	896	936	331	621	952
% App. Total	81.6	18.4		4.3	95.7		34.8	65.2	
PHF	.955	.911	.968	.667	.933	.929	.811	.935	.944

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City of Walnut
N/S: Grand Avenue
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : WNTGR10EPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound				Grand Avenue Northbound				I-10 Eastbound Ramps Eastbound				
Start Time	Thru	Right	U-Turns	App. Total	Left	Thru	U-Turns	App. Total	Left	Right	U-Turns	App. Total	Int. Total
04:00 PM	168	78	0	246	13	231	0	244	59	57	0	116	606
04:15 PM	181	95	0	276	14	265	0	279	75	41	0	116	671
04:30 PM	164	85	0	249	14	279	0	293	82	37	0	119	661
04:45 PM	167	81	0	248	16	287	0	303	64	53	0	117	668
Total	680	339	0	1019	57	1062	0	1119	280	188	0	468	2606
05:00 PM	135	70	0	205	19	315	0	334	65	46	0	111	650
05:15 PM	163	77	0	240	7	310	0	317	79	60	0	139	696
05:30 PM	182	70	0	252	11	328	0	339	75	32	0	107	698
05:45 PM	188	84	0	272	15	320	0	335	82	48	0	130	737
Total	668	301	0	969	52	1273	0	1325	301	186	0	487	2781
Grand Total	1348	640	0	1988	109	2335	0	2444	581	374	0	955	5387
Apprch %	67.8	32.2	0		4.5	95.5	0		60.8	39.2	0		
Total %	25	11.9	0	36.9	2	43.3	0	45.4	10.8	6.9	0	17.7	

	Grand Avenue Southbound			Grand Avenue Northbound			I-10 Eastbound Ramps Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	135	70	205	**19**	315	334	65	46	111	650
05:15 PM	163	77	240	7	310	317	79	**60**	**139**	696
05:30 PM	182	70	252	11	**328**	**339**	75	32	107	698
05:45 PM	**188**	**84**	**272**	15	320	335	**82**	48	130	**737**
Total Volume	668	301	969	52	1273	1325	301	186	487	2781
% App. Total	68.9	31.1		3.9	96.1		61.8	38.2		
PHF	.888	.896	.891	.684	.970	.977	.918	.775	.876	.943

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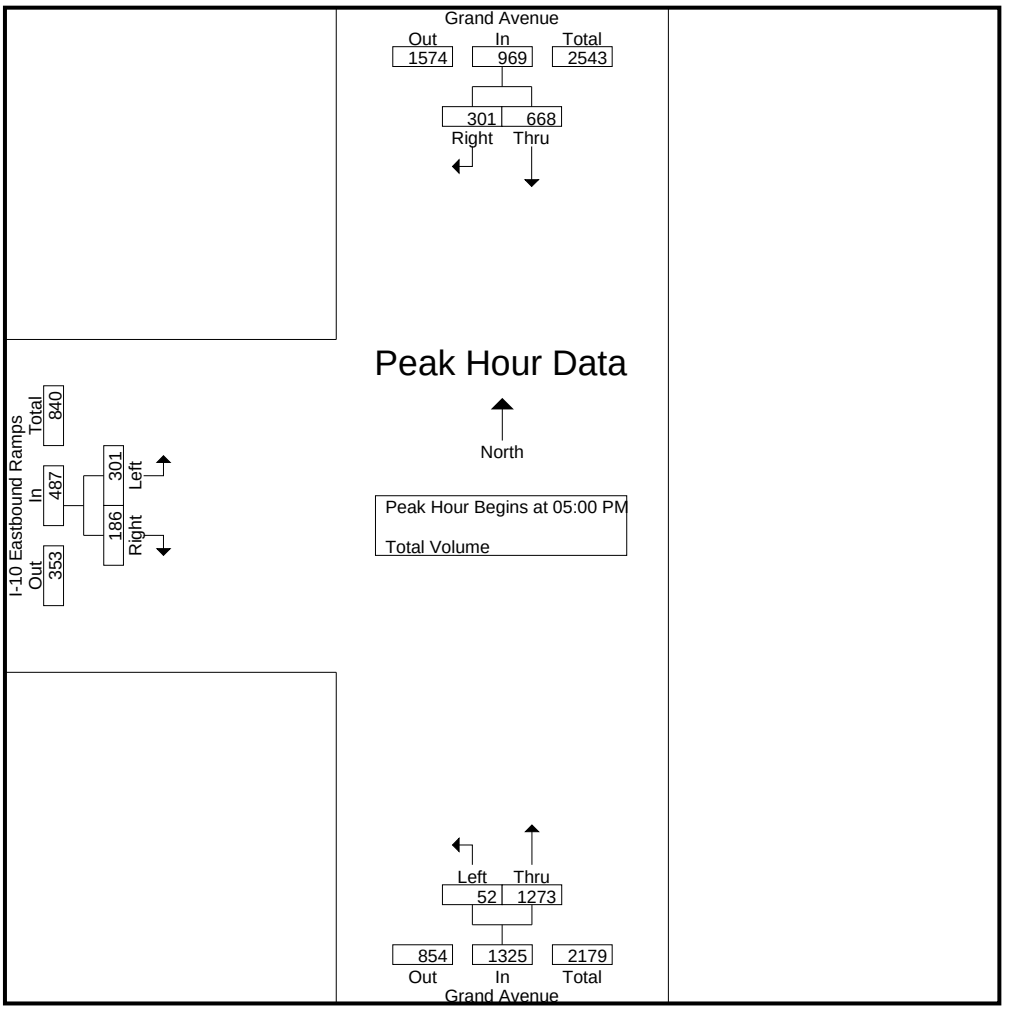
City of Walnut
N/S: Grand Avenue
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : WNTGR10EPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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

	04:00 PM			05:00 PM			05:00 PM		
+0 mins.	168	78	246	**19**	315	334	65	46	111
+15 mins.	**181**	**95**	**276**	7	310	317	79	**60**	**139**
+30 mins.	164	85	249	11	**328**	**339**	75	32	107
+45 mins.	167	81	248	15	320	335	**82**	48	130
Total Volume	680	339	1019	52	1273	1325	301	186	487
% App. Total	66.7	33.3		3.9	96.1		61.8	38.2	
PHF	.939	.892	.923	.684	.970	.977	.918	.775	.876

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City of Walnut
N/S: North Grand Avenue
E/W: Cameron Avenue
Weather: Clear

File Name : WNTGRCAAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	North Grand Avenue Southbound				North Grand Avenue Northbound				Cameron Avenue Eastbound				
Start Time	Thru	Right	U-Turns	App. Total	Left	Thru	U-Turns	App. Total	Left	Right	U-Turns	App. Total	Int. Total
07:00 AM	386	50	0	436	105	152	0	257	16	132	0	148	841
07:15 AM	450	47	0	497	115	195	0	310	8	168	0	176	983
07:30 AM	387	49	0	436	95	183	0	278	29	130	0	159	873
07:45 AM	430	35	0	465	82	209	0	291	33	131	0	164	920
Total	1653	181	0	1834	397	739	0	1136	86	561	0	647	3617
08:00 AM	358	47	0	405	82	177	0	259	22	115	0	137	801
08:15 AM	293	46	0	339	67	232	0	299	17	77	0	94	732
08:30 AM	268	52	0	320	98	222	0	320	12	84	0	96	736
08:45 AM	273	43	0	316	64	218	0	282	17	76	0	93	691
Total	1192	188	0	1380	311	849	0	1160	68	352	0	420	2960
Grand Total	2845	369	0	3214	708	1588	0	2296	154	913	0	1067	6577
Apprch %	88.5	11.5	0		30.8	69.2	0		14.4	85.6	0		
Total %	43.3	5.6	0	48.9	10.8	24.1	0	34.9	2.3	13.9	0	16.2	

	North Grand Avenue Southbound			North Grand Avenue Northbound			Cameron Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	386	**50**	436	105	152	257	16	132	148	841
07:15 AM	**450**	47	**497**	**115**	195	**310**	8	**168**	**176**	**983**
07:30 AM	387	49	436	95	183	278	29	130	159	873
07:45 AM	430	35	465	82	**209**	291	**33**	131	164	920
Total Volume	1653	181	1834	397	739	1136	86	561	647	3617
% App. Total	90.1	9.9		34.9	65.1		13.3	86.7		
PHF	.918	.905	.923	.863	.884	.916	.652	.835	.919	.920

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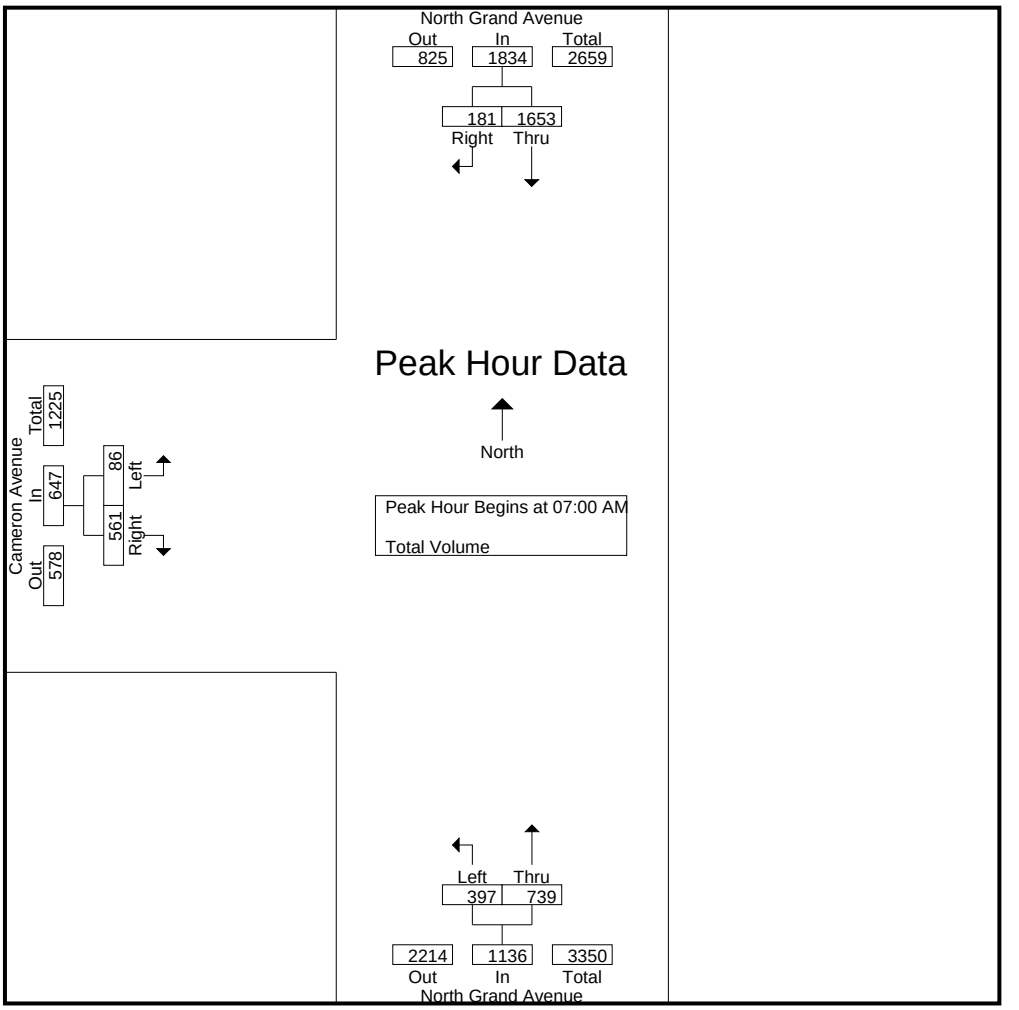
City of Walnut
N/S: North Grand Avenue
E/W: Cameron Avenue
Weather: Clear

File Name : WNTGRCAAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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

	07:00 AM			07:45 AM			07:00 AM		
+0 mins.	386	**50**	436	82	209	291	16	132	148
+15 mins.	**450**	47	**497**	82	177	259	8	**168**	**176**
+30 mins.	387	49	436	67	**232**	299	29	130	159
+45 mins.	430	35	465	**98**	222	**320**	**33**	131	164
Total Volume	1653	181	1834	329	840	1169	86	561	647
% App. Total	90.1	9.9		28.1	71.9		13.3	86.7	
PHF	.918	.905	.923	.839	.905	.913	.652	.835	.919

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City of Walnut
N/S: North Grand Avenue
E/W: Cameron Avenue
Weather: Clear

File Name : WNTGRCAPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	North Grand Avenue Southbound				North Grand Avenue Northbound				Cameron Avenue Eastbound				
Start Time	Thru	Right	U-Turns	App. Total	Left	Thru	U-Turns	App. Total	Left	Right	U-Turns	App. Total	Int. Total
04:00 PM	206	15	0	221	65	254	0	319	9	79	0	88	628
04:15 PM	198	13	0	211	76	282	0	358	18	103	0	121	690
04:30 PM	185	11	0	196	77	280	0	357	28	86	0	114	667
04:45 PM	213	18	0	231	86	328	0	414	20	101	0	121	766
Total	802	57	0	859	304	1144	0	1448	75	369	0	444	2751
05:00 PM	205	24	0	229	101	292	0	393	25	107	0	132	754
05:15 PM	174	29	0	203	97	282	0	379	24	98	0	122	704
05:30 PM	221	31	0	252	121	339	0	460	14	94	0	108	820
05:45 PM	208	31	0	239	99	330	0	429	18	108	0	126	794
Total	808	115	0	923	418	1243	0	1661	81	407	0	488	3072
Grand Total	1610	172	0	1782	722	2387	0	3109	156	776	0	932	5823
Apprch %	90.3	9.7	0		23.2	76.8	0		16.7	83.3	0		
Total %	27.6	3	0	30.6	12.4	41	0	53.4	2.7	13.3	0	16	

	North Grand Avenue Southbound			North Grand Avenue Northbound			Cameron Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	205	24	229	101	292	393	**25**	107	**132**	754
05:15 PM	174	29	203	97	282	379	24	98	122	704
05:30 PM	**221**	**31**	**252**	**121**	**339**	**460**	14	94	108	**820**
05:45 PM	208	31	239	99	330	429	18	**108**	126	794
Total Volume	808	115	923	418	1243	1661	81	407	488	3072
% App. Total	87.5	12.5		25.2	74.8		16.6	83.4		
PHF	.914	.927	.916	.864	.917	.903	.810	.942	.924	.937

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City of Walnut
N/S: North Grand Avenue
E/W: Cameron Avenue
Weather: Clear

File Name : WNTGRCAPM
Site Code : 04215551
Start Date : 10/1/2015
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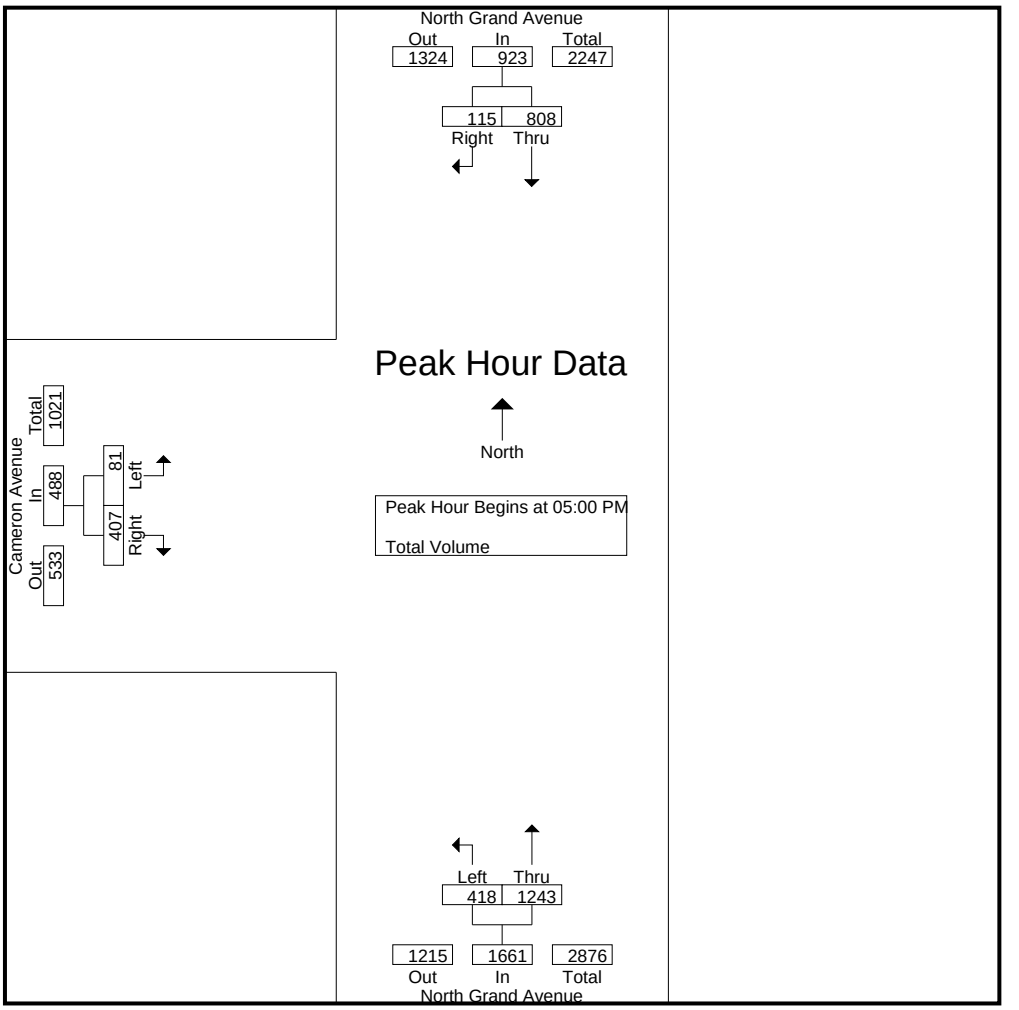

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			04:30 PM		
+0 mins.	205	24	229	101	292	393	**28**	86	114
+15 mins.	174	29	203	97	282	379	20	101	121
+30 mins.	**221**	**31**	**252**	**121**	**339**	**460**	25	**107**	**132**
+45 mins.	208	31	239	99	330	429	24	98	122
Total Volume	808	115	923	418	1243	1661	97	392	489
% App. Total	87.5	12.5		25.2	74.8		19.8	80.2	
PHF	.914	.927	.916	.864	.917	.903	.866	.916	.926

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City of Walnut
N/S: Grand Avenue
E/W: Mountaineer Road
Weather: Clear

File Name : WNTGRMOAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound				Mountaineer Road Westbound				Grand Avenue Northbound				
Start Time	Left	Thru	U-Turns	App. Total	Left	Right	U-Turns	App. Total	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	80	433	0	513	23	11	0	34	239	47	0	286	833
07:15 AM	133	455	0	588	36	19	0	55	287	58	0	345	988
07:30 AM	165	446	0	611	28	11	1	40	281	103	0	384	1035
07:45 AM	186	411	0	597	20	24	0	44	246	151	0	397	1038
Total	564	1745	0	2309	107	65	1	173	1053	359	0	1412	3894
08:00 AM	159	388	0	547	50	21	0	71	233	125	0	358	976
08:15 AM	57	389	0	446	60	12	1	73	296	61	0	357	876
08:30 AM	68	311	0	379	26	14	0	40	314	50	0	364	783
08:45 AM	54	319	0	373	26	12	0	38	267	41	0	308	719
Total	338	1407	0	1745	162	59	1	222	1110	277	0	1387	3354
Grand Total	902	3152	0	4054	269	124	2	395	2163	636	0	2799	7248
Apprch %	22.2	77.8	0		68.1	31.4	0.5		77.3	22.7	0		
Total %	12.4	43.5	0	55.9	3.7	1.7	0	5.4	29.8	8.8	0	38.6	

	Grand Avenue Southbound			Mountaineer Road Westbound			Grand Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	133	**455**	588	36	19	55	**287**	58	345	988
07:30 AM	165	446	**611**	28	11	39	281	103	384	1034
07:45 AM	**186**	411	597	20	**24**	44	246	**151**	**397**	**1038**
08:00 AM	159	388	547	**50**	21	**71**	233	125	358	976
Total Volume	643	1700	2343	134	75	209	1047	437	1484	4036
% App. Total	27.4	72.6		64.1	35.9		70.6	29.4		
PHF	.864	.934	.959	.670	.781	.736	.912	.724	.935	.972

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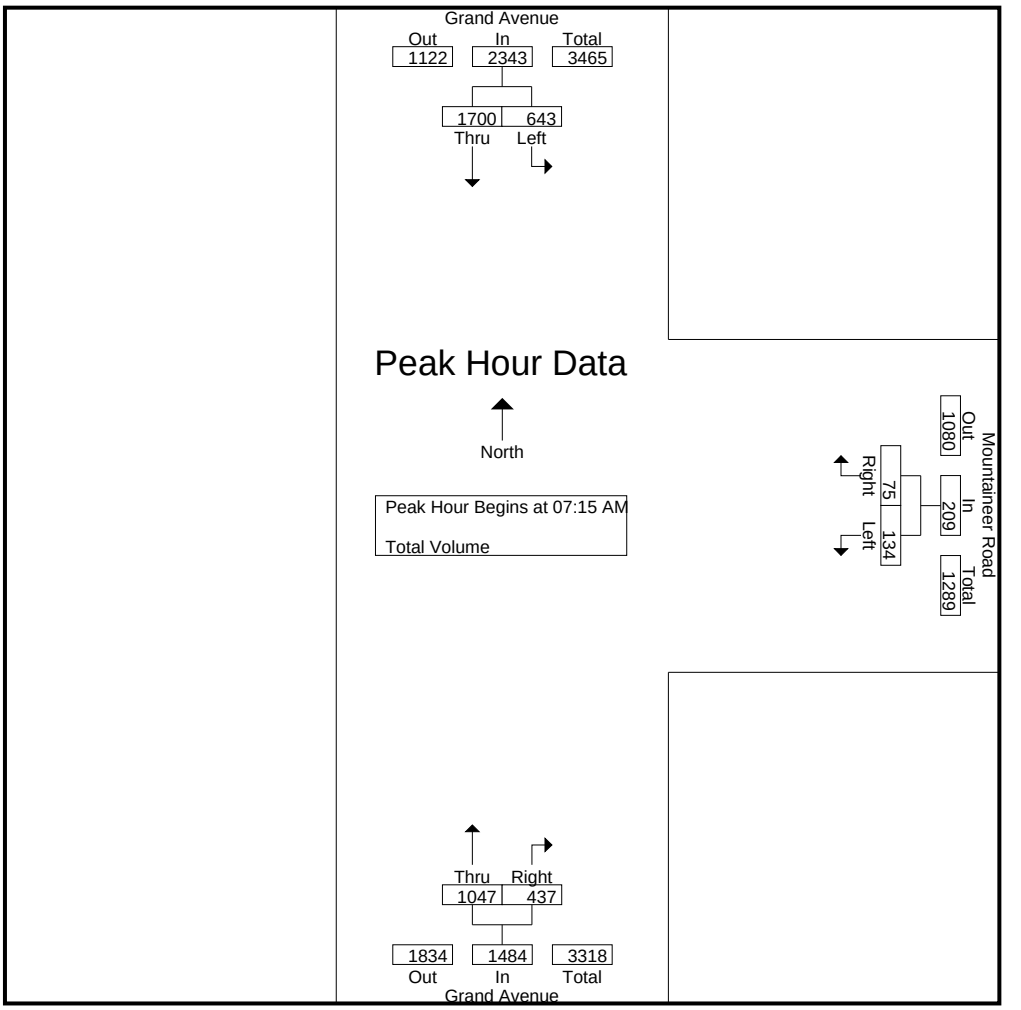
City of Walnut
N/S: Grand Avenue
E/W: Mountaineer Road
Weather: Clear

File Name : WNTGRMOAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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

	07:15 AM			07:45 AM			07:30 AM		
+0 mins.	133	**455**	588	20	**24**	44	281	103	384
+15 mins.	165	446	**611**	50	21	71	246	**151**	**397**
+30 mins.	**186**	411	597	**60**	12	**72**	233	125	358
+45 mins.	159	388	547	26	14	40	**296**	61	357
Total Volume	643	1700	2343	156	71	227	1056	440	1496
% App. Total	27.4	72.6		68.7	31.3		70.6	29.4	
PHF	.864	.934	.959	.650	.740	.788	.892	.728	.942

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City of Walnut
N/S: Grand Avenue
E/W: Mountaineer Road
Weather: Clear

File Name : WNTGRMOPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound				Mountaineer Road Westbound				Grand Avenue Northbound				
Start Time	Left	Thru	U-Turns	App. Total	Left	Right	U-Turns	App. Total	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	47	220	0	267	49	42	0	91	275	34	0	309	667
04:15 PM	42	263	0	305	71	73	0	144	317	46	0	363	812
04:30 PM	30	263	0	293	70	62	1	133	334	31	0	365	791
04:45 PM	25	293	0	318	31	35	0	66	370	42	0	412	796
Total	144	1039	0	1183	221	212	1	434	1296	153	0	1449	3066
05:00 PM	29	277	0	306	46	47	0	93	374	27	0	401	800
05:15 PM	17	269	0	286	22	44	0	66	460	31	0	491	843
05:30 PM	29	288	0	317	37	44	1	82	449	33	0	482	881
05:45 PM	31	286	0	317	31	26	0	57	429	27	0	456	830
Total	106	1120	0	1226	136	161	1	298	1712	118	0	1830	3354
Grand Total	250	2159	0	2409	357	373	2	732	3008	271	0	3279	6420
Apprch %	10.4	89.6	0		48.8	51	0.3		91.7	8.3	0		
Total %	3.9	33.6	0	37.5	5.6	5.8	0	11.4	46.9	4.2	0	51.1	

	Grand Avenue Southbound			Mountaineer Road Westbound			Grand Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	29	277	306	**46**	**47**	**93**	374	27	401	800
05:15 PM	17	269	286	22	44	66	**460**	31	**491**	843
05:30 PM	29	**288**	**317**	37	44	81	449	**33**	482	**880**
05:45 PM	**31**	286	317	31	26	57	429	27	456	830
Total Volume	106	1120	1226	136	161	297	1712	118	1830	3353
% App. Total	8.6	91.4		45.8	54.2		93.6	6.4		
PHF	.855	.972	.967	.739	.856	.798	.930	.894	.932	.953

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City of Walnut
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Weather: Clear

File Name : WNTGRMOPM
Site Code : 04215551
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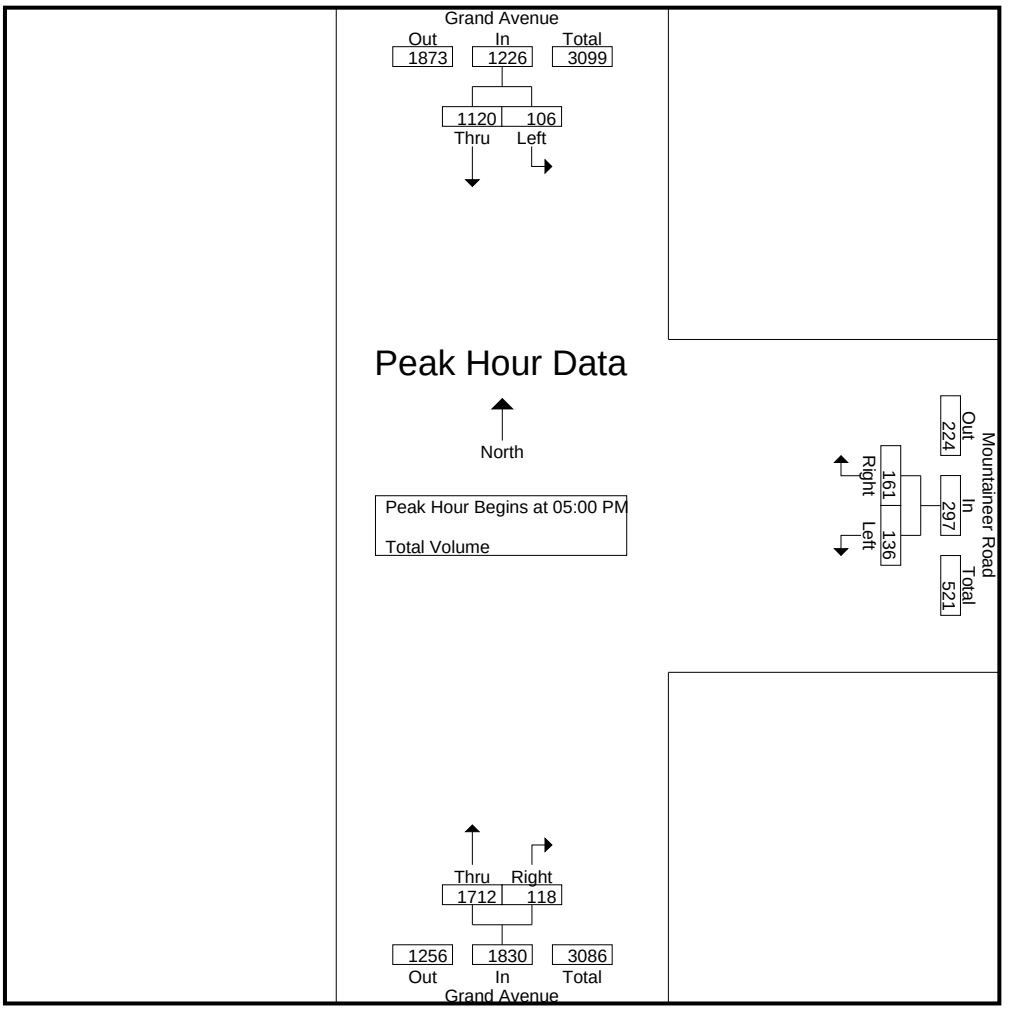

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:15 PM			05:00 PM		
+0 mins.	25	**293**	**318**	**71**	**73**	**144**	374	27	401
+15 mins.	**29**	277	306	70	62	132	**460**	31	**491**
+30 mins.	17	269	286	31	35	66	449	**33**	482
+45 mins.	29	288	317	46	47	93	429	27	456
Total Volume	100	1127	1227	218	217	435	1712	118	1830
% App. Total	8.1	91.9		50.1	49.9		93.6	6.4	
PHF	.862	.962	.965	.768	.743	.755	.930	.894	.932

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City of Walnut
N/S: Grand Avenue
E/W: San Jose Hills Road
Weather: Clear

File Name : WNTGRSJAM
Site Code : 04215551
Start Date : 10/1/2015

Groups Printed- Total Volume

	Grand Avenue Southbound					San Jose Hills Road Westbound					Grand Avenue Northbound					San Jose Hills Road Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	60	341	26	0	427	14	3	16	0	33	18	246	48	1	313	43	10	32	0	85	858
07:15 AM	70	397	32	0	499	24	3	10	0	37	19	304	93	0	416	37	11	37	0	85	1037
07:30 AM	76	339	21	0	436	28	3	24	0	55	30	287	137	2	456	24	27	66	0	117	1064
07:45 AM	79	359	21	0	459	30	3	19	0	52	33	331	143	3	510	28	41	59	0	128	1149
Total	285	1436	100	0	1821	96	12	69	0	177	100	1168	421	6	1695	132	89	194	0	415	4108
08:00 AM	38	327	75	0	440	33	19	26	0	78	29	290	96	2	417	38	20	49	0	107	1042
08:15 AM	28	340	97	0	465	24	23	7	0	54	38	275	66	0	379	68	5	70	0	143	1041
08:30 AM	16	277	25	1	319	12	2	13	0	27	10	239	50	4	303	73	11	96	0	180	829
08:45 AM	24	325	11	1	361	9	4	12	0	25	13	254	36	5	308	20	5	35	0	60	754
Total	106	1269	208	2	1585	78	48	58	0	184	90	1058	248	11	1407	199	41	250	0	490	3666
Grand Total	391	2705	308	2	3406	174	60	127	0	361	190	2226	669	17	3102	331	130	444	0	905	7774
Apprch %	11.5	79.4	9	0.1		48.2	16.6	35.2	0		6.1	71.8	21.6	0.5		36.6	14.4	49.1	0		
Total %	5	34.8	4	0	43.8	2.2	0.8	1.6	0	4.6	2.4	28.6	8.6	0.2	39.9	4.3	1.7	5.7	0	11.6	

	Grand Avenue Southbound				San Jose Hills Road Westbound				Grand Avenue Northbound				San Jose Hills Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	76	339	21	436	28	3	24	55	30	287	137	454	24	27	66	117	1062
07:45 AM	**79**	**359**								**331**	**143**	**507**		**41**			**1146**
08:00 AM	38	327	75	440	**33**	19	**26**	**78**	29	290	96	415	38	20	49	107	1040
08:15 AM	28	340	**97**	**465**	24	**23**	7	54	**38**	275	66	379	**68**	5	**70**	**143**	1041
Total Volume	221	1365	214	1800	115	48	76	239	130	1183	442	1755	158	93	244	495	4289
% App. Total	12.3	75.8	11.9		48.1	20.1	31.8		7.4	67.4	25.2		31.9	18.8	49.3		
PHF	.699	.951	.552	.968	.871	.522	.731	.766	.855	.894	.773	.865	.581	.567	.871	.865	.936

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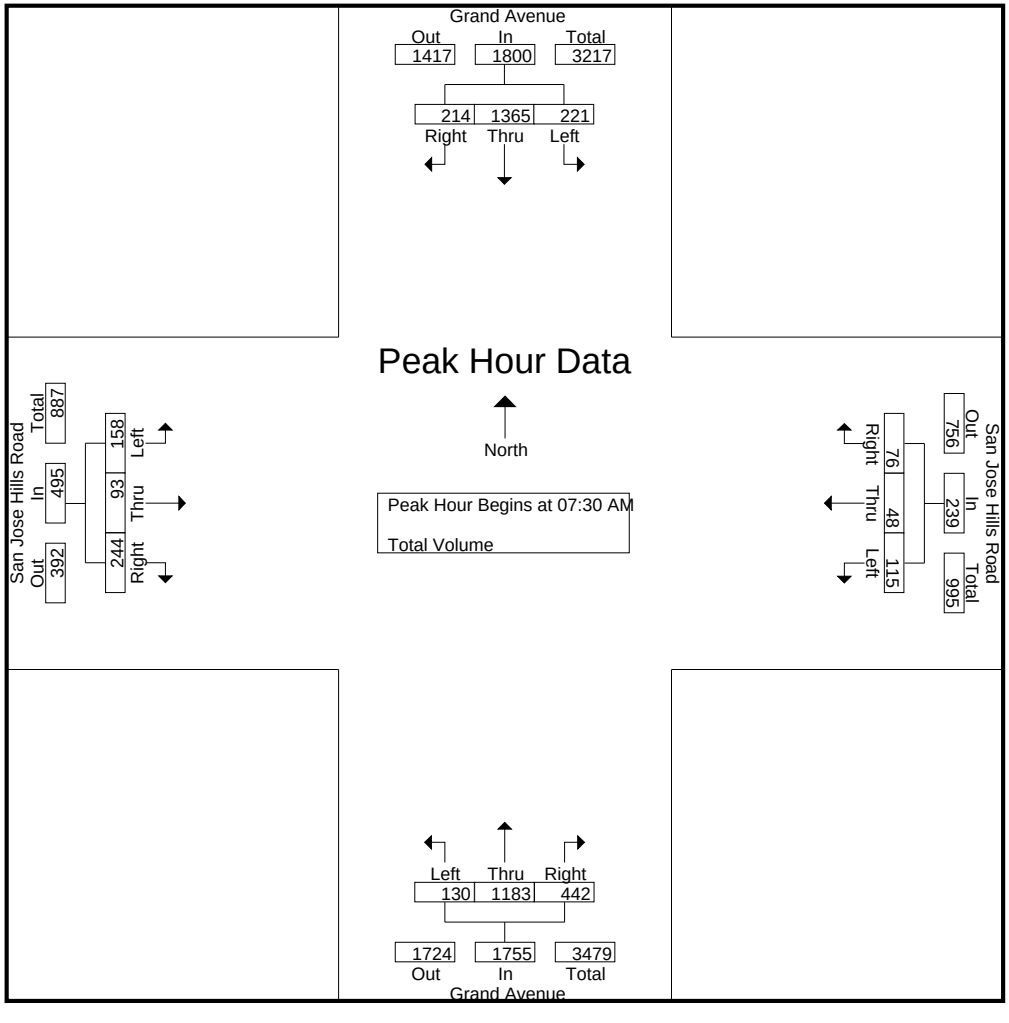
City of Walnut
N/S: Grand Avenue
E/W: San Jose Hills Road
Weather: Clear

File Name : WNTGRSJAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Grand Avenue
E/W: San Jose Hills Road
Weather: Clear

File Name : WNTGRSJAM
Site Code : 04215551
Start Date : 10/1/2015

	Grand Avenue Southbound				San Jose Hills Road Westbound				Grand Avenue Northbound				San Jose Hills Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:30 AM				07:15 AM				07:45 AM				
+0 mins.	70	**397**	32	**499**	28	3	24	55	19	304	93	416	28	**41**	59	128	
+15 mins.	76	339	21	436	30	3	19	52	30	287	137	454	38	20	49	107	
+30 mins.	**79**	359	21	459	**33**	19	**26**	**78**	**33**	**331**	**143**	**507**	68	5	70	143	
+45 mins.	38	327	**75**	440	24	**23**	7	54	29	290	96	415	**73**	11	**96**	**180**	
Total Volume	263	1422	149	1834	115	48	76	239	111	1212	469	1792	207	77	274	558	
% App. Total	14.3	77.5	8.1		48.1	20.1	31.8		6.2	67.6	26.2		37.1	13.8	49.1		
PHF	.832	.895	.497	.919	.871	.522	.731	.766	.841	.915	.820	.884	.709	.470	.714	.775	

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File Name : WNTGRSJPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound					San Jose Hills Road Westbound					Grand Avenue Northbound					San Jose Hills Road Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	25	216	22	1	264	34	7	28	0	69	15	285	33	0	333	14	3	16	0	33	699
04:15 PM	28	269	22	1	320	54	6	38	0	98	25	297	48	2	372	21	4	19	0	44	834
04:30 PM	26	264	24	0	314	81	11	61	0	153	18	285	28	2	333	25	1	21	0	47	847
04:45 PM	24	302	32	0	358	48	7	44	0	99	19	329	41	2	391	16	2	24	0	42	890
Total	103	1051	100	2	1256	217	31	171	0	419	77	1196	150	6	1429	76	10	80	0	166	3270
05:00 PM	29	262	15	0	306	32	6	30	0	68	15	346	30	1	392	28	4	23	0	55	821
05:15 PM	10	265	27	0	302	32	6	21	0	59	26	453	29	0	508	17	2	32	0	51	920
05:30 PM	14	252	33	0	299	36	10	26	0	72	16	407	25	1	449	27	8	33	0	68	888
05:45 PM	28	288	21	0	337	23	6	21	0	50	23	422	25	1	471	31	2	25	0	58	916
Total	81	1067	96	0	1244	123	28	98	0	249	80	1628	109	3	1820	103	16	113	0	232	3545
Grand Total	184	2118	196	2	2500	340	59	269	0	668	157	2824	259	9	3249	179	26	193	0	398	6815
Apprch %	7.4	84.7	7.8	0.1		50.9	8.8	40.3	0		4.8	86.9	8	0.3		45	6.5	48.5	0		
Total %	2.7	31.1	2.9	0	36.7	5	0.9	3.9	0	9.8	2.3	41.4	3.8	0.1	47.7	2.6	0.4	2.8	0	5.8	

	Grand Avenue Southbound				San Jose Hills Road Westbound				Grand Avenue Northbound				San Jose Hills Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**29**	262	15	306	32	6	**30**	68	15	346	**30**	391	28	4	23	55	820
05:15 PM	10	265	27	302	32	6	21	59	**26**	**453**	29	**508**	17	2	32	51	**920**
05:30 PM	14	252	**33**	299	**36**	**10**	26	**72**	16	407	25	448	27	**8**	**33**	**68**	887
05:45 PM	28	**288**	21	**337**	23	6	21	50	23	422	25	470	**31**	2	25	58	915
Total Volume	81	1067	96	1244	123	28	98	249	80	1628	109	1817	103	16	113	232	3542
% App. Total	6.5	85.8	7.7		49.4	11.2	39.4		4.4	89.6	6		44.4	6.9	48.7		
PHF	.698	.926	.727	.923	.854	.700	.817	.865	.769	.898	.908	.894	.831	.500	.856	.853	.963

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City of Walnut
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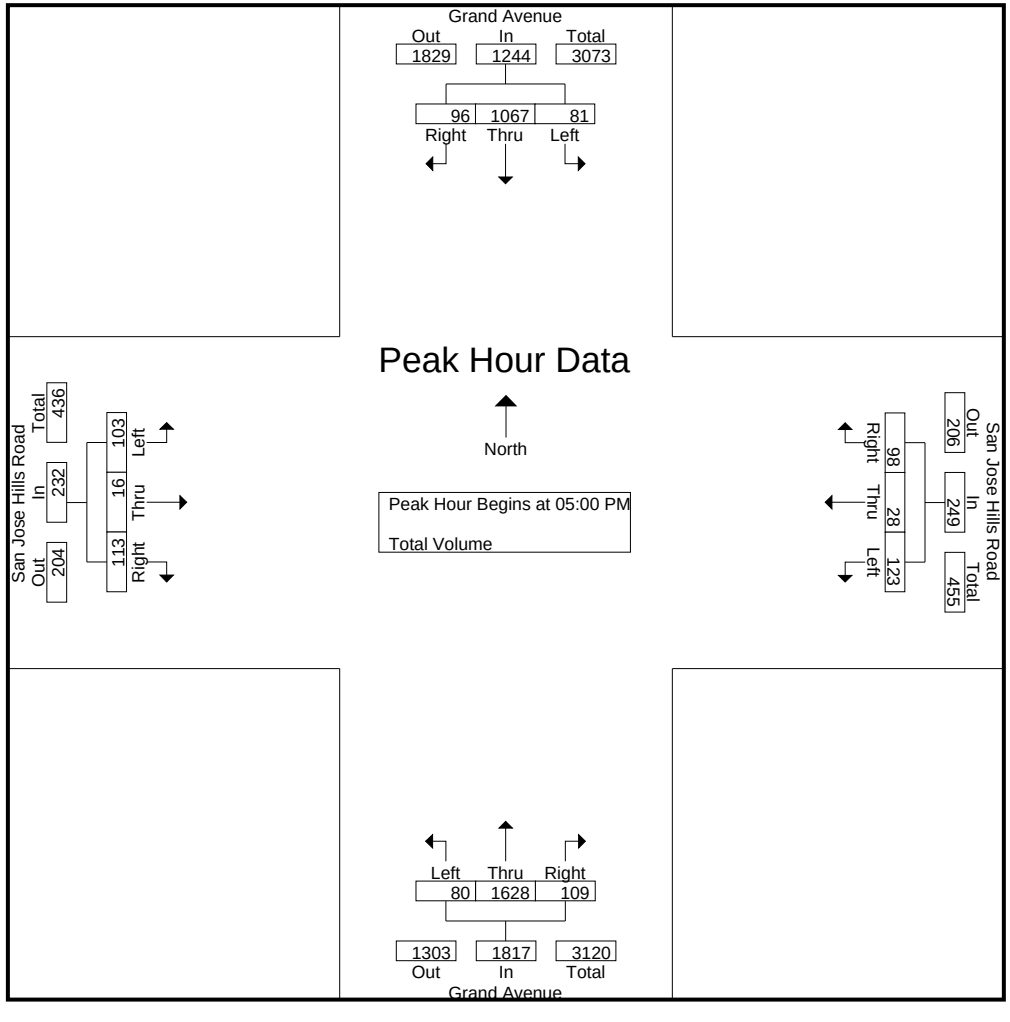
Weather: Clear

File Name : WNTGRSJPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Grand Avenue
E/W: San Jose Hills Road
Weather: Clear

File Name : WNTGRSJPM
Site Code : 04215551
Start Date : 10/1/2015

	Grand Avenue Southbound				San Jose Hills Road Westbound				Grand Avenue Northbound				San Jose Hills Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:00 PM				05:00 PM				05:00 PM				
+0 mins.	28	269	22	319	34	7	28	69	15	346	**30**	391	28	4	23	55	
+15 mins.	26	264	24	314	54	6	38	98	**26**	**453**	29	**508**	17	2	32	51	
+30 mins.	24	**302**	**32**	**358**	**81**	**11**	**61**	**153**	16	407	25	448	27	**8**	**33**	**68**	
+45 mins.	**29**	262	15	306	48	7	44	99	23	422	25	470	**31**	2	25	58	
Total Volume	107	1097	93	1297	217	31	171	419	80	1628	109	1817	103	16	113	232	
% App. Total	8.2	84.6	7.2		51.8	7.4	40.8		4.4	89.6	6		44.4	6.9	48.7		
PHF	.922	.908	.727	.906	.670	.705	.701	.685	.769	.898	.908	.894	.831	.500	.856	.853	

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City of Walnut
N/S: Grand Avenue
E/W: Temple Avenue
Weather: Clear

File Name : WNTGRTEAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound					Temple Avenue Westbound					Grand Avenue Northbound					Amar Road Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	100	292	42	0	434	15	152	62	0	229	38	195	130	0	363	63	132	38	0	233	1259
07:15 AM	83	290	37	0	410	25	165	40	0	230	65	289	158	0	512	61	202	47	0	310	1462
07:30 AM	116	267	47	0	430	22	84	56	0	162	58	339	188	0	585	85	192	38	0	315	1492
07:45 AM	111	251	42	0	404	29	92	41	0	162	52	398	165	0	615	72	189	24	0	285	1466
Total	410	1100	168	0	1678	91	493	199	0	783	213	1221	641	0	2075	281	715	147	0	1143	5679
08:00 AM	102	262	61	0	425	34	105	48	0	187	61	265	117	0	443	66	174	44	0	284	1339
08:15 AM	75	238	65	0	378	27	110	42	0	179	113	266	115	0	494	67	134	62	1	264	1315
08:30 AM	72	284	57	0	413	30	78	48	0	156	47	189	89	0	325	79	130	68	0	277	1171
08:45 AM	50	243	35	0	328	18	56	28	0	102	44	190	78	0	312	72	111	47	0	230	972
Total	299	1027	218	0	1544	109	349	166	0	624	265	910	399	0	1574	284	549	221	1	1055	4797
Grand Total	709	2127	386	0	3222	200	842	365	0	1407	478	2131	1040	0	3649	565	1264	368	1	2198	10476
Apprch %	22	66	12	0		14.2	59.8	25.9	0		13.1	58.4	28.5	0		25.7	57.5	16.7	0		
Total %	6.8	20.3	3.7	0	30.8	1.9	8	3.5	0	13.4	4.6	20.3	9.9	0	34.8	5.4	12.1	3.5	0	21	

	Grand Avenue Southbound				Temple Avenue Westbound				Grand Avenue Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	83	**290**	37	410	25	**165**	40	**230**	**65**	289	158	512	61	**202**	**47**	310	1462
07:30 AM	**116**	267	47	**430**	22	84	**56**	162	58	339	**188**	585	**85**	192	38	**315**	**1492**
07:45 AM	111	251	42	404	29	92	41	162	52	**398**	165	**615**	72	189	24	285	1466
08:00 AM	102	262	**61**	425	**34**	105	48	187	61	265	117	443	66	174	44	284	1339
Total Volume	412	1070	187	1669	110	446	185	741	236	1291	628	2155	284	757	153	1194	5759
% App. Total	24.7	64.1	11.2		14.8	60.2	25		11	59.9	29.1		23.8	63.4	12.8		
PHF	.888	.922	.766	.970	.809	.676	.826	.805	.908	.811	.835	.876	.835	.937	.814	.948	.965

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City of Walnut
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Site Code : 04215551
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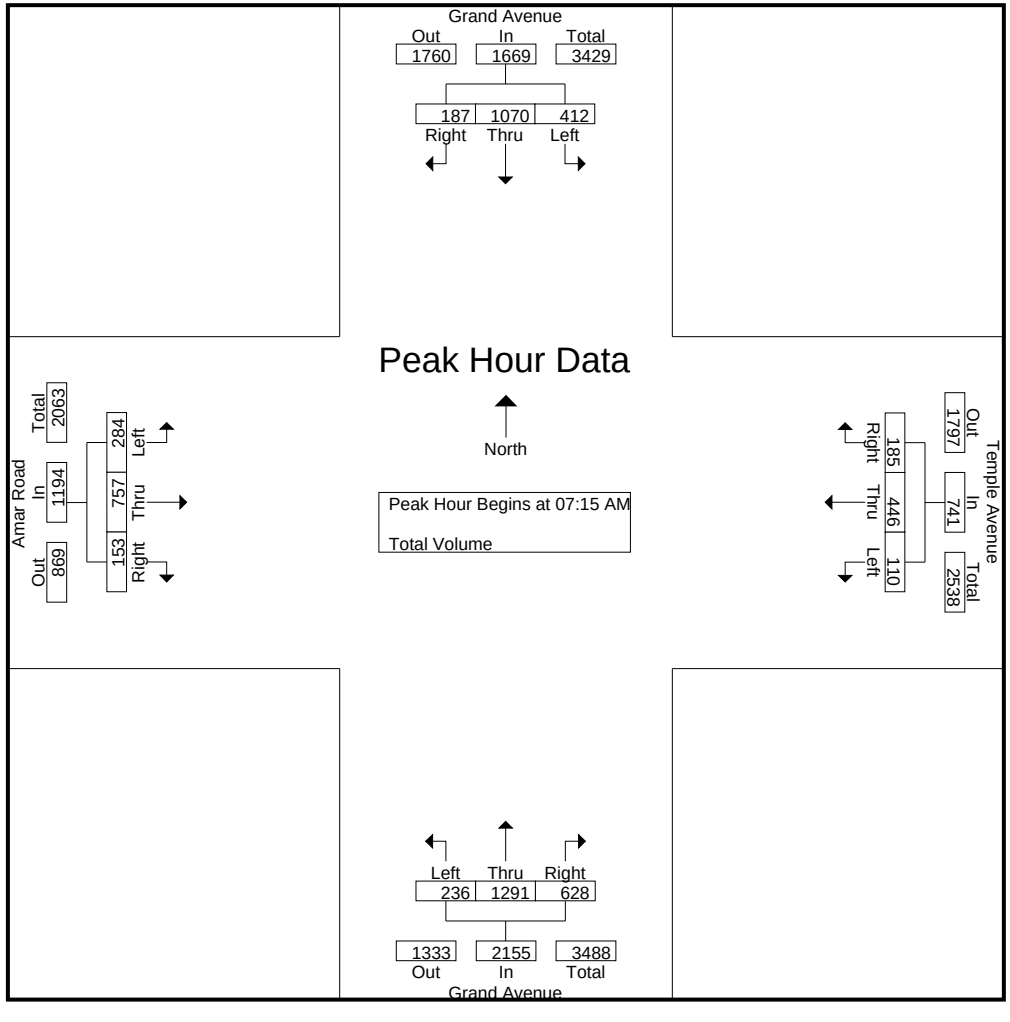

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Weather: Clear

File Name : WNTGRTEAM
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Start Date : 10/1/2015

	Grand Avenue Southbound				Temple Avenue Westbound				Grand Avenue Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:15 AM				07:15 AM				
+0 mins.	100	**292**	42	**434**	15	152	**62**	229	**65**	289	158	512	61	**202**	**47**	310	
+15 mins.	83	290	37	410	25	**165**	40	**230**	58	339	**188**	585	**85**	192	38	**315**	
+30 mins.	**116**	267	**47**	430	22	84	56	162	52	**398**	165	**615**	72	189	24	285	
+45 mins.	111	251	42	404	**29**	92	41	162	61	265	117	443	66	174	44	284	
Total Volume	410	1100	168	1678	91	493	199	783	236	1291	628	2155	284	757	153	1194	
% App. Total	24.4	65.6	10		11.6	63	25.4		11	59.9	29.1		23.8	63.4	12.8		
PHF	.884	.942	.894	.967	.784	.747	.802	.851	.908	.811	.835	.876	.835	.937	.814	.948	

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City of Walnut
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Site Code : 04215551
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Groups Printed- Total Volume

	Grand Avenue Southbound					Temple Avenue Westbound					Grand Avenue Northbound					Amar Road Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	61	188	50	0	299	64	112	60	0	236	62	183	74	0	319	93	134	75	0	302	1156
04:15 PM	80	206	46	0	332	86	118	71	0	275	53	228	100	0	381	71	161	88	0	320	1308
04:30 PM	84	256	73	0	413	97	147	62	0	306	47	233	56	0	336	72	149	67	2	290	1345
04:45 PM	73	204	71	0	348	89	160	57	1	307	59	266	79	0	404	71	171	68	0	310	1369
Total	298	854	240	0	1392	336	537	250	1	1124	221	910	309	0	1440	307	615	298	2	1222	5178
05:00 PM	57	230	72	0	359	98	138	75	0	311	73	238	60	0	371	94	159	74	1	328	1369
05:15 PM	50	192	50	1	293	85	157	70	0	312	91	330	79	0	500	86	165	62	0	313	1418
05:30 PM	52	206	73	0	331	99	178	95	0	372	76	293	68	0	437	91	153	81	0	325	1465
05:45 PM	50	204	67	1	322	77	186	86	1	350	87	289	81	0	457	75	174	75	0	324	1453
Total	209	832	262	2	1305	359	659	326	1	1345	327	1150	288	0	1765	346	651	292	1	1290	5705
Grand Total	507	1686	502	2	2697	695	1196	576	2	2469	548	2060	597	0	3205	653	1266	590	3	2512	10883
Apprch %	18.8	62.5	18.6	0.1		28.1	48.4	23.3	0.1		17.1	64.3	18.6	0		26	50.4	23.5	0.1		
Total %	4.7	15.5	4.6	0	24.8	6.4	11	5.3	0	22.7	5	18.9	5.5	0	29.4	6	11.6	5.4	0	23.1	

	Grand Avenue Southbound				Temple Avenue Westbound				Grand Avenue Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**57**	**230**	72	**359**	98	138	75	311	73	238	60	371	**94**	159	74	**327**	1368
05:15 PM	50	192	50	292	85	157	70	312	**91**	**330**	79	**500**	86	165	62	313	1417
05:30 PM	52	206	**73**	331	**99**	178	**95**	**372**	76	293	68	437	91	153	**81**	325	**1465**
05:45 PM	50	204	67	321	77	**186**	86	349	87	289	**81**	457	75	**174**	75	324	1451
Total Volume	209	832	262	1303	359	659	326	1344	327	1150	288	1765	346	651	292	1289	5701
% App. Total	16	63.9	20.1		26.7	49	24.3		18.5	65.2	16.3		26.8	50.5	22.7		
PHF	.917	.904	.897	.907	.907	.886	.858	.903	.898	.871	.889	.883	.920	.935	.901	.985	.973

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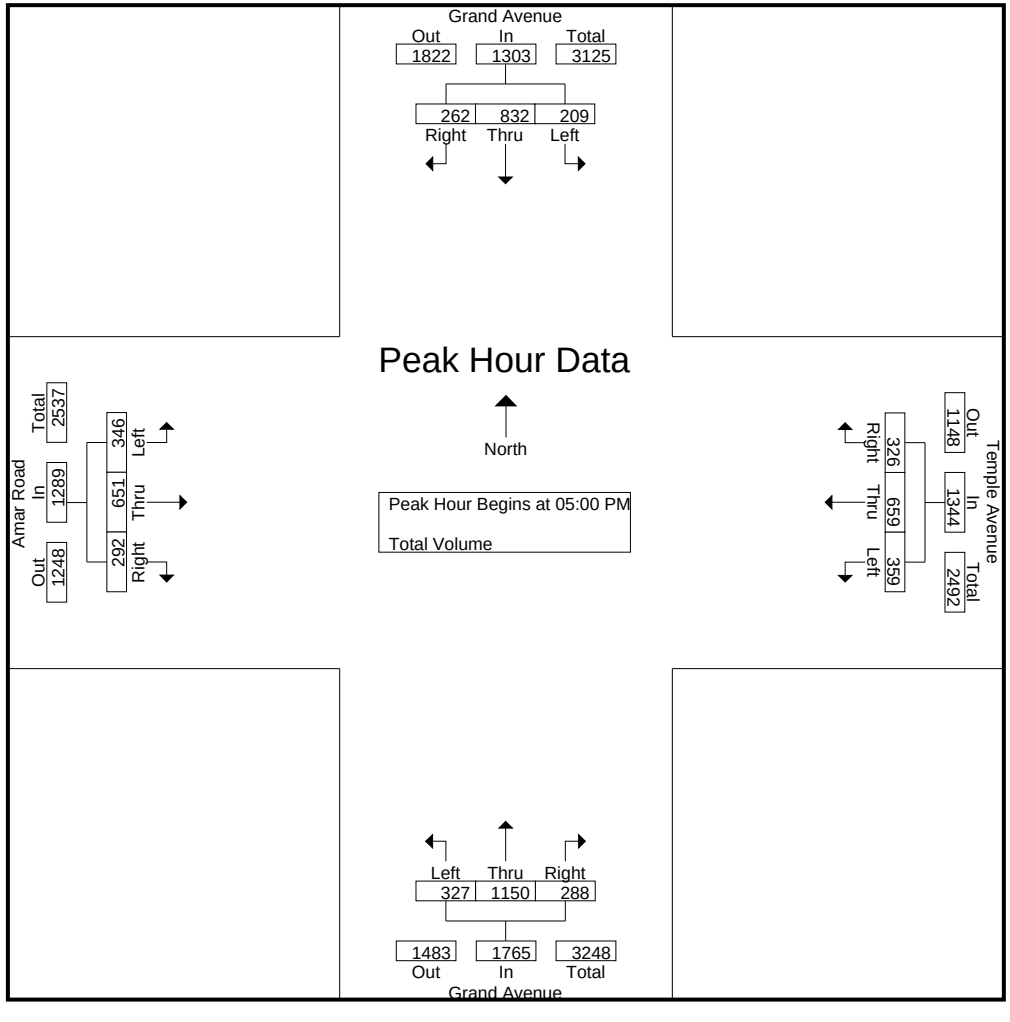

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City of Walnut
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File Name : WNTGRTEPM
Site Code : 04215551
Start Date : 10/1/2015

	Grand Avenue Southbound				Temple Avenue Westbound				Grand Avenue Northbound				Amar Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	80	206	46	332	98	138	75	311	73	238	60	371	**94**	159	74	**327**	
+15 mins.	**84**	**256**	**73**	**413**	85	157	70	312	**91**	**330**	79	**500**	86	165	62	313	
+30 mins.	73	204	71	348	**99**	178	**95**	**372**	76	293	68	437	91	153	**81**	325	
+45 mins.	57	230	72	359	77	**186**	86	349	87	289	**81**	457	75	**174**	75	324	
Total Volume	294	896	262	1452	359	659	326	1344	327	1150	288	1765	346	651	292	1289	
% App. Total	20.2	61.7	18		26.7	49	24.3		18.5	65.2	16.3		26.8	50.5	22.7		
PHF	.875	.875	.897	.879	.907	.886	.858	.903	.898	.871	.889	.883	.920	.935	.901	.985	

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City of Walnut
N/S: Grand Avenue
E/W: La Puente Road
Weather: Clear

File Name : WNTGRLPAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound					La Puente Road Westbound					Grand Avenue Northbound					La Puente Road Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	0	280	69	0	349	20	18	1	0	39	51	344	15	0	410	50	3	46	0	99	897
07:15 AM	0	247	128	0	375	42	71	2	0	115	57	368	26	0	451	115	30	99	0	244	1185
07:30 AM	0	294	85	0	379	26	21	5	0	52	34	488	18	0	540	148	25	138	0	311	1282
07:45 AM	0	250	27	0	277	25	8	4	0	37	25	400	15	0	440	111	16	114	0	241	995
Total	0	1071	309	0	1380	113	118	12	0	243	167	1600	74	0	1841	424	74	397	0	895	4359
08:00 AM	1	329	37	0	367	20	8	1	0	29	43	428	11	0	482	33	5	65	0	103	981
08:15 AM	0	280	37	0	317	33	6	2	0	41	51	356	9	1	417	39	3	69	0	111	886
08:30 AM	0	331	27	0	358	32	10	2	0	44	42	286	7	1	336	35	1	72	0	108	846
08:45 AM	2	280	42	0	324	29	8	2	0	39	45	241	11	0	297	34	7	55	0	96	756
Total	3	1220	143	0	1366	114	32	7	0	153	181	1311	38	2	1532	141	16	261	0	418	3469
Grand Total	3	2291	452	0	2746	227	150	19	0	396	348	2911	112	2	3373	565	90	658	0	1313	7828
Apprch %	0.1	83.4	16.5	0		57.3	37.9	4.8	0		10.3	86.3	3.3	0.1		43	6.9	50.1	0		
Total %	0	29.3	5.8	0	35.1	2.9	1.9	0.2	0	5.1	4.4	37.2	1.4	0	43.1	7.2	1.1	8.4	0	16.8	

	Grand Avenue Southbound				La Puente Road Westbound				Grand Avenue Northbound				La Puente Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	247	**128**	375	**42**	**71**	2	**115**	**57**	368	**26**	451	115	**30**	99	244	1185
07:30 AM	0	294	85	**379**	26	21	**5**	52	34	**488**	18	**540**	**148**	25	**138**	**311**	**1282**
07:45 AM	0	250	27	277	25	8	4	37	25	400	15	440	111	16	114	241	995
08:00 AM	**1**	**329**	37	367	20	8	1	29	43	428	11	482	33	5	65	103	981
Total Volume	1	1120	277	1398	113	108	12	233	159	1684	70	1913	407	76	416	899	4443
% App. Total	0.1	80.1	19.8		48.5	46.4	5.2		8.3	88	3.7		45.3	8.5	46.3		
PHF	.250	.851	.541	.922	.673	.380	.600	.507	.697	.863	.673	.886	.688	.633	.754	.723	.866

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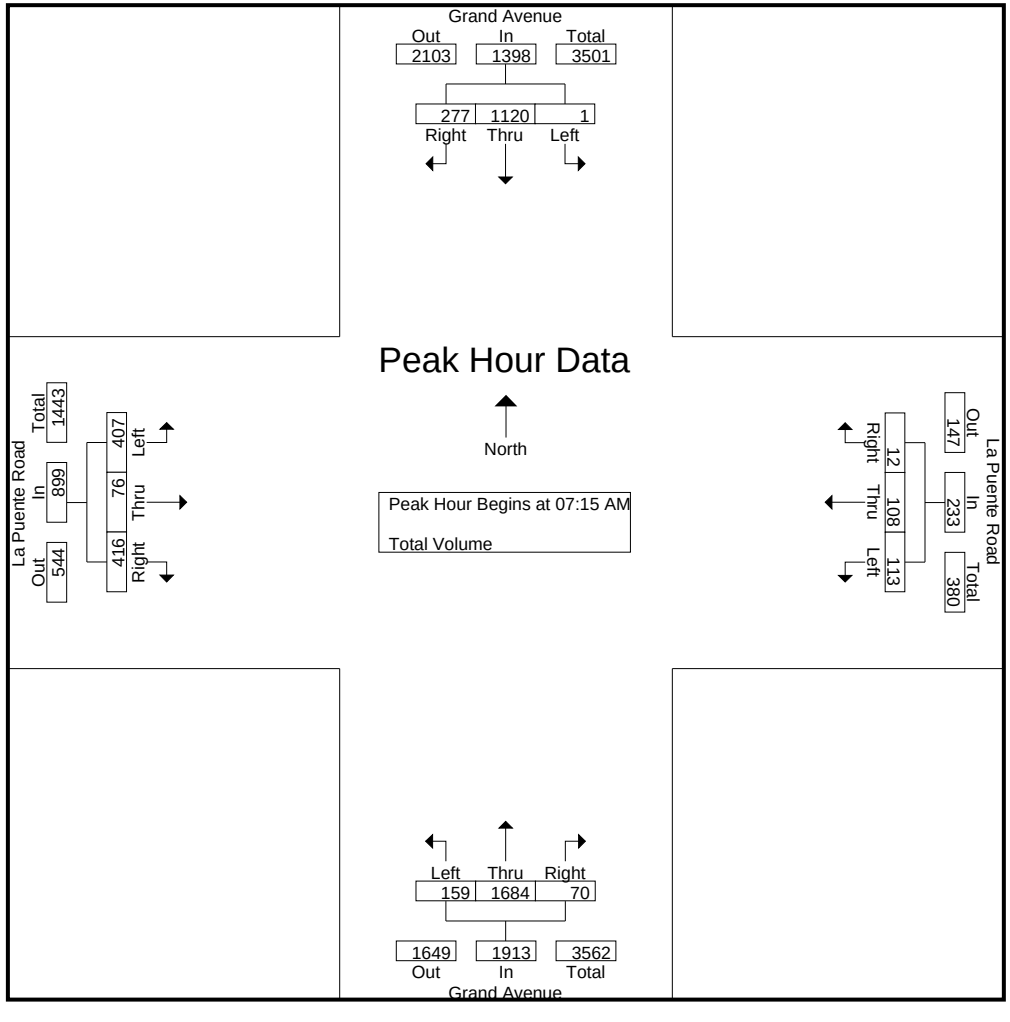
City of Walnut
N/S: Grand Avenue
E/W: La Puente Road
Weather: Clear

File Name : WNTGRLPAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Grand Avenue
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Start Date : 10/1/2015

	Grand Avenue Southbound				La Puente Road Westbound				Grand Avenue Northbound				La Puente Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:00 AM				07:15 AM				07:15 AM				
+0 mins.	0	247	**128**	375	20	18	1	39	**57**	368	**26**	451	115	**30**	99	244	
+15 mins.	0	294	85	**379**	**42**	**71**	2	**115**	34	**488**	18	**540**	**148**	25	**138**	**311**	
+30 mins.	0	250	27	277	26	21	**5**	52	25	400	15	440	111	16	114	241	
+45 mins.	**1**	**329**	37	367	25	8	4	37	43	428	11	482	33	5	65	103	
Total Volume	1	1120	277	1398	113	118	12	243	159	1684	70	1913	407	76	416	899	
% App. Total	0.1	80.1	19.8		46.5	48.6	4.9		8.3	88	3.7		45.3	8.5	46.3		
PHF	.250	.851	.541	.922	.673	.415	.600	.528	.697	.863	.673	.886	.688	.633	.754	.723	

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City of Walnut
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Groups Printed- Total Volume

	Grand Avenue Southbound					La Puente Road Westbound					Grand Avenue Northbound					La Puente Road Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	1	272	40	0	313	16	9	2	0	27	45	319	24	0	388	42	7	64	0	113	841
04:15 PM	0	331	39	0	370	14	5	3	0	22	36	282	27	0	345	63	13	81	0	157	894
04:30 PM	0	373	43	0	416	11	5	2	0	18	36	311	13	1	361	43	6	84	0	133	928
04:45 PM	2	319	43	1	365	21	4	2	0	27	43	319	20	0	382	59	12	97	0	168	942
Total	3	1295	165	1	1464	62	23	9	0	94	160	1231	84	1	1476	207	38	326	0	571	3605
05:00 PM	0	350	48	0	398	20	6	2	0	28	44	377	29	0	450	52	9	72	0	133	1009
05:15 PM	3	280	47	0	330	20	8	6	0	34	65	366	43	0	474	62	15	107	0	184	1022
05:30 PM	1	343	45	0	389	26	6	3	0	35	74	440	46	0	560	58	13	72	0	143	1127
05:45 PM	3	286	50	0	339	19	15	1	0	35	50	352	35	1	438	73	26	99	0	198	1010
Total	7	1259	190	0	1456	85	35	12	0	132	233	1535	153	1	1922	245	63	350	0	658	4168
Grand Total	10	2554	355	1	2920	147	58	21	0	226	393	2766	237	2	3398	452	101	676	0	1229	7773
Apprch %	0.3	87.5	12.2	0		65	25.7	9.3	0		11.6	81.4	7	0.1		36.8	8.2	55	0		
Total %	0.1	32.9	4.6	0	37.6	1.9	0.7	0.3	0	2.9	5.1	35.6	3	0	43.7	5.8	1.3	8.7	0	15.8	

	Grand Avenue Southbound				La Puente Road Westbound				Grand Avenue Northbound				La Puente Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	**350**	48	**398**	20	6	2	28	44	377	29	450	52	9	72	133	1009
05:15 PM	**3**	280	47	330	20	8	**6**	34	65	366	43	474	62	15	**107**	184	1022
05:30 PM	1	343	45	389	**26**	6	3	**35**	**74**	**440**	**46**	**560**	58	13	72	143	**1127**
05:45 PM	3	286	**50**	339	19	**15**	1	35	50	352	35	437	**73**	**26**	99	**198**	1009
Total Volume	7	1259	190	1456	85	35	12	132	233	1535	153	1921	245	63	350	658	4167
% App. Total	0.5	86.5	13		64.4	26.5	9.1		12.1	79.9	8		37.2	9.6	53.2		
PHF	.583	.899	.950	.915	.817	.583	.500	.943	.787	.872	.832	.858	.839	.606	.818	.831	.924

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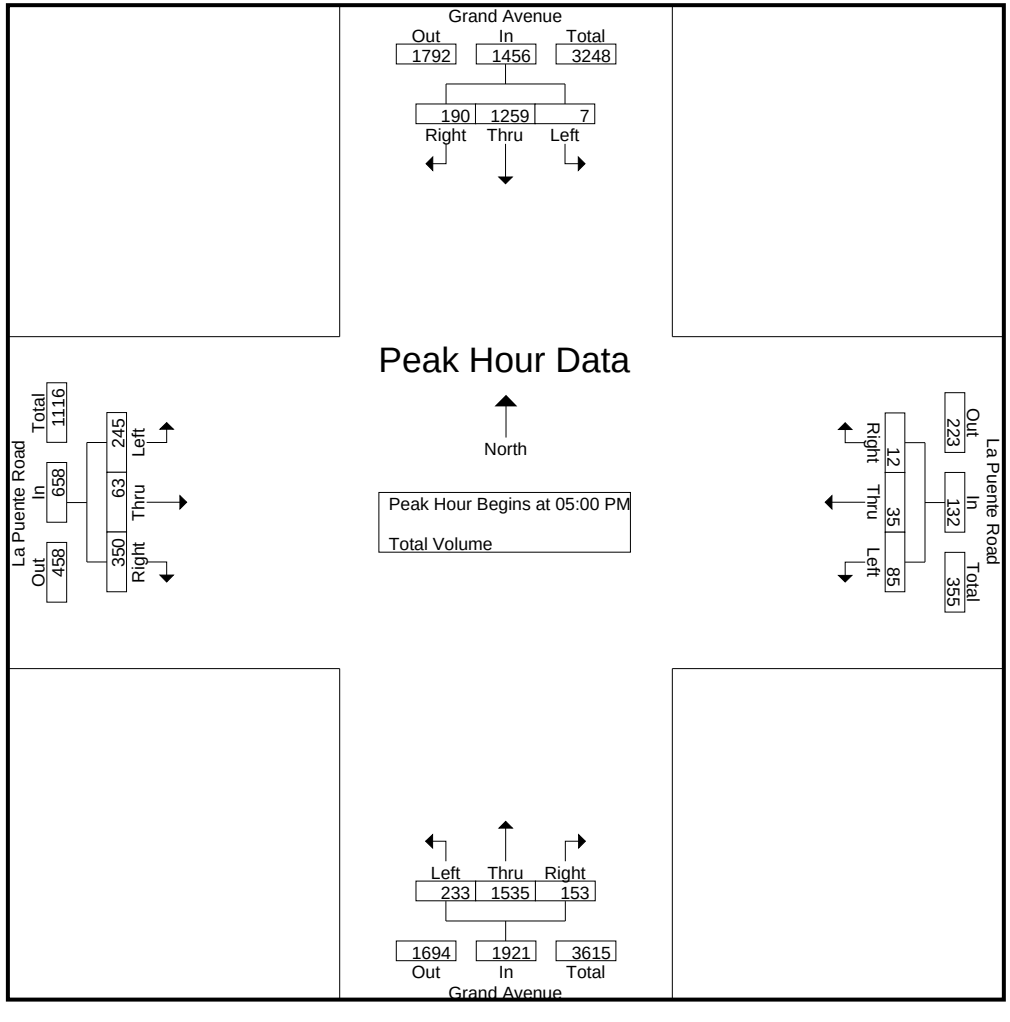
Start Date : 10/1/2015
Page No : 2



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City of Walnut
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Start Date : 10/1/2015

	Grand Avenue Southbound				La Puente Road Westbound				Grand Avenue Northbound				La Puente Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	331	39	370	20	6	2	28	44	377	29	450	52	9	72	133	
+15 mins.	0	**373**	43	**416**	20	8	**6**	34	65	366	43	474	62	15	**107**	184	
+30 mins.	**2**	319	43	364	**26**	6	3	**35**	**74**	**440**	**46**	**560**	58	13	72	143	
+45 mins.	0	350	**48**	398	19	**15**	1	35	50	352	35	437	**73**	**26**	99	**198**	
Total Volume	2	1373	173	1548	85	35	12	132	233	1535	153	1921	245	63	350	658	
% App. Total	0.1	88.7	11.2		64.4	26.5	9.1		12.1	79.9	8		37.2	9.6	53.2		
PHF	.250	.920	.901	.930	.817	.583	.500	.943	.787	.872	.832	.858	.839	.606	.818	.831	

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City of Walnut
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Weather: Clear

File Name : WNTGRVAAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound					Valley Boulevard Westbound					Grand Avenue Northbound					Valley Boulevard Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	31	215	94	0	340	39	320	44	1	404	76	340	83	0	499	74	112	33	0	219	1462
07:15 AM	50	225	107	1	383	53	311	40	4	408	91	348	117	0	556	88	120	46	0	254	1601
07:30 AM	66	238	108	0	412	37	266	28	3	334	67	364	85	0	516	112	148	54	2	316	1578
07:45 AM	60	260	87	0	407	38	219	27	6	290	57	312	79	0	448	127	120	36	0	283	1428
Total	207	938	396	1	1542	167	1116	139	14	1436	291	1364	364	0	2019	401	500	169	2	1072	6069
08:00 AM	51	250	90	0	391	39	257	31	1	328	72	322	68	0	462	107	128	29	0	264	1445
08:15 AM	29	258	95	0	382	60	220	25	5	310	41	302	80	0	423	78	118	41	0	237	1352
08:30 AM	53	250	84	3	390	37	253	37	4	331	52	225	67	0	344	61	111	40	1	213	1278
08:45 AM	42	242	86	1	371	41	190	23	1	255	56	216	75	1	348	72	107	51	2	232	1206
Total	175	1000	355	4	1534	177	920	116	11	1224	221	1065	290	1	1577	318	464	161	3	946	5281
Grand Total	382	1938	751	5	3076	344	2036	255	25	2660	512	2429	654	1	3596	719	964	330	5	2018	11350
Apprch %	12.4	63	24.4	0.2		12.9	76.5	9.6	0.9		14.2	67.5	18.2	0		35.6	47.8	16.4	0.2		
Total %	3.4	17.1	6.6	0	27.1	3	17.9	2.2	0.2	23.4	4.5	21.4	5.8	0	31.7	6.3	8.5	2.9	0	17.8	

	Grand Avenue Southbound				Valley Boulevard Westbound				Grand Avenue Northbound				Valley Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	31	215	94	340	39	**320**	**44**	403	76	340	83	499	74	112	33	219	1461
07:15 AM	50	225	107	382	**53**	311	40	**404**	**91**	348	**117**	**556**	88	120	46	254	**1596**
07:30 AM	**66**	238	**108**	**412**	37	266	28	331	67	**364**	85	516	112	**148**	**54**	**314**	1573
07:45 AM	60	**260**	87	407	38	219	27	284	57	312	79	448	**127**	120	36	283	1422
Total Volume	207	938	396	1541	167	1116	139	1422	291	1364	364	2019	401	500	169	1070	6052
% App. Total	13.4	60.9	25.7		11.7	78.5	9.8		14.4	67.6	18		37.5	46.7	15.8		
PHF	.784	.902	.917	.935	.788	.872	.790	.880	.799	.937	.778	.908	.789	.845	.782	.852	.948

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City of Walnut
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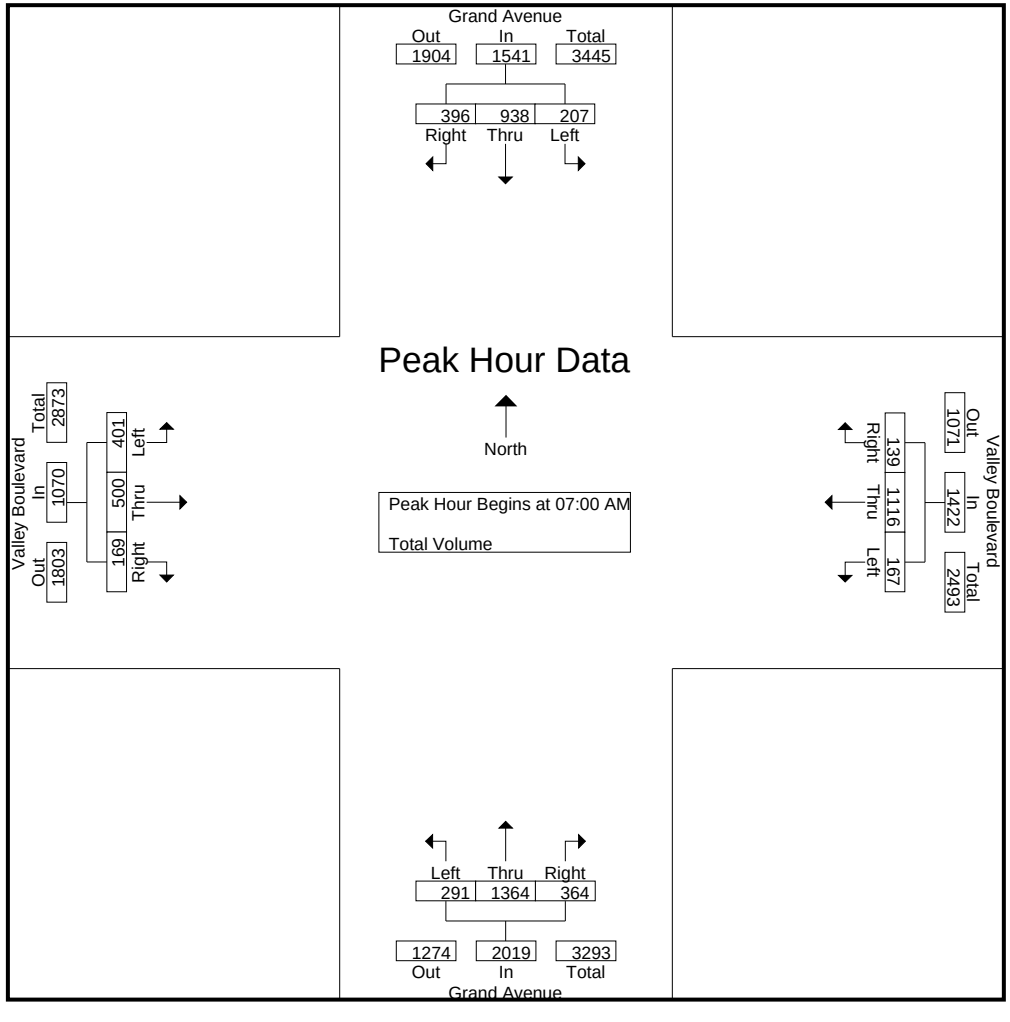

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	Grand Avenue Southbound				Valley Boulevard Westbound				Grand Avenue Northbound				Valley Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:00 AM				07:00 AM				07:15 AM				
+0 mins.	50	225	107	382	39	**320**	**44**	403	76	340	83	499	88	120	46	254	
+15 mins.	**66**	238	**108**	**412**	**53**	311	40	**404**	**91**	348	**117**	**556**	112	**148**	**54**	**314**	
+30 mins.	60	**260**	87	407	37	266	28	331	67	**364**	85	516	**127**	120	36	283	
+45 mins.	51	250	90	391	38	219	27	284	57	312	79	448	107	128	29	264	
Total Volume	227	973	392	1592	167	1116	139	1422	291	1364	364	2019	434	516	165	1115	
% App. Total	14.3	61.1	24.6		11.7	78.5	9.8		14.4	67.6	18		38.9	46.3	14.8		
PHF	.860	.936	.907	.966	.788	.872	.790	.880	.799	.937	.778	.908	.854	.872	.764	.888	

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Groups Printed- Total Volume

	Grand Avenue Southbound					Valley Boulevard Westbound					Grand Avenue Northbound					Valley Boulevard Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	61	221	44	1	327	63	160	41	1	265	62	188	32	6	288	105	310	64	5	484	1364
04:15 PM	74	332	47	0	453	80	117	34	3	234	51	169	28	7	255	129	256	49	3	437	1379
04:30 PM	74	274	51	0	399	71	151	30	3	255	38	197	41	2	278	144	355	77	2	578	1510
04:45 PM	109	296	52	4	461	86	134	22	2	244	47	198	30	6	281	134	313	92	0	539	1525
Total	318	1123	194	5	1640	300	562	127	9	998	198	752	131	21	1102	512	1234	282	10	2038	5778
05:00 PM	81	250	52	1	384	101	176	50	2	329	61	253	37	6	357	158	396	90	1	645	1715
05:15 PM	109	280	48	2	439	110	180	64	4	358	63	268	48	8	387	167	357	63	4	591	1775
05:30 PM	84	263	45	2	394	101	212	72	5	390	54	273	54	10	391	180	397	76	0	653	1828
05:45 PM	103	249	64	3	419	102	134	58	3	297	52	246	40	7	345	154	381	58	2	595	1656
Total	377	1042	209	8	1636	414	702	244	14	1374	230	1040	179	31	1480	659	1531	287	7	2484	6974
Grand Total	695	2165	403	13	3276	714	1264	371	23	2372	428	1792	310	52	2582	1171	2765	569	17	4522	12752
Apprch %	21.2	66.1	12.3	0.4		30.1	53.3	15.6	1		16.6	69.4	12	2		25.9	61.1	12.6	0.4		
Total %	5.5	17	3.2	0.1	25.7	5.6	9.9	2.9	0.2	18.6	3.4	14.1	2.4	0.4	20.2	9.2	21.7	4.5	0.1	35.5	

	Grand Avenue Southbound					Valley Boulevard Westbound					Grand Avenue Northbound					Valley Boulevard Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	81	250	52	1	384	101	176	50	2	329	61	253	37	6	357	158	396	**90**			
05:15 PM	**109**	**280**	**48**	**2**	**439**	**110**	**180**	**64**	**4**	**358**	**63**	268	48	8	387	167	357	63	**4**	591	1775
05:30 PM	84	263	45	2	394	101	**212**	**72**	**5**	**390**	54	**273**	**54**	**10**	**391**	**180**	**397**			**653**	**1828**
05:45 PM	103	249	**64**	**3**	419	102	134	58	3	297	52	246	40	7	345	154	381	58	2	595	1656
Total Volume	377	1042	209	8	1636	414	702	244	14	1374	230	1040	179	31	1480	659	1531	287	7	2484	6974
% App. Total	23	63.7	12.8	0.5		30.1	51.1	17.8	1		15.5	70.3	12.1	2.1		26.5	61.6	11.6	0.3		
PHF	.865	.930	.816	.667	.932	.941	.828	.847	.700	.881	.913	.952	.829	.775	.946	.915	.964	.797	.438	.951	.954

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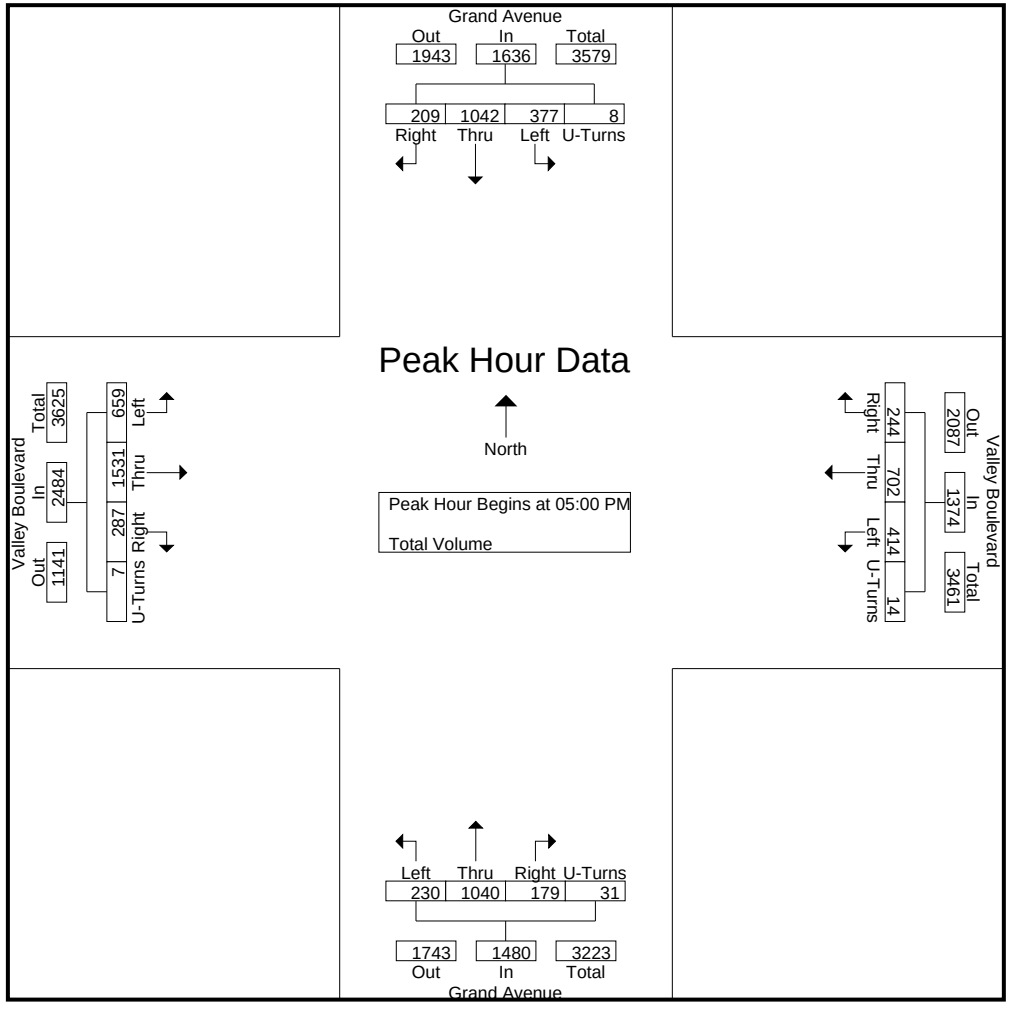

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	Grand Avenue Southbound					Valley Boulevard Westbound					Grand Avenue Northbound					Valley Boulevard Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	04:15 PM					05:00 PM					05:00 PM					05:00 PM					
+0 mins.	74	**332**																**90**			
+15 mins.	**74**	**274**	**51**	**0**	**399**	**110**	**180**	**64**	**4**	**358**	**63**	268	48	8	387	167	357	63	**4**	591	
+30 mins.	**109**	296	**52**	**4**	**461**	101	**212**	**72**	**5**	**390**	54	**273**	**54**	**10**	**391**	**180**	**397**			**653**	
+45 mins.	81	250	52	1	384	102	134	58	3	297	52	246	40	7	345	154	381	58	2	595	
Total Volume	338	1152	202	5	1697	414	702	244	14	1374	230	1040	179	31	1480	659	1531	287	7	2484	
% App. Total	19.9	67.9	11.9	0.3		30.1	51.1	17.8	1		15.5	70.3	12.1	2.1		26.5	61.6	11.6	0.3		
PHF	.775	.867	.971	.313	.920	.941	.828	.847	.700	.881	.913	.952	.829	.775	.946	.915	.964	.797	.438	.951	

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City of Walnut
N/S: Grand Avenue
E/W: Baker Parkway
Weather: Clear

File Name : WNTGRBAAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound					Construction Driveway Westbound					Grand Avenue Northbound					Baker Parkway Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	0	235	33	0	268	0	0	0	0	0	29	535	0	0	564	8	0	4	0	12	844
07:15 AM	0	221	50	0	271	0	0	0	0	0	39	597	0	0	636	11	0	11	0	22	929
07:30 AM	0	300	17	0	317	0	0	0	0	0	31	568	0	0	599	10	0	13	0	23	939
07:45 AM	0	246	7	0	253	0	0	0	0	0	17	553	0	0	570	10	0	8	0	18	841
Total	0	1002	107	0	1109	0	0	0	0	0	116	2253	0	0	2369	39	0	36	0	75	3553
08:00 AM	0	251	11	0	262	0	0	0	0	0	22	541	0	0	563	8	0	6	0	14	839
08:15 AM	0	239	27	0	266	0	0	0	0	0	29	515	0	0	544	5	0	5	0	10	820
08:30 AM	0	271	13	0	284	0	0	0	0	0	32	425	0	0	457	4	0	12	0	16	757
08:45 AM	0	282	10	0	292	0	0	0	0	0	25	427	0	0	452	3	0	14	0	17	761
Total	0	1043	61	0	1104	0	0	0	0	0	108	1908	0	0	2016	20	0	37	0	57	3177
Grand Total	0	2045	168	0	2213	0	0	0	0	0	224	4161	0	0	4385	59	0	73	0	132	6730
Apprch %	0	92.4	7.6	0		0	0	0	0		5.1	94.9	0	0		44.7	0	55.3	0		
Total %	0	30.4	2.5	0	32.9	0	0	0	0	0	3.3	61.8	0	0	65.2	0.9	0	1.1	0	2	

	Grand Avenue Southbound				Construction Driveway Westbound				Grand Avenue Northbound				Baker Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	235	33	268	0	0	0	0	29	535	0	564	8	0	4	12	844
07:15 AM	0	221	**50**	271	0	0	0	0	**39**	**597**	0	**636**	**11**	0	11	22	929
07:30 AM	0	**300**	17	**317**	0	0	0	0	31	568	0	599	10	0	**13**	**23**	**939**
07:45 AM	0	246	7	253	0	0	0	0	17	553	0	570	10	0	8	18	841
Total Volume	0	1002	107	1109	0	0	0	0	116	2253	0	2369	39	0	36	75	3553
% App. Total	0	90.4	9.6		0	0	0		4.9	95.1	0		52	0	48		
PHF	.000	.835	.535	.875	.000	.000	.000	.000	.744	.943	.000	.931	.886	.000	.692	.815	.946

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City of Walnut
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File Name : WNTGRBAAM
Site Code : 04215551
Start Date : 10/1/2015
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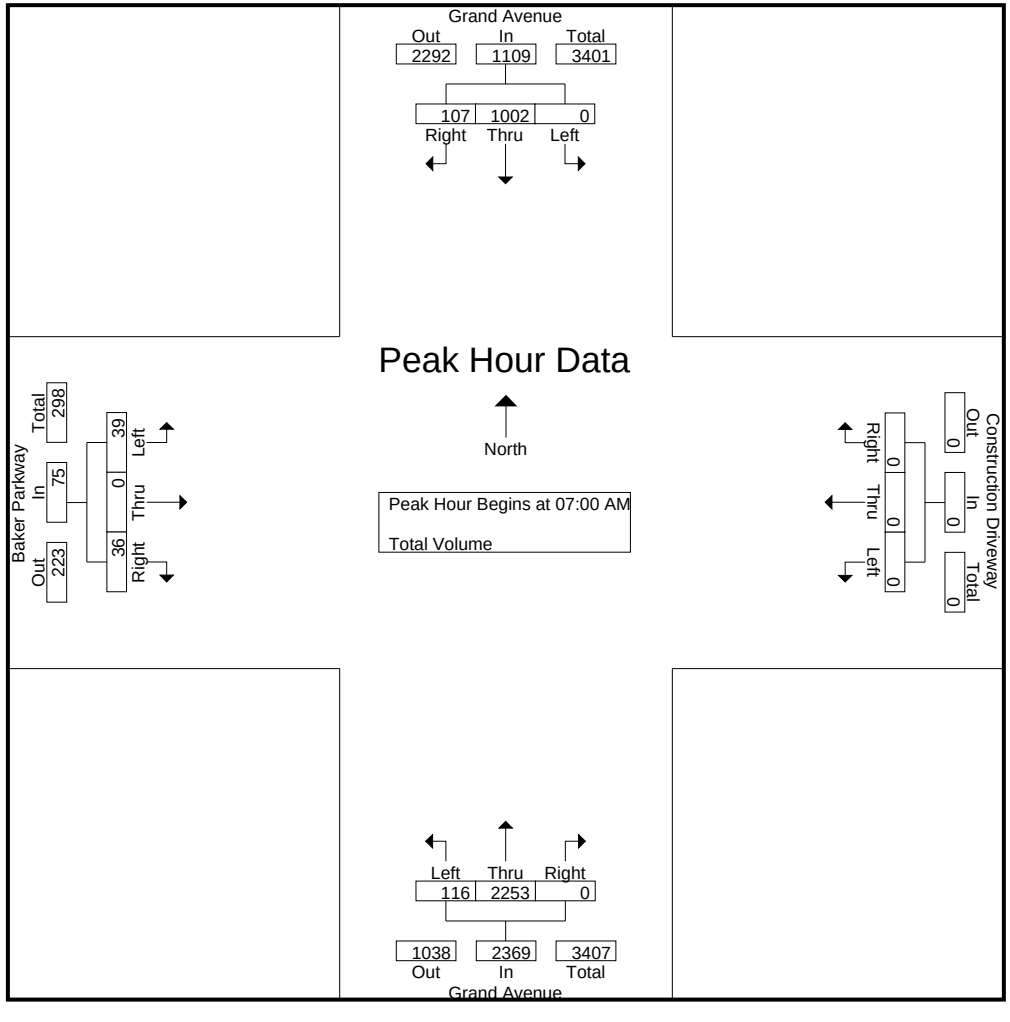

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City of Walnut
N/S: Grand Avenue
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File Name : WNTGRBAAM
Site Code : 04215551
Start Date : 10/1/2015

	Grand Avenue Southbound				Construction Driveway Westbound				Grand Avenue Northbound				Baker Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:15 AM				
+0 mins.	0	235	33	268	0	0	0	0	29	535	0	564	**11**	0	11	22	
+15 mins.	0	221	**50**	271	0	0	0	0	**39**	**597**	0	**636**	10	0	**13**	**23**	
+30 mins.	0	**300**	17	**317**	0	0	0	0	31	568	0	599	10	0	8	18	
+45 mins.	0	246	7	253	0	0	0	0	17	553	0	570	8	0	6	14	
Total Volume	0	1002	107	1109	0	0	0	0	116	2253	0	2369	39	0	38	77	
% App. Total	0	90.4	9.6		0	0	0		4.9	95.1	0		50.6	0	49.4		
PHF	.000	.835	.535	.875	.000	.000	.000	.000	.744	.943	.000	.931	.886	.000	.731	.837	

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City of Walnut
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Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound					Construction Driveway Westbound					Grand Avenue Northbound					Baker Parkway Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	0	379	5	0	384	0	0	0	0	0	11	213	0	0	224	42	0	18	0	60	668
04:15 PM	0	375	13	0	388	0	0	0	0	0	20	244	0	0	264	23	0	13	0	36	688
04:30 PM	0	362	8	0	370	0	0	0	0	0	5	248	0	1	254	32	0	22	0	54	678
04:45 PM	0	375	8	0	383	0	0	0	0	0	6	280	0	0	286	35	0	9	0	44	713
Total	0	1491	34	0	1525	0	0	0	0	0	42	985	0	1	1028	132	0	62	0	194	2747
05:00 PM	0	402	8	0	410	0	0	0	0	0	10	283	0	0	293	33	0	22	0	55	758
05:15 PM	0	405	6	0	411	0	0	0	0	0	8	336	0	0	344	38	0	26	0	64	819
05:30 PM	0	410	13	1	424	2	0	0	0	2	6	330	0	0	336	74	0	22	0	96	858
05:45 PM	0	350	23	0	373	1	0	0	0	1	9	312	0	4	325	27	0	24	0	51	750
Total	0	1567	50	1	1618	3	0	0	0	3	33	1261	0	4	1298	172	0	94	0	266	3185
Grand Total	0	3058	84	1	3143	3	0	0	0	3	75	2246	0	5	2326	304	0	156	0	460	5932
Apprch %	0	97.3	2.7	0		100	0	0	0		3.2	96.6	0	0.2		66.1	0	33.9	0		
Total %	0	51.6	1.4	0	53	0.1	0	0	0	0.1	1.3	37.9	0	0.1	39.2	5.1	0	2.6	0	7.8	

	Grand Avenue Southbound				Construction Driveway Westbound				Grand Avenue Northbound				Baker Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	402	8	410	0	0	0	0	**10**	283	0	293	33	0	22	55	758
05:15 PM	0	405	6	411	0	0	0	0	8	**336**	0	**344**	38	0	**26**	64	819
05:30 PM	0	**410**	13	**423**	**2**	0	0	**2**	6	330	0	336	**74**	0	22	**96**	**857**
05:45 PM	0	350	**23**	373	1	0	0	1	9	312	0	321	27	0	24	51	746
Total Volume	0	1567	50	1617	3	0	0	3	33	1261	0	1294	172	0	94	266	3180
% App. Total	0	96.9	3.1		100	0	0		2.6	97.4	0		64.7	0	35.3		
PHF	.000	.955	.543	.956	.375	.000	.000	.375	.825	.938	.000	.940	.581	.000	.904	.693	.928

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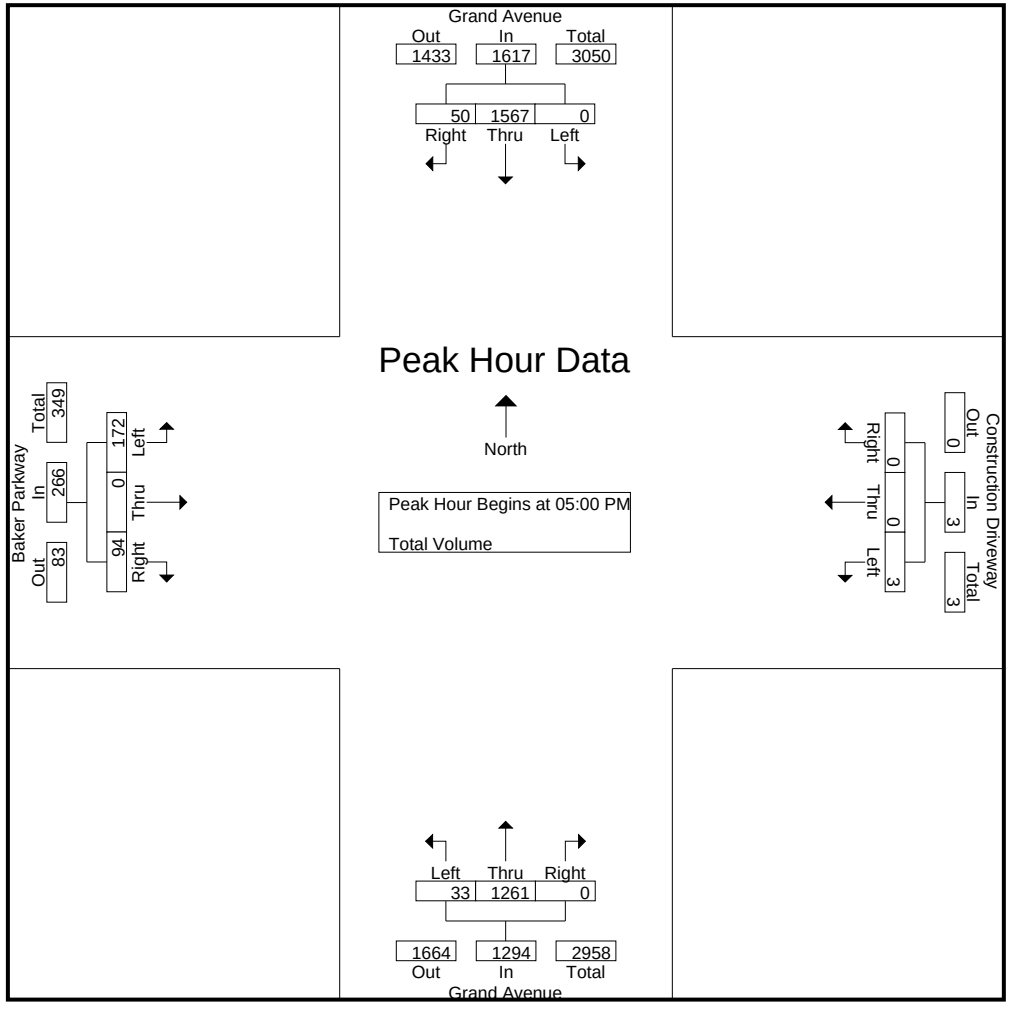

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City of Walnut
N/S: Grand Avenue
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	Grand Avenue Southbound				Construction Driveway Westbound				Grand Avenue Northbound				Baker Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	375	8	383	0	0	0	0	**10**	283	0	293	33	0	22	55	
+15 mins.	0	402	8	410	0	0	0	0	8	**336**	0	**344**	38	0	**26**	64	
+30 mins.	0	405	6	411	**2**	0	0	**2**	6	330	0	336	**74**	0	22	**96**	
+45 mins.	0	**410**	**13**	**423**	1	0	0	1	9	312	0	321	27	0	24	51	
Total Volume	0	1592	35	1627	3	0	0	3	33	1261	0	1294	172	0	94	266	
% App. Total	0	97.8	2.2		100	0	0		2.6	97.4	0		64.7	0	35.3		
PHF	.000	.971	.673	.962	.375	.000	.000	.375	.825	.938	.000	.940	.581	.000	.904	.693	

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City of Walnut
N/S: Grand Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : WNTGR60WAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound					SR-60 Westbound Ramps Westbound					Grand Avenue Northbound					Driveway Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	88	124	0	0	212	50	0	118	0	168	0	463	69	0	532	0	0	1	0	1	913
07:15 AM	97	161	1	0	259	42	0	150	0	192	0	480	82	0	562	0	0	0	0	0	1013
07:30 AM	92	198	1	0	291	86	0	151	0	237	0	430	98	0	528	0	1	0	0	1	1057
07:45 AM	72	196	0	0	268	84	0	153	0	237	0	423	71	0	494	0	0	0	0	0	999
Total	349	679	2	0	1030	262	0	572	0	834	0	1796	320	0	2116	0	1	1	0	2	3982
08:00 AM	85	168	0	0	253	54	0	128	0	182	0	329	75	0	404	0	0	0	0	0	839
08:15 AM	69	171	1	0	241	67	0	108	0	175	0	362	112	0	474	1	0	0	0	1	891
08:30 AM	81	193	0	0	274	66	0	118	0	184	0	417	119	0	536	0	0	0	0	0	994
08:45 AM	58	217	1	0	276	56	0	110	0	166	0	344	82	1	427	0	1	0	0	1	870
Total	293	749	2	0	1044	243	0	464	0	707	0	1452	388	1	1841	1	1	0	0	2	3594
Grand Total	642	1428	4	0	2074	505	0	1036	0	1541	0	3248	708	1	3957	1	2	1	0	4	7576
Apprch %	31	68.9	0.2	0		32.8	0	67.2	0		0	82.1	17.9	0		25	50	25	0		
Total %	8.5	18.8	0.1	0	27.4	6.7	0	13.7	0	20.3	0	42.9	9.3	0	52.2	0	0	0	0	0.1	

	Grand Avenue Southbound				SR-60 Westbound Ramps Westbound				Grand Avenue Northbound				Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	88	124	0	212	50	0	118	168	0	463	69	532	0	0	**1**	**1**	913
07:15 AM	**97**	161	**1**	259	42	0	150	192	0	**480**	82	**562**	0	0	0	0	1013
07:30 AM	92	**198**	1	**291**	**86**	0	151	**237**	0	430	**98**	528	0	**1**	0	1	**1057**
07:45 AM	72	196	0	268	84	0	**153**	237	0	423	71	494	0	0	0	0	999
Total Volume	349	679	2	1030	262	0	572	834	0	1796	320	2116	0	1	1	2	3982
% App. Total	33.9	65.9	0.2		31.4	0	68.6		0	84.9	15.1		0	50	50		
PHF	.899	.857	.500	.885	.762	.000	.935	.880	.000	.935	.816	.941	.000	.250	.250	.500	.942

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Site Code : 04215551
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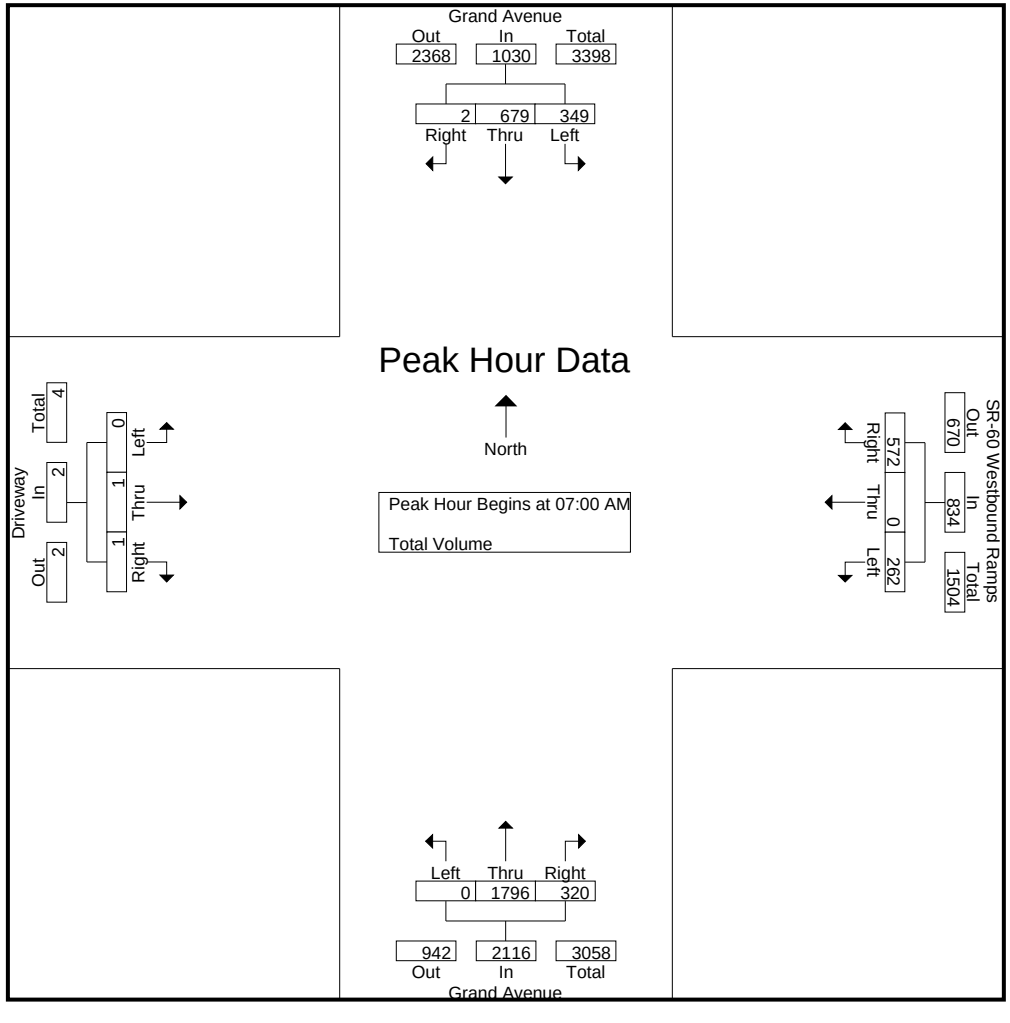

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	Grand Avenue Southbound				SR-60 Westbound Ramps Westbound				Grand Avenue Northbound				Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:00 AM				07:00 AM				
+0 mins.	**97**	161	**1**	259	42	0	150	192	0	463	69	532	0	0	**1**	**1**	
+15 mins.	92	**198**	1	**291**	**86**	0	151	**237**	0	**480**	82	**562**	0	0	0	0	
+30 mins.	72	196	0	268	84	0	**153**	237	0	430	**98**	528	0	**1**	0	1	
+45 mins.	85	168	0	253	54	0	128	182	0	423	71	494	0	0	0	0	
Total Volume	346	723	2	1071	266	0	582	848	0	1796	320	2116	0	1	1	2	
% App. Total	32.3	67.5	0.2		31.4	0	68.6		0	84.9	15.1		0	50	50		
PHF	.892	.913	.500	.920	.773	.000	.951	.895	.000	.935	.816	.941	.000	.250	.250	.500	

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Groups Printed- Total Volume

	Grand Avenue Southbound					SR-60 Westbound Ramps Westbound					Grand Avenue Northbound					Driveway Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	142	274	0	0	416	49	0	95	0	144	2	143	60	1	206	0	2	0	0	2	768
04:15 PM	122	307	1	0	430	47	1	105	0	153	0	160	61	1	222	1	0	0	0	1	806
04:30 PM	145	356	0	0	501	68	0	90	0	158	2	179	68	2	251	0	0	0	0	0	910
04:45 PM	133	241	1	0	375	59	0	88	0	147	0	179	66	1	246	0	0	0	0	0	768
Total	542	1178	2	0	1722	223	1	378	0	602	4	661	255	5	925	1	2	0	0	3	3252
05:00 PM	144	254	3	0	401	49	0	114	0	163	0	181	61	0	242	2	1	0	0	3	809
05:15 PM	140	339	0	0	479	50	1	131	0	182	0	216	68	0	284	0	0	0	0	0	945
05:30 PM	157	362	2	0	521	36	0	124	0	160	1	206	73	1	281	2	0	4	0	6	968
05:45 PM	169	427	0	0	596	51	0	126	0	177	0	196	81	2	279	0	1	0	0	1	1053
Total	610	1382	5	0	1997	186	1	495	0	682	1	799	283	3	1086	4	2	4	0	10	3775
Grand Total	1152	2560	7	0	3719	409	2	873	0	1284	5	1460	538	8	2011	5	4	4	0	13	7027
Apprch %	31	68.8	0.2	0		31.9	0.2	68	0		0.2	72.6	26.8	0.4		38.5	30.8	30.8	0		
Total %	16.4	36.4	0.1	0	52.9	5.8	0	12.4	0	18.3	0.1	20.8	7.7	0.1	28.6	0.1	0.1	0.1	0	0.2	

	Grand Avenue Southbound				SR-60 Westbound Ramps Westbound				Grand Avenue Northbound				Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	144	254	**3**	401	49	0	114	163	0	181	61	242	**2**	**1**	0	3	809
05:15 PM	140	339	0	479	50	**1**	**131**	**182**	0	**216**	68	**284**	0	0	0	0	945
05:30 PM	157	362	2	521	36	0	124	160	**1**	206	73	280	2	0	**4**	**6**	967
05:45 PM	**169**	**427**	0	**596**	**51**	0	126	177	0	196	**81**	277	0	1	0	1	**1051**
Total Volume	610	1382	5	1997	186	1	495	682	1	799	283	1083	4	2	4	10	3772
% App. Total	30.5	69.2	0.3		27.3	0.1	72.6		0.1	73.8	26.1		40	20	40		
PHF	.902	.809	.417	.838	.912	.250	.945	.937	.250	.925	.873	.953	.500	.500	.250	.417	.897

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Start Date : 10/1/2015
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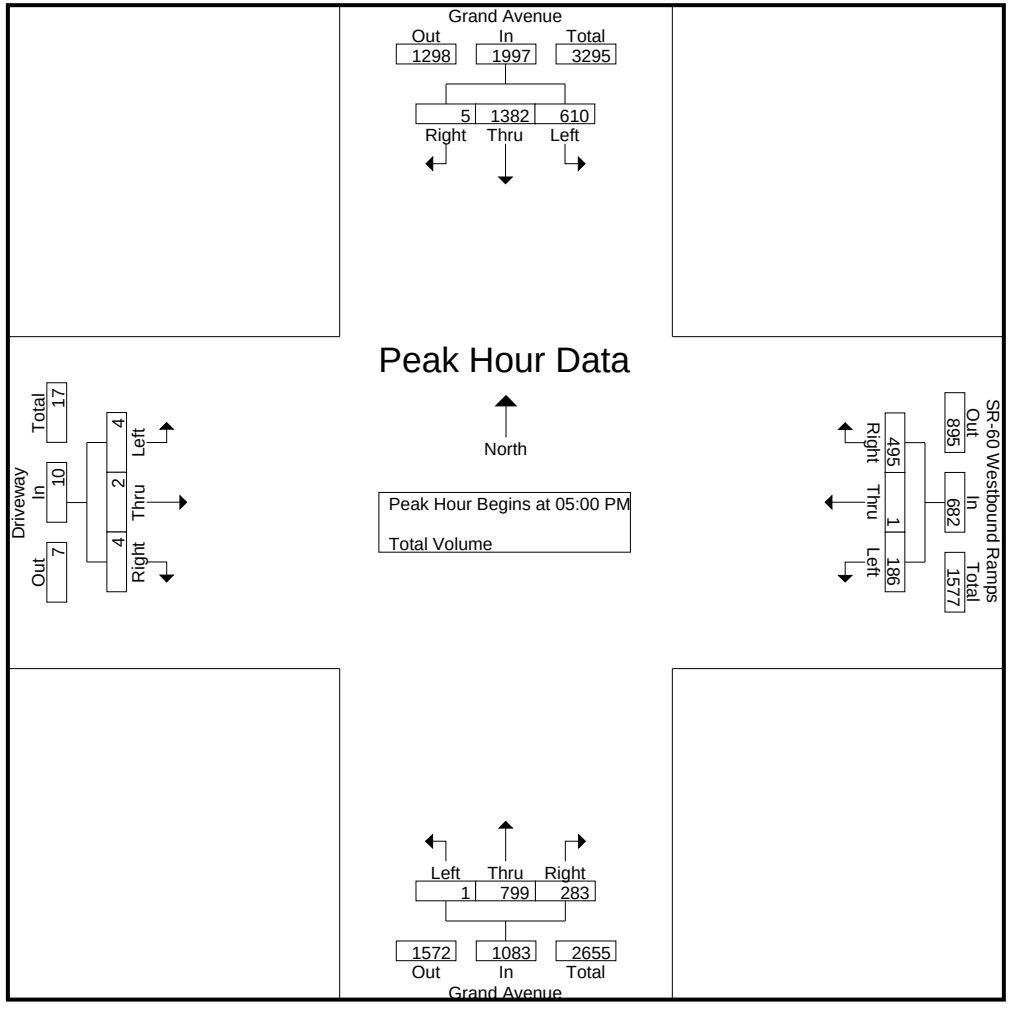

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Walnut
N/S: Grand Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : WNTGR60WPM
Site Code : 04215551
Start Date : 10/1/2015

	Grand Avenue Southbound				SR-60 Westbound Ramps Westbound				Grand Avenue Northbound				Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	144	254	**3**	401	49	0	114	163	0	181	61	242	**2**	**1**	0	3	
+15 mins.	140	339	0	479	50	**1**	**131**	**182**	0	**216**	68	**284**	0	0	0	0	
+30 mins.	157	362	2	521	36	0	124	160	**1**	206	73	280	2	0	**4**	**6**	
+45 mins.	**169**	**427**	0	**596**	**51**	0	126	177	0	196	**81**	277	0	1	0	1	
Total Volume	610	1382	5	1997	186	1	495	682	1	799	283	1083	4	2	4	10	
% App. Total	30.5	69.2	0.3		27.3	0.1	72.6		0.1	73.8	26.1		40	20	40		
PHF	.902	.809	.417	.838	.912	.250	.945	.937	.250	.925	.873	.953	.500	.500	.250	.417	

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City of Walnut
N/S: Grand Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : WNTGR60EAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound					SR-60 Eastbound On Ramp Westbound					Grand Avenue Northbound					SR-60 Eastbound Off Ramp Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	71	107	0	0	178	0	0	0	0	0	0	295	54	0	349	213	0	50	0	263	790
07:15 AM	65	136	0	1	202	0	0	0	0	0	0	295	64	0	359	262	0	70	0	332	893
07:30 AM	113	180	0	0	293	0	0	0	0	0	0	295	73	0	368	197	0	60	0	257	918
07:45 AM	67	208	0	0	275	0	0	0	0	0	0	258	60	0	318	249	0	84	0	333	926
Total	316	631	0	1	948	0	0	0	0	0	0	1143	251	0	1394	921	0	264	0	1185	3527
08:00 AM	67	152	0	0	219	0	0	0	0	0	0	329	70	0	399	197	0	67	0	264	882
08:15 AM	81	163	0	0	244	0	0	0	0	0	0	326	66	0	392	197	0	55	0	252	888
08:30 AM	72	171	0	0	243	0	0	0	0	0	0	260	67	0	327	185	1	65	0	251	821
08:45 AM	84	182	0	0	266	0	0	0	0	0	0	233	68	0	301	195	0	71	0	266	833
Total	304	668	0	0	972	0	0	0	0	0	0	1148	271	0	1419	774	1	258	0	1033	3424
Grand Total	620	1299	0	1	1920	0	0	0	0	0	0	2291	522	0	2813	1695	1	522	0	2218	6951
Apprch %	32.3	67.7	0	0.1		0	0	0	0		0	81.4	18.6	0		76.4	0	23.5	0		
Total %	8.9	18.7	0	0	27.6	0	0	0	0	0	0	33	7.5	0	40.5	24.4	0	7.5	0	31.9	

	Grand Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Grand Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	65	136	0	201	0	0	0	0	0	295	64	359	**262**	0	70	332	892
07:30 AM	**113**	180	0	**293**	0	0	0	0	0	295	**73**	368	197	0	60	257	918
07:45 AM	67	**208**	0	275	0	0	0	0	0	258	60	318	249	0	**84**	**333**	**926**
08:00 AM	67	152	0	219	0	0	0	0	0	**329**	70	**399**	197	0	67	264	882
Total Volume	312	676	0	988	0	0	0	0	0	1177	267	1444	905	0	281	1186	3618
% App. Total	31.6	68.4	0		0	0	0		0	81.5	18.5		76.3	0	23.7		
PHF	.690	.813	.000	.843	.000	.000	.000	.000	.000	.894	.914	.905	.864	.000	.836	.890	.977

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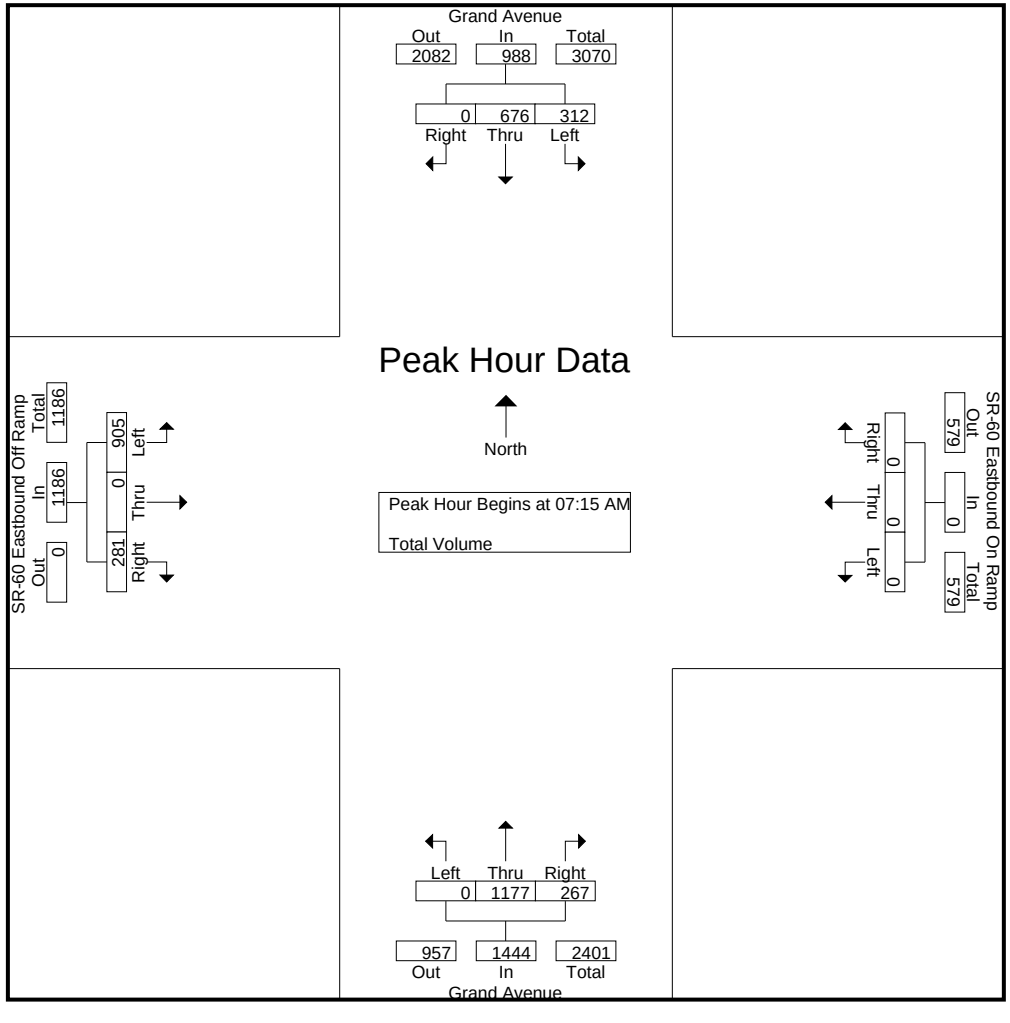
City of Walnut
N/S: Grand Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : WNTGR60EAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Grand Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : WNTGR60EAM
Site Code : 04215551
Start Date : 10/1/2015

	Grand Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Grand Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:00 AM				07:30 AM				07:15 AM				
+0 mins.	**113**	180	0	**293**	0	0	0	0	0	295	**73**	368	**262**	0	70	332	
+15 mins.	67	**208**	0	275	0	0	0	0	0	258	60	318	197	0	60	257	
+30 mins.	67	152	0	219	0	0	0	0	0	**329**	70	**399**	249	0	**84**	**333**	
+45 mins.	81	163	0	244	0	0	0	0	0	326	66	392	197	0	67	264	
Total Volume	328	703	0	1031	0	0	0	0	0	1208	269	1477	905	0	281	1186	
% App. Total	31.8	68.2	0		0	0	0		0	81.8	18.2		76.3	0	23.7		
PHF	.726	.845	.000	.880	.000	.000	.000	.000	.000	.918	.921	.925	.864	.000	.836	.890	

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City of Walnut
N/S: Grand Avenue
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File Name : WNTGR60EPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Grand Avenue Southbound					SR-60 Eastbound On Ramp Westbound					Grand Avenue Northbound					SR-60 Eastbound Off Ramp Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	78	233	0	0	311	0	0	0	0	0	0	159	137	0	296	44	0	46	0	90	697
04:15 PM	100	257	0	0	357	0	0	0	0	0	0	198	118	0	316	42	0	42	0	84	757
04:30 PM	114	315	0	0	429	0	0	0	0	0	0	190	149	0	339	44	1	54	0	99	867
04:45 PM	83	303	0	1	387	0	0	0	0	0	0	200	154	0	354	50	0	47	0	97	838
Total	375	1108	0	1	1484	0	0	0	0	0	0	747	558	0	1305	180	1	189	0	370	3159
05:00 PM	88	311	0	0	399	0	0	0	0	0	0	228	179	0	407	39	0	44	0	83	889
05:15 PM	88	311	0	1	400	0	0	0	0	0	0	234	150	0	384	45	0	40	0	85	869
05:30 PM	92	302	0	0	394	0	0	0	0	0	0	227	154	0	381	37	0	56	0	93	868
05:45 PM	112	370	0	0	482	0	0	0	0	0	0	244	136	0	380	48	0	36	0	84	946
Total	380	1294	0	1	1675	0	0	0	0	0	0	933	619	0	1552	169	0	176	0	345	3572
Grand Total	755	2402	0	2	3159	0	0	0	0	0	0	1680	1177	0	2857	349	1	365	0	715	6731
Apprch %	23.9	76	0	0.1		0	0	0	0		0	58.8	41.2	0		48.8	0.1	51	0		
Total %	11.2	35.7	0	0	46.9	0	0	0	0	0	0	25	17.5	0	42.4	5.2	0	5.4	0	10.6	

	Grand Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Grand Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	88	311	0	399	0	0	0	0	0	228	**179**	**407**	39	0	44	83	889
05:15 PM	88	311	0	399	0	0	0	0	0	234	150	384	45	0	40	85	868
05:30 PM	92	302	0	394	0	0	0	0	0	227	154	381	37	0	**56**	**93**	868
05:45 PM	**112**	**370**	0	**482**	0	0	0	0	0	**244**	136	380	**48**	0	36	84	**946**
Total Volume	380	1294	0	1674	0	0	0	0	0	933	619	1552	169	0	176	345	3571
% App. Total	22.7	77.3	0		0	0	0		0	60.1	39.9		49	0	51		
PHF	.848	.874	.000	.868	.000	.000	.000	.000	.000	.956	.865	.953	.880	.000	.786	.927	.944

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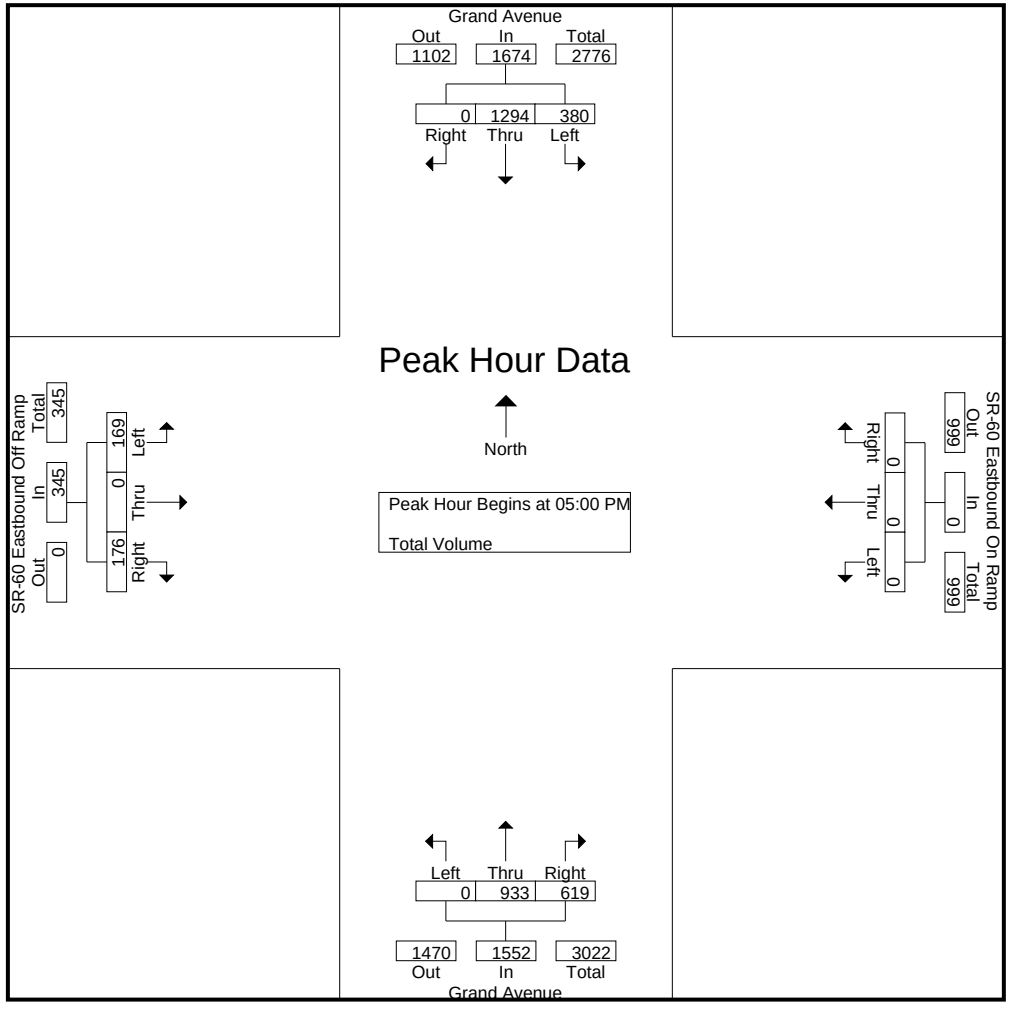
City of Walnut
N/S: Grand Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : WNTGR60EPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Grand Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : WNTGR60EPM
Site Code : 04215551
Start Date : 10/1/2015

	Grand Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Grand Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				04:00 PM				05:00 PM				04:00 PM				
+0 mins.	88	311	0	399	0	0	0	0	0	228	**179**	**407**	44	0	46	90	
+15 mins.	88	311	0	399	0	0	0	0	0	234	150	384	42	0	42	84	
+30 mins.	92	302	0	394	0	0	0	0	0	227	154	381	44	**1**	**54**	**99**	
+45 mins.	**112**	**370**	0	**482**	0	0	0	0	0	**244**	136	380	**50**	0	47	97	
Total Volume	380	1294	0	1674	0	0	0	0	0	933	619	1552	180	1	189	370	
% App. Total	22.7	77.3	0		0	0	0		0	60.1	39.9		48.6	0.3	51.1		
PHF	.848	.874	.000	.868	.000	.000	.000	.000	.000	.956	.865	.953	.900	.250	.875	.934	

Counts Unlimited
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City of Walnut
N/S: Mount SAC Way
E/W: Temple Avenue
Weather: Clear

File Name : WNTMTTEAM
Site Code : 04215551
Start Date : 10/1/2015

Groups Printed- Total Volume

	Mount SAC Way Southbound					Temple Avenue Westbound					Mount SAC Way Northbound					Temple Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	32	2	60	0	94	0	180	26	4	210	10	3	1	0	14	46	208	6	1	261	579
07:15 AM	41	4	56	0	101	1	196	28	4	229	39	4	6	0	49	9	271	62	1	343	722
07:30 AM	55	3	80	0	138	2	188	15	6	211	44	3	7	0	54	6	235	51	0	292	695
07:45 AM	45	2	59	0	106	3	214	13	1	231	22	6	4	0	32	8	259	54	0	321	690
Total	173	11	255	0	439	6	778	82	15	881	115	16	18	0	149	69	973	173	2	1217	2686
08:00 AM	32	2	51	0	85	0	232	24	1	257	21	1	11	0	33	12	215	51	0	278	653
08:15 AM	29	0	49	0	78	3	215	6	2	226	24	2	4	0	30	5	226	36	0	267	601
08:30 AM	21	1	38	0	60	0	308	20	4	332	40	2	6	0	48	8	229	31	0	268	708
08:45 AM	26	5	35	0	66	4	284	15	0	303	26	5	4	0	35	9	224	49	0	282	686
Total	108	8	173	0	289	7	1039	65	7	1118	111	10	25	0	146	34	894	167	0	1095	2648
Grand Total	281	19	428	0	728	13	1817	147	22	1999	226	26	43	0	295	103	1867	340	2	2312	5334
Apprch %	38.6	2.6	58.8	0		0.7	90.9	7.4	1.1		76.6	8.8	14.6	0		4.5	80.8	14.7	0.1		
Total %	5.3	0.4	8	0	13.6	0.2	34.1	2.8	0.4	37.5	4.2	0.5	0.8	0	5.5	1.9	35	6.4	0	43.3	

	Mount SAC Way Southbound				Temple Avenue Westbound				Mount SAC Way Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	41	**4**	56	101	1	196	**28**	225	39	4	6	49	9	**271**	**62**	**342**	**717**
07:30 AM	**55**	3	**80**	**138**	2	188	15	205	**44**	3	7	**54**	6	235	51	292	689
07:45 AM	45	2	59	106	**3**	214	13	230	22	**6**	4	32	8	259	54	321	689
08:00 AM	32	2	51	85	0	**232**	24	**256**	21	1	**11**	33	**12**	215	51	278	652
Total Volume	173	11	246	430	6	830	80	916	126	14	28	168	35	980	218	1233	2747
% App. Total	40.2	2.6	57.2		0.7	90.6	8.7		75	8.3	16.7		2.8	79.5	17.7		
PHF	.786	.688	.769	.779	.500	.894	.714	.895	.716	.583	.636	.778	.729	.904	.879	.901	.958

Counts Unlimited
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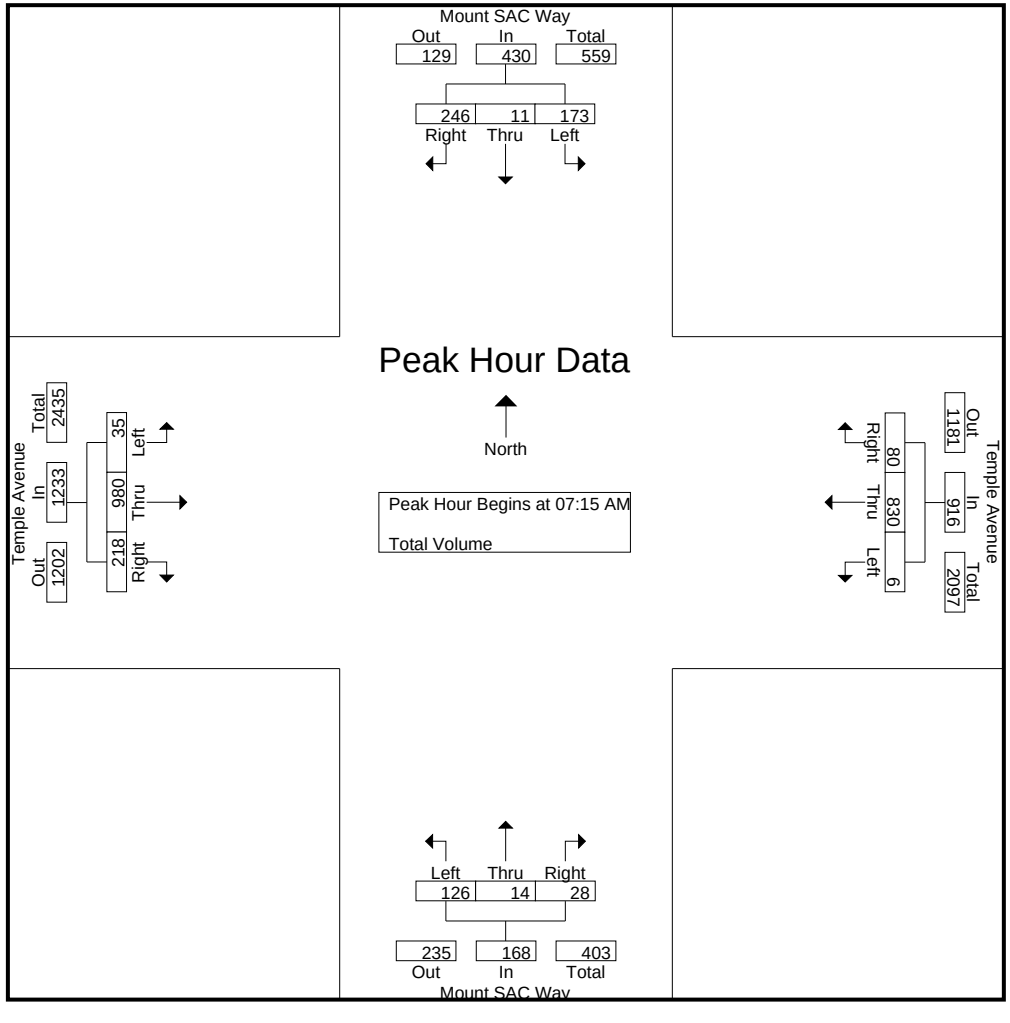
City of Walnut
N/S: Mount SAC Way
E/W: Temple Avenue
Weather: Clear

File Name : WNTMTTEAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Mount SAC Way
E/W: Temple Avenue
Weather: Clear

File Name : WNTMTTEAM
Site Code : 04215551
Start Date : 10/1/2015

	Mount SAC Way Southbound				Temple Avenue Westbound				Mount SAC Way Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				08:00 AM				07:15 AM				07:15 AM				
+0 mins.	32	2	60	94	0	232	**24**	256	39	4	6	49	9	**271**	**62**	**342**	
+15 mins.	41	**4**	56	101	3	215	6	224	**44**	3	7	**54**	6	235	51	292	
+30 mins.	**55**	3	**80**	**138**	0	**308**	20	**328**	22	**6**	4	32	8	259	54	321	
+45 mins.	45	2	59	106	**4**	284	15	303	21	1	**11**	33	**12**	215	51	278	
Total Volume	173	11	255	439	7	1039	65	1111	126	14	28	168	35	980	218	1233	
% App. Total	39.4	2.5	58.1		0.6	93.5	5.9		75	8.3	16.7		2.8	79.5	17.7		
PHF	.786	.688	.797	.795	.438	.843	.677	.847	.716	.583	.636	.778	.729	.904	.879	.901	

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City of Walnut
N/S: Mount SAC Way
E/W: Temple Avenue
Weather: Clear

File Name : WNTMTTEPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Mount SAC Way Southbound					Temple Avenue Westbound					Mount SAC Way Northbound					Temple Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	7	0	12	0	19	2	250	55	0	307	2	4	1	0	7	78	228	19	0	325	658
04:15 PM	19	2	18	0	39	3	192	65	2	262	2	1	0	0	3	84	336	17	0	437	741
04:30 PM	21	1	18	0	40	10	141	74	3	228	1	3	1	0	5	98	324	40	0	462	735
04:45 PM	22	6	34	0	62	19	128	48	3	198	3	2	0	0	5	80	332	69	0	481	746
Total	69	9	82	0	160	34	711	242	8	995	8	10	2	0	20	340	1220	145	0	1705	2880
05:00 PM	32	29	32	0	93	10	148	50	1	209	0	1	0	0	1	41	343	63	0	447	750
05:15 PM	23	11	21	0	55	18	163	32	2	215	1	3	1	0	5	29	264	35	0	328	603
05:30 PM	9	8	9	0	26	10	141	11	1	163	0	7	0	0	7	27	233	25	0	285	481
05:45 PM	13	8	12	0	33	6	107	11	1	125	6	5	3	0	14	27	188	25	0	240	412
Total	77	56	74	0	207	44	559	104	5	712	7	16	4	0	27	124	1028	148	0	1300	2246
Grand Total	146	65	156	0	367	78	1270	346	13	1707	15	26	6	0	47	464	2248	293	0	3005	5126
Apprch %	39.8	17.7	42.5	0		4.6	74.4	20.3	0.8		31.9	55.3	12.8	0		15.4	74.8	9.8	0		
Total %	2.8	1.3	3	0	7.2	1.5	24.8	6.7	0.3	33.3	0.3	0.5	0.1	0	0.9	9.1	43.9	5.7	0	58.6	

	Mount SAC Way Southbound				Temple Avenue Westbound				Mount SAC Way Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	19	2	18	39	3	**192**	65	**260**	2	1	0	3	84	336	17	437	739
04:30 PM	21	1	18	40	10	141	**74**	225	1	**3**	**1**	**5**	**98**	324	40	462	732
04:45 PM	22	6	**34**	62	**19**	128	48	195	**3**	2	0	5	80	332	**69**	**481**	743
05:00 PM	**32**	**29**	32	**93**	10	148	50	208	0	1	0	1	41	**343**	63	447	**749**
Total Volume	94	38	102	234	42	609	237	888	6	7	1	14	303	1335	189	1827	2963
% App. Total	40.2	16.2	43.6		4.7	68.6	26.7		42.9	50	7.1		16.6	73.1	10.3		
PHF	.734	.328	.750	.629	.553	.793	.801	.854	.500	.583	.250	.700	.773	.973	.685	.950	.989

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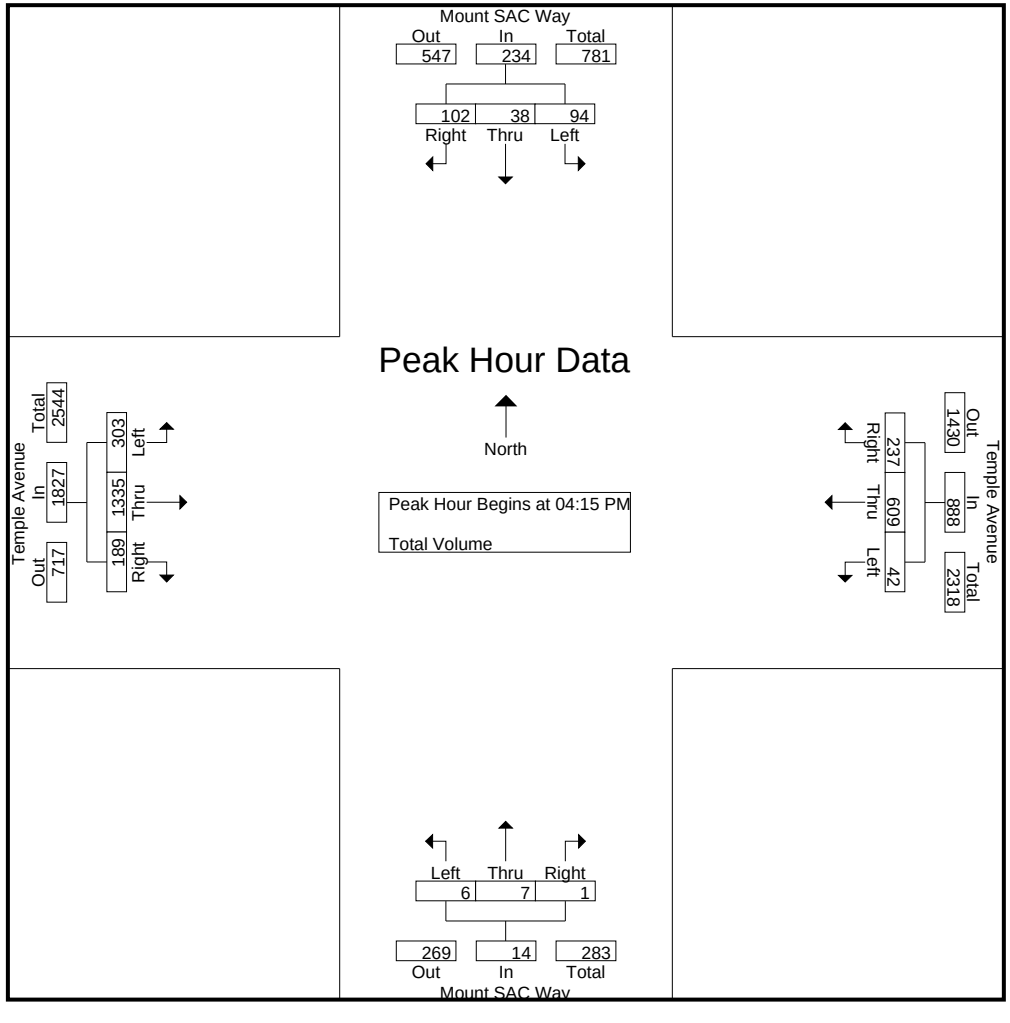
City of Walnut
N/S: Mount SAC Way
E/W: Temple Avenue
Weather: Clear

File Name : WNTMTTEPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Mount SAC Way
E/W: Temple Avenue
Weather: Clear

File Name : WNTMTTEPM
Site Code : 04215551
Start Date : 10/1/2015

	Mount SAC Way Southbound				Temple Avenue Westbound				Mount SAC Way Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:00 PM				05:00 PM				04:15 PM				
+0 mins.	21	1	18	40	2	**250**	55	**307**	0	1	0	1	84	336	17	437	
+15 mins.	22	6	**34**	62	3	192	65	260	1	3	1	5	**98**	324	40	462	
+30 mins.	**32**	**29**	32	**93**	10	141	**74**	225	0	**7**	0	7	80	332	**69**	**481**	
+45 mins.	23	11	21	55	**19**	128	48	195	**6**	5	**3**	**14**	41	**343**	63	447	
Total Volume	98	47	105	250	34	711	242	987	7	16	4	27	303	1335	189	1827	
% App. Total	39.2	18.8	42		3.4	72	24.5		25.9	59.3	14.8		16.6	73.1	10.3		
PHF	.766	.405	.772	.672	.447	.711	.818	.804	.292	.571	.333	.482	.773	.973	.685	.950	

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City of Walnut
N/S: Bonita Avenue
E/W: Temple Avenue
Weather: Clear

File Name : WNTBOTEAM
Site Code : 04215551
Start Date : 10/1/2015

Groups Printed- Total Volume

	Bonita Avenue Southbound					Temple Avenue Westbound					Service Road Northbound					Temple Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	4	3	4	0	11	25	386	76	0	487	7	2	1	0	10	27	135	16	0	178	686
07:15 AM	9	3	13	0	25	24	291	82	0	397	3	5	17	0	25	60	207	30	0	297	744
07:30 AM	23	5	13	0	41	42	224	83	0	349	7	2	2	0	11	84	187	30	0	301	702
07:45 AM	33	8	28	0	69	22	208	124	0	354	4	3	0	0	7	104	158	31	0	293	723
Total	69	19	58	0	146	113	1109	365	0	1587	21	12	20	0	53	275	687	107	0	1069	2855
08:00 AM	15	2	20	0	37	31	229	135	0	395	7	3	2	0	12	133	173	39	0	345	789
08:15 AM	20	9	24	0	53	27	202	111	0	340	4	2	1	0	7	103	151	28	0	282	682
08:30 AM	13	7	21	0	41	15	160	58	0	233	4	5	6	0	15	68	146	16	0	230	519
08:45 AM	17	7	8	0	32	28	116	53	0	197	6	1	3	0	10	48	116	19	0	183	422
Total	65	25	73	0	163	101	707	357	0	1165	21	11	12	0	44	352	586	102	0	1040	2412
Grand Total	134	44	131	0	309	214	1816	722	0	2752	42	23	32	0	97	627	1273	209	0	2109	5267
Apprch %	43.4	14.2	42.4	0		7.8	66	26.2	0		43.3	23.7	33	0		29.7	60.4	9.9	0		
Total %	2.5	0.8	2.5	0	5.9	4.1	34.5	13.7	0	52.2	0.8	0.4	0.6	0	1.8	11.9	24.2	4	0	40	

	Bonita Avenue Southbound				Temple Avenue Westbound				Service Road Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	9	3	13	25	24	**291**	82	**397**	3	**5**	**17**	**25**	60	**207**	30	297	744
07:30 AM	23	5	13	41	**42**	224	83	349	**7**	2	2	11	84	187	30	301	702
07:45 AM	**33**	**8**	**28**	**69**	22	208	124	354	4	3	0	7	104	158	31	293	723
08:00 AM	15	2	20	37	31	229	**135**	395	7	3	2	12	**133**	173	**39**	**345**	**789**
Total Volume	80	18	74	172	119	952	424	1495	21	13	21	55	381	725	130	1236	2958
% App. Total	46.5	10.5	43		8	63.7	28.4		38.2	23.6	38.2		30.8	58.7	10.5		
PHF	.606	.563	.661	.623	.708	.818	.785	.941	.750	.650	.309	.550	.716	.876	.833	.896	.937

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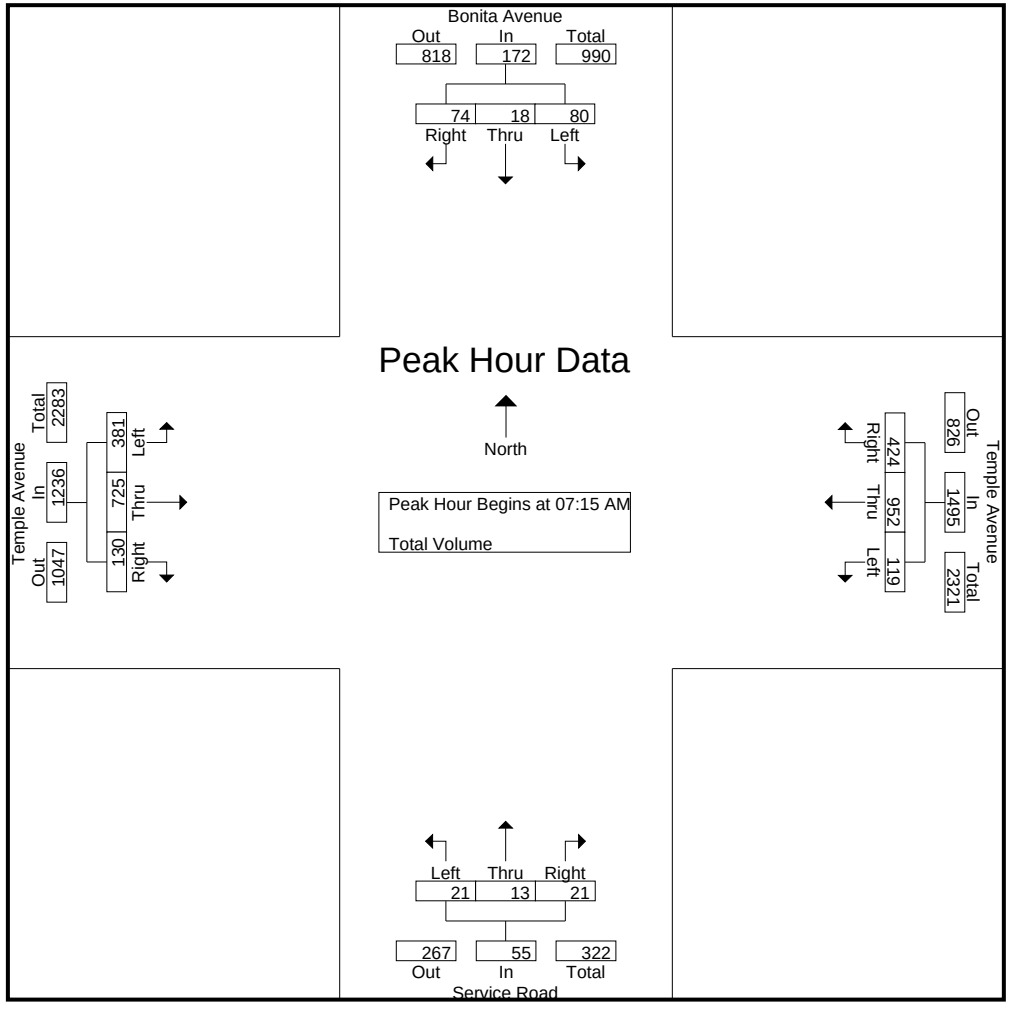
City of Walnut
N/S: Bonita Avenue
E/W: Temple Avenue
Weather: Clear

File Name : WNTBOTEAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Bonita Avenue
E/W: Temple Avenue
Weather: Clear

File Name : WNTBOTEAM
Site Code : 04215551
Start Date : 10/1/2015

	Bonita Avenue Southbound				Temple Avenue Westbound				Service Road Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:00 AM				07:15 AM				07:15 AM				
+0 mins.	23	5	13	41	25	**386**	76	**487**	3	**5**	**17**	**25**	60	**207**	30	297	
+15 mins.	**33**	8	**28**	**69**	24	291	82	397	**7**	2	2	11	84	187	30	301	
+30 mins.	15	2	20	37	**42**	224	83	349	4	3	0	7	104	158	31	293	
+45 mins.	20	**9**	24	53	22	208	**124**	354	7	3	2	12	**133**	173	**39**	**345**	
Total Volume	91	24	85	200	113	1109	365	1587	21	13	21	55	381	725	130	1236	
% App. Total	45.5	12	42.5		7.1	69.9	23		38.2	23.6	38.2		30.8	58.7	10.5		
PHF	.689	.667	.759	.725	.673	.718	.736	.815	.750	.650	.309	.550	.716	.876	.833	.896	

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City of Walnut
N/S: Bonita Avenue
E/W: Temple Avenue
Weather: Clear

File Name : WNTBOTEPM
Site Code : 04215551
Start Date : 10/1/2015

Groups Printed- Total Volume

	Bonita Avenue Southbound					Temple Avenue Westbound					Service Road Northbound					Temple Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	54	4	23	0	81	5	163	29	0	197	25	6	19	0	50	50	184	13	0	247	575
04:15 PM	82	7	56	0	145	8	147	53	0	208	18	5	29	0	52	48	210	14	0	272	677
04:30 PM	105	4	55	0	164	11	176	36	0	223	22	9	27	0	58	32	266	8	0	306	751
04:45 PM	51	2	24	0	77	3	148	36	0	187	27	6	15	0	48	44	264	11	0	319	631
Total	292	17	158	0	467	27	634	154	0	815	92	26	90	0	208	174	924	46	0	1144	2634
05:00 PM	49	4	24	0	77	5	228	40	0	273	35	6	21	0	62	34	213	16	0	263	675
05:15 PM	31	2	21	0	54	6	284	45	0	335	24	3	16	0	43	40	202	10	0	252	684
05:30 PM	38	2	18	0	58	5	285	55	0	345	31	9	26	0	66	40	176	8	0	224	693
05:45 PM	33	1	33	0	67	15	300	60	0	375	13	3	12	0	28	39	185	20	0	244	714
Total	151	9	96	0	256	31	1097	200	0	1328	103	21	75	0	199	153	776	54	0	983	2766
Grand Total	443	26	254	0	723	58	1731	354	0	2143	195	47	165	0	407	327	1700	100	0	2127	5400
Apprch %	61.3	3.6	35.1	0		2.7	80.8	16.5	0		47.9	11.5	40.5	0		15.4	79.9	4.7	0		
Total %	8.2	0.5	4.7	0	13.4	1.1	32.1	6.6	0	39.7	3.6	0.9	3.1	0	7.5	6.1	31.5	1.9	0	39.4	

	Bonita Avenue Southbound				Temple Avenue Westbound				Service Road Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**49**	**4**	24	**77**	5	228	40	273	**35**	6	21	62	34	**213**	16	**263**	675
05:15 PM	31	2	21	54	6	284	45	335	24	3	16	43	**40**	202	10	252	684
05:30 PM	38	2	18	58	5	285	55	345	31	**9**	**26**	**66**	40	176	8	224	693
05:45 PM	33	1	**33**	67	**15**	**300**	**60**	**375**	13	3	12	28	39	185	**20**	244	**714**
Total Volume	151	9	96	256	31	1097	200	1328	103	21	75	199	153	776	54	983	2766
% App. Total	59	3.5	37.5		2.3	82.6	15.1		51.8	10.6	37.7		15.6	78.9	5.5		
PHF	.770	.563	.727	.831	.517	.914	.833	.885	.736	.583	.721	.754	.956	.911	.675	.934	.968

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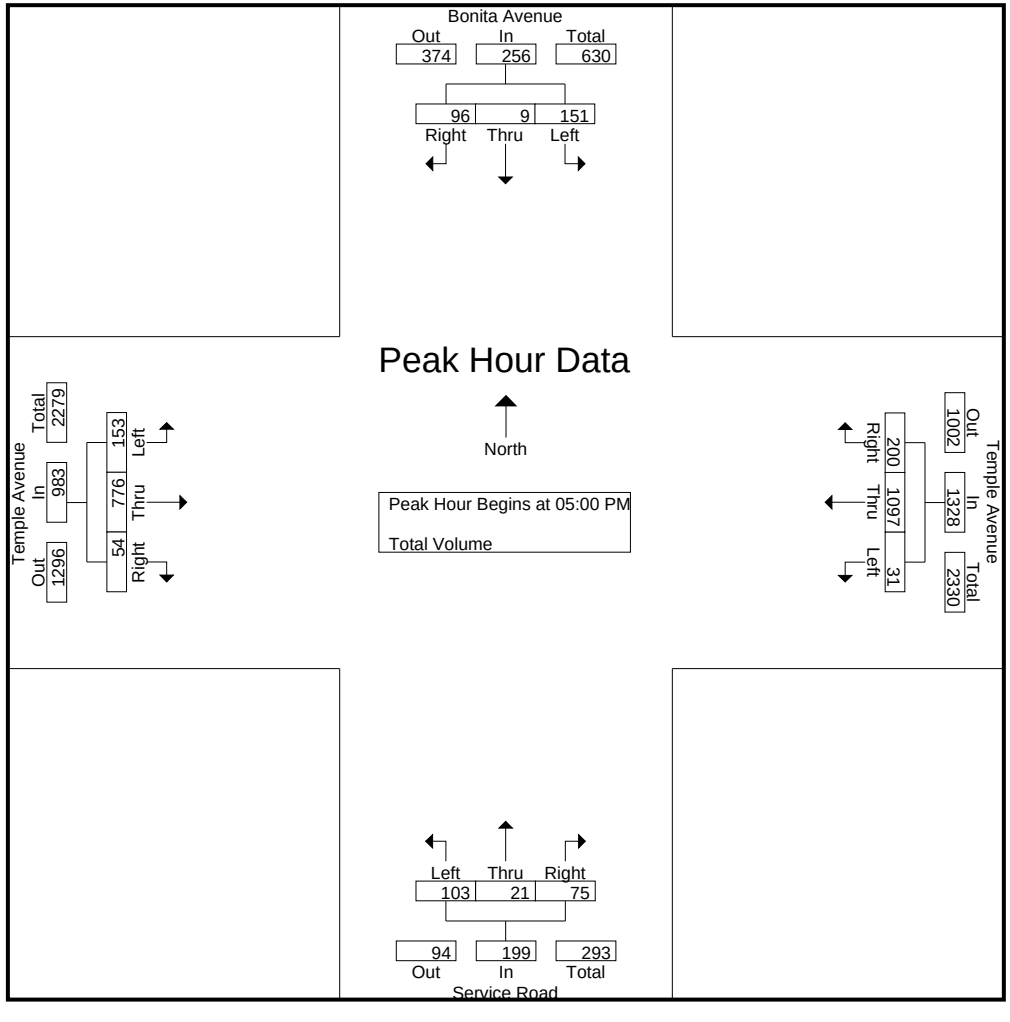
City of Walnut
N/S: Bonita Avenue
E/W: Temple Avenue
Weather: Clear

File Name : WNTBOTEPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Bonita Avenue
E/W: Temple Avenue
Weather: Clear

File Name : WNTBOTEPM
Site Code : 04215551
Start Date : 10/1/2015

	Bonita Avenue Southbound				Temple Avenue Westbound				Service Road Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				05:00 PM				04:15 PM				04:15 PM				
+0 mins.	54	4	23	81	5	228	40	273	18	5	**29**	52	**48**	210	14	272	
+15 mins.	82	**7**	**56**	145	6	284	45	335	22	**9**	27	58	32	**266**	8	306	
+30 mins.	**105**	4	55	**164**	5	285	55	345	27	6	15	48	44	264	11	**319**	
+45 mins.	51	2	24	77	**15**	**300**	**60**	**375**	**35**	6	21	**62**	34	213	**16**	263	
Total Volume	292	17	158	467	31	1097	200	1328	102	26	92	220	158	953	49	1160	
% App. Total	62.5	3.6	33.8		2.3	82.6	15.1		46.4	11.8	41.8		13.6	82.2	4.2		
PHF	.695	.607	.705	.712	.517	.914	.833	.885	.729	.722	.793	.887	.823	.896	.766	.909	

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City of Walnut
N/S: Lot F
E/W: Temple Avenue
Weather: Clear

File Name : WNTLFTEAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Lot F Driveway Southbound					Temple Avenue Westbound					Lot V Driveway Northbound					Temple Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	439	19	0	458	0	0	0	0	0	0	132	0	1	133	591
07:15 AM	0	0	0	0	0	0	388	18	0	406	0	0	0	0	0	0	249	0	0	249	655
07:30 AM	0	0	0	0	0	0	360	28	0	388	0	0	0	0	0	0	220	0	1	221	609
07:45 AM	0	0	0	0	0	0	389	61	0	450	0	0	0	0	0	2	201	0	1	204	654
Total	0	0	0	0	0	0	1576	126	0	1702	0	0	0	0	0	2	802	0	3	807	2509
08:00 AM	0	0	0	0	0	0	393	92	0	485	0	0	0	0	0	2	177	0	0	179	664
08:15 AM	0	0	0	0	0	0	283	60	0	343	0	0	0	0	0	3	182	0	0	185	528
08:30 AM	0	0	0	0	0	0	206	20	0	226	0	0	0	0	0	1	159	0	0	160	386
08:45 AM	0	0	0	0	0	0	221	37	0	258	0	0	0	0	0	0	143	0	0	143	401
Total	0	0	0	0	0	0	1103	209	0	1312	0	0	0	0	0	6	661	0	0	667	1979
Grand Total	0	0	0	0	0	0	2679	335	0	3014	0	0	0	0	0	8	1463	0	3	1474	4488
Apprch %	0	0	0	0		0	88.9	11.1	0		0	0	0	0		0.5	99.3	0	0.2		
Total %	0	0	0	0	0	0	59.7	7.5	0	67.2	0	0	0	0	0	0.2	32.6	0	0.1	32.8	

	Lot F Driveway Southbound				Temple Avenue Westbound				Lot V Driveway Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	388	18	406	0	0	0	0	0	**249**	0	**249**	655
07:30 AM	0	0	0	0	0	360	28	388	0	0	0	0	0	220	0	220	608
07:45 AM	0	0	0	0	0	389	61	450	0	0	0	0	**2**	201	0	203	653
08:00 AM	0	0	0	0	0	**393**	**92**	**485**	0	0	0	0	2	177	0	179	**664**
Total Volume	0	0	0	0	0	1530	199	1729	0	0	0	0	4	847	0	851	2580
% App. Total	0	0	0		0	88.5	11.5		0	0	0		0.5	99.5	0		
PHF	.000	.000	.000	.000	.000	.973	.541	.891	.000	.000	.000	.000	.500	.850	.000	.854	.971

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City of Walnut
N/S: Lot F
E/W: Temple Avenue
Weather: Clear

File Name : WNTLFTEAM
Site Code : 04215551
Start Date : 10/1/2015
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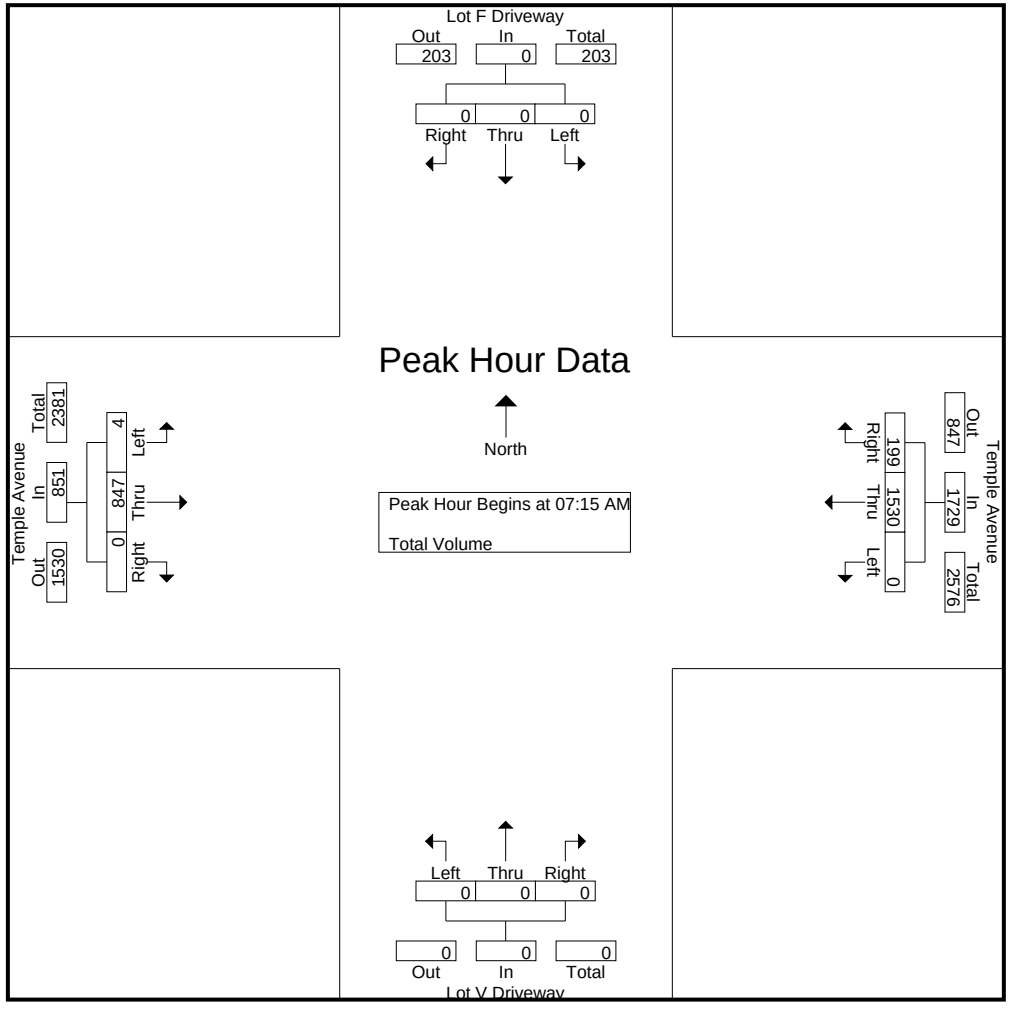

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City of Walnut
N/S: Lot F
E/W: Temple Avenue
Weather: Clear

File Name : WNTLFTEAM
Site Code : 04215551
Start Date : 10/1/2015

	Lot F Driveway Southbound				Temple Avenue Westbound				Lot V Driveway Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:15 AM				07:00 AM				07:15 AM				
+0 mins.	0	0	0	0	0	388	18	406	0	0	0	0	0	**249**	0	**249**	
+15 mins.	0	0	0	0	0	360	28	388	0	0	0	0	0	220	0	220	
+30 mins.	0	0	0	0	0	389	61	450	0	0	0	0	**2**	201	0	203	
+45 mins.	0	0	0	0	0	**393**	**92**	**485**	0	0	0	0	2	177	0	179	
Total Volume	0	0	0	0	0	1530	199	1729	0	0	0	0	4	847	0	851	
% App. Total	0	0	0		0	88.5	11.5		0	0	0		0.5	99.5	0		
PHF	.000	.000	.000	.000	.000	.973	.541	.891	.000	.000	.000	.000	.500	.850	.000	.854	

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City of Walnut
N/S: Lot F
E/W: Temple Avenue
Weather: Clear

File Name : WNTLFTEPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Lot F Driveway Southbound					Temple Avenue Westbound					Lot V Driveway Northbound					Temple Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	192	3	0	195	0	0	0	0	0	0	253	0	0	253	448
04:15 PM	0	0	0	0	0	0	226	5	2	233	0	0	0	0	0	3	358	0	0	361	594
04:30 PM	0	0	1	0	1	0	202	0	0	202	0	0	0	0	0	0	389	0	1	390	593
04:45 PM	0	0	0	0	0	0	220	2	0	222	0	0	0	0	0	0	315	0	0	315	537
Total	0	0	1	0	1	0	840	10	2	852	0	0	0	0	0	3	1315	0	1	1319	2172
05:00 PM	0	0	0	0	0	0	264	4	0	268	0	0	0	0	0	0	291	0	0	291	559
05:15 PM	0	0	0	0	0	0	328	1	0	329	0	0	0	0	0	0	245	0	1	246	575
05:30 PM	0	0	0	0	0	0	353	4	0	357	0	0	0	0	0	0	265	0	0	265	622
05:45 PM	0	0	0	0	0	0	337	5	0	342	0	0	0	0	0	0	228	0	0	228	570
Total	0	0	0	0	0	0	1282	14	0	1296	0	0	0	0	0	0	1029	0	1	1030	2326
Grand Total	0	0	1	0	1	0	2122	24	2	2148	0	0	0	0	0	3	2344	0	2	2349	4498
Apprch %	0	0	100	0		0	98.8	1.1	0.1		0	0	0	0		0.1	99.8	0	0.1		
Total %	0	0	0	0	0	0	47.2	0.5	0	47.8	0	0	0	0	0	0.1	52.1	0	0	52.2	

	Lot F Driveway Southbound				Temple Avenue Westbound				Lot V Driveway Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	264	4	268	0	0	0	0	0	**291**	0	**291**	559
05:15 PM	0	0	0	0	0	328	1	329	0	0	0	0	0	245	0	245	574
05:30 PM	0	0	0	0	0	**353**	4	**357**	0	0	0	0	0	265	0	265	**622**
05:45 PM	0	0	0	0	0	337	**5**	342	0	0	0	0	0	228	0	228	570
Total Volume	0	0	0	0	0	1282	14	1296	0	0	0	0	0	1029	0	1029	2325
% App. Total	0	0	0		0	98.9	1.1		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.908	.700	.908	.000	.000	.000	.000	.000	.884	.000	.884	.934

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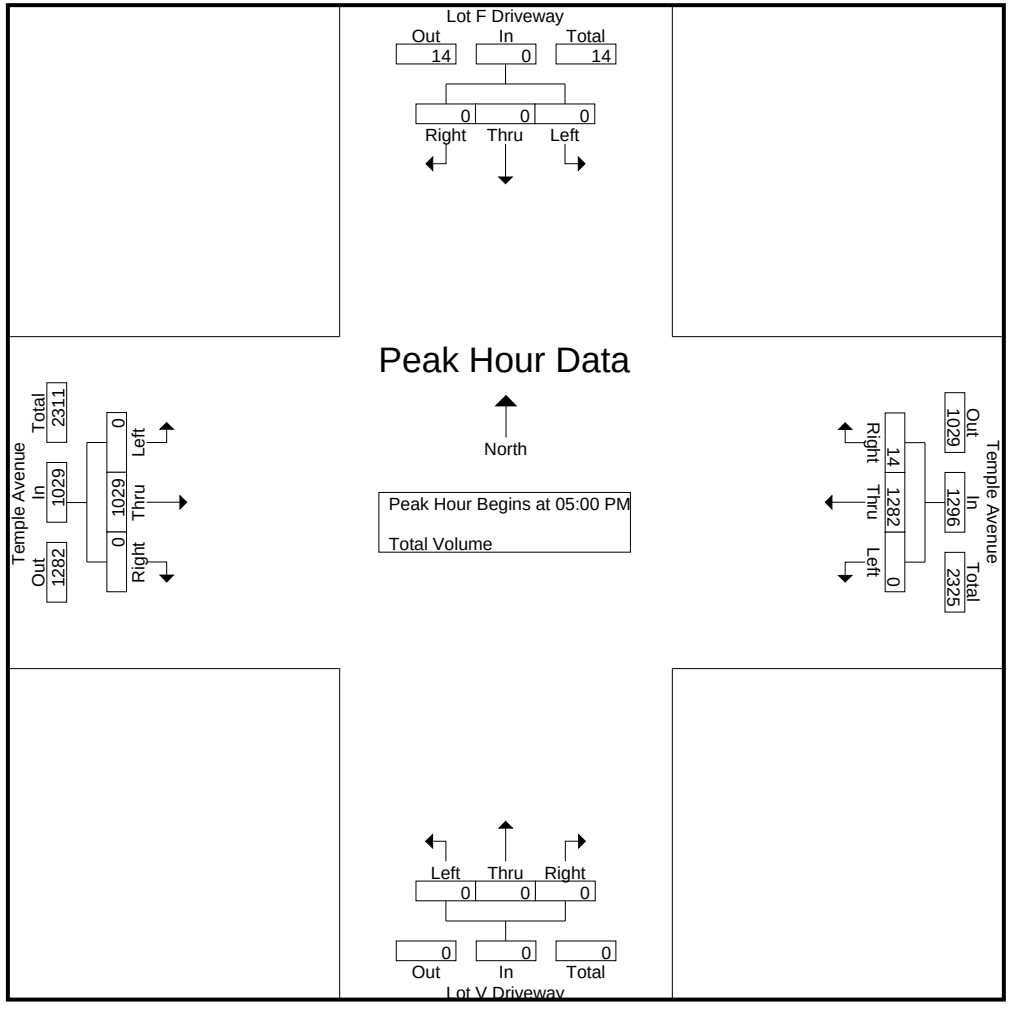
City of Walnut
N/S: Lot F
E/W: Temple Avenue
Weather: Clear

File Name : WNTLFTEPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Lot F
E/W: Temple Avenue
Weather: Clear

File Name : WNTLFTEPM
Site Code : 04215551
Start Date : 10/1/2015

	Lot F Driveway Southbound				Temple Avenue Westbound				Lot V Driveway Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				05:00 PM				04:00 PM				04:15 PM				
+0 mins.	0	0	0	0	0	264	4	268	0	0	0	0	**3**	358	0	361	
+15 mins.	0	0	0	0	0	328	1	329	0	0	0	0	0	**389**	0	**389**	
+30 mins.	0	0	**1**	**1**	0	**353**	4	**357**	0	0	0	0	0	315	0	315	
+45 mins.	0	0	0	0	0	337	**5**	342	0	0	0	0	0	291	0	291	
Total Volume	0	0	1	1	0	1282	14	1296	0	0	0	0	3	1353	0	1356	
% App. Total	0	0	100		0	98.9	1.1		0	0	0		0.2	99.8	0		
PHF	.000	.000	.250	.250	.000	.908	.700	.908	.000	.000	.000	.000	.250	.870	.000	.871	

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City of Walnut
N/S: Valley Boulevard
E/W: Temple Avenue
Weather: Clear

File Name : WNTVATEAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Valley Boulevard Southbound					Temple Avenue Westbound					Valley Boulevard Northbound					Temple Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	15	148	98	1	262	10	394	22	0	426	64	86	10	0	160	13	36	37	1	87	935
07:15 AM	19	167	62	2	250	7	319	18	0	344	58	142	11	0	211	29	57	49	0	135	940
07:30 AM	22	125	80	2	229	8	241	21	0	270	37	186	20	0	243	28	89	41	0	158	900
07:45 AM	32	120	79	0	231	9	300	28	1	338	47	117	9	0	173	27	85	28	0	140	882
Total	88	560	319	5	972	34	1254	89	1	1378	206	531	50	0	787	97	267	155	1	520	3657
08:00 AM	26	174	67	0	267	13	319	31	0	363	30	127	5	0	162	27	96	39	0	162	954
08:15 AM	10	158	64	0	232	29	272	38	0	339	56	75	11	0	142	32	73	29	0	134	847
08:30 AM	8	120	59	0	187	15	183	28	2	228	68	92	8	0	168	20	70	20	1	111	694
08:45 AM	17	87	64	0	168	14	342	36	1	393	53	87	6	0	146	23	83	17	1	124	831
Total	61	539	254	0	854	71	1116	133	3	1323	207	381	30	0	618	102	322	105	2	531	3326
Grand Total	149	1099	573	5	1826	105	2370	222	4	2701	413	912	80	0	1405	199	589	260	3	1051	6983
Apprch %	8.2	60.2	31.4	0.3		3.9	87.7	8.2	0.1		29.4	64.9	5.7	0		18.9	56	24.7	0.3		
Total %	2.1	15.7	8.2	0.1	26.1	1.5	33.9	3.2	0.1	38.7	5.9	13.1	1.1	0	20.1	2.8	8.4	3.7	0	15.1	

	Valley Boulevard Southbound				Temple Avenue Westbound				Valley Boulevard Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	19	167	62	248	7	**319**	18	344	**58**	142	11	211	**29**	57	**49**	135	938
07:30 AM	22	125	**80**	227	8	241	21	270	37	**186**	**20**	**243**	28	89	41	158	898
07:45 AM	**32**	120	79	231	9	300	28	337	47	117	9	173	27	85	28	140	881
08:00 AM	26	**174**	67	**267**	**13**	319	**31**	**363**	30	127	5	162	27	**96**	39	**162**	**954**
Total Volume	99	586	288	973	37	1179	98	1314	172	572	45	789	111	327	157	595	3671
% App. Total	10.2	60.2	29.6		2.8	89.7	7.5		21.8	72.5	5.7		18.7	55	26.4		
PHF	.773	.842	.900	.911	.712	.924	.790	.905	.741	.769	.563	.812	.957	.852	.801	.918	.962

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City of Walnut
N/S: Valley Boulevard
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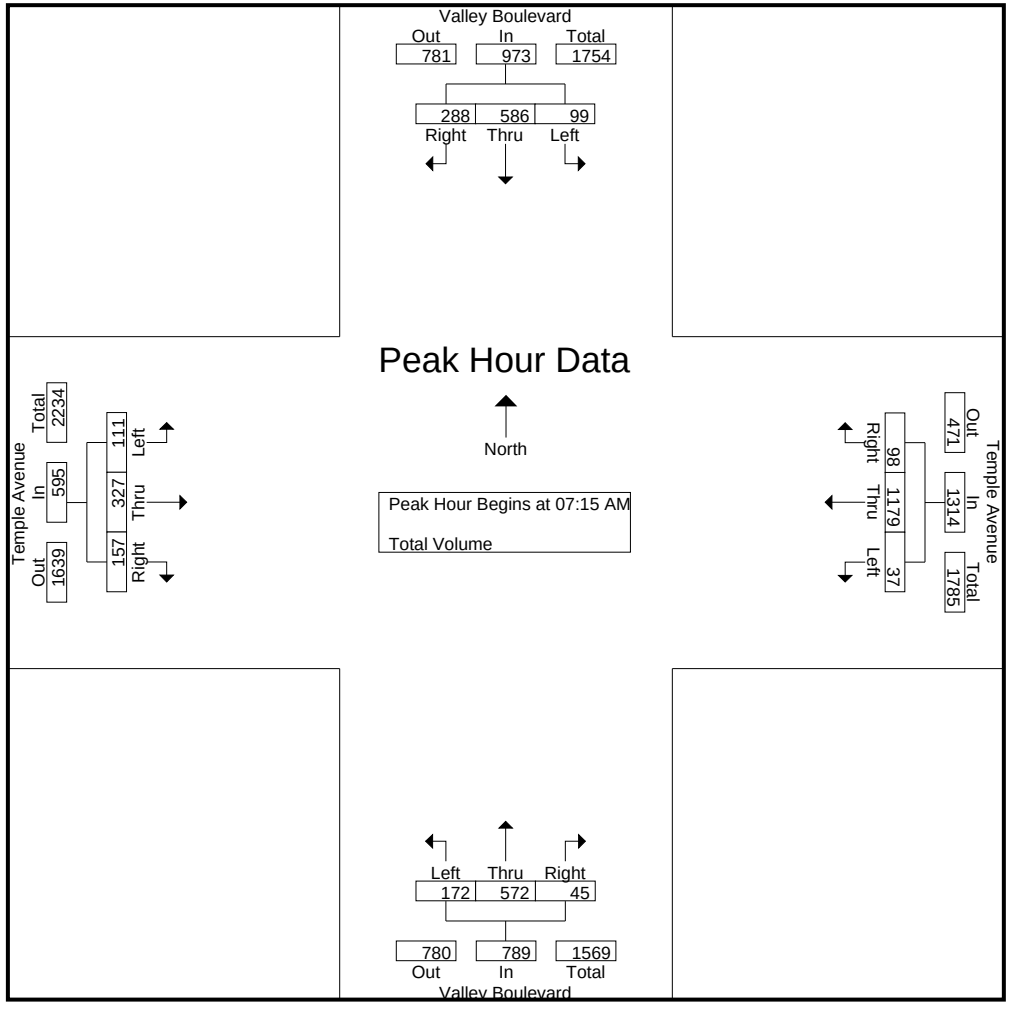
File Name : WNTVATEAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: Valley Boulevard
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Weather: Clear

File Name : WNTVATEAM
Site Code : 04215551
Start Date : 10/1/2015

	Valley Boulevard Southbound				Temple Avenue Westbound				Valley Boulevard Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:00 AM				07:15 AM				07:15 AM				
+0 mins.	19	167	62	248	**10**	**394**	22	**426**	**58**	142	11	211	**29**	57	**49**	135	
+15 mins.	22	125	**80**	227	7	319	18	344	37	**186**	**20**	**243**	28	89	41	158	
+30 mins.	**32**	120	79	231	8	241	21	270	47	117	9	173	27	85	28	140	
+45 mins.	26	**174**	67	**267**	9	300	**28**	337	30	127	5	162	27	**96**	39	**162**	
Total Volume	99	586	288	973	34	1254	89	1377	172	572	45	789	111	327	157	595	
% App. Total	10.2	60.2	29.6		2.5	91.1	6.5		21.8	72.5	5.7		18.7	55	26.4		
PHF	.773	.842	.900	.911	.850	.796	.795	.808	.741	.769	.563	.812	.957	.852	.801	.918	

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City of Walnut
N/S: Valley Boulevard
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File Name : WNTVATEPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Valley Boulevard Southbound					Temple Avenue Westbound					Valley Boulevard Northbound					Temple Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	49	90	29	0	168	18	163	17	0	198	35	144	8	0	187	51	194	42	0	287	840
04:15 PM	51	71	46	0	168	20	166	31	2	219	33	162	18	0	213	45	237	41	0	323	923
04:30 PM	54	96	31	4	185	19	146	27	0	192	53	203	11	0	267	51	286	39	5	381	1025
04:45 PM	54	97	28	0	179	21	182	33	0	236	40	155	15	0	210	66	328	59	1	454	1079
Total	208	354	134	4	700	78	657	108	2	845	161	664	52	0	877	213	1045	181	6	1445	3867
05:00 PM	36	113	32	0	181	16	139	26	0	181	57	234	17	1	309	37	184	46	0	267	938
05:15 PM	36	193	49	1	279	15	186	30	0	231	65	206	13	0	284	25	206	46	3	280	1074
05:30 PM	34	147	49	0	230	32	177	23	2	234	72	180	18	0	270	35	245	63	0	343	1077
05:45 PM	48	74	37	1	160	10	209	32	0	251	40	157	15	0	212	26	305	80	3	414	1037
Total	154	527	167	2	850	73	711	111	2	897	234	777	63	1	1075	123	940	235	6	1304	4126
Grand Total	362	881	301	6	1550	151	1368	219	4	1742	395	1441	115	1	1952	336	1985	416	12	2749	7993
Apprch %	23.4	56.8	19.4	0.4		8.7	78.5	12.6	0.2		20.2	73.8	5.9	0.1		12.2	72.2	15.1	0.4		
Total %	4.5	11	3.8	0.1	19.4	1.9	17.1	2.7	0.1	21.8	4.9	18	1.4	0	24.4	4.2	24.8	5.2	0.2	34.4	

	Valley Boulevard Southbound				Temple Avenue Westbound				Valley Boulevard Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**54**	97	28	179	21	182	**33**	**236**	40	155	15	210	**66**	**328**	59	**453**	**1078**
05:00 PM	36	113	32	181	16	139	26	181	57	**234**	17	**308**	37	184	46	267	937
05:15 PM	36	**193**	**49**	**278**	15	**186**	30	231	65	206	13	284	25	206	46	277	1070
05:30 PM	34	147	49	230	**32**	177	23	232	**72**	180	**18**	270	35	245	**63**	343	1075
Total Volume	160	550	158	868	84	684	112	880	234	775	63	1072	163	963	214	1340	4160
% App. Total	18.4	63.4	18.2		9.5	77.7	12.7		21.8	72.3	5.9		12.2	71.9	16		
PHF	.741	.712	.806	.781	.656	.919	.848	.932	.813	.828	.875	.870	.617	.734	.849	.740	.965

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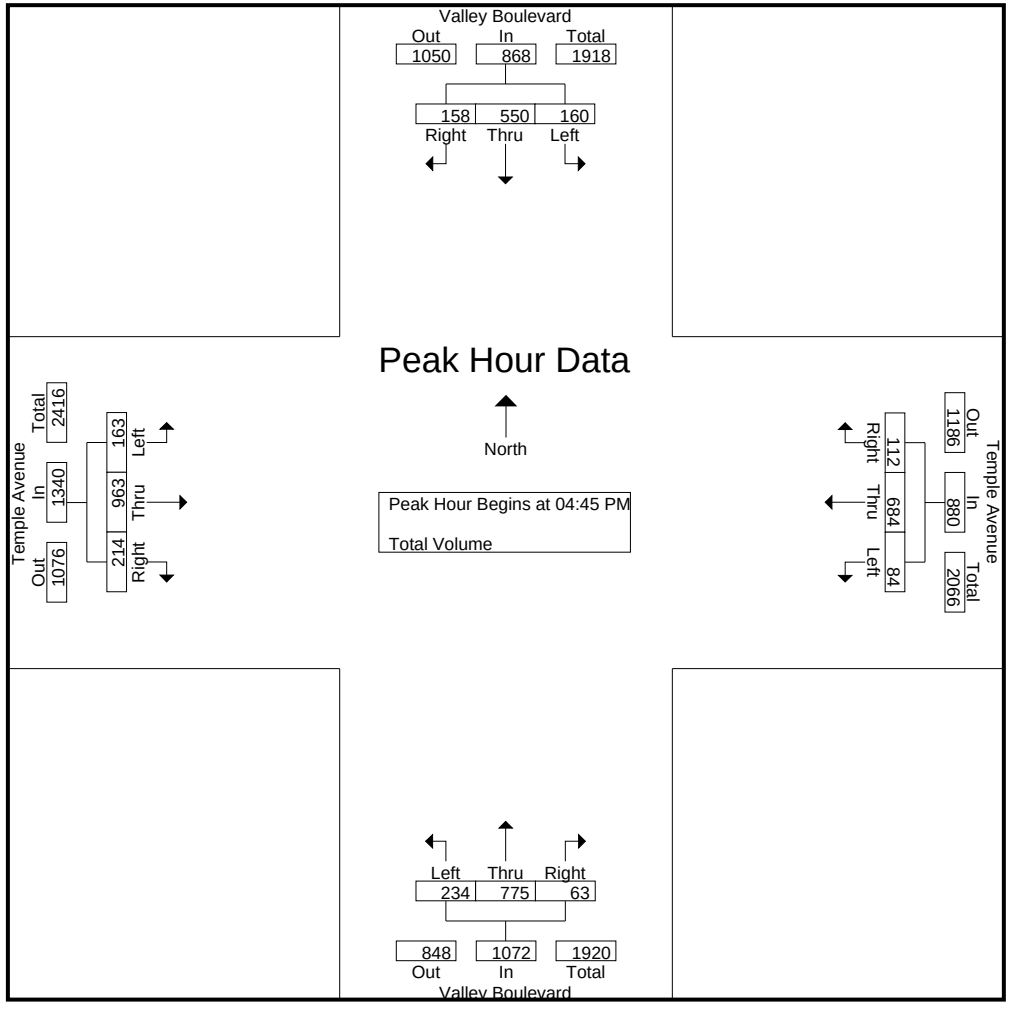
City of Walnut
N/S: Valley Boulevard
E/W: Temple Avenue
Weather: Clear

File Name : WNTVATEPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
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Start Date : 10/1/2015

	Valley Boulevard Southbound				Temple Avenue Westbound				Valley Boulevard Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				05:00 PM				05:00 PM				04:00 PM				
+0 mins.	**54**	97	28	179	16	139	26	181	57	**234**	17	**308**	51	194	42	287	
+15 mins.	36	113	32	181	15	186	30	231	65	206	13	284	45	237	41	323	
+30 mins.	36	**193**	**49**	**278**	**32**	177	23	232	**72**	180	**18**	270	51	286	39	376	
+45 mins.	34	147	49	230	10	**209**	**32**	**251**	40	157	15	212	**66**	**328**	**59**	**453**	
Total Volume	160	550	158	868	73	711	111	895	234	777	63	1074	213	1045	181	1439	
% App. Total	18.4	63.4	18.2		8.2	79.4	12.4		21.8	72.3	5.9		14.8	72.6	12.6		
PHF	.741	.712	.806	.781	.570	.850	.867	.891	.813	.830	.875	.872	.807	.796	.767	.794	

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City of Walnut
N/S: SR-57 Southbound Ramps
E/W: Temple Avenue
Weather: Clear

File Name : WNT57STEAM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	SR-57 Southbound Ramps Southbound					Temple Avenue Westbound					Driveway Northbound					Temple Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	141	0	246	0	387	1	452	12	8	473	0	0	1	0	1	0	120	0	0	120	981
07:15 AM	143	0	186	0	329	2	319	7	9	337	0	0	1	0	1	0	101	4	0	105	772
07:30 AM	159	0	145	0	304	1	209	8	16	234	0	0	0	0	0	0	160	4	0	164	702
07:45 AM	161	3	168	0	332	3	245	16	31	295	0	0	0	0	0	0	160	2	0	162	789
Total	604	3	745	0	1352	7	1225	43	64	1339	0	0	2	0	2	0	541	10	0	551	3244
08:00 AM	123	3	185	0	311	1	266	16	11	294	0	0	0	0	0	0	147	3	0	150	755
08:15 AM	151	3	186	0	340	2	270	7	7	286	0	0	0	0	0	0	142	8	0	150	776
08:30 AM	128	2	197	0	327	1	298	17	7	323	0	0	0	0	0	0	131	3	0	134	784
08:45 AM	113	3	200	0	316	1	308	23	7	339	0	0	1	0	1	0	122	3	0	125	781
Total	515	11	768	0	1294	5	1142	63	32	1242	0	0	1	0	1	0	542	17	0	559	3096
Grand Total	1119	14	1513	0	2646	12	2367	106	96	2581	0	0	3	0	3	0	1083	27	0	1110	6340
Apprch %	42.3	0.5	57.2	0		0.5	91.7	4.1	3.7		0	0	100	0		0	97.6	2.4	0		
Total %	17.6	0.2	23.9	0	41.7	0.2	37.3	1.7	1.5	40.7	0	0	0	0	0	0	17.1	0.4	0	17.5	

	SR-57 Southbound Ramps Southbound				Temple Avenue Westbound				Driveway Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	141	0	**246**	**387**	1	**452**	12	**465**	0	0	**1**	**1**	0	120	0	120	**973**
07:15 AM	143	0	186	329	2	319	7	328	0	0	1	1	0	101	**4**	105	763
07:30 AM	159	0	145	304	1	209	8	218	0	0	0	0	0	**160**	4	**164**	686
07:45 AM	**161**	**3**	168	332	**3**	245	**16**	264	0	0	0	0	0	160	2	162	758
Total Volume	604	3	745	1352	7	1225	43	1275	0	0	2	2	0	541	10	551	3180
% App. Total	44.7	0.2	55.1		0.5	96.1	3.4		0	0	100		0	98.2	1.8		
PHF	.938	.250	.757	.873	.583	.678	.672	.685	.000	.000	.500	.500	.000	.845	.625	.840	.817

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File Name : WNT57STEAM
Site Code : 04215551
Start Date : 10/1/2015
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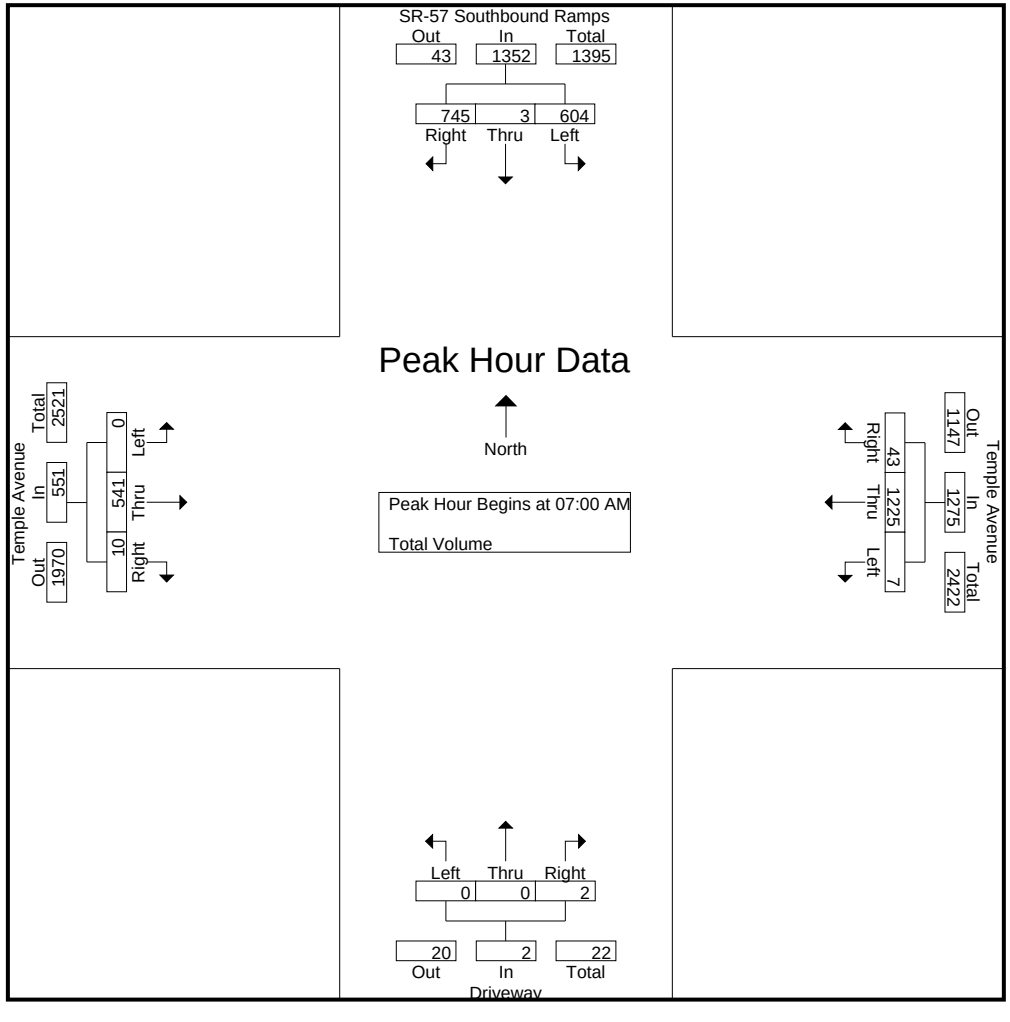

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City of Walnut
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Site Code : 04215551
Start Date : 10/1/2015

	SR-57 Southbound Ramps Southbound				Temple Avenue Westbound				Driveway Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:30 AM				
+0 mins.	141	0	**246**	**387**	1	**452**	12	**465**	0	0	**1**	**1**	0	**160**	4	**164**	
+15 mins.	143	0	186	329	2	319	7	328	0	0	1	1	0	160	2	162	
+30 mins.	159	0	145	304	1	209	8	218	0	0	0	0	0	147	3	150	
+45 mins.	**161**	**3**	168	332	**3**	245	**16**	264	0	0	0	0	0	142	**8**	150	
Total Volume	604	3	745	1352	7	1225	43	1275	0	0	2	2	0	609	17	626	
% App. Total	44.7	0.2	55.1		0.5	96.1	3.4		0	0	100		0	97.3	2.7		
PHF	.938	.250	.757	.873	.583	.678	.672	.685	.000	.000	.500	.500	.000	.952	.531	.954	

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Start Date : 10/1/2015

Groups Printed- Total Volume

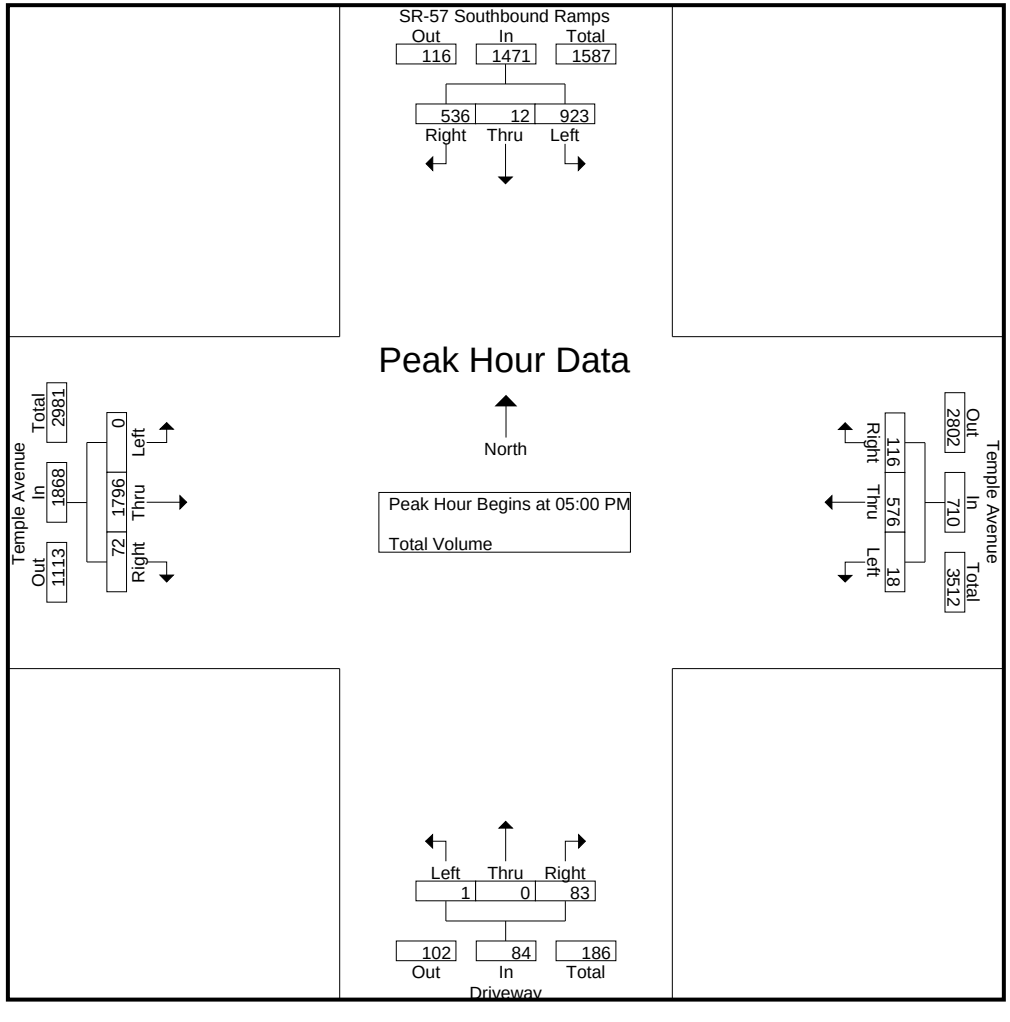
	SR-57 Southbound Ramps Southbound					Temple Avenue Westbound					Driveway Northbound					Temple Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Left	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	173	2	122	0	297	1	125	40	14	180	0	0	10	0	10	0	375	0	0	375	862
04:15 PM	167	3	137	0	307	2	126	27	6	161	0	0	8	0	8	0	437	4	0	441	917
04:30 PM	180	3	97	0	280	2	147	22	10	181	0	0	18	0	18	0	498	13	0	511	990
04:45 PM	191	2	128	0	321	0	143	26	8	177	0	0	13	0	13	0	514	10	0	524	1035
Total	711	10	484	0	1205	5	541	115	38	699	0	0	49	0	49	0	1824	27	0	1851	3804
05:00 PM	207	1	117	0	325	5	145	37	10	197	0	0	16	0	16	0	445	15	0	460	998
05:15 PM	244	5	137	0	386	5	130	32	12	179	0	0	19	0	19	0	441	16	0	457	1041
05:30 PM	246	4	145	0	395	2	162	31	13	208	1	0	20	0	21	0	437	24	0	461	1085
05:45 PM	226	2	137	0	365	6	139	16	6	167	0	0	28	0	28	0	473	17	0	490	1050
Total	923	12	536	0	1471	18	576	116	41	751	1	0	83	0	84	0	1796	72	0	1868	4174
Grand Total	1634	22	1020	0	2676	23	1117	231	79	1450	1	0	132	0	133	0	3620	99	0	3719	7978
Apprch %	61.1	0.8	38.1	0		1.6	77	15.9	5.4		0.8	0	99.2	0		0	97.3	2.7	0		
Total %	20.5	0.3	12.8	0	33.5	0.3	14	2.9	1	18.2	0	0	1.7	0	1.7	0	45.4	1.2	0	46.6	

	SR-57 Southbound Ramps Southbound				Temple Avenue Westbound				Driveway Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	207	1	117	325	5	145	**37**	187	0	0	16	16	0	445	15	460	988
05:15 PM	244	**5**	137	386	5	130	32	167	0	0	19	19	0	441	16	457	1029
05:30 PM	**246**	4	**145**	**395**	2	**162**	31	**195**	**1**	0	20	21	0	437	**24**	461	**1072**
05:45 PM	226	2	137	365	**6**	139	16	161	0	0	**28**	**28**	0	**473**	17	**490**	1044
Total Volume	923	12	536	1471	18	576	116	710	1	0	83	84	0	1796	72	1868	4133
% App. Total	62.7	0.8	36.4		2.5	81.1	16.3		1.2	0	98.8		0	96.1	3.9		
PHF	.938	.600	.924	.931	.750	.889	.784	.910	.250	.000	.741	.750	.000	.949	.750	.953	.964

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

City of Walnut
N/S: SR-57 Southbound Ramps
E/W: Temple Avenue
Weather: Clear

File Name : WNT57STEPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
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File Name : WNT57STEPM
Site Code : 04215551
Start Date : 10/1/2015

	SR-57 Southbound Ramps Southbound				Temple Avenue Westbound				Driveway Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				04:45 PM				05:00 PM				04:30 PM				
+0 mins.	207	1	117	325	0	143	26	169	0	0	16	16	0	498	13	511	
+15 mins.	244	**5**	137	386	**5**	145	**37**	187	0	0	19	19	0	**514**	10	**524**	
+30 mins.	**246**	4	**145**	**395**	5	130	32	167	**1**	0	20	21	0	445	15	460	
+45 mins.	226	2	137	365	2	**162**	31	**195**	0	0	**28**	**28**	0	441	**16**	457	
Total Volume	923	12	536	1471	12	580	126	718	1	0	83	84	0	1898	54	1952	
% App. Total	62.7	0.8	36.4		1.7	80.8	17.5		1.2	0	98.8		0	97.2	2.8		
PHF	.938	.600	.924	.931	.600	.895	.851	.921	.250	.000	.741	.750	.000	.923	.844	.931	

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City of Walnut
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E/W: Temple Avenue
Weather: Clear

File Name : WNT57NTEAM
Site Code : 04215551
Start Date : 10/1/2015

Groups Printed- Total Volume

	Temple Avenue Westbound				SR-57 Northbound Ramps Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	U-Turns	App. Total	Left	Right	U-Turns	App. Total	Thru	Right	U-Turns	App. Total	Int. Total
07:00 AM	0	534	0	534	161	41	0	202	178	64	0	242	978
07:15 AM	0	396	0	396	101	70	0	171	199	44	1	244	811
07:30 AM	0	335	0	335	65	62	0	127	216	82	0	298	760
07:45 AM	0	334	0	334	58	101	0	159	213	86	0	299	792
Total	0	1599	0	1599	385	274	0	659	806	276	1	1083	3341
08:00 AM	0	350	0	350	74	91	0	165	200	70	0	270	785
08:15 AM	0	361	0	361	92	67	0	159	217	78	0	295	815
08:30 AM	0	335	0	335	94	74	0	168	202	59	0	261	764
08:45 AM	0	328	0	328	150	59	0	209	180	54	0	234	771
Total	0	1374	0	1374	410	291	0	701	799	261	0	1060	3135
Grand Total	0	2973	0	2973	795	565	0	1360	1605	537	1	2143	6476
Apprch %	0	100	0		58.5	41.5	0		74.9	25.1	0		
Total %	0	45.9	0	45.9	12.3	8.7	0	21	24.8	8.3	0	33.1	

	Temple Avenue Westbound			SR-57 Northbound Ramps Northbound			Temple Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	**534**	**534**	**161**	41	**202**	178	64	242	**978**
07:15 AM	0	396	396	101	70	171	199	44	243	810
07:30 AM	0	335	335	65	62	127	**216**	82	298	760
07:45 AM	0	334	334	58	**101**	159	213	**86**	**299**	792
Total Volume	0	1599	1599	385	274	659	806	276	1082	3340
% App. Total	0	100		58.4	41.6		74.5	25.5		
PHF	.000	.749	.749	.598	.678	.816	.933	.802	.905	.854

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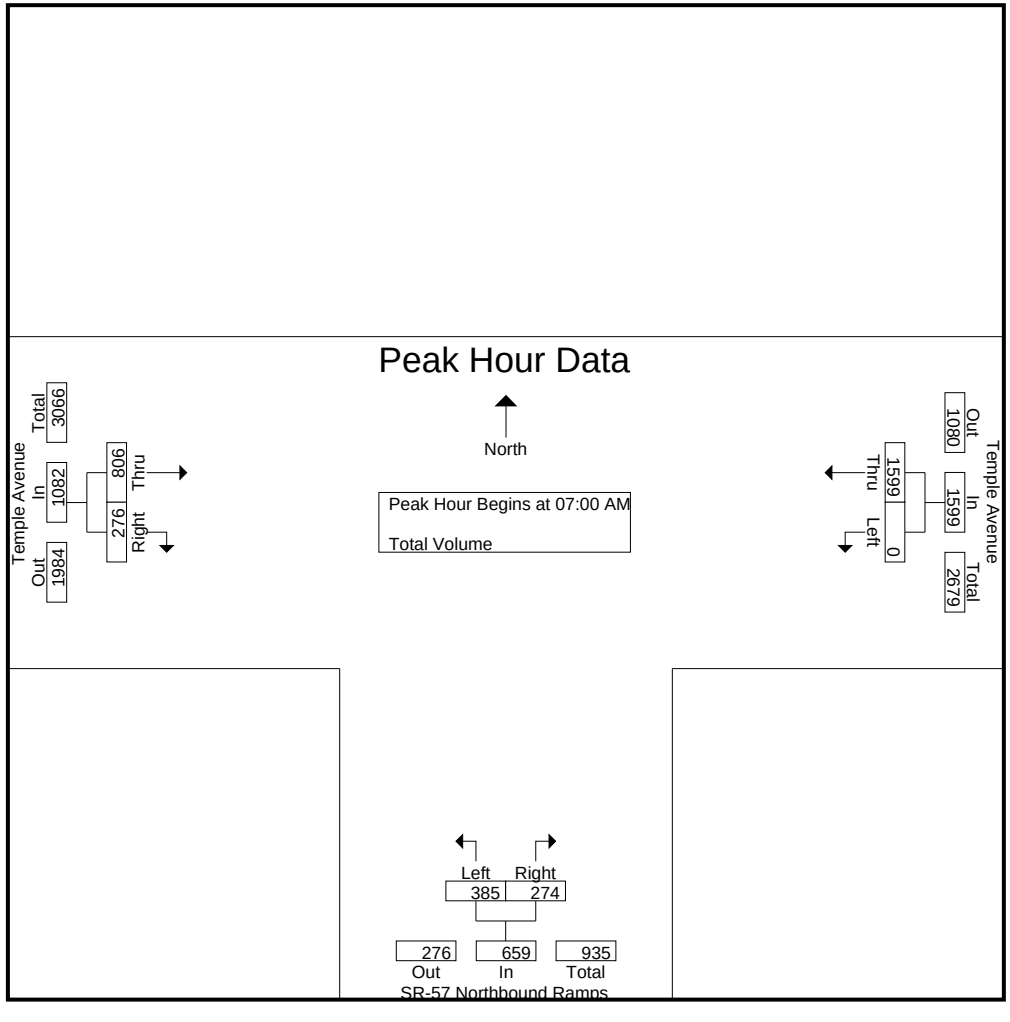
Site Code : 04215551
Start Date : 10/1/2015
Page No : 2



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City of Walnut
N/S: SR-57 Northbound Ramps
E/W: Temple Avenue
Weather: Clear

File Name : WNT57NTEAM
Site Code : 04215551
Start Date : 10/1/2015

	Temple Avenue Westbound			SR-57 Northbound Ramps Northbound			Temple Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Each Approach Begins at:										
	07:00 AM			08:00 AM			07:30 AM			
+0 mins.	0	**534**	**534**	74	**91**	165	216	82	298	
+15 mins.	0	396	396	92	67	159	213	**86**	**299**	
+30 mins.	0	335	335	94	74	168	200	70	270	
+45 mins.	0	334	334	**150**	59	**209**	**217**	78	295	
Total Volume	0	1599	1599	410	291	701	846	316	1162	
% App. Total	0	100		58.5	41.5		72.8	27.2		
PHF	.000	.749	.749	.683	.799	.839	.975	.919	.972	

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File Name : WNT57NTEPM
Site Code : 04215551
Start Date : 10/1/2015
Page No : 1

Groups Printed- Total Volume

	Temple Avenue Westbound				SR-57 Northbound Ramps Northbound				Temple Avenue Eastbound				
Start Time	Left	Thru	U-Turns	App. Total	Left	Right	U-Turns	App. Total	Thru	Right	U-Turns	App. Total	Int. Total
04:00 PM	0	222	0	222	32	58	0	90	407	145	0	552	864
04:15 PM	0	214	0	214	33	57	0	90	386	195	0	581	885
04:30 PM	0	185	0	185	42	76	0	118	428	205	0	633	936
04:45 PM	0	210	0	210	28	69	0	97	510	164	0	674	981
Total	0	831	0	831	135	260	0	395	1731	709	0	2440	3666
05:00 PM	0	246	0	246	24	61	0	85	485	156	0	641	972
05:15 PM	0	253	0	253	36	64	0	100	542	142	0	684	1037
05:30 PM	0	255	0	255	35	83	0	118	525	168	0	693	1066
05:45 PM	0	215	0	215	28	81	0	109	545	155	0	700	1024
Total	0	969	0	969	123	289	0	412	2097	621	0	2718	4099
Grand Total	0	1800	0	1800	258	549	0	807	3828	1330	0	5158	7765
Apprch %	0	100	0		32	68	0		74.2	25.8	0		
Total %	0	23.2	0	23.2	3.3	7.1	0	10.4	49.3	17.1	0	66.4	

	Temple Avenue Westbound			SR-57 Northbound Ramps Northbound			Temple Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	246	246	24	61	85	485	156	641	972
05:15 PM	0	253	253	**36**	64	100	542	142	684	1037
05:30 PM	0	**255**	**255**	35	**83**	**118**	525	**168**	693	**1066**
05:45 PM	0	215	215	28	81	109	**545**	155	**700**	1024
Total Volume	0	969	969	123	289	412	2097	621	2718	4099
% App. Total	0	100		29.9	70.1		77.2	22.8		
PHF	.000	.950	.950	.854	.870	.873	.962	.924	.971	.961

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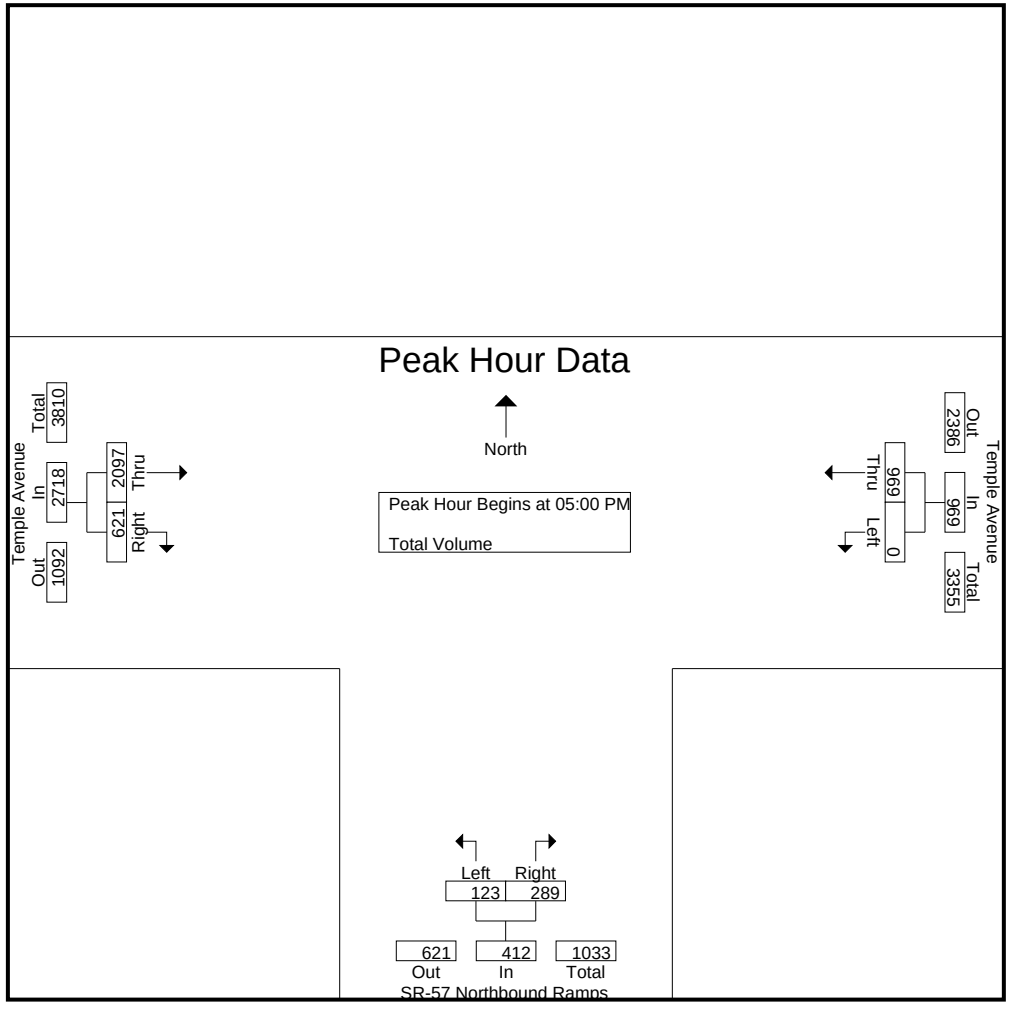

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City of Walnut
N/S: SR-57 Northbound Ramps
E/W: Temple Avenue
Weather: Clear

File Name : WNT57NTEPM
Site Code : 04215551
Start Date : 10/1/2015

	Temple Avenue Westbound			SR-57 Northbound Ramps Northbound			Temple Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Each Approach Begins at:										
	05:00 PM			05:00 PM			05:00 PM			
+0 mins.	0	246	246	24	61	85	485	156	641	
+15 mins.	0	253	253	**36**	64	100	542	142	684	
+30 mins.	0	**255**	**255**	35	**83**	**118**	525	**168**	693	
+45 mins.	0	215	215	28	81	109	**545**	155	**700**	
Total Volume	0	969	969	123	289	412	2097	621	2718	
% App. Total	0	100		29.9	70.1		77.2	22.8		
PHF	.000	.950	.950	.854	.870	.873	.962	.924	.971	

APPENDIX B:
LOS CALCULATION SHEETS

EXISTING CONDITIONS

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.780
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:		Include				Include				Ovl				Include		
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0	1	0	0	1! 0	0	1	0	2	0 1	1	0	1	1 0
Volume Module:																
Base Vol:	594	4	140		18	10	12		4	1170	436		78	1018	3	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	594	4	140		18	10	12		4	1170	436		78	1018	3	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	594	4	140		18	10	12		4	1170	436		78	1018	3	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92	
PHF Volume:	645	4	152		20	11	13		4	1270	473		85	1105	3	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	645	4	152		20	11	13		4	1270	473		85	1105	3	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	645	4	152		20	11	13		4	1270	473		85	1105	3	
OvlAdjVol:											149					
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.99	0.01	1.00		0.45	0.25	0.30		1.00	2.00	1.00		1.00	1.99	0.01	
Final Sat.:	3179	21	1600		720	400	480		1600	3200	1600		1600	3191	9	
Capacity Analysis Module:																
Vol/Sat:	0.20	0.20	0.10		0.03	0.03	0.03		0.00	0.40	0.30		0.05	0.35	0.35	
OvlAdjV/S:											0.09					
Crit Moves:	****						****			****			****			

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.726
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:		Include				Include				Include				Include		
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0	1	0	1	0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	268	27	102		22	45	19		7	1045	292		53	790	14	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	268	27	102		22	45	19		7	1045	292		53	790	14	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	268	27	102		22	45	19		7	1045	292		53	790	14	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94	
PHF Volume:	287	29	109		24	48	20		7	1118	312		57	845	15	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	287	29	109		24	48	20		7	1118	312		57	845	15	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	287	29	109		24	48	20		7	1118	312		57	845	15	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.82	0.18	1.00		0.33	0.67	1.00		1.00	1.56	0.44		1.00	2.00	1.00	
Final Sat.:	2907	293	1600		525	1075	1600		1600	2501	699		1600	3200	1600	
Capacity Analysis Module:																
Vol/Sat:	0.10	0.10	0.07		0.04	0.04	0.01		0.00	0.45	0.45		0.04	0.26	0.01	
Crit Moves:	****				****					****			****			

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.605
Loss Time (sec):	6	Average Delay (sec/veh):	23.4
Optimal Cycle:	33	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	0	1 0	0 1	0	0 1!	0 0
Volume Module:												
Base Vol:	144	1051	17	0	812	140	437	6	310	12	3	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	144	1051	17	0	812	140	437	6	310	12	3	8
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	144	1051	17	0	812	140	437	6	310	12	3	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	146	1063	17	0	821	142	442	6	314	12	3	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	146	1063	17	0	821	142	442	6	314	12	3	8
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	146	1063	17	0	821	142	442	6	314	12	3	8
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	1.00	0.95	0.85	0.95	0.95	0.85	0.93	0.93	0.93
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.99	0.01	1.00	0.52	0.13	0.35
Final Sat.:	1805	3610	1615	1900	3610	1615	1786	25	1615	921	230	614
Capacity Analysis Module:												
Vol/Sat:	0.08	0.29	0.01	0.00	0.23	0.09	0.25	0.25	0.19	0.01	0.01	0.01
Crit Moves:	****				****			****			****	
Green/Cycle:	0.13	0.51	0.51	0.00	0.38	0.38	0.41	0.41	0.41	0.02	0.02	0.02
Volume/Cap:	0.61	0.58	0.02	0.00	0.61	0.23	0.61	0.61	0.47	0.61	0.61	0.61
Delay/Veh:	45.2	17.5	12.2	0.0	26.0	21.5	24.7	24.7	22.2	73.0	73.0	73.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.2	17.5	12.2	0.0	26.0	21.5	24.7	24.7	22.2	73.0	73.0	73.0
LOS by Move:	D	B	B	A	C	C	C	C	C	E	E	E
HCM2kAvgQ:	4	12	0	0	11	3	11	11	7	2	2	2

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

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Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.866
Loss Time (sec):	6	Average Delay (sec/veh):	28.5
Optimal Cycle:	77	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 0	0	0 1	1 0	1	0 1!	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	41	873	0	0	927	223	349	0	533	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	873	0	0	927	223	349	0	533	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	873	0	0	927	223	349	0	533	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	43	925	0	0	982	236	370	0	565	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	925	0	0	982	236	370	0	565	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	925	0	0	982	236	370	0	565	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.92	0.92	0.89	1.00	0.89	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.61	0.39	1.25	0.00	0.75	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2826	680	2112	0	1276	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.26	0.00	0.00	0.35	0.35	0.18	0.00	0.44	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.03	0.43	0.00	0.00	0.40	0.40	0.51	0.00	0.51	0.00	0.00	0.00
Volume/Cap:	0.87	0.60	0.00	0.00	0.87	0.87	0.34	0.00	0.87	0.00	0.00	0.00
Delay/Veh:	127.3	22.5	0.0	0.0	33.4	33.4	14.6	0.0	29.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	127.3	22.5	0.0	0.0	33.4	33.4	14.6	0.0	29.0	0.0	0.0	0.0
LOS by Move:	F	C	A	A	C	C	B	A	C	A	A	A
HCM2kAvgQ:	3	12	0	0	19	19	5	0	23	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.944
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	128	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 0	1 0	1	0 1	0 1
Volume Module:												
Base Vol:	130	1183	442	221	1365	214	158	93	244	115	48	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1183	442	221	1365	214	158	93	244	115	48	76
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	130	1183	442	221	1365	214	158	93	244	115	48	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	139	1264	472	236	1458	229	169	99	261	123	51	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	1264	472	236	1458	229	169	99	261	123	51	81
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	139	1264	472	236	1458	229	169	99	261	123	51	81
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.28	0.72	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	442	1158	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.39	0.30	0.15	0.46	0.14	0.11	0.23	0.23	0.08	0.03	0.05
Crit Moves:	****				****			****		****		

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.900
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	236	1291	628	412	1070	187	284	757	153	110	446	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	236	1291	628	412	1070	187	284	757	153	110	446	185
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	236	1291	628	412	1070	187	284	757	153	110	446	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	245	1338	651	427	1109	194	294	784	159	114	462	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	1338	651	427	1109	194	294	784	159	114	462	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	245	1338	651	427	1109	194	294	784	159	114	462	192
OvlAdjVol:			587						23			0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.55	0.45	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	4086	714	2880	3200	1600	2880	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.28	0.41	0.15	0.27	0.27	0.10	0.25	0.10	0.04	0.14	0.12
OvlAdjV/S:			0.37						0.01			0.00
Crit Moves:			****	****				****		****		

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.065
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	159	1684	70	1	1120	277	407	76	416	113	108	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	1684	70	1	1120	277	407	76	416	113	108	12
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	159	1684	70	1	1120	277	407	76	416	113	108	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	184	1945	81	1	1293	320	470	88	480	130	125	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	1945	81	1	1293	320	470	88	480	130	125	14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	1945	81	1	1293	320	470	88	480	130	125	14
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.69	0.31	1.00	1.46	1.39	0.15
Final Sat.:	1600	3200	1600	1600	3200	1600	2696	504	1600	2331	2222	247
Capacity Analysis Module:												
Vol/Sat:	0.11	0.61	0.05	0.00	0.40	0.20	0.17	0.17	0.30	0.06	0.06	0.06
OvlAdjV/S:						0.00						
Crit Moves:		****		****					****			****

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.868
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	86	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	291	1364	364	207	938	396	401	500	169	167	1116	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	291	1364	364	207	938	396	401	500	169	167	1116	139
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	291	1364	364	207	938	396	401	500	169	167	1116	139
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	307	1439	0	218	989	0	423	527	0	176	1177	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	307	1439	0	218	989	0	423	527	0	176	1177	147
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	307	1439	0	218	989	0	423	527	0	176	1177	147
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	2880	4800	1600	2880	4800	1600	2880	4800	1600	2880	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.30	0.00	0.08	0.21	0.00	0.15	0.11	0.00	0.06	0.25	0.09
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.859
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	83	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 0	0	0 3	0 1	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	116	2253	0	0	1002	107	39	0	36	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	116	2253	0	0	1002	107	39	0	36	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	2253	0	0	1002	107	39	0	36	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	123	2382	0	0	1059	113	41	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	2382	0	0	1059	113	41	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	123	2382	0	0	1059	113	41	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	4800	1600	2880	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.74	0.00	0.00	0.22	0.07	0.01	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****			****			****				

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.846
Loss Time (sec):	10	Average Delay (sec/veh):	22.8
Optimal Cycle:	84	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	1 1	0	1 0	0 1	0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	1796	320	349	679	2	0	1	1	262	0	572
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1796	320	349	679	2	0	1	1	262	0	572
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1796	320	349	679	2	0	1	1	262	0	572
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	1907	340	370	721	2	0	1	1	278	0	607
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1907	340	370	721	2	0	1	1	278	0	607
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1907	340	370	721	2	0	1	1	278	0	607
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	0.95	1.00	0.93	0.93	0.88	1.00	0.88
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.50	0.50	1.31	0.00	1.69
Final Sat.:	1900	3610	1615	3502	3599	11	1900	879	879	2206	0	2830
Capacity Analysis Module:												
Vol/Sat:	0.00	0.53	0.21	0.11	0.20	0.00	0.00	0.00	0.00	0.13	0.00	0.21
Crit Moves:		****		****				****		****		
Green/Cycle:	0.00	0.62	0.77	0.13	0.75	0.75	0.00	0.00	0.00	0.15	0.00	0.28
Volume/Cap:	0.00	0.85	0.27	0.85	0.27	0.27	0.00	0.85	0.85	0.85	0.00	0.78
Delay/Veh:	0.0	18.1	3.4	56.9	4.0	4.0	0.0	470	470.0	47.9	0.0	36.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.1	3.4	56.9	4.0	4.0	0.0	470	470.0	47.9	0.0	36.9
LOS by Move:	A	B	A	E	A	A	A	F	F	D	A	D
HCM2kAvgQ:	0	24	3	6	4	4	0	1	1	9	0	12

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.861
Loss Time (sec):	10	Average Delay (sec/veh):	31.9
Optimal Cycle:	89	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2 0	1	1 0	2 0	0	2 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	1177	267	312	676	0	905	0	281	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1177	267	312	676	0	905	0	281	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1177	267	312	676	0	905	0	281	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	0	1205	273	319	692	0	926	0	288	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1205	273	319	692	0	926	0	288	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1205	273	319	692	0	926	0	288	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.33	0.17	0.18	0.19	0.00	0.26	0.00	0.18	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green/Cycle:	0.00	0.39	0.39	0.21	0.59	0.00	0.31	0.00	0.31	0.00	0.00	0.00
Volume/Cap:	0.00	0.86	0.44	0.86	0.32	0.00	0.86	0.00	0.58	0.00	0.00	0.00
Delay/Veh:	0.0	33.9	23.1	56.5	10.3	0.0	39.9	0.0	30.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	33.9	23.1	56.5	10.3	0.0	39.9	0.0	30.9	0.0	0.0	0.0
LOS by Move:	A	C	C	E	B	A	D	A	C	A	A	A
HCM2kAvgQ:	0	21	6	10	5	0	17	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.724
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	126	14	28	173	11	246	35	980	218	6	830	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	14	28	173	11	246	35	980	218	6	830	80
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	126	14	28	173	11	246	35	980	218	6	830	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	132	15	29	181	11	257	37	1023	228	6	866	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	15	29	181	11	257	37	1023	228	6	866	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	132	15	29	181	11	257	37	1023	228	6	866	84
OvlAdjVol:						220						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.90	0.10	1.00	0.94	0.06	1.00	1.00	1.64	0.36	1.00	2.00	1.00
Final Sat.:	1440	160	1600	1504	96	1600	1600	2618	582	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.02	0.12	0.12	0.16	0.02	0.39	0.39	0.00	0.27	0.05
OvlAdjV/S:						0.14						
Crit Moves:		****				****		****		****		

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.597
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	0 1	2	0 1	0 1	2	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	21	13	21	80	18	74	381	725	130	119	952	424
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	13	21	80	18	74	381	725	130	119	952	424
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	21	13	21	80	18	74	381	725	130	119	952	424
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	22	14	22	85	19	79	407	774	139	127	1016	453
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	14	22	85	19	79	407	774	139	127	1016	453
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	22	14	22	85	19	79	407	774	139	127	1016	453
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.70	0.30	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	2880	1600	1600	2880	2713	487	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.03	0.01	0.05	0.14	0.29	0.29	0.08	0.32	0.28
OvlAdjV/S:						0.00						
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[15.3]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		4	847	0		0	1530	199	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		4	847	0		0	1530	199	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		4	847	0		0	1530	199	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	0	0	0		0	0	0		4	872	0		0	1576	205	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		4	872	0		0	1576	205	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	1668	2661	436		2020	2456	788		1781	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Potent Cap.:	89	23	574		52	31	338		353	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Move Cap.:	88	23	574		51	31	338		353	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		0.01	xxxx	xxxx	xxxx	xxxx	xxxx		
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		15.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*		*	*	*		C	*	*	*	*	*		
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.751
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0	2	0 1	1	0	2	0 1	1	0	2	1 0	1	0	2	1 0
Volume Module:																
Base Vol:	172	572	45		99	586	288		111	327	157		37	1179	98	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	172	572	45		99	586	288		111	327	157		37	1179	98	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	172	572	45		99	586	288		111	327	157		37	1179	98	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.96	0.96	0.96		0.96	0.96	0.96		0.96	0.96	0.96		0.96	0.96	0.96	
PHF Volume:	179	595	47		103	609	299		115	340	163		38	1226	102	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	179	595	47		103	609	299		115	340	163		38	1226	102	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	179	595	47		103	609	299		115	340	163		38	1226	102	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.03	0.97		1.00	2.77	0.23	
Final Sat.:	1600	3200	1600		1600	3200	1600		1600	3243	1557		1600	4432	368	
Capacity Analysis Module:																
Vol/Sat:	0.11	0.19	0.03		0.06	0.19	0.19		0.07	0.10	0.10		0.02	0.28	0.28	
Crit Moves:	****					****			****					****		

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.825
Loss Time (sec):	6	Average Delay (sec/veh):	22.9
Optimal Cycle:	64	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	1	1	0	1! 0	1	0	0	2	1	0	1	0	3	0	1
Volume Module:												
Base Vol:	0	0	2	604	3	745	0	541	10	7	1225	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	2	604	3	745	0	541	10	7	1225	43
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	2	604	3	745	0	541	10	7	1225	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.00
PHF Volume:	0	0	2	739	4	912	0	662	12	9	1499	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	2	739	4	912	0	662	12	9	1499	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	0	2	739	4	912	0	662	12	9	1499	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.90	0.90	0.90	1.00	0.91	0.91	0.95	0.91	1.00
Lanes:	0.00	0.00	1.00	1.44	0.01	1.55	0.00	2.95	0.05	1.00	3.00	1.00
Final Sat.:	0	0	1644	2464	8	2641	0	5078	94	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.30	0.49	0.35	0.00	0.13	0.13	0.00	0.29	0.00
Crit Moves:					****		****				****	
Green/Cycle:	0.00	0.00	0.00	0.59	0.59	0.59	0.00	0.34	0.34	0.01	0.35	0.00
Volume/Cap:	0.00	0.00	xxxx	0.51	0.83	0.59	0.00	0.39	0.39	0.39	0.83	0.00
Delay/Veh:	0.0	0.0	0.0	12.2	19.3	13.2	0.0	25.3	25.3	59.8	32.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	12.2	19.3	13.2	0.0	25.3	25.3	59.8	32.9	0.0
LOS by Move:	A	A	A	B	B	B	A	C	C	E	C	A
HCM2kAvgQ:	0	0	0	13	6	9	0	6	6	1	18	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.104
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	0	0	0	1	1	0	1	0	0	0	1	0	0	0	0	0
Volume Module:												
Base Vol:	397	739	0	0	1653	181	86	0	561	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	397	739	0	0	1653	181	86	0	561	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	397	739	0	0	1653	181	86	0	561	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	432	803	0	0	1797	197	93	0	610	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	432	803	0	0	1797	197	93	0	610	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	432	803	0	0	1797	197	93	0	610	0	0	0
OvlAdjVol:									370			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.80	0.20	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	2884	316	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.15	0.25	0.00	0.00	0.62	0.62	0.06	0.00	0.38	0.00	0.00	0.00
OvlAdjV/S:									0.23			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.559
Loss Time (sec):	6	Average Delay (sec/veh):	13.6
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	0	1	0	2	1 1
Volume Module:												
Base Vol:	385	0	274	0	0	0	0	806	276	0	1599	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	385	0	274	0	0	0	0	806	276	0	1599	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	385	0	274	0	0	0	0	806	276	0	1599	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.00	0.85	0.85	0.85
PHF Volume:	451	0	321	0	0	0	0	944	0	0	1872	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	451	0	321	0	0	0	0	944	0	0	1872	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	451	0	321	0	0	0	0	944	0	0	1872	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Lanes:	1.58	0.00	1.42	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.00	0.00
Final Sat.:	2744	0	2453	0	0	0	1900	5187	1729	0	5187	0
Capacity Analysis Module:												
Vol/Sat:	0.16	0.00	0.13	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.36	0.00
Crit Moves:	****										****	
Green/Cycle:	0.29	0.00	0.29	0.00	0.00	0.00	0.00	0.65	0.00	0.00	0.65	0.00
Volume/Cap:	0.56	0.00	0.44	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.56	0.00
Delay/Veh:	30.3	0.0	28.9	0.0	0.0	0.0	0.0	7.7	0.0	0.0	10.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.3	0.0	28.9	0.0	0.0	0.0	0.0	7.7	0.0	0.0	10.0	0.0
LOS by Move:	C		A	C		A	A		A	A		B A
HCM2kAvgQ:	8	0	6	0	0	0	0	5	0	0	12	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.714
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 0 1	2	0	2 0 0	0	0	0 0 0	2	0	0 0 2
Volume Module:												
Base Vol:	0	1047	437	643	1700	0	0	0	0	134	0	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1047	437	643	1700	0	0	0	0	134	0	75
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1047	437	643	1700	0	0	0	0	134	0	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	1077	450	662	1749	0	0	0	0	138	0	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1077	450	662	1749	0	0	0	0	138	0	77
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1077	450	662	1749	0	0	0	0	138	0	77
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	2880	3200	0	0	0	0	2880	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.28	0.23	0.55	0.00	0.00	0.00	0.00	0.05	0.00	0.02
OvlAdjV/S:												0.00
Crit Moves:		****			****						****	

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.745
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0	1	0	0 1!	0	0	1	0 2	0	1	1	0 1	1	0
Volume Module:																
Base Vol:	570	9	191		6	3	13		6	1118	481		129	960		12
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	570	9	191		6	3	13		6	1118	481		129	960		12
Added Vol:	0	0	0		0	0	0		0	0	0		0	0		0
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0		0
Initial Fut:	570	9	191		6	3	13		6	1118	481		129	960		12
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97		0.97
PHF Volume:	589	9	197		6	3	13		6	1155	497		133	992		12
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0		0
Reduced Vol:	589	9	197		6	3	13		6	1155	497		133	992		12
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
FinalVolume:	589	9	197		6	3	13		6	1155	497		133	992		12
OvlAdjVol:											198					
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600		1600
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Lanes:	1.97	0.03	1.00		0.27	0.14	0.59		1.00	2.00	1.00		1.00	1.98		0.02
Final Sat.:	3150	50	1600		436	218	945		1600	3200	1600		1600	3160		40
Capacity Analysis Module:																
Vol/Sat:	0.19	0.19	0.12		0.01	0.01	0.01		0.00	0.36	0.31		0.08	0.31		0.31
OvlAdjV/S:											0.12					
Crit Moves:	****					****				****				****		

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.656
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0	1	0	1 0	0	1	1	0 1	1	0	1	0 2	0	1
Volume Module:																
Base Vol:	254	42	132		17	22	5		19	999	161		107	890		19
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	254	42	132		17	22	5		19	999	161		107	890		19
Added Vol:	0	0	0		0	0	0		0	0	0		0	0		0
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0		0
Initial Fut:	254	42	132		17	22	5		19	999	161		107	890		19
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.98	0.98	0.98		0.98	0.98	0.98		0.98	0.98	0.98		0.98	0.98		0.98
PHF Volume:	258	43	134		17	22	5		19	1016	164		109	905		19
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0		0
Reduced Vol:	258	43	134		17	22	5		19	1016	164		109	905		19
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
FinalVolume:	258	43	134		17	22	5		19	1016	164		109	905		19
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600		1600
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Lanes:	1.72	0.28	1.00		0.44	0.56	1.00		1.00	1.72	0.28		1.00	2.00		1.00
Final Sat.:	2746	454	1600		697	903	1600		1600	2756	444		1600	3200		1600
Capacity Analysis Module:																
Vol/Sat:	0.09	0.09	0.08		0.02	0.02	0.00		0.01	0.37	0.37		0.07	0.28		0.01
Crit Moves:	****					****				****				****		

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.719
Loss Time (sec):	6	Average Delay (sec/veh):	24.8
Optimal Cycle:	44	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	0	1 0	0 1	0	0 1!	0 0
Volume Module:												
Base Vol:	389	1090	34	3	815	385	282	11	117	18	17	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	389	1090	34	3	815	385	282	11	117	18	17	6
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	389	1090	34	3	815	385	282	11	117	18	17	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	412	1155	36	3	863	408	299	12	124	19	18	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	412	1155	36	3	863	408	299	12	124	19	18	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	412	1155	36	3	863	408	299	12	124	19	18	6
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.96	0.96	0.96
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.96	0.04	1.00	0.44	0.41	0.15
Final Sat.:	1805	3610	1615	1805	3610	1615	1745	68	1615	800	756	267
Capacity Analysis Module:												
Vol/Sat:	0.23	0.32	0.02	0.00	0.24	0.25	0.17	0.17	0.08	0.02	0.02	0.02
Crit Moves:	****					****	****				****	
Green/Cycle:	0.32	0.67	0.67	0.00	0.35	0.35	0.24	0.24	0.24	0.03	0.03	0.03
Volume/Cap:	0.72	0.48	0.03	0.48	0.68	0.72	0.72	0.72	0.32	0.72	0.72	0.72
Delay/Veh:	34.6	8.4	5.8	96.1	29.2	32.6	40.8	40.8	31.9	81.9	81.9	81.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.6	8.4	5.8	96.1	29.2	32.6	40.8	40.8	31.9	81.9	81.9	81.9
LOS by Move:	C	A	A	F	C	C	D	D	C	F	F	F
HCM2kAvgQ:	11	9	0	1	13	12	10	10	3	3	3	3

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

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Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.616
Loss Time (sec):	6	Average Delay (sec/veh):	16.7
Optimal Cycle:	34	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 0	0	0 1	1 0	1	0 1!	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	52	1273	0	0	668	301	301	0	186	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	52	1273	0	0	668	301	301	0	186	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	1273	0	0	668	301	301	0	186	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	55	1350	0	0	708	319	319	0	197	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	1350	0	0	708	319	319	0	197	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	55	1350	0	0	708	319	319	0	197	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.91	0.91	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.38	0.62	1.45	0.00	0.55	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2372	1069	2515	0	961	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.37	0.00	0.00	0.30	0.30	0.13	0.00	0.21	0.00	0.00	0.00
Crit Moves:		****		****					****			
Green/Cycle:	0.06	0.61	0.00	0.00	0.55	0.55	0.33	0.00	0.33	0.00	0.00	0.00
Volume/Cap:	0.54	0.62	0.00	0.00	0.54	0.54	0.38	0.00	0.62	0.00	0.00	0.00
Delay/Veh:	51.8	12.9	0.0	0.0	14.7	14.7	25.6	0.0	29.4	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.8	12.9	0.0	0.0	14.7	14.7	25.6	0.0	29.4	0.0	0.0	0.0
LOS by Move:	D	B	A	A	B	B	C	A	C	A	A	A
HCM2kAvgQ:	3	14	0	0	10	10	5	0	10	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.844
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	78	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 0	1 0	1	0 1	0 1
Volume Module:												
Base Vol:	80	1628	109	81	1067	96	103	16	113	123	28	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	1628	109	81	1067	96	103	16	113	123	28	98
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	1628	109	81	1067	96	103	16	113	123	28	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	83	1691	113	84	1108	100	107	17	117	128	29	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1691	113	84	1108	100	107	17	117	128	29	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	1691	113	84	1108	100	107	17	117	128	29	102
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.12	0.88	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	198	1402	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.53	0.07	0.05	0.35	0.06	0.07	0.08	0.08	0.08	0.02	0.06
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.788
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	327	1150	288	209	832	262	346	651	292	359	659	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	327	1150	288	209	832	262	346	651	292	359	659	326
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	327	1150	288	209	832	262	346	651	292	359	659	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	336	1182	296	215	855	269	356	669	300	369	677	335
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	336	1182	296	215	855	269	356	669	300	369	677	335
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	336	1182	296	215	855	269	356	669	300	369	677	335
OvlAdjVol:			91						113			216
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.28	0.72	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	3650	1150	2880	3200	1600	2880	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.25	0.18	0.07	0.23	0.23	0.12	0.21	0.19	0.13	0.21	0.21
OvlAdjV/S:			0.06						0.07			0.13
Crit Moves:	****				****			****			****	

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.950
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	133	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	233	1535	153	7	1259	190	245	63	350	85	35	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	233	1535	153	7	1259	190	245	63	350	85	35	12
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1535	153	7	1259	190	245	63	350	85	35	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	252	1661	166	8	1363	206	265	68	379	92	38	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	1661	166	8	1363	206	265	68	379	92	38	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	252	1661	166	8	1363	206	265	68	379	92	38	13
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.59	0.41	1.00	1.94	0.79	0.27
Final Sat.:	1600	3200	1600	1600	3200	1600	2545	655	1600	3098	1268	434
Capacity Analysis Module:												
Vol/Sat:	0.16	0.52	0.10	0.00	0.43	0.13	0.10	0.10	0.24	0.03	0.03	0.03
OvlAdjV/S:						0.00						
Crit Moves:	****				****				****			****

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.957
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	140	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	261	1040	179	385	1042	209	666	1531	287	428	702	244
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	274	1090	0	404	1092	0	698	1605	0	449	736	256
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	274	1090	0	404	1092	0	698	1605	0	449	736	256
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	274	1090	0	404	1092	0	698	1605	0	449	736	256
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	2880	4800	1600	2880	4800	1600	2880	4800	1600	2880	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.23	0.00	0.14	0.23	0.00	0.24	0.33	0.00	0.16	0.15	0.16
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.589
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 0	0	0 3	0 1	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	33	1261	0	0	1567	50	172	0	94	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	1261	0	0	1567	50	172	0	94	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	1261	0	0	1567	50	172	0	94	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.00	0.93	0.93	0.93
PHF Volume:	36	1359	0	0	1689	54	185	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1359	0	0	1689	54	185	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	36	1359	0	0	1689	54	185	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	4800	1600	2880	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.42	0.00	0.00	0.35	0.03	0.06	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****			****			****				

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.746
Loss Time (sec):	10	Average Delay (sec/veh):	22.8
Optimal Cycle:	61	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	1 1	0	1 0	0 0	1 0	1 0	1! 0	1
Volume Module:												
Base Vol:	1	799	283	610	1382	5	4	2	4	186	1	495
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	799	283	610	1382	5	4	2	4	186	1	495
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	799	283	610	1382	5	4	2	4	186	1	495
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	1	891	315	680	1541	6	4	2	4	207	1	552
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	891	315	680	1541	6	4	2	4	207	1	552
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	891	315	680	1541	6	4	2	4	207	1	552
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.95	0.95	0.95	0.90	0.90	0.88	0.88	0.88
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.33	0.67	1.27	0.01	1.72
Final Sat.:	1805	3610	1615	3502	3593	13	1805	570	1140	2126	5	2882
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.20	0.19	0.43	0.43	0.00	0.00	0.00	0.10	0.23	0.19
Crit Moves:		****		****			****				****	
Green/Cycle:	0.00	0.33	0.63	0.26	0.59	0.59	0.00	0.01	0.01	0.30	0.31	0.57
Volume/Cap:	0.73	0.75	0.31	0.75	0.73	0.73	0.75	0.33	0.33	0.33	0.75	0.34
Delay/Veh:	462.5	32.3	8.8	37.3	16.0	16.0	246.2	58.2	58.2	27.5	34.3	11.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	462.5	32.3	8.8	37.3	16.0	16.0	246.2	58.2	58.2	27.5	34.3	11.7
LOS by Move:	F	C	A	D	B	B	F	E	E	C	C	B
HCM2kAvgQ:	0	13	4	10	18	18	1	1	1	4	12	5

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.827
Loss Time (sec):	10	Average Delay (sec/veh):	21.4
Optimal Cycle:	78	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2 0	1	1 0	2 0	0	2 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	933	619	380	1294	0	169	0	176	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	933	619	380	1294	0	169	0	176	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	933	619	380	1294	0	169	0	176	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	988	656	403	1371	0	179	0	186	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	988	656	403	1371	0	179	0	186	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	988	656	403	1371	0	179	0	186	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.41	0.22	0.38	0.00	0.05	0.00	0.12	0.00	0.00	0.00
Crit Moves:			****	****					****			
Green/Cycle:	0.00	0.49	0.49	0.27	0.76	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Volume/Cap:	0.00	0.56	0.83	0.83	0.50	0.00	0.37	0.00	0.83	0.00	0.00	0.00
Delay/Veh:	0.0	18.2	29.0	45.5	4.8	0.0	39.5	0.0	63.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.2	29.0	45.5	4.8	0.0	39.5	0.0	63.5	0.0	0.0	0.0
LOS by Move:	A	B	C	D	A	A	D	A	E	A	A	A
HCM2kAvgQ:	0	11	20	12	8	0	3	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.700
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	6	7	1	94	38	102	303	1335	189	42	609	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	7	1	94	38	102	303	1335	189	42	609	237
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	7	1	94	38	102	303	1335	189	42	609	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	6	7	1	95	38	103	306	1350	191	42	616	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	7	1	95	38	103	306	1350	191	42	616	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	6	7	1	95	38	103	306	1350	191	42	616	240
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.46	0.54	1.00	0.71	0.29	1.00	1.00	1.75	0.25	1.00	2.00	1.00
Final Sat.:	738	862	1600	1139	461	1600	1600	2803	397	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.00	0.08	0.08	0.06	0.19	0.48	0.48	0.03	0.19	0.15
OvlAdjV/S:						0.00						
Crit Moves:	****			****				****		****		

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.612
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	0 1	2	0 1	0 1	2	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	103	21	75	151	9	96	153	776	54	31	1097	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	103	21	75	151	9	96	153	776	54	31	1097	200
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	103	21	75	151	9	96	153	776	54	31	1097	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	106	22	77	156	9	99	158	802	56	32	1133	207
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	22	77	156	9	99	158	802	56	32	1133	207
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	106	22	77	156	9	99	158	802	56	32	1133	207
OvlAdjVol:						11						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.87	0.13	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	2880	1600	1600	2880	2992	208	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.01	0.05	0.05	0.01	0.06	0.05	0.27	0.27	0.02	0.35	0.13
OvlAdjV/S:						0.01						
Crit Moves:			****	****			****				****	

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		0	1029	0		0	1282	14	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93	
PHF Volume:	0	0	0		0	0	0		0	1102	0		0	1373	15	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		0	1102	0		0	1373	15	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1788	2489	551		1923	2474	686		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	74	30	483		60	30	394		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	74	30	483		60	30	394		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.763
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0		
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	2	1	0	1	0	2	1	0
Volume Module:																				
Base Vol:	234	775	63			160	550	158			163	963	214			84	684	112		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	234	775	63			160	550	158			163	963	214			84	684	112		
Added Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	234	775	63			160	550	158			163	963	214			84	684	112		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.97	0.97	0.97			0.97	0.97	0.97			0.97	0.97	0.97			0.97	0.97	0.97		
PHF Volume:	242	803	65			166	570	164			169	998	222			87	709	116		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	242	803	65			166	570	164			169	998	222			87	709	116		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	242	803	65			166	570	164			169	998	222			87	709	116		
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600			1600	1600	1600			1600	1600	1600			1600	1600	1600		
Adjustment:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Lanes:	1.00	2.00	1.00			1.00	2.00	1.00			1.00	2.45	0.55			1.00	2.58	0.42		
Final Sat.:	1600	3200	1600			1600	3200	1600			1600	3927	873			1600	4125	675		
Capacity Analysis Module:																				
Vol/Sat:	0.15	0.25	0.04			0.10	0.18	0.10			0.11	0.25	0.25			0.05	0.17	0.17		
Crit Moves:		****					****						****				****			

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.881
Loss Time (sec):	6	Average Delay (sec/veh):	24.5
Optimal Cycle:	84	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0 1! 0	1	0	2 1 0	1	0	3 0 1
Volume Module:												
Base Vol:	1	0	83	923	12	536	0	1796	72	18	576	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	0	83	923	12	536	0	1796	72	18	576	116
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	83	923	12	536	0	1796	72	18	576	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00
PHF Volume:	1	0	86	957	12	556	0	1863	75	19	598	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	86	957	12	556	0	1863	75	19	598	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	1	0	86	957	12	556	0	1863	75	19	598	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	1.00	0.87	0.92	0.92	0.92	1.00	0.90	0.90	0.95	0.91	1.00
Lanes:	0.01	0.00	0.99	1.62	0.02	1.36	0.00	2.88	0.12	1.00	3.00	1.00
Final Sat.:	20	0	1628	2826	28	2371	0	4957	199	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.05	0.34	0.44	0.23	0.00	0.38	0.38	0.01	0.12	0.00
Crit Moves:					****			****		****		
Green/Cycle:	0.00	0.00	0.00	0.50	0.50	0.50	0.00	0.43	0.43	0.01	0.44	0.00
Volume/Cap:	xxxx	0.00	xxxx	0.68	0.88	0.47	0.00	0.88	0.88	0.88	0.26	0.00
Delay/Veh:	0.0	0.0	0.0	19.6	27.9	16.3	0.0	30.8	30.8	191.5	17.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	19.6	27.9	16.3	0.0	30.8	30.8	191.5	17.9	0.0
LOS by Move:	A	A	A	B	C	B	A	C	C	F	B	A
HCM2kAvgQ:	2	0	2	22	1	11	0	23	23	2	4	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.679
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2 0 0	0	0	1 1 0	1	0	0 0 1	0	0	0 0 0
Volume Module:												
Base Vol:	418	1243	0	0	808	115	81	0	407	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	418	1243	0	0	808	115	81	0	407	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	418	1243	0	0	808	115	81	0	407	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	446	1327	0	0	862	123	86	0	434	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	446	1327	0	0	862	123	86	0	434	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	446	1327	0	0	862	123	86	0	434	0	0	0
OvlAdjVol:									187			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.75	0.25	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	2801	399	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.15	0.41	0.00	0.00	0.31	0.31	0.05	0.00	0.27	0.00	0.00	0.00
OvlAdjV/S:									0.12			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.560
Loss Time (sec):	6	Average Delay (sec/veh):	8.8
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	1	0	2	1	1	0
Volume Module:												
Base Vol:	123	0	289	0	0	0	0	2097	621	0	969	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	123	0	289	0	0	0	0	2097	621	0	969	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	123	0	289	0	0	0	0	2097	621	0	969	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00	0.96	0.96	0.96
PHF Volume:	128	0	301	0	0	0	0	2182	0	0	1008	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	0	301	0	0	0	0	2182	0	0	1008	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	128	0	301	0	0	0	0	2182	0	0	1008	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Lanes:	1.30	0.00	1.70	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.00	0.00
Final Sat.:	2175	0	2850	0	0	0	1900	5187	1729	0	5187	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.11	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.19	0.00
Crit Moves:			****					****				
Green/Cycle:	0.19	0.00	0.19	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.75	0.00
Volume/Cap:	0.31	0.00	0.56	0.00	0.00	0.00	0.00	0.56	0.00	0.00	0.26	0.00
Delay/Veh:	35.1	0.0	37.8	0.0	0.0	0.0	0.0	5.5	0.0	0.0	3.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.1	0.0	37.8	0.0	0.0	0.0	0.0	5.5	0.0	0.0	3.9	0.0
LOS by Move:	D		A	D		A	A		A	A		A
HCM2kAvgQ:	3	0	6	0	0	0	0	11	0	0	4	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.750
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 0	1	2	0	2	0	0	0	0	0
Volume Module:												
Base Vol:	0	1712	118	106	1120	0	0	0	0	136	0	161
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1712	118	106	1120	0	0	0	0	136	0	161
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1712	118	106	1120	0	0	0	0	136	0	161
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1796	124	111	1175	0	0	0	0	143	0	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1796	124	111	1175	0	0	0	0	143	0	169
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1796	124	111	1175	0	0	0	0	143	0	169
OvlAdjVol:												45
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	2880	3200	0	0	0	0	2880	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.56	0.08	0.04	0.37	0.00	0.00	0.00	0.00	0.05	0.00	0.05
OvlAdjV/S:												0.01
Crit Moves:		****			****						****	

EXISTING PLUS 2020 PROJECT CONDITIONS

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.784
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0	1	0	0 1!	0	0	1	0 2	0	1	1	0 1	1	0
Volume Module:																
Base Vol:	594	4	140		18	10	12		4	1170	436		78	1018		3
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	594	4	140		18	10	12		4	1170	436		78	1018		3
Added Vol:	0	0	8		0	0	0		0	11	0		1	2		0
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0		0
Initial Fut:	594	4	148		18	10	12		4	1181	436		79	1020		3
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92		0.92
PHF Volume:	645	4	161		20	11	13		4	1282	473		86	1107		3
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0		0
Reduced Vol:	645	4	161		20	11	13		4	1282	473		86	1107		3
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
FinalVolume:	645	4	161		20	11	13		4	1282	473		86	1107		3
OvlAdjVol:											149					
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600		1600
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Lanes:	1.99	0.01	1.00		0.45	0.25	0.30		1.00	2.00	1.00		1.00	1.99		0.01
Final Sat.:	3179	21	1600		720	400	480		1600	3200	1600		1600	3191		9
Capacity Analysis Module:																
Vol/Sat:	0.20	0.20	0.10		0.03	0.03	0.03		0.00	0.40	0.30		0.05	0.35		0.35
OvlAdjV/S:											0.09					
Crit Moves:	****						****			****		****				

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.736
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0	1	0	1 0	0	1	1	0 1	1	0	1	0 2	0	1
Volume Module:																
Base Vol:	268	27	102		22	45	19		7	1045	292		53	790		14
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	268	27	102		22	45	19		7	1045	292		53	790		14
Added Vol:	0	0	13		0	0	0		0	26	0		3	5		0
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0		0
Initial Fut:	268	27	115		22	45	19		7	1071	292		56	795		14
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94		0.94
PHF Volume:	287	29	123		24	48	20		7	1145	312		60	850		15
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0		0
Reduced Vol:	287	29	123		24	48	20		7	1145	312		60	850		15
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
FinalVolume:	287	29	123		24	48	20		7	1145	312		60	850		15
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600		1600
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Lanes:	1.82	0.18	1.00		0.33	0.67	1.00		1.00	1.57	0.43		1.00	2.00		1.00
Final Sat.:	2907	293	1600		525	1075	1600		1600	2514	686		1600	3200		1600
Capacity Analysis Module:																
Vol/Sat:	0.10	0.10	0.08		0.04	0.04	0.01		0.00	0.46	0.46		0.04	0.27		0.01
Crit Moves:	****				****					****			****			

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.611
Loss Time (sec):	6	Average Delay (sec/veh):	23.5
Optimal Cycle:	34	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	144	1051	17	0	812	140	437	6	310	12	3	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	144	1051	17	0	812	140	437	6	310	12	3	8
Added Vol:	6	1	0	0	8	0	0	0	34	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	150	1052	17	0	820	140	437	6	344	12	3	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	152	1064	17	0	830	142	442	6	348	12	3	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	1064	17	0	830	142	442	6	348	12	3	8
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	152	1064	17	0	830	142	442	6	348	12	3	8
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	1.00	0.95	0.85	0.95	0.95	0.85	0.93	0.93	0.93
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.99	0.01	1.00	0.52	0.13	0.35
Final Sat.:	1805	3610	1615	1900	3610	1615	1786	25	1615	921	230	614
Capacity Analysis Module:												
Vol/Sat:	0.08	0.29	0.01	0.00	0.23	0.09	0.25	0.25	0.22	0.01	0.01	0.01
Crit Moves:	****				****			****			****	
Green/Cycle:	0.14	0.51	0.51	0.00	0.38	0.38	0.40	0.40	0.40	0.02	0.02	0.02
Volume/Cap:	0.61	0.57	0.02	0.00	0.61	0.23	0.61	0.61	0.53	0.61	0.61	0.61
Delay/Veh:	45.0	17.2	12.0	0.0	26.1	21.5	25.1	25.1	23.4	74.3	74.3	74.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.0	17.2	12.0	0.0	26.1	21.5	25.1	25.1	23.4	74.3	74.3	74.3
LOS by Move:	D	B	B	A	C	C	C	C	C	E	E	E
HCM2kAvgQ:	4	11	0	0	11	3	11	11	8	2	2	2

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Note: Queue reported is the number of cars per lane.

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Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.904
Loss Time (sec):	6	Average Delay (sec/veh):	31.0
Optimal Cycle:	96	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	41	873	0	0	927	223	349	0	533	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	873	0	0	927	223	349	0	533	0	0	0
Added Vol:	7	7	0	0	41	0	0	0	30	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	48	880	0	0	968	223	349	0	563	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	51	932	0	0	1025	236	370	0	596	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	932	0	0	1025	236	370	0	596	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	932	0	0	1025	236	370	0	596	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.92	0.92	0.89	1.00	0.89	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.63	0.37	1.24	0.00	0.76	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2852	657	2091	0	1291	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.26	0.00	0.00	0.36	0.36	0.18	0.00	0.46	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.03	0.43	0.00	0.00	0.40	0.40	0.51	0.00	0.51	0.00	0.00	0.00
Volume/Cap:	0.90	0.60	0.00	0.00	0.90	0.90	0.35	0.00	0.90	0.00	0.00	0.00
Delay/Veh:	133.9	22.7	0.0	0.0	36.9	36.9	14.6	0.0	33.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	133.9	22.7	0.0	0.0	36.9	36.9	14.6	0.0	33.0	0.0	0.0	0.0
LOS by Move:	F	C	A	A	D	D	B	A	C	A	A	A
HCM2kAvgQ:	4	12	0	0	21	21	5	0	26	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.967
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	151	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	130	1183	442	221	1365	214	158	93	244	115	48	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1183	442	221	1365	214	158	93	244	115	48	76
Added Vol:	0	45	11	8	9	0	0	2	0	2	0	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	130	1228	453	229	1374	214	158	95	244	117	48	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	139	1312	484	245	1468	229	169	101	261	125	51	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	1312	484	245	1468	229	169	101	261	125	51	83
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	139	1312	484	245	1468	229	169	101	261	125	51	83
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.28	0.72	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	448	1152	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.41	0.30	0.15	0.46	0.14	0.11	0.23	0.23	0.08	0.03	0.05
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.943
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 127 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	236	1291	628	412	1070	187	284	757	153	110	446	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	236	1291	628	412	1070	187	284	757	153	110	446	185
Added Vol:	0	45	45	0	9	2	11	41	0	9	8	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	236	1336	673	412	1079	189	295	798	153	119	454	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	245	1384	697	427	1118	196	306	827	159	123	470	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	1384	697	427	1118	196	306	827	159	123	470	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	245	1384	697	427	1118	196	306	827	159	123	470	192
OvlAdjVol:			629						23			0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.55	0.45	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	4085	715	2880	3200	1600	2880	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.29	0.44	0.15	0.27	0.27	0.11	0.26	0.10	0.04	0.15	0.12
OvlAdjV/S:			0.39						0.01			0.00
Crit Moves:			****	****				****		****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.089
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	159	1684	70	1	1120	277	407	76	416	113	108	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	1684	70	1	1120	277	407	76	416	113	108	12
Added Vol:	0	56	0	2	11	4	23	0	0	0	0	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	159	1740	70	3	1131	281	430	76	416	113	108	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	184	2009	81	3	1306	324	497	88	480	130	125	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	2009	81	3	1306	324	497	88	480	130	125	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	2009	81	3	1306	324	497	88	480	130	125	27
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.70	0.30	1.00	1.39	1.33	0.28
Final Sat.:	1600	3200	1600	1600	3200	1600	2719	481	1600	2223	2125	453
Capacity Analysis Module:												
Vol/Sat:	0.11	0.63	0.05	0.00	0.41	0.20	0.18	0.18	0.30	0.06	0.06	0.06
OvlAdjV/S:						0.00						
Crit Moves:		****			****				****	****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.882
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	92	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	291	1364	364	207	938	396	401	500	169	167	1116	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	291	1364	364	207	938	396	401	500	169	167	1116	139
Added Vol:	0	41	0	0	8	3	15	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	291	1405	364	207	946	399	416	500	169	167	1116	139
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	307	1482	0	218	998	0	439	527	0	176	1177	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	307	1482	0	218	998	0	439	527	0	176	1177	147
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	307	1482	0	218	998	0	439	527	0	176	1177	147
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	2880	4800	1600	2880	4800	1600	2880	4800	1600	2880	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.31	0.00	0.08	0.21	0.00	0.15	0.11	0.00	0.06	0.25	0.09
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.867
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	86	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 0	0	0 3	0 1	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	116	2253	0	0	1002	107	39	0	36	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	116	2253	0	0	1002	107	39	0	36	0	0	0
Added Vol:	0	26	0	0	5	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	2279	0	0	1007	107	39	0	36	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	123	2409	0	0	1064	113	41	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	2409	0	0	1064	113	41	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	123	2409	0	0	1064	113	41	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	4800	1600	2880	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.75	0.00	0.00	0.22	0.07	0.01	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****			****			****				

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.855
Loss Time (sec):	10	Average Delay (sec/veh):	23.1
Optimal Cycle:	87	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	2	0 1	1 0	1	0 0	1 0	1	0 1!	0 1
Volume Module:												
Base Vol:	0	1796	320	349	679	2	0	1	1	262	0	572
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1796	320	349	679	2	0	1	1	262	0	572
Added Vol:	0	26	0	3	2	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1822	320	352	681	2	0	1	1	262	0	572
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	1934	340	374	723	2	0	1	1	278	0	607
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1934	340	374	723	2	0	1	1	278	0	607
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1934	340	374	723	2	0	1	1	278	0	607
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	0.95	1.00	0.93	0.93	0.88	1.00	0.88
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.50	0.50	1.31	0.00	1.69
Final Sat.:	1900	3610	1615	3502	3599	11	1900	879	879	2206	0	2830
Capacity Analysis Module:												
Vol/Sat:	0.00	0.54	0.21	0.11	0.20	0.00	0.00	0.00	0.13	0.00	0.21	
Crit Moves:		****		****			****		****			
Green/Cycle:	0.00	0.63	0.77	0.12	0.75	0.75	0.00	0.00	0.00	0.15	0.00	0.27
Volume/Cap:	0.00	0.86	0.27	0.86	0.27	0.27	0.00	0.86	0.86	0.86	0.00	0.78
Delay/Veh:	0.0	18.5	3.4	58.1	3.9	3.9	0.0	482	481.6	48.7	0.0	37.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.5	3.4	58.1	3.9	3.9	0.0	482	481.6	48.7	0.0	37.3
LOS by Move:	A	B	A	E	A	A	A	F	F	D	A	D
HCM2kAvgQ:	0	24	3	7	4	4	0	1	1	9	0	12

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.870
Loss Time (sec):	10	Average Delay (sec/veh):	32.4
Optimal Cycle:	92	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 2	0 1	1	0 2	0 0	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	1177	267	312	676	0	905	0	281	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1177	267	312	676	0	905	0	281	0	0	0
Added Vol:	0	11	0	0	2	0	15	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1188	267	312	678	0	920	0	281	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	0	1216	273	319	694	0	942	0	288	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1216	273	319	694	0	942	0	288	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1216	273	319	694	0	942	0	288	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.17	0.18	0.19	0.00	0.27	0.00	0.18	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green/Cycle:	0.00	0.39	0.39	0.20	0.59	0.00	0.31	0.00	0.31	0.00	0.00	0.00
Volume/Cap:	0.00	0.87	0.44	0.87	0.33	0.00	0.87	0.00	0.58	0.00	0.00	0.00
Delay/Veh:	0.0	34.5	23.1	58.0	10.5	0.0	40.4	0.0	30.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	34.5	23.1	58.0	10.5	0.0	40.4	0.0	30.7	0.0	0.0	0.0
LOS by Move:	A	C	C	E	B	A	D	A	C	A	A	A
HCM2kAvgQ:	0	21	6	11	6	0	17	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.752
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	0	0	1	0	1	0	1	1	0	1
Volume Module:												
Base Vol:	126	14	28	173	11	246	35	980	218	6	830	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	14	28	173	11	246	35	980	218	6	830	80
Added Vol:	5	0	5	5	0	5	23	39	23	26	8	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	131	14	33	178	11	251	58	1019	241	32	838	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	137	15	34	186	11	262	61	1064	252	33	875	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	15	34	186	11	262	61	1064	252	33	875	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	137	15	34	186	11	262	61	1064	252	33	875	111
OvlAdjVol:						201						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.90	0.10	1.00	0.94	0.06	1.00	1.00	1.62	0.38	1.00	2.00	1.00
Final Sat.:	1446	154	1600	1507	93	1600	1600	2588	612	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.02	0.12	0.12	0.16	0.04	0.41	0.41	0.02	0.27	0.07
OvlAdjV/S:						0.13						
Crit Moves:	****					****		****		****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.636
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1	2	0	1	0	1	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	21	13	21	80	18	74	381	725	130	119	952	424
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	13	21	80	18	74	381	725	130	119	952	424
Added Vol:	4	0	8	8	0	4	20	10	20	41	53	41
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	13	29	88	18	78	401	735	150	160	1005	465
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	27	14	31	94	19	83	428	784	160	171	1073	496
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	14	31	94	19	83	428	784	160	171	1073	496
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	14	31	94	19	83	428	784	160	171	1073	496
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.66	0.34	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	2880	1600	1600	2880	2658	542	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.02	0.03	0.01	0.05	0.15	0.30	0.30	0.11	0.34	0.31
OvlAdjV/S:						0.00						
Crit Moves:				****	****			****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[16.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		4	847	0		0	1530	199	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		4	847	0		0	1530	199	
Added Vol:	0	0	0		0	0	0		0	27	0		0	135	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		4	874	0		0	1665	199	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	0	0	0		0	0	0		4	900	0		0	1715	205	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		4	900	0		0	1715	205	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	1766	2828	450		2173	2623	857		1920	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	77	18	562		41	24	305		312	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	76	18	562		40	24	305		312	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		0.01	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		16.7	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		C	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.796
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 66 Level Of Service: C

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0		
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	2	1	0	1	0	2	1	0
Volume Module:																				
Base Vol:	172	572	45			99	586	288			111	327	157			37	1179	98		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	172	572	45			99	586	288			111	327	157			37	1179	98		
Added Vol:	8	0	0			0	0	30			6	18	1			0	90	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	180	572	45			99	586	318			117	345	158			37	1269	98		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.96	0.96	0.96			0.96	0.96	0.96			0.96	0.96	0.96			0.96	0.96	0.96		
PHF Volume:	187	595	47			103	609	331			122	359	164			38	1319	102		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	187	595	47			103	609	331			122	359	164			38	1319	102		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	187	595	47			103	609	331			122	359	164			38	1319	102		
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600			1600	1600	1600			1600	1600	1600			1600	1600	1600		
Adjustment:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Lanes:	1.00	2.00	1.00			1.00	2.00	1.00			1.00	2.06	0.94			1.00	2.78	0.22		
Final Sat.:	1600	3200	1600			1600	3200	1600			1600	3292	1508			1600	4456	344		
Capacity Analysis Module:																				
Vol/Sat:	0.12	0.19	0.03			0.06	0.19	0.21			0.08	0.11	0.11			0.02	0.30	0.30		
Crit Moves:	****							****			****							****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.853
Loss Time (sec):	6	Average Delay (sec/veh):	23.6
Optimal Cycle:	73	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0 0 1	1	0	1! 0 1	0	0	2 1 0	1	0	3 0 1
Volume Module:												
Base Vol:	0	0	2	604	3	745	0	541	10	7	1225	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	2	604	3	745	0	541	10	7	1225	43
Added Vol:	0	0	0	0	0	38	0	18	0	0	53	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	2	604	3	783	0	559	10	7	1278	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.00
PHF Volume:	0	0	2	739	4	958	0	684	12	9	1564	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	2	739	4	958	0	684	12	9	1564	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	0	2	739	4	958	0	684	12	9	1564	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.90	0.90	0.90	1.00	0.91	0.91	0.95	0.91	1.00
Lanes:	0.00	0.00	1.00	1.43	0.01	1.56	0.00	2.95	0.05	1.00	3.00	1.00
Final Sat.:	0	0	1644	2443	7	2662	0	5081	91	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.30	0.50	0.36	0.00	0.13	0.13	0.00	0.30	0.00
Crit Moves:					****		****				****	
Green/Cycle:	0.00	0.00	0.00	0.59	0.59	0.59	0.00	0.34	0.34	0.01	0.35	0.00
Volume/Cap:	0.00	0.00	xxxx	0.52	0.85	0.61	0.00	0.39	0.39	0.40	0.85	0.00
Delay/Veh:	0.0	0.0	0.0	12.4	20.9	13.8	0.0	25.2	25.2	60.5	34.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	12.4	20.9	13.8	0.0	25.2	25.2	60.5	34.0	0.0
LOS by Move:	A	A	A	B	C	B	A	C	C	E	C	A
HCM2kAvgQ:	0	0	0	13	8	10	0	6	6	1	19	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.136
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2 0 0	0	0	1 1 0	1	0	0 0 1	0	0	0 0 0
Volume Module:												
Base Vol:	397	739	0	0	1653	181	86	0	561	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	397	739	0	0	1653	181	86	0	561	0	0	0
Added Vol:	2	16	0	0	79	0	0	0	8	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	399	755	0	0	1732	181	86	0	569	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	434	821	0	0	1883	197	93	0	618	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	434	821	0	0	1883	197	93	0	618	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	434	821	0	0	1883	197	93	0	618	0	0	0
OvlAdjVol:									378			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.81	0.19	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	2897	303	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.15	0.26	0.00	0.00	0.65	0.65	0.06	0.00	0.39	0.00	0.00	0.00
OvlAdjV/S:									0.24			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.577
Loss Time (sec):	6	Average Delay (sec/veh):	14.3
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	0	1	0	2	1 1
Volume Module:												
Base Vol:	385	0	274	0	0	0	0	806	276	0	1599	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	385	0	274	0	0	0	0	806	276	0	1599	0
Added Vol:	38	0	0	0	0	0	0	3	7	0	15	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	423	0	274	0	0	0	0	809	283	0	1614	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.00	0.85	0.85	0.85
PHF Volume:	495	0	321	0	0	0	0	947	0	0	1890	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	495	0	321	0	0	0	0	947	0	0	1890	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	495	0	321	0	0	0	0	947	0	0	1890	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Lanes:	1.61	0.00	1.39	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.00	0.00
Final Sat.:	2790	0	2419	0	0	0	1900	5187	1729	0	5187	0
Capacity Analysis Module:												
Vol/Sat:	0.18	0.00	0.13	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.36	0.00
Crit Moves:	****										****	
Green/Cycle:	0.31	0.00	0.31	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.63	0.00
Volume/Cap:	0.58	0.00	0.43	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.58	0.00
Delay/Veh:	29.7	0.0	27.8	0.0	0.0	0.0	0.0	8.3	0.0	0.0	10.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.7	0.0	27.8	0.0	0.0	0.0	0.0	8.3	0.0	0.0	10.9	0.0
LOS by Move:	C		A	C		A	A		A	A		B A
HCM2kAvgQ:	9	0	6	0	0	0	0	5	0	0	12	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.749
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 0 1	2	0	2 0 0	0	0	0 0 0	2	0	0 0 2
Volume Module:												
Base Vol:	0	1047	437	643	1700	0	0	0	0	134	0	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1047	437	643	1700	0	0	0	0	134	0	75
Added Vol:	0	2	45	87	8	0	0	0	0	9	0	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1049	482	730	1708	0	0	0	0	143	0	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	1079	496	751	1757	0	0	0	0	147	0	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1079	496	751	1757	0	0	0	0	147	0	95
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1079	496	751	1757	0	0	0	0	147	0	95
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	2880	3200	0	0	0	0	2880	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.31	0.26	0.55	0.00	0.00	0.00	0.00	0.05	0.00	0.03
OvlAdjV/S:												0.00
Crit Moves:		****			****						****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.750
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0	1	0	0 1!	0	0	1	0 2	0	1	1	0 1	1	0
Volume Module:																
Base Vol:	570	9	191		6	3	13		6	1118	481		129	960		12
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	570	9	191		6	3	13		6	1118	481		129	960		12
Added Vol:	0	0	6		0	0	0		0	9	0		3	4		0
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0		0
Initial Fut:	570	9	197		6	3	13		6	1127	481		132	964		12
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97		0.97
PHF Volume:	589	9	204		6	3	13		6	1164	497		136	996		12
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0		0
Reduced Vol:	589	9	204		6	3	13		6	1164	497		136	996		12
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
FinalVolume:	589	9	204		6	3	13		6	1164	497		136	996		12
OvlAdjVol:											198					
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600		1600
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Lanes:	1.97	0.03	1.00		0.27	0.14	0.59		1.00	2.00	1.00		1.00	1.98		0.02
Final Sat.:	3150	50	1600		436	218	945		1600	3200	1600		1600	3161		39
Capacity Analysis Module:																
Vol/Sat:	0.19	0.19	0.13		0.01	0.01	0.01		0.00	0.36	0.31		0.09	0.32		0.32
OvlAdjV/S:											0.12					
Crit Moves:	****					****				****			****			

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.666
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0	1	0	1 0	0	1	1	0 1	1	0	1	0 2	0	1
Volume Module:																
Base Vol:	254	42	132		17	22	5		19	999	161		107	890		19
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Initial Bse:	254	42	132		17	22	5		19	999	161		107	890		19
Added Vol:	0	0	11		0	0	0		0	21	0		5	10		0
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0		0
Initial Fut:	254	42	143		17	22	5		19	1020	161		112	900		19
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.98	0.98	0.98		0.98	0.98	0.98		0.98	0.98	0.98		0.98	0.98		0.98
PHF Volume:	258	43	145		17	22	5		19	1038	164		114	916		19
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0		0
Reduced Vol:	258	43	145		17	22	5		19	1038	164		114	916		19
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
FinalVolume:	258	43	145		17	22	5		19	1038	164		114	916		19
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600		1600
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00
Lanes:	1.72	0.28	1.00		0.44	0.56	1.00		1.00	1.73	0.27		1.00	2.00		1.00
Final Sat.:	2746	454	1600		697	903	1600		1600	2764	436		1600	3200		1600
Capacity Analysis Module:																
Vol/Sat:	0.09	0.09	0.09		0.02	0.02	0.00		0.01	0.38	0.38		0.07	0.29		0.01
Crit Moves:	****					****				****			****			

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.727
Loss Time (sec):	6	Average Delay (sec/veh):	25.1
Optimal Cycle:	45	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	0	1 0	0 1	0	0 1!	0 0
Volume Module:												
Base Vol:	389	1090	34	3	815	385	282	11	117	18	17	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	389	1090	34	3	815	385	282	11	117	18	17	6
Added Vol:	12	3	0	0	6	0	0	0	27	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	401	1093	34	3	821	385	282	11	144	18	17	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	425	1158	36	3	870	408	299	12	153	19	18	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	425	1158	36	3	870	408	299	12	153	19	18	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	425	1158	36	3	870	408	299	12	153	19	18	6
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.96	0.96	0.96
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.96	0.04	1.00	0.44	0.41	0.15
Final Sat.:	1805	3610	1615	1805	3610	1615	1745	68	1615	800	756	267
Capacity Analysis Module:												
Vol/Sat:	0.24	0.32	0.02	0.00	0.24	0.25	0.17	0.17	0.09	0.02	0.02	0.02
Crit Moves:	****					****	****				****	
Green/Cycle:	0.32	0.67	0.67	0.00	0.35	0.35	0.24	0.24	0.24	0.03	0.03	0.03
Volume/Cap:	0.73	0.48	0.03	0.48	0.69	0.73	0.73	0.73	0.40	0.73	0.73	0.73
Delay/Veh:	34.4	8.3	5.7	95.9	29.7	33.2	41.4	41.4	32.9	83.7	83.7	83.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.4	8.3	5.7	95.9	29.7	33.2	41.4	41.4	32.9	83.7	83.7	83.7
LOS by Move:	C	A	A	F	C	C	D	D	C	F	F	F
HCM2kAvgQ:	11	9	0	1	13	12	10	10	4	3	3	3

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

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Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.638
Loss Time (sec):	6	Average Delay (sec/veh):	18.0
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	52	1273	0	0	668	301	301	0	186	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	52	1273	0	0	668	301	301	0	186	0	0	0
Added Vol:	13	15	0	0	33	0	0	0	24	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	65	1288	0	0	701	301	301	0	210	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	69	1366	0	0	743	319	319	0	223	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	69	1366	0	0	743	319	319	0	223	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	69	1366	0	0	743	319	319	0	223	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.91	0.91	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.40	0.60	1.42	0.00	0.58	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2412	1036	2453	0	1008	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.38	0.00	0.00	0.31	0.31	0.13	0.00	0.22	0.00	0.00	0.00
Crit Moves:		****		****					****			
Green/Cycle:	0.07	0.59	0.00	0.00	0.53	0.53	0.35	0.00	0.35	0.00	0.00	0.00
Volume/Cap:	0.58	0.64	0.00	0.00	0.58	0.58	0.38	0.00	0.64	0.00	0.00	0.00
Delay/Veh:	52.7	13.9	0.0	0.0	16.6	16.6	24.7	0.0	29.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.7	13.9	0.0	0.0	16.6	16.6	24.7	0.0	29.0	0.0	0.0	0.0
LOS by Move:	D	B	A	A	B	B	C	A	C	A	A	A
HCM2kAvgQ:	3	15	0	0	11	11	5	0	11	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.865
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	85	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	80	1628	109	81	1067	96	103	16	113	123	28	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	1628	109	81	1067	96	103	16	113	123	28	98
Added Vol:	0	36	9	7	18	0	0	2	0	4	1	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	1664	118	88	1085	96	103	18	113	127	29	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	83	1728	123	91	1127	100	107	19	117	132	30	105
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1728	123	91	1127	100	107	19	117	132	30	105
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	1728	123	91	1127	100	107	19	117	132	30	105
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.14	0.86	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	220	1380	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.54	0.08	0.06	0.35	0.06	0.07	0.09	0.09	0.08	0.02	0.07
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.799
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	327	1150	288	209	832	262	346	651	292	359	659	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	327	1150	288	209	832	262	346	651	292	359	659	326
Added Vol:	0	36	36	0	18	4	9	33	0	18	16	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	327	1186	324	209	850	266	355	684	292	377	675	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	336	1219	333	215	874	273	365	703	300	387	694	335
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	336	1219	333	215	874	273	365	703	300	387	694	335
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	336	1219	333	215	874	273	365	703	300	387	694	335
OvlAdjVol:			118						113			216
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.28	0.72	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	3656	1144	2880	3200	1600	2880	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.25	0.21	0.07	0.24	0.24	0.13	0.22	0.19	0.13	0.22	0.21
OvlAdjV/S:			0.07						0.07			0.13
Crit Moves:	****				****		****				****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.960
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	142	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	233	1535	153	7	1259	190	245	63	350	85	35	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	233	1535	153	7	1259	190	245	63	350	85	35	12
Added Vol:	0	45	0	4	22	9	18	0	0	0	0	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1580	153	11	1281	199	263	63	350	85	35	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	252	1710	166	12	1386	215	285	68	379	92	38	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	1710	166	12	1386	215	285	68	379	92	38	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	252	1710	166	12	1386	215	285	68	379	92	38	23
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.61	0.39	1.00	1.82	0.74	0.44
Final Sat.:	1600	3200	1600	1600	3200	1600	2582	618	1600	2901	1188	711
Capacity Analysis Module:												
Vol/Sat:	0.16	0.53	0.10	0.01	0.43	0.13	0.11	0.11	0.24	0.03	0.03	0.03
OvlAdjV/S:						0.00						
Crit Moves:	****				****				****			****

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.965
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	148	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Added Vol:	0	33	0	0	16	6	12	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	261	1073	179	385	1058	215	678	1531	287	428	702	244
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	274	1125	0	404	1109	0	711	1605	0	449	736	256
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	274	1125	0	404	1109	0	711	1605	0	449	736	256
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	274	1125	0	404	1109	0	711	1605	0	449	736	256
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	2880	4800	1600	2880	4800	1600	2880	4800	1600	2880	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.23	0.00	0.14	0.23	0.00	0.25	0.33	0.00	0.16	0.15	0.16
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.596
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 0	0	0 3	0 1	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	33	1261	0	0	1567	50	172	0	94	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	1261	0	0	1567	50	172	0	94	0	0	0
Added Vol:	0	21	0	0	10	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	1282	0	0	1577	50	172	0	94	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.00	0.93	0.93	0.93
PHF Volume:	36	1381	0	0	1699	54	185	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1381	0	0	1699	54	185	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	36	1381	0	0	1699	54	185	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	4800	1600	2880	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.43	0.00	0.00	0.35	0.03	0.06	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****			****			****				

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.755
Loss Time (sec): 10 Average Delay (sec/veh): 22.9
Optimal Cycle: 62 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	2	0 1	1 0	1	0 0	1 0	1	0 1!	0 1
Volume Module:												
Base Vol:	1	799	283	610	1382	5	4	2	4	186	1	495
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	799	283	610	1382	5	4	2	4	186	1	495
Added Vol:	0	21	0	6	4	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	820	283	616	1386	5	4	2	4	186	1	495
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	1	914	315	687	1545	6	4	2	4	207	1	552
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	914	315	687	1545	6	4	2	4	207	1	552
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	914	315	687	1545	6	4	2	4	207	1	552
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.95	0.95	0.95	0.90	0.90	0.88	0.88	0.88
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.33	0.67	1.27	0.01	1.72
Final Sat.:	1805	3610	1615	3502	3593	13	1805	570	1140	2126	5	2882
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.20	0.20	0.43	0.43	0.00	0.00	0.00	0.10	0.23	0.19
Crit Moves:		****		****			****				****	
Green/Cycle:	0.00	0.34	0.63	0.26	0.59	0.59	0.00	0.01	0.01	0.29	0.30	0.56
Volume/Cap:	0.72	0.76	0.31	0.76	0.72	0.72	0.76	0.33	0.33	0.33	0.76	0.34
Delay/Veh:	458.9	32.3	8.7	37.7	15.7	15.7	253.5	58.5	58.5	27.8	34.9	12.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	458.9	32.3	8.7	37.7	15.7	15.7	253.5	58.5	58.5	27.8	34.9	12.0
LOS by Move:	F	C	A	D	B	B	F	E	E	C	C	B
HCM2kAvgQ:	0	13	4	10	18	18	1	1	1	4	12	5

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.827
Loss Time (sec): 10 Average Delay (sec/veh): 21.4
Optimal Cycle: 78 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 2	0 1	1	0 2	0 0	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	933	619	380	1294	0	169	0	176	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	933	619	380	1294	0	169	0	176	0	0	0
Added Vol:	0	9	0	0	4	0	12	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	942	619	380	1298	0	181	0	176	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	998	656	403	1375	0	192	0	186	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	998	656	403	1375	0	192	0	186	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	998	656	403	1375	0	192	0	186	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.41	0.22	0.38	0.00	0.05	0.00	0.12	0.00	0.00	0.00
Crit Moves:			****	****					****			
Green/Cycle:	0.00	0.49	0.49	0.27	0.76	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Volume/Cap:	0.00	0.56	0.83	0.83	0.50	0.00	0.39	0.00	0.83	0.00	0.00	0.00
Delay/Veh:	0.0	18.3	29.0	45.5	4.8	0.0	39.7	0.0	63.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.3	29.0	45.5	4.8	0.0	39.7	0.0	63.5	0.0	0.0	0.0
LOS by Move:	A	B	C	D	A	A	D	A	E	A	A	A
HCM2kAvgQ:	0	12	20	12	8	0	3	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.741
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0 1	0	0 1	1 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	6	7	1	94	38	102	303	1335	189	42	609	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	7	1	94	38	102	303	1335	189	42	609	237
Added Vol:	9	0	10	10	0	9	19	32	19	21	16	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	7	11	104	38	111	322	1367	208	63	625	258
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	15	7	11	105	38	112	326	1382	210	64	632	261
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	7	11	105	38	112	326	1382	210	64	632	261
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	15	7	11	105	38	112	326	1382	210	64	632	261
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.68	0.32	1.00	0.73	0.27	1.00	1.00	1.74	0.26	1.00	2.00	1.00
Final Sat.:	1091	509	1600	1172	428	1600	1600	2777	423	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.09	0.09	0.07	0.20	0.50	0.50	0.04	0.20	0.16
OvlAdjV/S:						0.00						
Crit Moves:		****			****			****		****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.647
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	0 1	2 0	1	0 1	2 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	103	21	75	151	9	96	153	776	54	31	1097	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	103	21	75	151	9	96	153	776	54	31	1097	200
Added Vol:	8	0	16	16	0	8	16	21	16	33	42	33
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	111	21	91	167	9	104	169	797	70	64	1139	233
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	115	22	94	173	9	107	175	823	72	66	1177	241
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	115	22	94	173	9	107	175	823	72	66	1177	241
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	115	22	94	173	9	107	175	823	72	66	1177	241
OvlAdjVol:						10						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.84	0.16	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	2880	1600	1600	2880	2942	258	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.01	0.06	0.06	0.01	0.07	0.06	0.28	0.28	0.04	0.37	0.15
OvlAdjV/S:						0.01						
Crit Moves:			****	****				****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Added Vol:	0	0	0		0	0	0		0	54	0		0	108	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		0	1083	0		0	1390	14	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93	
PHF Volume:	0	0	0		0	0	0		0	1160	0		0	1488	15	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		0	1160	0		0	1488	15	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1904	2663	580		2068	2648	744		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	62	23	463		48	23	362		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	62	23	463		48	23	362		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.772
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 61 Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0	2	0 1	1	0	2	0 1	1	0	2	1 0	1	0	2	1 0
Volume Module:																
Base Vol:	234	775	63		160	550	158		163	963	214		84	684	112	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	234	775	63		160	550	158		163	963	214		84	684	112	
Added Vol:	6	0	0		0	0	24		12	36	3		0	72	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	240	775	63		160	550	182		175	999	217		84	756	112	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	249	803	65		166	570	189		181	1035	225		87	783	116	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	249	803	65		166	570	189		181	1035	225		87	783	116	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	249	803	65		166	570	189		181	1035	225		87	783	116	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.46	0.54		1.00	2.61	0.39	
Final Sat.:	1600	3200	1600		1600	3200	1600		1600	3943	857		1600	4181	619	
Capacity Analysis Module:																
Vol/Sat:	0.16	0.25	0.04		0.10	0.18	0.12		0.11	0.26	0.26		0.05	0.19	0.19	
Crit Moves:		****				****					****			****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.899
Loss Time (sec): 6 Average Delay (sec/veh): 25.2
Optimal Cycle: 93 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0 1! 0	1	0	2 1 0	1	0	3 0 1
Volume Module:												
Base Vol:	1	0	83	923	12	536	0	1796	72	18	576	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	0	83	923	12	536	0	1796	72	18	576	116
Added Vol:	0	0	0	0	0	30	0	36	0	0	42	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	83	923	12	566	0	1832	72	18	618	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00
PHF Volume:	1	0	86	957	12	587	0	1900	75	19	641	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	86	957	12	587	0	1900	75	19	641	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	1	0	86	957	12	587	0	1900	75	19	641	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	1.00	0.87	0.91	0.91	0.91	1.00	0.90	0.90	0.95	0.91	1.00
Lanes:	0.01	0.00	0.99	1.61	0.02	1.37	0.00	2.89	0.11	1.00	3.00	1.00
Final Sat.:	20	0	1628	2798	28	2388	0	4961	195	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.05	0.34	0.45	0.25	0.00	0.38	0.38	0.01	0.12	0.00
Crit Moves:					****			****		****		
Green/Cycle:	0.00	0.00	0.00	0.50	0.50	0.50	0.00	0.43	0.43	0.01	0.44	0.00
Volume/Cap:	xxxx	0.00	xxxx	0.68	0.90	0.49	0.00	0.90	0.90	0.90	0.28	0.00
Delay/Veh:	0.0	0.0	0.0	19.7	29.3	16.5	0.0	32.1	32.1	199.9	18.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	19.7	29.3	16.5	0.0	32.1	32.1	199.9	18.1	0.0
LOS by Move:	A	A	A	B	C	B	A	C	C	F	B	A
HCM2kAvgQ:	2	0	2	22	1	12	0	24	24	2	5	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.705
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 51 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2 0 0	0	0	1 1 0	1	0	0 0 1	0	0	0 0 0
Volume Module:												
Base Vol:	418	1243	0	0	808	115	81	0	407	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	418	1243	0	0	808	115	81	0	407	0	0	0
Added Vol:	3	31	0	0	63	0	0	0	7	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	421	1274	0	0	871	115	81	0	414	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	449	1360	0	0	930	123	86	0	442	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	449	1360	0	0	930	123	86	0	442	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	449	1360	0	0	930	123	86	0	442	0	0	0
OvlAdjVol:									192			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.77	0.23	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	2827	373	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.16	0.42	0.00	0.00	0.33	0.33	0.05	0.00	0.28	0.00	0.00	0.00
OvlAdjV/S:									0.12			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.564
Loss Time (sec):	6	Average Delay (sec/veh):	9.1
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	0	0	1	0	2
Volume Module:												
Base Vol:	123	0	289	0	0	0	0	2097	621	0	969	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	123	0	289	0	0	0	0	2097	621	0	969	0
Added Vol:	30	0	0	0	0	0	0	6	15	0	12	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	153	0	289	0	0	0	0	2103	636	0	981	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00	0.96	0.96	0.96
PHF Volume:	159	0	301	0	0	0	0	2188	0	0	1021	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	159	0	301	0	0	0	0	2188	0	0	1021	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	159	0	301	0	0	0	0	2188	0	0	1021	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Lanes:	1.35	0.00	1.65	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.00	0.00
Final Sat.:	2268	0	2786	0	0	0	1900	5187	1729	0	5187	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.00	0.11	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.20	0.00
Crit Moves:			****					****				
Green/Cycle:	0.19	0.00	0.19	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.75	0.00
Volume/Cap:	0.37	0.00	0.56	0.00	0.00	0.00	0.00	0.56	0.00	0.00	0.26	0.00
Delay/Veh:	35.3	0.0	37.6	0.0	0.0	0.0	0.0	5.7	0.0	0.0	4.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.3	0.0	37.6	0.0	0.0	0.0	0.0	5.7	0.0	0.0	4.0	0.0
LOS by Move:	D		A	D		A	A		A	A		A
HCM2kAvgQ:	3		0	6		0	0		11	0		4

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.783
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 0	1	2	0	2	0	0	0	0	0
Volume Module:												
Base Vol:	0	1712	118	106	1120	0	0	0	0	136	0	161
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1712	118	106	1120	0	0	0	0	136	0	161
Added Vol:	0	3	36	70	7	0	0	0	0	18	0	35
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1715	154	176	1127	0	0	0	0	154	0	196
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1800	162	185	1183	0	0	0	0	162	0	206
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1800	162	185	1183	0	0	0	0	162	0	206
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1800	162	185	1183	0	0	0	0	162	0	206
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	2880	3200	0	0	0	0	2880	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.56	0.10	0.06	0.37	0.00	0.00	0.00	0.00	0.06	0.00	0.06
OvlAdjV/S:												0.00
Crit Moves:		****			****						****	

MITIGATED CONDITIONS

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.959
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	142	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2.0	0	0	0 1.0	1 0	1	0 0.0	0 2	0	0 0.0	0 0
Volume Module:												
Base Vol:	397	739	0	0	1653	181	86	0	561	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	397	739	0	0	1653	181	86	0	561	0	0	0
Added Vol:	2	16	0	0	79	0	0	0	8	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	399	755	0	0	1732	181	86	0	569	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	434	821	0	0	1883	197	93	0	618	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	434	821	0	0	1883	197	93	0	618	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	434	821	0	0	1883	197	93	0	618	0	0	0
OvlAdjVol:									137			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.81	0.19	1.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	2897	303	1600	0	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.15	0.26	0.00	0.00	0.65	0.65	0.06	0.00	0.19	0.00	0.00	0.00
OvlAdjV/S:									0.04			
Crit Moves:	****				****		****					

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.894
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	97	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3.0	0 1	2	0 2.0	1 0	2	0 2.0	1 0	2	0 2.0	0 1
Volume Module:												
Base Vol:	236	1291	628	412	1070	187	284	757	153	110	446	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	236	1291	628	412	1070	187	284	757	153	110	446	185
Added Vol:	0	45	45	0	9	2	11	41	0	9	8	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	236	1336	673	412	1079	189	295	798	153	119	454	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	245	1384	697	427	1118	196	306	827	159	123	470	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	1384	697	427	1118	196	306	827	159	123	470	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	245	1384	697	427	1118	196	306	827	159	123	470	192
OvlAdjVol:		629							93			0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.55	0.45	2.00	2.52	0.48	2.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	4085	715	2880	4028	772	2880	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.29	0.44	0.15	0.27	0.27	0.11	0.21	0.21	0.04	0.15	0.12
OvlAdjV/S:			0.39						0.12			0.00
Crit Moves:			****	****			****				****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.974
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	159	Level Of Service:	E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Ovl				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0	2	0 1	1	0	2	0 1	1	1	0	0 1	1	1	0	1 0
Volume Module:																
Base Vol:	159	1684	70	1	1120	277	407	76	416	113	108	12				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	159	1684	70	1	1120	277	407	76	416	113	108	12				
Added Vol:	0	56	0	2	11	4	23	0	0	0	0	11				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	159	1740	70	3	1131	281	430	76	416	113	108	23				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87				
PHF Volume:	184	2009	81	3	1306	324	497	88	480	130	125	27				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	184	2009	81	3	1306	324	497	88	480	130	125	27				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
FinalVolume:	184	2009	81	3	1306	324	497	88	480	130	125	27				
OvlAdjVol:						32			297							
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600				
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.70	0.30	1.00	1.39	1.33	0.28				
Final Sat.:	1600	3200	1600	1600	3200	1600	2719	481	1600	2223	2125	453				
Capacity Analysis Module:																
Vol/Sat:	0.11	0.63	0.05	0.00	0.41	0.20	0.18	0.18	0.30	0.06	0.06	0.06				
OvlAdjV/S:						0.02			0.19							
Crit Moves:		****			****				****	****						

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.639
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	2	0 0	0	0	1	1 0	1	0	0	0 2	0	0	0	0 0
Volume Module:																
Base Vol:	418	1243	0	0	808	115	81	0	407	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	418	1243	0	0	808	115	81	0	407	0	0	0				
Added Vol:	3	31	0	0	63	0	0	0	7	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	421	1274	0	0	871	115	81	0	414	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94				
PHF Volume:	449	1360	0	0	930	123	86	0	442	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	449	1360	0	0	930	123	86	0	442	0	0	0				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
FinalVolume:	449	1360	0	0	930	123	86	0	442	0	0	0				
OvlAdjVol:									0							
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600				
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Lanes:	2.00	2.00	0.00	0.00	1.77	0.23	1.00	0.00	2.00	0.00	0.00	0.00				
Final Sat.:	2880	3200	0	0	2827	373	1600	0	3200	0	0	0				
Capacity Analysis Module:																
Vol/Sat:	0.16	0.42	0.00	0.00	0.33	0.33	0.05	0.00	0.14	0.00	0.00	0.00				
OvlAdjV/S:									0.00							
Crit Moves:	****				****		****									

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.799
Loss Time (sec): 10 | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 66 | Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	3 0 1	2	0	2 1 0	2	0	2 1 0	2	0	2 0 1
Volume Module:												
Base Vol:	327	1150	288	209	832	262	346	651	292	359	659	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	327	1150	288	209	832	262	346	651	292	359	659	326
Added Vol:	0	36	36	0	18	4	9	33	0	18	16	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	327	1186	324	209	850	266	355	684	292	377	675	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	336	1219	333	215	874	273	365	703	300	387	694	335
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	336	1219	333	215	874	273	365	703	300	387	694	335
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	336	1219	333	215	874	273	365	703	300	387	694	335
OvlAdjVol:			118						133			216
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.28	0.72	2.00	2.10	0.90	2.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	3656	1144	2880	3364	1436	2880	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.25	0.21	0.07	0.24	0.24	0.13	0.21	0.21	0.13	0.22	0.21
OvlAdjV/S:			0.07						0.09			0.13
Crit Moves:	****				****			****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.833
Loss Time (sec): 10 | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 75 | Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2 0 1	1	0	2 0 1	1	1	0 0 1	1	1	0 1 0
Volume Module:												
Base Vol:	233	1535	153	7	1259	190	245	63	350	85	35	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	233	1535	153	7	1259	190	245	63	350	85	35	12
Added Vol:	0	45	0	4	22	9	18	0	0	0	0	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1580	153	11	1281	199	263	63	350	85	35	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	252	1710	166	12	1386	215	285	68	379	92	38	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	1710	166	12	1386	215	285	68	379	92	38	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	252	1710	166	12	1386	215	285	68	379	92	38	23
OvlAdjVol:						39			127			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.61	0.39	1.00	1.82	0.74	0.44
Final Sat.:	1600	3200	1600	1600	3200	1600	2582	618	1600	2901	1188	711
Capacity Analysis Module:												
Vol/Sat:	0.16	0.53	0.10	0.01	0.43	0.13	0.11	0.11	0.24	0.03	0.03	0.03
OvlAdjV/S:						0.02			0.08			
Crit Moves:	****				****			****				****

EXISTING PLUS 2025 PROJECT CONDITIONS

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.789
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	0 1!	0 0	1	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	594	4	140	18	10	12	4	1170	436	78	1018	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	594	4	140	18	10	12	4	1170	436	78	1018	3
Added Vol:	0	0	14	0	0	0	0	21	0	3	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	594	4	154	18	10	12	4	1191	436	81	1022	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	645	4	167	20	11	13	4	1293	473	88	1110	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	645	4	167	20	11	13	4	1293	473	88	1110	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	645	4	167	20	11	13	4	1293	473	88	1110	3
OvlAdjVol:									149			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.99	0.01	1.00	0.45	0.25	0.30	1.00	2.00	1.00	1.00	1.99	0.01
Final Sat.:	3179	21	1600	720	400	480	1600	3200	1600	1600	3191	9
Capacity Analysis Module:												
Vol/Sat:	0.20	0.20	0.10	0.03	0.03	0.03	0.00	0.40	0.30	0.05	0.35	0.35
OvlAdjV/S:									0.09			
Crit Moves:	****					****		****		****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.746
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	268	27	102	22	45	19	7	1045	292	53	790	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	268	27	102	22	45	19	7	1045	292	53	790	14
Added Vol:	0	0	25	0	0	0	0	50	0	5	10	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	268	27	127	22	45	19	7	1095	292	58	800	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	287	29	136	24	48	20	7	1171	312	62	856	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	287	29	136	24	48	20	7	1171	312	62	856	15
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	287	29	136	24	48	20	7	1171	312	62	856	15
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.82	0.18	1.00	0.33	0.67	1.00	1.00	1.58	0.42	1.00	2.00	1.00
Final Sat.:	2907	293	1600	525	1075	1600	1600	2526	674	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.08	0.04	0.04	0.01	0.00	0.46	0.46	0.04	0.27	0.01
Crit Moves:	****			****				****		****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.616
Loss Time (sec):	6	Average Delay (sec/veh):	23.7
Optimal Cycle:	34	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	0	1 0	0 1	0	0 1!	0 0
Volume Module:												
Base Vol:	144	1051	17	0	812	140	437	6	310	12	3	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	144	1051	17	0	812	140	437	6	310	12	3	8
Added Vol:	11	3	0	0	14	0	0	0	64	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	155	1054	17	0	826	140	437	6	374	12	3	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	157	1066	17	0	836	142	442	6	378	12	3	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	157	1066	17	0	836	142	442	6	378	12	3	8
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	157	1066	17	0	836	142	442	6	378	12	3	8
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	1.00	0.95	0.85	0.95	0.95	0.85	0.93	0.93	0.93
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.99	0.01	1.00	0.52	0.13	0.35
Final Sat.:	1805	3610	1615	1900	3610	1615	1786	25	1615	921	230	614
Capacity Analysis Module:												
Vol/Sat:	0.09	0.30	0.01	0.00	0.23	0.09	0.25	0.25	0.23	0.01	0.01	0.01
Crit Moves:	****				****			****			****	
Green/Cycle:	0.14	0.52	0.52	0.00	0.38	0.38	0.40	0.40	0.40	0.02	0.02	0.02
Volume/Cap:	0.62	0.57	0.02	0.00	0.62	0.23	0.62	0.62	0.58	0.62	0.62	0.62
Delay/Veh:	44.9	17.0	11.8	0.0	26.2	21.6	25.4	25.4	24.7	75.4	75.4	75.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.9	17.0	11.8	0.0	26.2	21.6	25.4	25.4	24.7	75.4	75.4	75.4
LOS by Move:	D	B	B	A	C	C	C	C	C	E	E	E
HCM2kAvgQ:	4	11	0	0	11	3	11	11	10	2	2	2

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
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Note: Queue reported is the number of cars per lane.

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AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.938
Loss Time (sec):	6	Average Delay (sec/veh):	34.1
Optimal Cycle:	121	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	41	873	0	0	927	223	349	0	533	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	873	0	0	927	223	349	0	533	0	0	0
Added Vol:	13	14	0	0	79	0	0	0	57	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	54	887	0	0	1006	223	349	0	590	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	57	940	0	0	1066	236	370	0	625	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	940	0	0	1066	236	370	0	625	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	57	940	0	0	1066	236	370	0	625	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.92	0.92	0.89	1.00	0.89	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.64	0.36	1.23	0.00	0.77	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2875	637	2076	0	1305	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.26	0.00	0.00	0.37	0.37	0.18	0.00	0.48	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.03	0.43	0.00	0.00	0.40	0.40	0.51	0.00	0.51	0.00	0.00	0.00
Volume/Cap:	0.94	0.61	0.00	0.00	0.94	0.94	0.35	0.00	0.94	0.00	0.00	0.00
Delay/Veh:	141.0	22.7	0.0	0.0	41.3	41.3	14.6	0.0	37.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	141.0	22.7	0.0	0.0	41.3	41.3	14.6	0.0	37.9	0.0	0.0	0.0
LOS by Move:	F	C	A	A	D	D	B	A	D	A	A	A
HCM2kAvgQ:	4	12	0	0	22	22	6	0	28	0	0	0

Note: Queue reported is the number of cars per lane.

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Existing Plus 2025 Project Conditions
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.989
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	130	1183	442	221	1365	214	158	93	244	115	48	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1183	442	221	1365	214	158	93	244	115	48	76
Added Vol:	0	86	21	16	17	0	0	4	0	4	1	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	130	1269	463	237	1382	214	158	97	244	119	49	79
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	139	1356	495	253	1476	229	169	104	261	127	52	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	1356	495	253	1476	229	169	104	261	127	52	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	139	1356	495	253	1476	229	169	104	261	127	52	84
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.28	0.72	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	455	1145	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.42	0.31	0.16	0.46	0.14	0.11	0.23	0.23	0.08	0.03	0.05
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.981
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	169	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	236	1291	628	412	1070	187	284	757	153	110	446	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	236	1291	628	412	1070	187	284	757	153	110	446	185
Added Vol:	0	86	86	0	17	4	21	79	0	17	16	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	236	1377	714	412	1087	191	305	836	153	127	462	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	245	1427	740	427	1126	198	316	866	159	132	479	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	1427	740	427	1126	198	316	866	159	132	479	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	245	1427	740	427	1126	198	316	866	159	132	479	192
OvlAdjVol:			667						23			0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.55	0.45	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	4083	717	2880	3200	1600	2880	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.30	0.46	0.15	0.28	0.28	0.11	0.27	0.10	0.05	0.15	0.12
OvlAdjV/S:			0.42						0.01			0.00
Crit Moves:			****	****				****		****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.111
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	159	1684	70	1	1120	277	407	76	416	113	108	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	1684	70	1	1120	277	407	76	416	113	108	12
Added Vol:	0	107	0	4	21	9	43	0	0	0	0	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	159	1791	70	5	1141	286	450	76	416	113	108	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	184	2068	81	6	1318	330	520	88	480	130	125	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	2068	81	6	1318	330	520	88	480	130	125	38
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	2068	81	6	1318	330	520	88	480	130	125	38
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.71	0.29	1.00	1.34	1.27	0.39
Final Sat.:	1600	3200	1600	1600	3200	1600	2738	462	1600	2138	2040	622
Capacity Analysis Module:												
Vol/Sat:	0.11	0.65	0.05	0.00	0.41	0.21	0.19	0.19	0.30	0.06	0.06	0.06
OvlAdjV/S:						0.00						
Crit Moves:		****			****				****			****

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.896
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	98	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	291	1364	364	207	938	396	401	500	169	167	1116	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	291	1364	364	207	938	396	401	500	169	167	1116	139
Added Vol:	0	79	0	0	16	6	29	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	291	1443	364	207	954	402	430	500	169	167	1116	139
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	307	1522	0	218	1006	0	454	527	0	176	1177	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	307	1522	0	218	1006	0	454	527	0	176	1177	147
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	307	1522	0	218	1006	0	454	527	0	176	1177	147
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	2880	4800	1600	2880	4800	1600	2880	4800	1600	2880	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.32	0.00	0.08	0.21	0.00	0.16	0.11	0.00	0.06	0.25	0.09
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.875
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	89	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 1	1	0 3	0 1	2	0 1	0 1	1	0 1	0 1
Volume Module:												
Base Vol:	116	2253	0	0	1002	107	39	0	36	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	116	2253	0	0	1002	107	39	0	36	0	0	0
Added Vol:	0	50	0	0	10	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	2303	0	0	1012	107	39	0	36	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	123	2434	0	0	1070	113	41	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	2434	0	0	1070	113	41	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	123	2434	0	0	1070	113	41	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	2880	3200	1600	1600	4800	1600	2880	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.76	0.00	0.00	0.22	0.07	0.01	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****			****			****				

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.864
Loss Time (sec):	10	Average Delay (sec/veh):	23.5
Optimal Cycle:	90	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	2	0 1	1 0	1	0 0	1 0	1	0 1!	0 1
Volume Module:												
Base Vol:	0	1796	320	349	679	2	0	1	1	262	0	572
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1796	320	349	679	2	0	1	1	262	0	572
Added Vol:	0	50	0	6	4	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1846	320	355	683	2	0	1	1	262	0	572
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	1960	340	377	725	2	0	1	1	278	0	607
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1960	340	377	725	2	0	1	1	278	0	607
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1960	340	377	725	2	0	1	1	278	0	607
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	0.95	1.00	0.93	0.93	0.88	1.00	0.88
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.50	0.50	1.31	0.00	1.69
Final Sat.:	1900	3610	1615	3502	3599	11	1900	879	879	2206	0	2830
Capacity Analysis Module:												
Vol/Sat:	0.00	0.54	0.21	0.11	0.20	0.00	0.00	0.00	0.00	0.13	0.00	0.21
Crit Moves:		****		****				****		****		
Green/Cycle:	0.00	0.63	0.77	0.12	0.75	0.75	0.00	0.00	0.00	0.15	0.00	0.27
Volume/Cap:	0.00	0.86	0.27	0.86	0.27	0.27	0.00	0.86	0.86	0.86	0.00	0.79
Delay/Veh:	0.0	18.8	3.4	59.2	3.9	3.9	0.0	493	492.6	49.5	0.0	37.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.8	3.4	59.2	3.9	3.9	0.0	493	492.6	49.5	0.0	37.6
LOS by Move:	A	B	A	E	A	A	A	F	F	D	A	D
HCM2kAvgQ:	0	25	3	7	4	4	0	1	1	9	0	12

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.877
Loss Time (sec):	10	Average Delay (sec/veh):	32.8
Optimal Cycle:	95	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 2	0 1	1	0 2	0 0	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	1177	267	312	676	0	905	0	281	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1177	267	312	676	0	905	0	281	0	0	0
Added Vol:	0	21	0	0	4	0	29	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1198	267	312	680	0	934	0	281	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	0	1226	273	319	696	0	956	0	288	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1226	273	319	696	0	956	0	288	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1226	273	319	696	0	956	0	288	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.17	0.18	0.19	0.00	0.27	0.00	0.18	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green/Cycle:	0.00	0.39	0.39	0.20	0.59	0.00	0.31	0.00	0.31	0.00	0.00	0.00
Volume/Cap:	0.00	0.88	0.44	0.88	0.33	0.00	0.88	0.00	0.57	0.00	0.00	0.00
Delay/Veh:	0.0	35.0	23.1	59.4	10.6	0.0	40.9	0.0	30.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	35.0	23.1	59.4	10.6	0.0	40.9	0.0	30.5	0.0	0.0	0.0
LOS by Move:	A	D	C	E	B	A	D	A	C	A	A	A
HCM2kAvgQ:	0	22	6	11	6	0	18	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.790
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	126	14	28	173	11	246	35	980	218	6	830	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	14	28	173	11	246	35	980	218	6	830	80
Added Vol:	9	0	10	10	0	9	45	75	45	50	15	50
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	135	14	38	183	11	255	80	1055	263	56	845	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	141	15	40	191	11	266	84	1101	275	58	882	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	15	40	191	11	266	84	1101	275	58	882	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	141	15	40	191	11	266	84	1101	275	58	882	136
OvlAdjVol:						183						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.91	0.09	1.00	0.94	0.06	1.00	1.00	1.60	0.40	1.00	2.00	1.00
Final Sat.:	1450	150	1600	1509	91	1600	1600	2561	639	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.02	0.13	0.13	0.17	0.05	0.43	0.43	0.04	0.28	0.08
OvlAdjV/S:						0.11						
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.666
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	0 1	2	0 1	0 1	2	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	21	13	21	80	18	74	381	725	130	119	952	424
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	13	21	80	18	74	381	725	130	119	952	424
Added Vol:	8	0	16	16	0	8	38	20	38	79	100	79
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	13	37	96	18	82	419	745	168	198	1052	503
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	31	14	39	102	19	88	447	795	179	211	1123	537
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	14	39	102	19	88	447	795	179	211	1123	537
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	31	14	39	102	19	88	447	795	179	211	1123	537
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.63	0.37	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	2880	1600	1600	2880	2611	589	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.02	0.04	0.01	0.05	0.16	0.30	0.30	0.13	0.35	0.34
OvlAdjV/S:						0.00						
Crit Moves:			****	****				****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[18.1]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		4	847	0		0	1530	199	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		4	847	0		0	1530	199	
Added Vol:	0	0	0		0	0	0		0	51	0		0	257	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		4	898	0		0	1787	199	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	0	0	0		0	0	0		4	925	0		0	1840	205	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		4	925	0		0	1840	205	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	1853	2978	462		2311	2773	920		2045	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	67	14	552		33	19	277		279	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	66	14	552		32	19	277		279	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		0.01	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		18.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		C	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.838
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 76 Level Of Service: D

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0		
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	2	1	0	1	0	2	1	0
Volume Module:																				
Base Vol:	172	572	45			99	586	288			111	327	157			37	1179	98		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	172	572	45			99	586	288			111	327	157			37	1179	98		
Added Vol:	14	0	0			0	0	57			11	34	3			0	172	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	186	572	45			99	586	345			122	361	160			37	1351	98		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.96	0.96	0.96			0.96	0.96	0.96			0.96	0.96	0.96			0.96	0.96	0.96		
PHF Volume:	193	595	47			103	609	359			127	375	166			38	1404	102		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	193	595	47			103	609	359			127	375	166			38	1404	102		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	193	595	47			103	609	359			127	375	166			38	1404	102		
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600			1600	1600	1600			1600	1600	1600			1600	1600	1600		
Adjustment:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Lanes:	1.00	2.00	1.00			1.00	2.00	1.00			1.00	2.08	0.92			1.00	2.80	0.20		
Final Sat.:	1600	3200	1600			1600	3200	1600			1600	3326	1474			1600	4475	325		
Capacity Analysis Module:																				
Vol/Sat:	0.12	0.19	0.03			0.06	0.19	0.22			0.08	0.11	0.11			0.02	0.31	0.31		
Crit Moves:	****							****			****						****			

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.879
Loss Time (sec):	6	Average Delay (sec/veh):	24.4
Optimal Cycle:	83	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0 0 1	1	0	1! 0 1	0	0	2 1 0	1	0	3 0 1
Volume Module:												
Base Vol:	0	0	2	604	3	745	0	541	10	7	1225	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	2	604	3	745	0	541	10	7	1225	43
Added Vol:	0	0	0	0	0	72	0	34	0	0	100	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	2	604	3	817	0	575	10	7	1325	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.00
PHF Volume:	0	0	2	739	4	1000	0	704	12	9	1622	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	2	739	4	1000	0	704	12	9	1622	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	0	2	739	4	1000	0	704	12	9	1622	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.89	0.89	0.89	1.00	0.91	0.91	0.95	0.91	1.00
Lanes:	0.00	0.00	1.00	1.42	0.01	1.57	0.00	2.95	0.05	1.00	3.00	1.00
Final Sat.:	0	0	1644	2420	7	2674	0	5083	88	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.31	0.51	0.37	0.00	0.14	0.14	0.00	0.31	0.00
Crit Moves:					****		****				****	
Green/Cycle:	0.00	0.00	0.00	0.58	0.58	0.58	0.00	0.34	0.34	0.01	0.36	0.00
Volume/Cap:	0.00	0.00	xxxx	0.52	0.88	0.64	0.00	0.40	0.40	0.40	0.88	0.00
Delay/Veh:	0.0	0.0	0.0	12.6	22.7	14.3	0.0	25.1	25.1	61.0	35.4	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	12.6	22.7	14.3	0.0	25.1	25.1	61.0	35.4	0.0
LOS by Move:	A	A	A	B	C	B	A	C	C	E	D	A
HCM2kAvgQ:	0	0	0	13	9	11	0	6	6	1	20	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.166
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2 0 0	0	0	1 1 0	1	0	0 0 1	0	0	0 0 0
Volume Module:												
Base Vol:	397	739	0	0	1653	181	86	0	561	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	397	739	0	0	1653	181	86	0	561	0	0	0
Added Vol:	3	30	0	0	151	0	0	0	16	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	400	769	0	0	1804	181	86	0	577	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	435	836	0	0	1961	197	93	0	627	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	435	836	0	0	1961	197	93	0	627	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	435	836	0	0	1961	197	93	0	627	0	0	0
OvlAdjVol:									386			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.82	0.18	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	2908	292	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.15	0.26	0.00	0.00	0.67	0.67	0.06	0.00	0.39	0.00	0.00	0.00
OvlAdjV/S:									0.24			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.592
Loss Time (sec):	6	Average Delay (sec/veh):	14.8
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	0	1	0	2	1 1
Volume Module:												
Base Vol:	385	0	274	0	0	0	0	806	276	0	1599	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	385	0	274	0	0	0	0	806	276	0	1599	0
Added Vol:	72	0	0	0	0	0	0	6	14	0	29	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	457	0	274	0	0	0	0	812	290	0	1628	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.00	0.85	0.85	0.85
PHF Volume:	535	0	321	0	0	0	0	951	0	0	1906	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	535	0	321	0	0	0	0	951	0	0	1906	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	535	0	321	0	0	0	0	951	0	0	1906	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Lanes:	1.63	0.00	1.37	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.00	0.00
Final Sat.:	2827	0	2392	0	0	0	1900	5187	1729	0	5187	0
Capacity Analysis Module:												
Vol/Sat:	0.19	0.00	0.13	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.37	0.00
Crit Moves:	****										****	
Green/Cycle:	0.32	0.00	0.32	0.00	0.00	0.00	0.00	0.62	0.00	0.00	0.62	0.00
Volume/Cap:	0.59	0.00	0.42	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.59	0.00
Delay/Veh:	29.2	0.0	26.9	0.0	0.0	0.0	0.0	8.9	0.0	0.0	11.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.2	0.0	26.9	0.0	0.0	0.0	0.0	8.9	0.0	0.0	11.7	0.0
LOS by Move:	C		A	C		A	A		A	A		B A
HCM2kAvgQ:	9	0	6	0	0	0	0	5	0	0	13	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.781
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 0	1	2	0	2	0	0	0	0	0 0 0
Volume Module:												
Base Vol:	0	1047	437	643	1700	0	0	0	0	134	0	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1047	437	643	1700	0	0	0	0	134	0	75
Added Vol:	0	3	86	166	16	0	0	0	0	17	0	33
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1050	523	809	1716	0	0	0	0	151	0	108
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	1080	538	832	1765	0	0	0	0	155	0	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1080	538	832	1765	0	0	0	0	155	0	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1080	538	832	1765	0	0	0	0	155	0	111
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	2880	3200	0	0	0	0	2880	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.34	0.29	0.55	0.00	0.00	0.00	0.00	0.05	0.00	0.03
OvlAdjV/S:												0.00
Crit Moves:		****			****						****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.755
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	0 1!	0 0	1	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	570	9	191	6	3	13	6	1118	481	129	960	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	570	9	191	6	3	13	6	1118	481	129	960	12
Added Vol:	0	0	11	0	0	0	0	17	0	6	9	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	570	9	202	6	3	13	6	1135	481	135	969	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	589	9	209	6	3	13	6	1173	497	139	1001	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	589	9	209	6	3	13	6	1173	497	139	1001	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	589	9	209	6	3	13	6	1173	497	139	1001	12
OvlAdjVol:									198			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.97	0.03	1.00	0.27	0.14	0.59	1.00	2.00	1.00	1.00	1.98	0.02
Final Sat.:	3150	50	1600	436	218	945	1600	3200	1600	1600	3161	39
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.13	0.01	0.01	0.01	0.00	0.37	0.31	0.09	0.32	0.32
OvlAdjV/S:									0.12			
Crit Moves:	****				****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.677
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	254	42	132	17	22	5	19	999	161	107	890	19
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	254	42	132	17	22	5	19	999	161	107	890	19
Added Vol:	0	0	20	0	0	0	0	40	0	10	20	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	254	42	152	17	22	5	19	1039	161	117	910	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	258	43	155	17	22	5	19	1057	164	119	926	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	258	43	155	17	22	5	19	1057	164	119	926	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	258	43	155	17	22	5	19	1057	164	119	926	19
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.72	0.28	1.00	0.44	0.56	1.00	1.00	1.73	0.27	1.00	2.00	1.00
Final Sat.:	2746	454	1600	697	903	1600	1600	2771	429	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.10	0.02	0.02	0.00	0.01	0.38	0.38	0.07	0.29	0.01
Crit Moves:			****		****			****		****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.733
Loss Time (sec):	6	Average Delay (sec/veh):	25.5
Optimal Cycle:	46	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	389	1090	34	3	815	385	282	11	117	18	17	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	389	1090	34	3	815	385	282	11	117	18	17	6
Added Vol:	23	6	0	0	11	0	0	0	51	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	412	1096	34	3	826	385	282	11	168	18	17	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	436	1161	36	3	875	408	299	12	178	19	18	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	436	1161	36	3	875	408	299	12	178	19	18	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	436	1161	36	3	875	408	299	12	178	19	18	6
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.96	0.96	0.96
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.96	0.04	1.00	0.44	0.41	0.15
Final Sat.:	1805	3610	1615	1805	3610	1615	1745	68	1615	800	756	267
Capacity Analysis Module:												
Vol/Sat:	0.24	0.32	0.02	0.00	0.24	0.25	0.17	0.17	0.11	0.02	0.02	0.02
Crit Moves:	****					****	****				****	
Green/Cycle:	0.33	0.67	0.67	0.00	0.34	0.34	0.23	0.23	0.23	0.03	0.03	0.03
Volume/Cap:	0.73	0.48	0.03	0.48	0.70	0.73	0.73	0.73	0.47	0.73	0.73	0.73
Delay/Veh:	34.3	8.2	5.6	95.8	30.2	33.8	42.0	42.0	34.0	85.3	85.3	85.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.3	8.2	5.6	95.8	30.2	33.8	42.0	42.0	34.0	85.3	85.3	85.3
LOS by Move:	C	A	A	F	C	C	D	D	C	F	F	F
HCM2kAvgQ:	12	9	0	1	13	12	10	10	5	3	3	3

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Note: Queue reported is the number of cars per lane.

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Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.657
Loss Time (sec):	6	Average Delay (sec/veh):	19.2
Optimal Cycle:	38	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	52	1273	0	0	668	301	301	0	186	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	52	1273	0	0	668	301	301	0	186	0	0	0
Added Vol:	26	29	0	0	63	0	0	0	46	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	78	1302	0	0	731	301	301	0	232	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	83	1381	0	0	775	319	319	0	246	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1381	0	0	775	319	319	0	246	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	1381	0	0	775	319	319	0	246	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.91	0.91	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.42	0.58	1.39	0.00	0.61	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2445	1007	2409	0	1048	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.38	0.00	0.00	0.32	0.32	0.13	0.00	0.23	0.00	0.00	0.00
Crit Moves:		****		****					****			
Green/Cycle:	0.07	0.58	0.00	0.00	0.51	0.51	0.36	0.00	0.36	0.00	0.00	0.00
Volume/Cap:	0.62	0.66	0.00	0.00	0.62	0.62	0.37	0.00	0.66	0.00	0.00	0.00
Delay/Veh:	53.8	14.9	0.0	0.0	18.4	18.4	24.0	0.0	28.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.8	14.9	0.0	0.0	18.4	18.4	24.0	0.0	28.8	0.0	0.0	0.0
LOS by Move:	D	B	A	A	B	B	C	A	C	A	A	A
HCM2kAvgQ:	4	15	0	0	12	12	5	0	11	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.883
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	92	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	80	1628	109	81	1067	96	103	16	113	123	28	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	1628	109	81	1067	96	103	16	113	123	28	98
Added Vol:	0	69	17	13	34	0	0	3	0	9	1	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	1697	126	94	1101	96	103	19	113	132	29	104
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	83	1762	131	98	1143	100	107	20	117	137	30	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1762	131	98	1143	100	107	20	117	137	30	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	1762	131	98	1143	100	107	20	117	137	30	108
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.14	0.86	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	230	1370	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.55	0.08	0.06	0.36	0.06	0.07	0.09	0.09	0.09	0.02	0.07
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.830
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	74	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	327	1150	288	209	832	262	346	651	292	359	659	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	327	1150	288	209	832	262	346	651	292	359	659	326
Added Vol:	0	69	69	0	34	9	17	63	0	34	31	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	327	1219	357	209	866	271	363	714	292	393	690	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	336	1253	367	215	890	279	373	734	300	404	709	335
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	336	1253	367	215	890	279	373	734	300	404	709	335
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	336	1253	367	215	890	279	373	734	300	404	709	335
OvlAdjVol:			143						113			216
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.28	0.72	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	3656	1144	2880	3200	1600	2880	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.26	0.23	0.07	0.24	0.24	0.13	0.23	0.19	0.14	0.22	0.21
OvlAdjV/S:			0.09						0.07			0.13
Crit Moves:	****				****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.968
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	152	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	233	1535	153	7	1259	190	245	63	350	85	35	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	233	1535	153	7	1259	190	245	63	350	85	35	12
Added Vol:	0	86	0	9	43	17	34	0	0	0	0	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1621	153	16	1302	207	279	63	350	85	35	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	252	1754	166	17	1409	224	302	68	379	92	38	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	1754	166	17	1409	224	302	68	379	92	38	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	252	1754	166	17	1409	224	302	68	379	92	38	31
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.63	0.37	1.00	1.72	0.70	0.58
Final Sat.:	1600	3200	1600	1600	3200	1600	2611	589	1600	2738	1128	935
Capacity Analysis Module:												
Vol/Sat:	0.16	0.55	0.10	0.01	0.44	0.14	0.12	0.12	0.24	0.03	0.03	0.03
OvlAdjV/S:						0.00						
Crit Moves:	****				****				****	****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.971
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	155	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Added Vol:	0	63	0	0	31	11	23	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	261	1103	179	385	1073	220	689	1531	287	428	702	244
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	274	1156	0	404	1125	0	722	1605	0	449	736	256
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	274	1156	0	404	1125	0	722	1605	0	449	736	256
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	274	1156	0	404	1125	0	722	1605	0	449	736	256
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	2880	4800	1600	2880	4800	1600	2880	4800	1600	2880	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.24	0.00	0.14	0.23	0.00	0.25	0.33	0.00	0.16	0.15	0.16
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.602
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 1	1	0 3	0 1	2	0 1	0 1	1	0 1	0 1
Volume Module:												
Base Vol:	33	1261	0	0	1567	50	172	0	94	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	1261	0	0	1567	50	172	0	94	0	0	0
Added Vol:	0	40	0	0	20	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	1301	0	0	1587	50	172	0	94	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.00	0.93	0.93	0.93
PHF Volume:	36	1402	0	0	1710	54	185	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1402	0	0	1710	54	185	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	36	1402	0	0	1710	54	185	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	2880	3200	1600	1600	4800	1600	2880	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.44	0.00	0.00	0.36	0.03	0.06	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****			****			****				

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.763
Loss Time (sec): 10 Average Delay (sec/veh): 23.0
Optimal Cycle: 64 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	2	0 1	1 0	1	0 0	1 0	1	0 1!	0 1
Volume Module:												
Base Vol:	1	799	283	610	1382	5	4	2	4	186	1	495
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	799	283	610	1382	5	4	2	4	186	1	495
Added Vol:	0	40	0	11	9	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	839	283	621	1391	5	4	2	4	186	1	495
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	1	935	315	692	1551	6	4	2	4	207	1	552
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	935	315	692	1551	6	4	2	4	207	1	552
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	935	315	692	1551	6	4	2	4	207	1	552
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.95	0.95	0.95	0.90	0.90	0.88	0.88	0.88
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.33	0.67	1.27	0.01	1.72
Final Sat.:	1805	3610	1615	3502	3593	13	1805	570	1140	2126	5	2882
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.20	0.20	0.43	0.43	0.00	0.00	0.00	0.10	0.23	0.19
Crit Moves:		****		****			****				****	
Green/Cycle:	0.00	0.34	0.63	0.26	0.60	0.60	0.00	0.01	0.01	0.29	0.30	0.56
Volume/Cap:	0.72	0.76	0.31	0.76	0.72	0.72	0.76	0.34	0.34	0.34	0.76	0.34
Delay/Veh:	456.9	32.4	8.7	38.1	15.5	15.5	260.0	58.8	58.8	28.0	35.4	12.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	456.9	32.4	8.7	38.1	15.5	15.5	260.0	58.8	58.8	28.0	35.4	12.2
LOS by Move:	F	C	A	D	B	B	F	E	E	C	D	B
HCM2kAvgQ:	0	14	4	10	18	18	1	1	1	4	12	5

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.827
Loss Time (sec): 10 Average Delay (sec/veh): 21.5
Optimal Cycle: 78 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 2	0 1	1	0 2	0 0	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	933	619	380	1294	0	169	0	176	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	933	619	380	1294	0	169	0	176	0	0	0
Added Vol:	0	17	0	0	9	0	23	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	950	619	380	1303	0	192	0	176	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	1006	656	403	1380	0	203	0	186	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1006	656	403	1380	0	203	0	186	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1006	656	403	1380	0	203	0	186	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.41	0.22	0.38	0.00	0.06	0.00	0.12	0.00	0.00	0.00
Crit Moves:			****	****					****			
Green/Cycle:	0.00	0.49	0.49	0.27	0.76	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Volume/Cap:	0.00	0.57	0.83	0.83	0.50	0.00	0.42	0.00	0.83	0.00	0.00	0.00
Delay/Veh:	0.0	18.4	29.0	45.5	4.8	0.0	39.9	0.0	63.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.4	29.0	45.5	4.8	0.0	39.9	0.0	63.5	0.0	0.0	0.0
LOS by Move:	A	B	C	D	A	A	D	A	E	A	A	A
HCM2kAvgQ:	0	12	20	12	8	0	3	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.779
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0 1	0	0 1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	6	7	1	94	38	102	303	1335	189	42	609	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	7	1	94	38	102	303	1335	189	42	609	237
Added Vol:	18	0	20	20	0	18	36	60	36	40	30	40
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	7	21	114	38	120	339	1395	225	82	639	277
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	24	7	21	115	38	121	343	1411	228	83	646	280
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	7	21	115	38	121	343	1411	228	83	646	280
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	7	21	115	38	121	343	1411	228	83	646	280
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.77	0.23	1.00	0.75	0.25	1.00	1.00	1.72	0.28	1.00	2.00	1.00
Final Sat.:	1239	361	1600	1200	400	1600	1600	2756	444	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.10	0.10	0.08	0.21	0.51	0.51	0.05	0.20	0.18
OvlAdjV/S:						0.00						
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.679
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	0 1	2 0	1	0 1	2 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	103	21	75	151	9	96	153	776	54	31	1097	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	103	21	75	151	9	96	153	776	54	31	1097	200
Added Vol:	15	0	31	31	0	15	30	40	30	63	80	63
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	118	21	106	182	9	111	183	816	84	94	1177	263
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	122	22	110	188	9	115	189	843	87	97	1216	272
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	22	110	188	9	115	189	843	87	97	1216	272
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	122	22	110	188	9	115	189	843	87	97	1216	272
OvlAdjVol:						10						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.81	0.19	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	2880	1600	1600	2880	2901	299	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.01	0.07	0.07	0.01	0.07	0.07	0.29	0.29	0.06	0.38	0.17
OvlAdjV/S:						0.01						
Crit Moves:			****	****				****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Added Vol:	0	0	0		0	0	0		0	103	0		0	206	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		0	1132	0		0	1488	14	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93	
PHF Volume:	0	0	0		0	0	0		0	1212	0		0	1593	15	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		0	1212	0		0	1593	15	
Adjusted Volume Module:																
Grade:	0%				0%				0%				0%			
% Cycle/Cars:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
% Truck/Comb:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
PCE Adj:	1.10	1.10	1.10		1.10	1.10	1.10		1.10	1.00	1.00		1.10	1.00	1.00	
Cycl/Car PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Trck/Cmb PCE:	xxxx	xxxx			xxxx	xxxx			xxxx	xxxx			xxxx	xxxx		
Adj Vol.:	0	0	0		0	0	0		0	1212	0		0	1593	15	
Critical Gap Module:																
MoveUp Time:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Critical Gp:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Adj Cap:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Level Of Service Module:																
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				0.0				0.0			

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.776
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	C

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0		
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	2	1	0	1	0	2	1	0
Volume Module:																				
Base Vol:	234	775	63			160	550	158			163	963	214			84	684	112		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	234	775	63			160	550	158			163	963	214			84	684	112		
Added Vol:	11	0	0			0	0	46			23	69	6			0	137	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	245	775	63			160	550	204			186	1032	220			84	821	112		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.97	0.97	0.97			0.97	0.97	0.97			0.97	0.97	0.97			0.97	0.97	0.97		
PHF Volume:	254	803	65			166	570	211			193	1069	228			87	851	116		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	254	803	65			166	570	211			193	1069	228			87	851	116		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	254	803	65			166	570	211			193	1069	228			87	851	116		
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600			1600	1600	1600			1600	1600	1600			1600	1600	1600		
Adjustment:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Lanes:	1.00	2.00	1.00			1.00	2.00	1.00			1.00	2.47	0.53			1.00	2.64	0.36		
Final Sat.:	1600	3200	1600			1600	3200	1600			1600	3957	843			1600	4224	576		
Capacity Analysis Module:																				
Vol/Sat:	0.16	0.25	0.04			0.10	0.18	0.13			0.12	0.27	0.27			0.05	0.20	0.20		
Crit Moves:		****					****					****					****			

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.915
Loss Time (sec): 6 Average Delay (sec/veh): 25.8
Optimal Cycle: 103 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0 1! 0	1	0	2 1 0	1	0	3 0 1
Volume Module:												
Base Vol:	1	0	83	923	12	536	0	1796	72	18	576	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	0	83	923	12	536	0	1796	72	18	576	116
Added Vol:	0	0	0	0	0	57	0	69	0	0	80	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	83	923	12	593	0	1865	72	18	656	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00
PHF Volume:	1	0	86	957	12	615	0	1935	75	19	680	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	86	957	12	615	0	1935	75	19	680	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	1	0	86	957	12	615	0	1935	75	19	680	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	1.00	0.87	0.91	0.91	0.91	1.00	0.90	0.90	0.95	0.91	1.00
Lanes:	0.01	0.00	0.99	1.60	0.02	1.38	0.00	2.89	0.11	1.00	3.00	1.00
Final Sat.:	20	0	1628	2780	27	2407	0	4964	192	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.05	0.34	0.46	0.26	0.00	0.39	0.39	0.01	0.13	0.00
Crit Moves:					****			****		****		
Green/Cycle:	0.00	0.00	0.00	0.50	0.50	0.50	0.00	0.43	0.43	0.01	0.44	0.00
Volume/Cap:	xxxx	0.00	xxxx	0.69	0.91	0.51	0.00	0.91	0.91	0.92	0.30	0.00
Delay/Veh:	0.0	0.0	0.0	19.7	30.8	16.8	0.0	33.5	33.5	208.7	18.3	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	19.7	30.8	16.8	0.0	33.5	33.5	208.7	18.3	0.0
LOS by Move:	A	A	A	B	C	B	A	C	C	F	B	A
HCM2kAvgQ:	2	0	2	22	1	12	0	25	25	2	5	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.728
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 54 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2 0 0	0	0	1 1 0	1	0	0 0 1	0	0	0 0 0
Volume Module:												
Base Vol:	418	1243	0	0	808	115	81	0	407	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	418	1243	0	0	808	115	81	0	407	0	0	0
Added Vol:	6	60	0	0	121	0	0	0	13	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	424	1303	0	0	929	115	81	0	420	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	453	1391	0	0	991	123	86	0	448	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	453	1391	0	0	991	123	86	0	448	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	453	1391	0	0	991	123	86	0	448	0	0	0
OvlAdjVol:									197			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.78	0.22	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	2848	352	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.16	0.43	0.00	0.00	0.35	0.35	0.05	0.00	0.28	0.00	0.00	0.00
OvlAdjV/S:									0.12			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.567
Loss Time (sec):	6	Average Delay (sec/veh):	9.4
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1!	0 1	0	0 0	0 0	1	0 2	1 1	0	0 3	0 0
Volume Module:												
Base Vol:	123	0	289	0	0	0	0	2097	621	0	969	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	123	0	289	0	0	0	0	2097	621	0	969	0
Added Vol:	57	0	0	0	0	0	0	11	29	0	23	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	180	0	289	0	0	0	0	2108	650	0	992	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00	0.96	0.96	0.96
PHF Volume:	187	0	301	0	0	0	0	2194	0	0	1032	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	187	0	301	0	0	0	0	2194	0	0	1032	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	187	0	301	0	0	0	0	2194	0	0	1032	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00
Lanes:	1.38	0.00	1.62	0.00	0.00	0.00	1.00	3.00	1.00	0.00	3.00	0.00
Final Sat.:	2342	0	2735	0	0	0	1900	5187	1729	0	5187	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.11	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.20	0.00
Crit Moves:			****					****				
Green/Cycle:	0.19	0.00	0.19	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.75	0.00
Volume/Cap:	0.41	0.00	0.57	0.00	0.00	0.00	0.00	0.57	0.00	0.00	0.27	0.00
Delay/Veh:	35.5	0.0	37.4	0.0	0.0	0.0	0.0	5.8	0.0	0.0	4.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.5	0.0	37.4	0.0	0.0	0.0	0.0	5.8	0.0	0.0	4.1	0.0
LOS by Move:	D		A	D		A	A		A	A		A
HCM2kAvgQ:	4	0	6	0	0	0	0	11	0	0	4	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.812
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 2	0 1	2	0 2	0 0	0	0 0	0 0	2	0 0	0 2
Volume Module:												
Base Vol:	0	1712	118	106	1120	0	0	0	0	136	0	161
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1712	118	106	1120	0	0	0	0	136	0	161
Added Vol:	0	6	69	133	13	0	0	0	0	34	0	67
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1718	187	239	1133	0	0	0	0	170	0	228
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1803	196	251	1189	0	0	0	0	178	0	239
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1803	196	251	1189	0	0	0	0	178	0	239
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1803	196	251	1189	0	0	0	0	178	0	239
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	2880	3200	0	0	0	0	2880	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.56	0.12	0.09	0.37	0.00	0.00	0.00	0.00	0.06	0.00	0.07
OvlAdjV/S:												0.00
Crit Moves:		****		****						****		

MITIGATED CONDITIONS

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.984
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	172	Level Of Service:	E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	2	0 0	0	0	1	1 0	1	0	0	0 2	0	0	0	0 0
Volume Module:																
Base Vol:	397	739	0		0	1653	181		86	0	561		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	397	739	0		0	1653	181		86	0	561		0	0	0	
Added Vol:	3	30	0		0	151	0		0	0	16		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	400	769	0		0	1804	181		86	0	577		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92	
PHF Volume:	435	836	0		0	1961	197		93	0	627		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	435	836	0		0	1961	197		93	0	627		0	0	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	435	836	0		0	1961	197		93	0	627		0	0	0	
OvlAdjVol:											144					
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	0.90	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	2.00	2.00	0.00		0.00	1.82	0.18		1.00	0.00	2.00		0.00	0.00	0.00	
Final Sat.:	2880	3200	0		0	2908	292		1600	0	3200		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.15	0.26	0.00		0.00	0.67	0.67		0.06	0.00	0.20		0.00	0.00	0.00	
OvlAdjV/S:											0.05					
Crit Moves:	****					****			****							

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.924
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	114	Level Of Service:	E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Ovl				Include				Ovl				Ovl			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	3	0 1	2	0	2	1 0	2	0	2	1 0	2	0	2	0 1
Volume Module:																
Base Vol:	236	1291	628		412	1070	187		284	757	153		110	446	185	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	236	1291	628		412	1070	187		284	757	153		110	446	185	
Added Vol:	0	86	86		0	17	4		21	79	0		17	16	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	236	1377	714		412	1087	191		305	836	153		127	462	185	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	245	1427	740		427	1126	198		316	866	159		132	479	192	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	245	1427	740		427	1126	198		316	866	159		132	479	192	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	245	1427	740		427	1126	198		316	866	159		132	479	192	
OvlAdjVol:			667								95				0	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	0.90	1.00	1.00		0.90	1.00	1.00		0.90	1.00	1.00		0.90	1.00	1.00	
Lanes:	2.00	3.00	1.00		2.00	2.55	0.45		2.00	2.54	0.46		2.00	2.00	1.00	
Final Sat.:	2880	4800	1600		2880	4083	717		2880	4057	743		2880	3200	1600	
Capacity Analysis Module:																
Vol/Sat:	0.08	0.30	0.46		0.15	0.28	0.28		0.11	0.21	0.21		0.05	0.15	0.12	
OvlAdjV/S:			0.42								0.13				0.00	
Crit Moves:			****		****				****					****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.001
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	0	1	1	0	2	0	1	1	1	0	0	1	1	1	0	1	0
Volume Module:												
Base Vol:	159	1684	70	1	1120	277	407	76	416	113	108	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	1684	70	1	1120	277	407	76	416	113	108	12
Added Vol:	0	107	0	4	21	9	43	0	0	0	0	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	159	1791	70	5	1141	286	450	76	416	113	108	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	184	2068	81	6	1318	330	520	88	480	130	125	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	2068	81	6	1318	330	520	88	480	130	125	38
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	2068	81	6	1318	330	520	88	480	130	125	38
OvlAdjVol:						27			297			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.71	0.29	1.00	1.34	1.27	0.39
Final Sat.:	1600	3200	1600	1600	3200	1600	2738	462	1600	2138	2040	622
Capacity Analysis Module:												
Vol/Sat:	0.11	0.65	0.05	0.00	0.41	0.21	0.19	0.19	0.30	0.06	0.06	0.06
OvlAdjV/S:						0.02			0.19			
Crit Moves:		****			****			****				****

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.704
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 51 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	0	0	1	0	1	0	0	1	1	0	2	0	1	1	0	2	0	1
Volume Module:												
Base Vol:	126	14	28	173	11	246	35	980	218	6	830	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	14	28	173	11	246	35	980	218	6	830	80
Added Vol:	9	0	10	10	0	9	45	75	45	50	15	50
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	135	14	38	183	11	255	80	1055	263	56	845	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	141	15	40	191	11	266	84	1101	275	58	882	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	15	40	191	11	266	84	1101	275	58	882	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	141	15	40	191	11	266	84	1101	275	58	882	136
OvlAdjVol:						183						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.91	0.09	1.00	0.94	0.06	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1450	150	1600	1509	91	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.02	0.13	0.13	0.17	0.05	0.34	0.17	0.04	0.28	0.08
OvlAdjV/S:						0.11						
Crit Moves:		****			****				****		****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.659
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 0	0	0 1	1 0	1	0 0	0 2	0	0 0	0 0
Volume Module:												
Base Vol:	418	1243	0	0	808	115	81	0	407	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	418	1243	0	0	808	115	81	0	407	0	0	0
Added Vol:	6	60	0	0	121	0	0	0	13	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	424	1303	0	0	929	115	81	0	420	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	453	1391	0	0	991	123	86	0	448	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	453	1391	0	0	991	123	86	0	448	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	453	1391	0	0	991	123	86	0	448	0	0	0
OvlAdjVol:									0			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.78	0.22	1.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	2848	352	1600	0	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.16	0.43	0.00	0.00	0.35	0.35	0.05	0.00	0.14	0.00	0.00	0.00
OvlAdjV/S:									0.00			
Crit Moves:	****				****		****					

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.816
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	1 0	2	0 2	0 1
Volume Module:												
Base Vol:	327	1150	288	209	832	262	346	651	292	359	659	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	327	1150	288	209	832	262	346	651	292	359	659	326
Added Vol:	0	69	69	0	34	9	17	63	0	34	31	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	327	1219	357	209	866	271	363	714	292	393	690	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	336	1253	367	215	890	279	373	734	300	404	709	335
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	336	1253	367	215	890	279	373	734	300	404	709	335
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	336	1253	367	215	890	279	373	734	300	404	709	335
OvlAdjVol:			143						138			216
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.28	0.72	2.00	2.13	0.87	2.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	3656	1144	2880	3407	1393	2880	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.26	0.23	0.07	0.24	0.24	0.13	0.22	0.22	0.14	0.22	0.21
OvlAdjV/S:			0.09						0.10			0.13
Crit Moves:	****				****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.847
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	79	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	0	1	1	1	0	1	0
Volume Module:												
Base Vol:	233	1535	153	7	1259	190	245	63	350	85	35	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	233	1535	153	7	1259	190	245	63	350	85	35	12
Added Vol:	0	86	0	9	43	17	34	0	0	0	0	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1621	153	16	1302	207	279	63	350	85	35	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	252	1754	166	17	1409	224	302	68	379	92	38	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	1754	166	17	1409	224	302	68	379	92	38	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	252	1754	166	17	1409	224	302	68	379	92	38	31
OvlAdjVol:						39			127			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.63	0.37	1.00	1.72	0.70	0.58
Final Sat.:	1600	3200	1600	1600	3200	1600	2611	589	1600	2738	1128	935
Capacity Analysis Module:												
Vol/Sat:	0.16	0.55	0.10	0.01	0.44	0.14	0.12	0.12	0.24	0.03	0.03	0.03
OvlAdjV/S:						0.02			0.08			
Crit Moves:	****				****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.708
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	0	0	1	0	1	0	0	1	1	0	2	0	1	1	0	2	0	1
Volume Module:												
Base Vol:	6	7	1	94	38	102	303	1335	189	42	609	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	7	1	94	38	102	303	1335	189	42	609	237
Added Vol:	18	0	20	20	0	18	36	60	36	40	30	40
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	7	21	114	38	120	339	1395	225	82	639	277
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	24	7	21	115	38	121	343	1411	228	83	646	280
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	7	21	115	38	121	343	1411	228	83	646	280
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	7	21	115	38	121	343	1411	228	83	646	280
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.77	0.23	1.00	0.75	0.25	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1239	361	1600	1200	400	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.10	0.10	0.08	0.21	0.44	0.14	0.05	0.20	0.18
OvlAdjV/S:						0.00						
Crit Moves:		****			****				****		****	

EXISTING PLUS 2020
CUMULATIVE PLUS PROJECT CONDITIONS

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.808
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:		Include				Include				Ovl				Include		
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0	1	0	0	1! 0	0	1	0	2	0 1	1	0	1	1 0
Volume Module:																
Base Vol:	594	4	140		18	10	12		4	1170	436	78	1018		3	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
Initial Bse:	594	4	140		18	10	12		4	1170	436	78	1018		3	
Added Vol:	6	0	8		0	0	0		0	69	6	4	31		0	
PasserByVol:	0	0	0		0	0	0		0	0	0	0	0		0	
Initial Fut:	600	4	148		18	10	12		4	1239	442	82	1049		3	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
PHF Adj:	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92	0.92	0.92		0.92	
PHF Volume:	651	4	161		20	11	13		4	1345	480	89	1139		3	
Reduct Vol:	0	0	0		0	0	0		0	0	0	0	0		0	
Reduced Vol:	651	4	161		20	11	13		4	1345	480	89	1139		3	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
FinalVolume:	651	4	161		20	11	13		4	1345	480	89	1139		3	
OvlAdjVol:											152					
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600	1600	1600		1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
Lanes:	1.99	0.01	1.00		0.45	0.25	0.30		1.00	2.00	1.00	1.00	1.99		0.01	
Final Sat.:	3179	21	1600		720	400	480		1600	3200	1600	1600	3191		9	
Capacity Analysis Module:																
Vol/Sat:	0.20	0.20	0.10		0.03	0.03	0.03		0.00	0.42	0.30	0.06	0.36		0.36	
OvlAdjV/S:											0.10					
Crit Moves:	****						****			****		****				

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.756
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:		Include				Include				Include				Include		
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0	1	0	1	0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	268	27	102		22	45	19		7	1045	292	53	790		14	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
Initial Bse:	268	27	102		22	45	19		7	1045	292	53	790		14	
Added Vol:	0	0	13		0	0	0		0	84	0	3	36		0	
PasserByVol:	0	0	0		0	0	0		0	0	0	0	0		0	
Initial Fut:	268	27	115		22	45	19		7	1129	292	56	826		14	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
PHF Adj:	0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94	0.94	0.94		0.94	
PHF Volume:	287	29	123		24	48	20		7	1207	312	60	883		15	
Reduct Vol:	0	0	0		0	0	0		0	0	0	0	0		0	
Reduced Vol:	287	29	123		24	48	20		7	1207	312	60	883		15	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
FinalVolume:	287	29	123		24	48	20		7	1207	312	60	883		15	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600	1600	1600		1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	
Lanes:	1.82	0.18	1.00		0.33	0.67	1.00		1.00	1.59	0.41	1.00	2.00		1.00	
Final Sat.:	2907	293	1600		525	1075	1600		1600	2542	658	1600	3200		1600	
Capacity Analysis Module:																
Vol/Sat:	0.10	0.10	0.08		0.04	0.04	0.01		0.00	0.47	0.47	0.04	0.28		0.01	
Crit Moves:	****				****					****		****				

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.635
Loss Time (sec):	6	Average Delay (sec/veh):	24.0
Optimal Cycle:	36	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	0	1 0	0 1	0	0 1!	0 0
Volume Module:												
Base Vol:	144	1051	17	0	812	140	437	6	310	12	3	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	144	1051	17	0	812	140	437	6	310	12	3	8
Added Vol:	40	13	0	0	20	0	0	0	34	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	184	1064	17	0	832	140	437	6	344	12	3	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	186	1076	17	0	842	142	442	6	348	12	3	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	186	1076	17	0	842	142	442	6	348	12	3	8
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	186	1076	17	0	842	142	442	6	348	12	3	8
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	1.00	0.95	0.85	0.95	0.95	0.85	0.93	0.93	0.93
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.99	0.01	1.00	0.52	0.13	0.35
Final Sat.:	1805	3610	1615	1900	3610	1615	1786	25	1615	921	230	614
Capacity Analysis Module:												
Vol/Sat:	0.10	0.30	0.01	0.00	0.23	0.09	0.25	0.25	0.22	0.01	0.01	0.01
Crit Moves:	****				****			****			****	
Green/Cycle:	0.16	0.53	0.53	0.00	0.37	0.37	0.39	0.39	0.39	0.02	0.02	0.02
Volume/Cap:	0.64	0.56	0.02	0.00	0.64	0.24	0.64	0.64	0.55	0.64	0.64	0.64
Delay/Veh:	43.6	16.2	11.2	0.0	27.1	22.2	26.7	26.7	24.8	79.9	79.9	79.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.6	16.2	11.2	0.0	27.1	22.2	26.7	26.7	24.8	79.9	79.9	79.9
LOS by Move:	D	B	B	A	C	C	C	C	C	E	E	E
HCM2kAvgQ:	5	11	0	0	12	3	12	12	9	2	2	2

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Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.945
Loss Time (sec):	6	Average Delay (sec/veh):	35.2
Optimal Cycle:	129	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2.0	0		0	0 1.0	1 0		1	0 1.0	0		0	0 0.0	0 0	
Volume Module:																
Base Vol:	41	873	0		0	927	223		349	0	533		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	41	873	0		0	927	223		349	0	533		0	0	0	
Added Vol:	7	54	0		0	54	0		0	0	84		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	48	927	0		0	981	223		349	0	617		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94	
PHF Volume:	51	982	0		0	1039	236		370	0	654		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	51	982	0		0	1039	236		370	0	654		0	0	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	51	982	0		0	1039	236		370	0	654		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	1.00		1.00	0.92	0.92		0.89	1.00	0.89		1.00	1.00	1.00	
Lanes:	1.00	2.00	0.00		0.00	1.63	0.37		1.22	0.00	0.78		0.00	0.00	0.00	
Final Sat.:	1805	3610	0		0	2859	650		2059	0	1315		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.27	0.00		0.00	0.36	0.36		0.18	0.00	0.50		0.00	0.00	0.00	
Crit Moves:	****					****					****					
Green/Cycle:	0.03	0.41	0.00		0.00	0.38	0.38		0.53	0.00	0.53		0.00	0.00	0.00	
Volume/Cap:	0.95	0.66	0.00		0.00	0.95	0.95		0.34	0.00	0.95		0.00	0.00	0.00	
Delay/Veh:	150.8	24.6	0.0		0.0	43.4	43.4		13.8	0.0	38.3		0.0	0.0	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	150.8	24.6	0.0		0.0	43.4	43.4		13.8	0.0	38.3		0.0	0.0	0.0	
LOS by Move:	F	C	A		A	D	D		B	A	D		A	A	A	
HCM2kAvgQ:	4	13	0		0	22	22		5	0	30		0	0	0	

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.983
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	171	Level Of Service:	E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Prot+Permit				Prot+Permit			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2.0	0 1.0		1	0 2.0	0 1.0		1	0 0.1	1 0.9		1	0 1.0	0 1.0	
Volume Module:																
Base Vol:	130	1183	442		221	1365	214		158	93	244		115	48	76	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	130	1183	442		221	1365	214		158	93	244		115	48	76	
Added Vol:	0	92	11		8	75	0		0	2	0		2	0	2	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	130	1275	453		229	1440	214		158	95	244		117	48	78	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94	
PHF Volume:	139	1362	484		245	1538	229		169	101	261		125	51	83	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	139	1362	484		245	1538	229		169	101	261		125	51	83	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	139	1362	484		245	1538	229		169	101	261		125	51	83	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	0.28	0.72		1.00	1.00	1.00	
Final Sat.:	1600	3200	1600		1600	3200	1600		1600	448	1152		1600	1600	1600	
Capacity Analysis Module:																
Vol/Sat:	0.09	0.43	0.30		0.15	0.48	0.14		0.11	0.23	0.23		0.08	0.03	0.05	
Crit Moves:		****				****					****			****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.967
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	151	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	236	1291	628	412	1070	187	284	757	153	110	446	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	236	1291	628	412	1070	187	284	757	153	110	446	185
Added Vol:	0	89	54	0	73	5	14	99	2	11	32	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	236	1380	682	412	1143	192	298	856	155	121	478	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	245	1430	707	427	1184	199	309	887	161	125	495	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	1430	707	427	1184	199	309	887	161	125	495	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	245	1430	707	427	1184	199	309	887	161	125	495	192
OvlAdjVol:			637						25			0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.57	0.43	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	4110	690	2880	3200	1600	2880	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.30	0.44	0.15	0.29	0.29	0.11	0.28	0.10	0.04	0.15	0.12
OvlAdjV/S:			0.40						0.02			0.00
Crit Moves:			****	****				****		****		

Mt SAC PEP EIR
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AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.108
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	159	1684	70	1	1120	277	407	76	416	113	108	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	1684	70	1	1120	277	407	76	416	113	108	12
Added Vol:	0	109	0	2	79	4	23	0	0	0	0	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	159	1793	70	3	1199	281	430	76	416	113	108	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	184	2070	81	3	1385	324	497	88	480	130	125	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	2070	81	3	1385	324	497	88	480	130	125	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	2070	81	3	1385	324	497	88	480	130	125	27
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.70	0.30	1.00	1.39	1.33	0.28
Final Sat.:	1600	3200	1600	1600	3200	1600	2719	481	1600	2223	2125	453
Capacity Analysis Module:												
Vol/Sat:	0.11	0.65	0.05	0.00	0.43	0.20	0.18	0.18	0.30	0.06	0.06	0.06
OvlAdjV/S:						0.00						
Crit Moves:		****		****					****	****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.918
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	110	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	291	1364	364	207	938	396	401	500	169	167	1116	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	291	1364	364	207	938	396	401	500	169	167	1116	139
Added Vol:	4	42	87	46	10	24	61	10	18	21	7	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	295	1406	451	253	948	420	462	510	187	188	1123	145
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	311	1483	0	267	1000	0	487	538	0	198	1185	153
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	311	1483	0	267	1000	0	487	538	0	198	1185	153
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	311	1483	0	267	1000	0	487	538	0	198	1185	153
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	2880	4800	1600	2880	4800	1600	2880	4800	1600	2880	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.31	0.00	0.09	0.21	0.00	0.17	0.11	0.00	0.07	0.25	0.10
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.898
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	99	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 0	0	0 3	0 1	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	116	2253	0	0	1002	107	39	0	36	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	116	2253	0	0	1002	107	39	0	36	0	0	0
Added Vol:	0	118	0	0	46	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	2371	0	0	1048	107	39	0	36	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	123	2506	0	0	1108	113	41	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	2506	0	0	1108	113	41	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	123	2506	0	0	1108	113	41	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	4800	1600	2880	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.78	0.00	0.00	0.23	0.07	0.01	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****			****			****				

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.891
Loss Time (sec): 10 Average Delay (sec/veh): 24.8
Optimal Cycle: 101 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	2	0 1	1 0	1	0 0	1 0	1	0 1!	0 1
Volume Module:												
Base Vol:	0	1796	320	349	679	2	0	1	1	262	0	572
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1796	320	349	679	2	0	1	1	262	0	572
Added Vol:	0	117	0	22	24	0	0	0	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1913	320	371	703	2	0	1	1	262	0	573
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	2031	340	394	746	2	0	1	1	278	0	608
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2031	340	394	746	2	0	1	1	278	0	608
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2031	340	394	746	2	0	1	1	278	0	608
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	0.95	1.00	0.93	0.93	0.88	1.00	0.88
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.50	0.50	1.31	0.00	1.69
Final Sat.:	1900	3610	1615	3502	3600	10	1900	879	879	2205	0	2831
Capacity Analysis Module:												
Vol/Sat:	0.00	0.56	0.21	0.11	0.21	0.21	0.00	0.00	0.00	0.13	0.00	0.21
Crit Moves:		****		****				****		****		
Green/Cycle:	0.00	0.63	0.77	0.13	0.76	0.76	0.00	0.00	0.00	0.14	0.00	0.27
Volume/Cap:	0.00	0.89	0.27	0.89	0.27	0.27	0.00	0.89	0.89	0.89	0.00	0.80
Delay/Veh:	0.0	20.4	3.4	62.7	3.8	3.8	0.0	527	526.7	52.3	0.0	38.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	20.4	3.4	62.7	3.8	3.8	0.0	527	526.7	52.3	0.0	38.2
LOS by Move:	A	C	A	E	A	A	A	F	F	D	A	D
HCM2kAvgQ:	0	27	3	7	4	4	0	1	1	10	0	12

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.902
Loss Time (sec): 10 Average Delay (sec/veh): 34.5
Optimal Cycle: 106 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 2	0 1	1	0 2	0 0	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	1177	267	312	676	0	905	0	281	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1177	267	312	676	0	905	0	281	0	0	0
Added Vol:	0	64	0	5	19	0	53	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1241	267	317	695	0	958	0	281	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	0	1270	273	324	711	0	981	0	288	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1270	273	324	711	0	981	0	288	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1270	273	324	711	0	981	0	288	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.35	0.17	0.18	0.20	0.00	0.28	0.00	0.18	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green/Cycle:	0.00	0.39	0.39	0.20	0.59	0.00	0.31	0.00	0.31	0.00	0.00	0.00
Volume/Cap:	0.00	0.90	0.43	0.90	0.33	0.00	0.90	0.00	0.57	0.00	0.00	0.00
Delay/Veh:	0.0	37.0	22.9	63.9	10.6	0.0	43.4	0.0	30.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	37.0	22.9	63.9	10.6	0.0	43.4	0.0	30.5	0.0	0.0	0.0
LOS by Move:	A	D	C	E	B	A	D	A	C	A	A	A
HCM2kAvgQ:	0	23	6	11	6	0	19	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.774
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 61 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	0	0	1	0	1	0	1	1	0	1
Volume Module:												
Base Vol:	126	14	28	173	11	246	35	980	218	6	830	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	14	28	173	11	246	35	980	218	6	830	80
Added Vol:	5	0	5	5	0	5	23	106	23	26	34	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	131	14	33	178	11	251	58	1086	241	32	864	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	137	15	34	186	11	262	61	1134	252	33	902	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	15	34	186	11	262	61	1134	252	33	902	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	137	15	34	186	11	262	61	1134	252	33	902	111
OvlAdjVol:						201						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.90	0.10	1.00	0.94	0.06	1.00	1.00	1.64	0.36	1.00	2.00	1.00
Final Sat.:	1446	154	1600	1507	93	1600	1600	2619	581	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.02	0.12	0.12	0.16	0.04	0.43	0.43	0.02	0.28	0.07
OvlAdjV/S:						0.13						
Crit Moves:	****					****		****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.644
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1	2	0	1	0	1	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	21	13	21	80	18	74	381	725	130	119	952	424
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	13	21	80	18	74	381	725	130	119	952	424
Added Vol:	4	0	8	8	0	4	20	77	20	41	78	41
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	13	29	88	18	78	401	802	150	160	1030	465
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	27	14	31	94	19	83	428	856	160	171	1099	496
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	14	31	94	19	83	428	856	160	171	1099	496
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	14	31	94	19	83	428	856	160	171	1099	496
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.68	0.32	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	2880	1600	1600	2880	2696	504	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.02	0.03	0.01	0.05	0.15	0.32	0.32	0.11	0.34	0.31
OvlAdjV/S:						0.00						
Crit Moves:				****	****			****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[17.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		4	847	0		0	1530	199	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		4	847	0		0	1530	199	
Added Vol:	0	0	0		0	0	0		0	93	0		0	161	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		4	940	0		0	1691	199	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	0	0	0		0	0	0		4	968	0		0	1742	205	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		4	968	0		0	1742	205	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	1847	2923	484		2234	2718	871		1946	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Potent Cap.:	68	16	534		37	21	298		305	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Move Cap.:	67	15	534		37	21	298		305	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		0.01	xxxx	xxxx	xxxx	xxxx	xxxx		
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		17.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*		*	*	*		C	*	*	*	*	*		
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.915
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 108 Level Of Service: E

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0		
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	2	1	0	1	0	2	1	0
Volume Module:																				
Base Vol:	172	572	45			99	586	288			111	327	157			37	1179	98		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	172	572	45			99	586	288			111	327	157			37	1179	98		
Added Vol:	61	10	4			0	7	84			27	75	18			23	258	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	233	582	49			99	593	372			138	402	175			60	1437	98		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.96	0.96	0.96			0.96	0.96	0.96			0.96	0.96	0.96			0.96	0.96	0.96		
PHF Volume:	242	605	51			103	616	387			143	418	182			62	1494	102		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	242	605	51			103	616	387			143	418	182			62	1494	102		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	242	605	51			103	616	387			143	418	182			62	1494	102		
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600			1600	1600	1600			1600	1600	1600			1600	1600	1600		
Adjustment:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Lanes:	1.00	2.00	1.00			1.00	2.00	1.00			1.00	2.09	0.91			1.00	2.81	0.19		
Final Sat.:	1600	3200	1600			1600	3200	1600			1600	3344	1456			1600	4494	306		
Capacity Analysis Module:																				
Vol/Sat:	0.15	0.19	0.03			0.06	0.19	0.24			0.09	0.12	0.12			0.04	0.33	0.33		
Crit Moves:	****							****			****						****			

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.009
Loss Time (sec): 6 Average Delay (sec/veh): 32.1
Optimal Cycle: 180 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	1	1	0	1! 0	1	0	0	2	1	0	1	0	3	0	1
Volume Module:												
Base Vol:	0	0	2	604	3	745	0	541	10	7	1225	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	2	604	3	745	0	541	10	7	1225	43
Added Vol:	0	0	0	257	0	140	0	78	0	0	141	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	2	861	3	885	0	619	10	7	1366	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.00
PHF Volume:	0	0	2	1054	4	1083	0	758	12	9	1672	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	2	1054	4	1083	0	758	12	9	1672	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	0	2	1054	4	1083	0	758	12	9	1672	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.90	0.90	0.90	1.00	0.91	0.91	0.95	0.91	1.00
Lanes:	0.00	0.00	1.00	1.49	0.01	1.50	0.00	2.95	0.05	1.00	3.00	1.00
Final Sat.:	0	0	1644	2556	6	2579	0	5094	82	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.41	0.63	0.42	0.00	0.15	0.15	0.00	0.32	0.00
Crit Moves:					****		****				****	
Green/Cycle:	0.00	0.00	0.00	0.62	0.62	0.62	0.00	0.31	0.31	0.01	0.32	0.00
Volume/Cap:	0.00	0.00	xxxx	0.66	1.01	0.68	0.00	0.48	0.48	0.48	1.01	0.00
Delay/Veh:	0.0	0.0	0.0	12.8	40.6	13.0	0.0	28.2	28.2	68.1	58.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	12.8	40.6	13.0	0.0	28.2	28.2	68.1	58.2	0.0
LOS by Move:	A	A	A	B	D	B	A	C	C	E	E	A
HCM2kAvgQ:	0	0	0	21	3	12	0	7	7	1	26	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.159
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	0	0	0	1	1	0	1	0	0	0	1	0	0	0	0	0
Volume Module:												
Base Vol:	397	739	0	0	1653	181	86	0	561	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	397	739	0	0	1653	181	86	0	561	0	0	0
Added Vol:	2	62	0	0	146	0	0	0	8	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	399	801	0	0	1799	181	86	0	569	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	434	871	0	0	1955	197	93	0	618	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	434	871	0	0	1955	197	93	0	618	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	434	871	0	0	1955	197	93	0	618	0	0	0
OvlAdjVol:									378			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.82	0.18	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	2907	293	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.15	0.27	0.00	0.00	0.67	0.67	0.06	0.00	0.39	0.00	0.00	0.00
OvlAdjV/S:									0.24			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.646
Loss Time (sec):	6	Average Delay (sec/veh):	16.1
Optimal Cycle:	37	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	0	1	0	2	1 1
Volume Module:												
Base Vol:	385	0	274	0	0	0	0	806	276	0	1599	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	385	0	274	0	0	0	0	806	276	0	1599	0
Added Vol:	117	0	114	0	0	0	0	268	35	0	59	61
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	502	0	388	0	0	0	0	1074	311	0	1658	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.00	0.85	0.85	0.85
PHF Volume:	588	0	454	0	0	0	0	1258	0	0	1941	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	588	0	454	0	0	0	0	1258	0	0	1941	71
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	588	0	454	0	0	0	0	1258	0	0	1941	71
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Lanes:	1.56	0.00	1.44	0.00	0.00	0.00	1.00	3.00	1.00	0.00	2.89	0.11
Final Sat.:	2704	0	2482	0	0	0	1900	5187	1729	0	4978	183
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.18	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.39	0.39
Crit Moves:	****										****	
Green/Cycle:	0.34	0.00	0.34	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.60	0.60
Volume/Cap:	0.65	0.00	0.54	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.65	0.65
Delay/Veh:	29.1	0.0	27.3	0.0	0.0	0.0	0.0	10.5	0.0	0.0	13.4	13.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.1	0.0	27.3	0.0	0.0	0.0	0.0	10.5	0.0	0.0	13.4	13.4
LOS by Move:	C		A	C		A	A		A	A		B
HCM2kAvgQ:	11	0	8	0	0	0	0	7	0	0	15	15

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.764
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 0 1	2	0	2 0 0	0	0	0 0 0	2	0	0 0 2
Volume Module:												
Base Vol:	0	1047	437	643	1700	0	0	0	0	134	0	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1047	437	643	1700	0	0	0	0	134	0	75
Added Vol:	0	48	45	87	75	0	0	0	0	9	0	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1095	482	730	1775	0	0	0	0	143	0	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	1127	496	751	1826	0	0	0	0	147	0	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1127	496	751	1826	0	0	0	0	147	0	95
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1127	496	751	1826	0	0	0	0	147	0	95
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	2880	3200	0	0	0	0	2880	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.35	0.31	0.26	0.57	0.00	0.00	0.00	0.00	0.05	0.00	0.03
OvlAdjV/S:												0.00
Crit Moves:		****			****						****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.763
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	0 1!	0 0	1	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	570	9	191	6	3	13	6	1118	481	129	960	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	570	9	191	6	3	13	6	1118	481	129	960	12
Added Vol:	4	0	8	0	0	0	0	44	5	3	62	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	574	9	199	6	3	13	6	1162	486	132	1022	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	593	9	206	6	3	13	6	1200	502	136	1056	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	593	9	206	6	3	13	6	1200	502	136	1056	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	593	9	206	6	3	13	6	1200	502	136	1056	12
OvlAdjVol:									201			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.97	0.03	1.00	0.27	0.14	0.59	1.00	2.00	1.00	1.00	1.98	0.02
Final Sat.:	3151	49	1600	436	218	945	1600	3200	1600	1600	3163	37
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.13	0.01	0.01	0.01	0.00	0.38	0.31	0.09	0.33	0.33
OvlAdjV/S:									0.13			
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.678
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	254	42	132	17	22	5	19	999	161	107	890	19
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	254	42	132	17	22	5	19	999	161	107	890	19
Added Vol:	0	0	11	0	0	0	0	58	1	5	68	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	254	42	143	17	22	5	19	1057	162	112	958	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	258	43	145	17	22	5	19	1075	165	114	975	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	258	43	145	17	22	5	19	1075	165	114	975	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	258	43	145	17	22	5	19	1075	165	114	975	19
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.72	0.28	1.00	0.44	0.56	1.00	1.00	1.73	0.27	1.00	2.00	1.00
Final Sat.:	2746	454	1600	697	903	1600	1600	2775	425	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.02	0.02	0.00	0.01	0.39	0.39	0.07	0.30	0.01
Crit Moves:	****				****			****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.767
Loss Time (sec): 6 Average Delay (sec/veh): 26.6
Optimal Cycle: 52 Level Of Service: C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2.0	0 1	1	0 2.0	0 1	0	1 0.0	0 1	0	0 1!	0 0
Volume Module:												
Base Vol:	389	1090	34	3	815	385	282	11	117	18	17	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	389	1090	34	3	815	385	282	11	117	18	17	6
Added Vol:	77	11	0	0	15	0	0	0	28	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	466	1101	34	3	830	385	282	11	145	18	17	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	494	1166	36	3	879	408	299	12	154	19	18	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	494	1166	36	3	879	408	299	12	154	19	18	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	494	1166	36	3	879	408	299	12	154	19	18	6
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.96	0.96	0.96
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.96	0.04	1.00	0.44	0.41	0.15
Final Sat.:	1805	3610	1615	1805	3610	1615	1745	68	1615	800	756	267
Capacity Analysis Module:												
Vol/Sat:	0.27	0.32	0.02	0.00	0.24	0.25	0.17	0.17	0.10	0.02	0.02	0.02
Crit Moves:	****					****	****				****	
Green/Cycle:	0.36	0.68	0.68	0.00	0.33	0.33	0.22	0.22	0.22	0.03	0.03	0.03
Volume/Cap:	0.77	0.47	0.03	0.47	0.74	0.77	0.77	0.77	0.43	0.77	0.77	0.77
Delay/Veh:	34.0	7.6	5.2	94.4	32.3	36.7	45.0	45.0	34.2	94.2	94.2	94.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.0	7.6	5.2	94.4	32.3	36.7	45.0	45.0	34.2	94.2	94.2	94.2
LOS by Move:	C	A	A	F	C	D	D	D	C	F	F	F
HCM2kAvgQ:	13	9	0	1	14	13	11	11	4	3	3	3

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Existing Plus 2020 Project Conditions And Cumulative Projects
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Note: Queue reported is the number of cars per lane.

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Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.683
Loss Time (sec):	6	Average Delay (sec/veh):	18.9
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	52	1273	0	0	668	301	301	0	186	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	52	1273	0	0	668	301	301	0	186	0	0	0
Added Vol:	14	88	0	0	43	0	0	0	58	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	66	1361	0	0	711	301	301	0	244	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	70	1443	0	0	754	319	319	0	259	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	1443	0	0	754	319	319	0	259	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	1443	0	0	754	319	319	0	259	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.91	0.91	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.41	0.59	1.38	0.00	0.62	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2422	1025	2383	0	1067	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.40	0.00	0.00	0.31	0.31	0.13	0.00	0.24	0.00	0.00	0.00
Crit Moves:		****		****					****			
Green/Cycle:	0.06	0.59	0.00	0.00	0.52	0.52	0.35	0.00	0.35	0.00	0.00	0.00
Volume/Cap:	0.60	0.68	0.00	0.00	0.60	0.60	0.38	0.00	0.68	0.00	0.00	0.00
Delay/Veh:	53.8	15.3	0.0	0.0	17.3	17.3	24.2	0.0	29.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.8	15.3	0.0	0.0	17.3	17.3	24.2	0.0	29.8	0.0	0.0	0.0
LOS by Move:	D	B	A	A	B	B	C	A	C	A	A	A
HCM2kAvgQ:	3	17	0	0	12	12	5	0	12	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.889
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	95	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	80	1628	109	81	1067	96	103	16	113	123	28	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	1628	109	81	1067	96	103	16	113	123	28	98
Added Vol:	0	110	9	7	62	0	0	2	0	4	1	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	1738	118	88	1129	96	103	18	113	127	29	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	83	1805	123	91	1172	100	107	19	117	132	30	105
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1805	123	91	1172	100	107	19	117	132	30	105
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	1805	123	91	1172	100	107	19	117	132	30	105
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.14	0.86	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	220	1380	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.56	0.08	0.06	0.37	0.06	0.07	0.09	0.09	0.08	0.02	0.07
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.833
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	75	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	327	1150	288	209	832	262	346	651	292	359	659	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	327	1150	288	209	832	262	346	651	292	359	659	326
Added Vol:	2	106	41	0	59	7	13	63	1	27	72	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	329	1256	329	209	891	269	359	714	293	386	731	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	338	1291	338	215	916	276	369	734	301	397	751	335
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	338	1291	338	215	916	276	369	734	301	397	751	335
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	338	1291	338	215	916	276	369	734	301	397	751	335
OvlAdjVol:			118						113			216
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.30	0.70	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	3687	1113	2880	3200	1600	2880	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.27	0.21	0.07	0.25	0.25	0.13	0.23	0.19	0.14	0.23	0.21
OvlAdjV/S:			0.07						0.07			0.13
Crit Moves:	****				****			****			****	

Mt SAC PEP EIR
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.977
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	162	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	233	1535	153	7	1259	190	245	63	350	85	35	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	233	1535	153	7	1259	190	245	63	350	85	35	12
Added Vol:	0	121	0	4	73	9	18	0	0	0	0	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1656	153	11	1332	199	263	63	350	85	35	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	252	1792	166	12	1442	215	285	68	379	92	38	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	1792	166	12	1442	215	285	68	379	92	38	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	252	1792	166	12	1442	215	285	68	379	92	38	23
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.61	0.39	1.00	1.82	0.74	0.44
Final Sat.:	1600	3200	1600	1600	3200	1600	2582	618	1600	2901	1188	711
Capacity Analysis Module:												
Vol/Sat:	0.16	0.56	0.10	0.01	0.45	0.13	0.11	0.11	0.24	0.03	0.03	0.03
OvlAdjV/S:						0.00						
Crit Moves:	****				****				****			****

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.000
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Added Vol:	18	35	26	7	18	49	39	6	10	85	9	48
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	279	1075	205	392	1060	258	705	1537	297	513	711	292
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	292	1127	0	411	1111	0	739	1611	0	538	745	306
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	292	1127	0	411	1111	0	739	1611	0	538	745	306
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	292	1127	0	411	1111	0	739	1611	0	538	745	306
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	2880	4800	1600	2880	4800	1600	2880	4800	1600	2880	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.23	0.00	0.14	0.23	0.00	0.26	0.34	0.00	0.19	0.16	0.19
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.611
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 0	0	0 3	0 1	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	33	1261	0	0	1567	50	172	0	94	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	1261	0	0	1567	50	172	0	94	0	0	0
Added Vol:	0	66	0	0	107	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	1327	0	0	1674	50	172	0	94	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.00	0.93	0.93	0.93
PHF Volume:	36	1430	0	0	1804	54	185	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1430	0	0	1804	54	185	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	36	1430	0	0	1804	54	185	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	4800	1600	2880	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.45	0.00	0.00	0.38	0.03	0.06	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****			****			****				

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.786
Loss Time (sec):	10	Average Delay (sec/veh):	23.4
Optimal Cycle:	68	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	2	0 1	1 0	1	0 0	1 0	1	0 1!	0 1
Volume Module:												
Base Vol:	1	799	283	610	1382	5	4	2	4	186	1	495
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	799	283	610	1382	5	4	2	4	186	1	495
Added Vol:	0	61	0	50	56	0	0	0	0	0	0	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	860	283	660	1438	5	4	2	4	186	1	500
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	1	959	315	736	1603	6	4	2	4	207	1	557
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	959	315	736	1603	6	4	2	4	207	1	557
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	959	315	736	1603	6	4	2	4	207	1	557
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.95	0.95	0.95	0.90	0.90	0.88	0.88	0.88
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.33	0.67	1.27	0.01	1.72
Final Sat.:	1805	3610	1615	3502	3597	13	1805	570	1140	2123	5	2885
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.20	0.21	0.45	0.45	0.00	0.00	0.00	0.10	0.23	0.19
Crit Moves:		****		****			****				****	
Green/Cycle:	0.00	0.34	0.62	0.27	0.60	0.60	0.00	0.01	0.01	0.28	0.29	0.56
Volume/Cap:	0.74	0.79	0.31	0.79	0.74	0.74	0.79	0.34	0.34	0.34	0.79	0.35
Delay/Veh:	478.5	33.3	9.1	38.5	15.5	15.5	278.4	59.4	59.4	28.5	36.8	12.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	478.5	33.3	9.1	38.5	15.5	15.5	278.4	59.4	59.4	28.5	36.8	12.1
LOS by Move:	F	C	A	D	B	B	F	E	E	C	D	B
HCM2kAvgQ:	0	14	4	11	19	19	1	1	1	4	13	5

Note: Queue reported is the number of cars per lane.

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Existing Plus 2020 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.829
Loss Time (sec):	10	Average Delay (sec/veh):	21.5
Optimal Cycle:	79	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 2	0 1	1	0 2	0 0	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	933	619	380	1294	0	169	0	176	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	933	619	380	1294	0	169	0	176	0	0	0
Added Vol:	0	29	0	3	54	0	31	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	962	619	383	1348	0	200	0	176	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	1019	656	406	1428	0	212	0	186	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1019	656	406	1428	0	212	0	186	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1019	656	406	1428	0	212	0	186	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.41	0.22	0.40	0.00	0.06	0.00	0.12	0.00	0.00	0.00
Crit Moves:			****	****					****			
Green/Cycle:	0.00	0.49	0.49	0.27	0.76	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Volume/Cap:	0.00	0.58	0.83	0.83	0.52	0.00	0.43	0.00	0.83	0.00	0.00	0.00
Delay/Veh:	0.0	18.6	29.3	45.6	4.9	0.0	40.1	0.0	63.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.6	29.3	45.6	4.9	0.0	40.1	0.0	63.8	0.0	0.0	0.0
LOS by Move:	A	B	C	D	A	A	D	A	E	A	A	A
HCM2kAvgQ:	0	12	20	12	9	0	4	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.752
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0 1	0	0 1	1 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	6	7	1	94	38	102	303	1335	189	42	609	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	7	1	94	38	102	303	1335	189	42	609	237
Added Vol:	9	0	10	10	0	9	19	67	19	21	80	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	7	11	104	38	111	322	1402	208	63	689	258
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	15	7	11	105	38	112	326	1418	210	64	697	261
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	7	11	105	38	112	326	1418	210	64	697	261
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	15	7	11	105	38	112	326	1418	210	64	697	261
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.68	0.32	1.00	0.73	0.27	1.00	1.00	1.74	0.26	1.00	2.00	1.00
Final Sat.:	1091	509	1600	1172	428	1600	1600	2787	413	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.09	0.09	0.07	0.20	0.51	0.51	0.04	0.22	0.16
OvlAdjV/S:						0.00						
Crit Moves:	****			****			****			****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.668
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	0 1	2 0	1	0 1	2 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	103	21	75	151	9	96	153	776	54	31	1097	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	103	21	75	151	9	96	153	776	54	31	1097	200
Added Vol:	8	0	16	16	0	8	16	56	16	33	107	33
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	111	21	91	167	9	104	169	832	70	64	1204	233
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	115	22	94	173	9	107	175	860	72	66	1244	241
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	115	22	94	173	9	107	175	860	72	66	1244	241
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	115	22	94	173	9	107	175	860	72	66	1244	241
OvlAdjVol:						10						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.84	0.16	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	2880	1600	1600	2880	2952	248	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.01	0.06	0.06	0.01	0.07	0.06	0.29	0.29	0.04	0.39	0.15
OvlAdjV/S:						0.01						
Crit Moves:			****	****			****				****	

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Added Vol:	0	0	0		0	0	0		0	89	0		0	173	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		0	1118	0		0	1455	14	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93	
PHF Volume:	0	0	0		0	0	0		0	1197	0		0	1558	15	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		0	1197	0		0	1558	15	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1976	2770	599		2156	2755	779		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	55	20	450		42	20	343		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	55	20	450		42	20	343		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.814
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0	2	0 1	1	0	2	0 1	1	0	2	1 0	1	0	2	1 0
Volume Module:																
Base Vol:	234	775	63		160	550	158		163	963	214		84	684	112	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	234	775	63		160	550	158		163	963	214		84	684	112	
Added Vol:	26	6	24		0	9	49		64	195	52		4	144	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	260	781	87		160	559	207		227	1158	266		88	828	112	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	269	809	90		166	579	215		235	1200	276		91	858	116	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	269	809	90		166	579	215		235	1200	276		91	858	116	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	269	809	90		166	579	215		235	1200	276		91	858	116	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.44	0.56		1.00	2.64	0.36	
Final Sat.:	1600	3200	1600		1600	3200	1600		1600	3903	897		1600	4228	572	
Capacity Analysis Module:																
Vol/Sat:	0.17	0.25	0.06		0.10	0.18	0.13		0.15	0.31	0.31		0.06	0.20	0.20	
Crit Moves:	****					****				****			****			

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.971
Loss Time (sec): 6 Average Delay (sec/veh): 29.9
Optimal Cycle: 165 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0 1! 0	1	0	2 1 0	1	0	3 0 1
Volume Module:												
Base Vol:	1	0	83	923	12	536	0	1796	72	18	576	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	0	83	923	12	536	0	1796	72	18	576	116
Added Vol:	0	0	0	72	0	64	0	219	0	0	84	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	83	995	12	600	0	2015	72	18	660	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00
PHF Volume:	1	0	86	1032	12	622	0	2090	75	19	685	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	86	1032	12	622	0	2090	75	19	685	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	1	0	86	1032	12	622	0	2090	75	19	685	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	1.00	0.87	0.92	0.92	0.92	1.00	0.91	0.91	0.95	0.91	1.00
Lanes:	0.01	0.00	0.99	1.62	0.01	1.37	0.00	2.90	0.10	1.00	3.00	1.00
Final Sat.:	20	0	1628	2809	26	2385	0	4983	178	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.05	0.37	0.48	0.26	0.00	0.42	0.42	0.01	0.13	0.00
Crit Moves:					****			****		****		
Green/Cycle:	0.00	0.00	0.00	0.50	0.50	0.50	0.00	0.43	0.43	0.01	0.44	0.00
Volume/Cap:	xxxx	0.00	xxxx	0.74	0.97	0.52	0.00	0.97	0.97	0.97	0.30	0.00
Delay/Veh:	0.0	0.0	0.0	21.3	39.8	17.3	0.0	40.7	40.7	238.1	18.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	21.3	39.8	17.3	0.0	40.7	40.7	238.1	18.0	0.0
LOS by Move:	A	A	A	C	D	B	A	D	D	F	B	A
HCM2kAvgQ:	2	0	2	25	2	13	0	30	30	2	5	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.720
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2 0 0	0	0	1 1 0	1	0	0 0 1	0	0	0 0 0
Volume Module:												
Base Vol:	418	1243	0	0	808	115	81	0	407	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	418	1243	0	0	808	115	81	0	407	0	0	0
Added Vol:	3	105	0	0	107	0	0	0	7	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	421	1348	0	0	915	115	81	0	414	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	449	1439	0	0	977	123	86	0	442	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	449	1439	0	0	977	123	86	0	442	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	449	1439	0	0	977	123	86	0	442	0	0	0
OvlAdjVol:									192			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.78	0.22	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	2843	357	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.16	0.45	0.00	0.00	0.34	0.34	0.05	0.00	0.28	0.00	0.00	0.00
OvlAdjV/S:									0.12			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.599
Loss Time (sec):	6	Average Delay (sec/veh):	9.8
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1!	0 1	0	0 0	0 0	1	0 2	1 1	0	0 2	1 0
Volume Module:												
Base Vol:	123	0	289	0	0	0	0	2097	621	0	969	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	123	0	289	0	0	0	0	2097	621	0	969	0
Added Vol:	61	0	42	0	0	0	0	90	113	0	151	280
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	184	0	331	0	0	0	0	2187	734	0	1120	280
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00	0.96	0.96	0.96
PHF Volume:	191	0	344	0	0	0	0	2276	0	0	1165	291
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	191	0	344	0	0	0	0	2276	0	0	1165	291
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	191	0	344	0	0	0	0	2276	0	0	1165	291
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.88	0.88
Lanes:	1.36	0.00	1.64	0.00	0.00	0.00	1.00	3.00	1.00	0.00	2.40	0.60
Final Sat.:	2289	0	2771	0	0	0	1900	5187	1729	0	4025	1006
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.12	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.29	0.29
Crit Moves:			****					****				
Green/Cycle:	0.21	0.00	0.21	0.00	0.00	0.00	0.00	0.73	0.00	0.00	0.73	0.73
Volume/Cap:	0.40	0.00	0.60	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.40	0.40
Delay/Veh:	34.5	0.0	37.0	0.0	0.0	0.0	0.0	6.6	0.0	0.0	5.1	5.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.5	0.0	37.0	0.0	0.0	0.0	0.0	6.6	0.0	0.0	5.1	5.1
LOS by Move:	C	A	D	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	4	0	7	0	0	0	0	13	0	0	6	6

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.807
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 2	0 1	2	0 2	0 0	0	0 0	0 0	2	0 0	0 2
Volume Module:												
Base Vol:	0	1712	118	106	1120	0	0	0	0	136	0	161
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1712	118	106	1120	0	0	0	0	136	0	161
Added Vol:	0	77	36	70	50	0	0	0	0	18	0	35
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1789	154	176	1170	0	0	0	0	154	0	196
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1877	162	185	1228	0	0	0	0	162	0	206
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1877	162	185	1228	0	0	0	0	162	0	206
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1877	162	185	1228	0	0	0	0	162	0	206
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	2880	3200	0	0	0	0	2880	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.59	0.10	0.06	0.38	0.00	0.00	0.00	0.00	0.06	0.00	0.06
OvlAdjV/S:												0.00
Crit Moves:		****		****						****		

MITIGATED CONDITIONS

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.982
Loss Time (sec): 10 | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 169 | Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	2	0 0	0	0	1	1 0	1	0	0	0 2	0	0	0	0 0
Volume Module:																
Base Vol:	397	739		0	0	1653		181	86		0	561	0		0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	397	739		0	0	1653		181	86		0	561	0		0	0
Added Vol:	2	62		0	0	146		0	0		0	8	0		0	0
PasserByVol:	0	0		0	0	0		0	0		0	0	0		0	0
Initial Fut:	399	801		0	0	1799		181	86		0	569	0		0	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.92	0.92		0.92	0.92	0.92		0.92	0.92		0.92	0.92	0.92		0.92	0.92
PHF Volume:	434	871		0	0	1955		197	93		0	618	0		0	0
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Reduced Vol:	434	871		0	0	1955		197	93		0	618	0		0	0
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
FinalVolume:	434	871		0	0	1955		197	93		0	618	0		0	0
OvlAdjVol:												137				
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600		1600	1600	1600		1600	1600
Adjustment:	0.90	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Lanes:	2.00	2.00		0.00	0.00	1.82		0.18	1.00		0.00	2.00	0.00		0.00	0.00
Final Sat.:	2880	3200		0	0	2907		293	1600		0	3200	0		0	0
Capacity Analysis Module:																
Vol/Sat:	0.15	0.27		0.00	0.00	0.67		0.67	0.06		0.00	0.19	0.00		0.00	0.00
OvlAdjV/S:												0.04				
Crit Moves:	****					****			****							

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.908
Loss Time (sec): 10 | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 104 | Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Ovl				Include				Ovl				Ovl			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	3	0 1	2	0	2	1 0	2	0	2	1 0	2	0	2	0 1
Volume Module:																
Base Vol:	236	1291		628	412	1070		187	284	757		153	110	446		185
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	236	1291		628	412	1070		187	284	757		153	110	446		185
Added Vol:	0	89		54	0	73		5	14	99		2	11	32		0
PasserByVol:	0	0		0	0	0		0	0	0		0	0	0		0
Initial Fut:	236	1380		682	412	1143		192	298	856		155	121	478		185
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97
PHF Volume:	245	1430		707	427	1184		199	309	887		161	125	495		192
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	245	1430		707	427	1184		199	309	887		161	125	495		192
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	245	1430		707	427	1184		199	309	887		161	125	495		192
OvlAdjVol:			637									98				0
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600		1600
Adjustment:	0.90	1.00		1.00	0.90	1.00		1.00	0.90	1.00		1.00	0.90	1.00		1.00
Lanes:	2.00	3.00		1.00	2.00	2.57		0.43	2.00	2.54		0.46	2.00	2.00		1.00
Final Sat.:	2880	4800		1600	2880	4110		690	2880	4064		736	2880	3200		1600
Capacity Analysis Module:																
Vol/Sat:	0.08	0.30		0.44	0.15	0.29		0.29	0.11	0.22		0.22	0.04	0.15		0.12
OvlAdjV/S:				0.40								0.13				0.00
Crit Moves:				****	****				****					****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.993
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Ovl				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0	2	0 1	1	0	2	0 1	1	1	0	0 1	1	1	0	1 0
Volume Module:																
Base Vol:	159	1684		70	1	1120		277	407		76	416	113		108	12
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	159	1684		70	1	1120		277	407		76	416	113		108	12
Added Vol:	0	109		0	2	79		4	23		0	0	0		0	11
PasserByVol:	0	0		0	0	0		0	0		0	0	0		0	0
Initial Fut:	159	1793		70	3	1199		281	430		76	416	113		108	23
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.87	0.87		0.87	0.87	0.87		0.87	0.87		0.87	0.87	0.87		0.87	0.87
PHF Volume:	184	2070		81	3	1385		324	497		88	480	130		125	27
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Reduced Vol:	184	2070		81	3	1385		324	497		88	480	130		125	27
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
FinalVolume:	184	2070		81	3	1385		324	497		88	480	130		125	27
OvlAdjVol:								32				297				
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600		1600	1600	1600		1600	1600
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Lanes:	1.00	2.00		1.00	1.00	2.00		1.00	1.70		0.30	1.00	1.39		1.33	0.28
Final Sat.:	1600	3200		1600	1600	3200		1600	2719		481	1600	2223		2125	453
Capacity Analysis Module:																
Vol/Sat:	0.11	0.65		0.05	0.00	0.43		0.20	0.18		0.18	0.30	0.06		0.06	0.06
OvlAdjV/S:								0.02				0.19				
Crit Moves:		****				****						****	****			

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.636
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Ignore				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	2	1 0	0	0	3	0 1	2	0	0	0 1	0	0	0	0 0
Volume Module:																
Base Vol:	116	2253		0	0	1002		107	39		0	36	0		0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	116	2253		0	0	1002		107	39		0	36	0		0	0
Added Vol:	0	118		0	0	46		0	0		0	0	0		0	0
PasserByVol:	0	0		0	0	0		0	0		0	0	0		0	0
Initial Fut:	116	2371		0	0	1048		107	39		0	36	0		0	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	0.00	1.00		1.00	1.00
PHF Adj:	0.95	0.95		0.95	0.95	0.95		0.95	0.95		0.00	0.95	0.95		0.95	0.95
PHF Volume:	123	2506		0	0	1108		113	41		0	0	0		0	0
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Reduced Vol:	123	2506		0	0	1108		113	41		0	0	0		0	0
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		0.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		0.00	1.00	1.00		1.00	1.00
FinalVolume:	123	2506		0	0	1108		113	41		0	0	0		0	0
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600		1600	1600	1600		1600	1600
Adjustment:	0.90	1.00		1.00	1.00	1.00		1.00	0.90		1.00	1.00	1.00		1.00	1.00
Lanes:	2.00	3.00		0.00	0.00	3.00		1.00	2.00		0.00	1.00	0.00		0.00	0.00
Final Sat.:	2880	4800		0	0	4800		1600	2880		0	1600	0		0	0
Capacity Analysis Module:																
Vol/Sat:	0.04	0.52		0.00	0.00	0.23		0.07	0.01		0.00	0.00	0.00		0.00	0.00
Crit Moves:		****				****				****						

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.696
Loss Time (sec): 10 | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 | Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	0	0	1	0	1	0	1	0	2	0	1	1	0	2	0	1
Volume Module:												
Base Vol:	126	14	28	173	11	246	35	980	218	6	830	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	14	28	173	11	246	35	980	218	6	830	80
Added Vol:	5	0	5	5	0	5	23	106	23	26	34	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	131	14	33	178	11	251	58	1086	241	32	864	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	137	15	34	186	11	262	61	1134	252	33	902	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	15	34	186	11	262	61	1134	252	33	902	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	137	15	34	186	11	262	61	1134	252	33	902	111
OvlAdjVol:						201						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.90	0.10	1.00	0.94	0.06	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1446	154	1600	1507	93	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.02	0.12	0.12	0.16	0.04	0.35	0.16	0.02	0.28	0.07
OvlAdjV/S:						0.13						
Crit Moves:	****					****		****			****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.654
Loss Time (sec): 10 | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 | Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	0	0	0	0	1	1	0	1	0	0	0	2	0	0	0	0	0
Volume Module:												
Base Vol:	418	1243	0	0	808	115	81	0	407	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	418	1243	0	0	808	115	81	0	407	0	0	0
Added Vol:	3	105	0	0	107	0	0	0	7	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	421	1348	0	0	915	115	81	0	414	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	449	1439	0	0	977	123	86	0	442	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	449	1439	0	0	977	123	86	0	442	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	449	1439	0	0	977	123	86	0	442	0	0	0
OvlAdjVol:									0			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.78	0.22	1.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	2843	357	1600	0	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.16	0.45	0.00	0.00	0.34	0.34	0.05	0.00	0.14	0.00	0.00	0.00
OvlAdjV/S:									0.00			
Crit Moves:	****				****		****					

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PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.819
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 71 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	3 0 1	2	0	2 1 0	2	0	2 1 0	2	0	2 0 1
Volume Module:												
Base Vol:	327	1150	288	209	832	262	346	651	292	359	659	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	327	1150	288	209	832	262	346	651	292	359	659	326
Added Vol:	2	106	41	0	59	7	13	63	1	27	72	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	329	1256	329	209	891	269	359	714	293	386	731	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	338	1291	338	215	916	276	369	734	301	397	751	335
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	338	1291	338	215	916	276	369	734	301	397	751	335
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	338	1291	338	215	916	276	369	734	301	397	751	335
OvlAdjVol:			118						137			216
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.30	0.70	2.00	2.13	0.87	2.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	3687	1113	2880	3403	1397	2880	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.27	0.21	0.07	0.25	0.25	0.13	0.22	0.22	0.14	0.23	0.21
OvlAdjV/S:			0.07						0.10			0.13
Crit Moves:	****				****			****		****		

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.850
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 80 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2 0 1	1	0	2 0 1	1	1	0 0 1	1	1	0 1 0
Volume Module:												
Base Vol:	233	1535	153	7	1259	190	245	63	350	85	35	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	233	1535	153	7	1259	190	245	63	350	85	35	12
Added Vol:	0	121	0	4	73	9	18	0	0	0	0	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1656	153	11	1332	199	263	63	350	85	35	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	252	1792	166	12	1442	215	285	68	379	92	38	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	1792	166	12	1442	215	285	68	379	92	38	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	252	1792	166	12	1442	215	285	68	379	92	38	23
OvlAdjVol:						39			127			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.61	0.39	1.00	1.82	0.74	0.44
Final Sat.:	1600	3200	1600	1600	3200	1600	2582	618	1600	2901	1188	711
Capacity Analysis Module:												
Vol/Sat:	0.16	0.56	0.10	0.01	0.45	0.13	0.11	0.11	0.24	0.03	0.03	0.03
OvlAdjV/S:						0.02			0.08			
Crit Moves:	****				****		****					****

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.553
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	1 0	0	0 3	0 1	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	33	1261	0	0	1567	50	172	0	94	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	1261	0	0	1567	50	172	0	94	0	0	0
Added Vol:	0	66	0	0	107	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	1327	0	0	1674	50	172	0	94	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.00	0.93	0.93	0.93
PHF Volume:	36	1430	0	0	1804	54	185	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1430	0	0	1804	54	185	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	36	1430	0	0	1804	54	185	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	2880	4800	0	0	4800	1600	2880	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.30	0.00	0.00	0.38	0.03	0.06	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****		****					

Mt SAC PEP EIR
Existing Plus 2020 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.686
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 48 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 0	0 1	0	1 0	0 1	1	0 2	0 1	1	0 2	0 1
Volume Module:												
Base Vol:	6	7	1	94	38	102	303	1335	189	42	609	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	7	1	94	38	102	303	1335	189	42	609	237
Added Vol:	9	0	10	10	0	9	19	67	19	21	80	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	7	11	104	38	111	322	1402	208	63	689	258
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	15	7	11	105	38	112	326	1418	210	64	697	261
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	7	11	105	38	112	326	1418	210	64	697	261
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	15	7	11	105	38	112	326	1418	210	64	697	261
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.68	0.32	1.00	0.73	0.27	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1091	509	1600	1172	428	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.09	0.09	0.07	0.20	0.44	0.13	0.04	0.22	0.16
OvlAdjV/S:						0.00						
Crit Moves:		****			****			****		****		

EXISTING PLUS 2025 CUMULATIVE PLUS PROJECT CONDITIONS

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.833
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	75	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Split Phase			Split Phase			Protected				Protected			
Rights:	Include			Include			Ovl				Include			
Min. Green:	0	0	0	0	0	0	0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0 1	0	0 1!	0 0	1	0 2	0 1		1	0 1	1 0	
Volume Module:														
Base Vol:	594	4	140	18	10	12	4	1170	436	78	1018		3	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Initial Bse:	594	4	140	18	10	12	4	1170	436	78	1018		3	
Added Vol:	6	0	15	0	0	0	0	141	6	5	168		0	
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0		0	
Initial Fut:	600	4	155	18	10	12	4	1311	442	83	1186		3	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		0.92	
PHF Volume:	651	4	168	20	11	13	4	1423	480	90	1288		3	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0		0	
Reduced Vol:	651	4	168	20	11	13	4	1423	480	90	1288		3	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
FinalVolume:	651	4	168	20	11	13	4	1423	480	90	1288		3	
OvlAdjVol:									152					
Saturation Flow Module:														
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600		1600	
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Lanes:	1.99	0.01	1.00	0.45	0.25	0.30	1.00	2.00	1.00	1.00	1.99		0.01	
Final Sat.:	3179	21	1600	720	400	480	1600	3200	1600	1600	3192		8	
Capacity Analysis Module:														
Vol/Sat:	0.20	0.20	0.11	0.03	0.03	0.03	0.00	0.44	0.30	0.06	0.40		0.40	
OvlAdjV/S:									0.10					
Crit Moves:	****					****		****		****				

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.786
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Split Phase			Split Phase			Protected				Protected			
Rights:	Include			Include			Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	1 0	0 1	0	1 0	0 1	1	0 1	0		1	0 2	0 1	
Volume Module:														
Base Vol:	268	27	102	22	45	19	7	1045	292	53	790		14	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Initial Bse:	268	27	102	22	45	19	7	1045	292	53	790		14	
Added Vol:	0	0	25	0	0	0	0	170	0	5	175		0	
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0		0	
Initial Fut:	268	27	127	22	45	19	7	1215	292	58	965		14	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94		0.94	
PHF Volume:	287	29	136	24	48	20	7	1299	312	62	1032		15	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0		0	
Reduced Vol:	287	29	136	24	48	20	7	1299	312	62	1032		15	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
FinalVolume:	287	29	136	24	48	20	7	1299	312	62	1032		15	
Saturation Flow Module:														
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600		1600	
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Lanes:	1.82	0.18	1.00	0.33	0.67	1.00	1.00	1.61	0.39	1.00	2.00		1.00	
Final Sat.:	2907	293	1600	525	1075	1600	1600	2580	620	1600	3200		1600	
Capacity Analysis Module:														
Vol/Sat:	0.10	0.10	0.08	0.04	0.04	0.01	0.00	0.50	0.50	0.04	0.32		0.01	
Crit Moves:	****			****				****		****				

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.653
Loss Time (sec):	6	Average Delay (sec/veh):	24.6
Optimal Cycle:	37	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2.0	1	1	0 2.0	0 1	0	1 0.0	0 1	0	0 1.0	0 0
Volume Module:												
Base Vol:	144	1051	17	0	812	140	437	6	310	12	3	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	144	1051	17	0	812	140	437	6	310	12	3	8
Added Vol:	67	15	0	0	27	0	0	0	64	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	211	1066	17	0	839	140	437	6	374	12	3	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	213	1078	17	0	849	142	442	6	378	12	3	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	213	1078	17	0	849	142	442	6	378	12	3	8
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	213	1078	17	0	849	142	442	6	378	12	3	8
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	1.00	0.95	0.85	0.95	0.95	0.85	0.93	0.93	0.93
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.99	0.01	1.00	0.52	0.13	0.35
Final Sat.:	1805	3610	1615	1900	3610	1615	1786	25	1615	921	230	614
Capacity Analysis Module:												
Vol/Sat:	0.12	0.30	0.01	0.00	0.24	0.09	0.25	0.25	0.23	0.01	0.01	0.01
Crit Moves:	****				****			****			****	
Green/Cycle:	0.18	0.54	0.54	0.00	0.36	0.36	0.38	0.38	0.38	0.02	0.02	0.02
Volume/Cap:	0.65	0.55	0.02	0.00	0.65	0.24	0.65	0.65	0.62	0.65	0.65	0.65
Delay/Veh:	42.7	15.4	10.7	0.0	28.0	22.7	27.9	27.9	27.1	84.6	84.6	84.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.7	15.4	10.7	0.0	28.0	22.7	27.9	27.9	27.1	84.6	84.6	84.6
LOS by Move:	D	B	B	A	C	C	C	C	C	F	F	F
HCM2kAvgQ:	6	11	0	0	12	3	12	12	10	2	2	2

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Note: Queue reported is the number of cars per lane.

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Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	1.042
Loss Time (sec):	6	Average Delay (sec/veh):	51.3
Optimal Cycle:	180	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2.0	0	0	0	1	1 0		1	0 1!	0	0	0	0	0	0
Volume Module:																
Base Vol:	41	873	0	0	927	223	349	0	533	0	0	0				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	41	873	0	0	927	223	349	0	533	0	0	0				
Added Vol:	14	82	0	0	91	0	0	0	200	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	55	955	0	0	1018	223	349	0	733	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94				
PHF Volume:	58	1012	0	0	1078	236	370	0	776	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	58	1012	0	0	1078	236	370	0	776	0	0	0				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
FinalVolume:	58	1012	0	0	1078	236	370	0	776	0	0	0				
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900				
Adjustment:	0.95	0.95	1.00	1.00	0.92	0.92	0.88	1.00	0.88	1.00	1.00	1.00				
Lanes:	1.00	2.00	0.00	0.00	1.64	0.36	1.19	0.00	0.81	0.00	0.00	0.00				
Final Sat.:	1805	3610	0	0	2881	631	2002	0	1356	0	0	0				
Capacity Analysis Module:																
Vol/Sat:	0.03	0.28	0.00	0.00	0.37	0.37	0.18	0.00	0.57	0.00	0.00	0.00				
Crit Moves:	****				****				****							
Green/Cycle:	0.03	0.39	0.00	0.00	0.36	0.36	0.55	0.00	0.55	0.00	0.00	0.00				
Volume/Cap:	1.04	0.72	0.00	0.00	1.04	1.04	0.34	0.00	1.04	0.00	0.00	0.00				
Delay/Veh:	181.0	27.6	0.0	0.0	68.9	68.9	12.5	0.0	61.1	0.0	0.0	0.0				
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
AdjDel/Veh:	181.0	27.6	0.0	0.0	68.9	68.9	12.5	0.0	61.1	0.0	0.0	0.0				
LOS by Move:	F	C	A	A	E	E	B	A	E	A	A	A				
HCM2kAvgQ:	4	15	0	0	27	27	5	0	40	0	0	0				

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.012
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Prot+Permit				Prot+Permit			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2.0	0	1	1	0 2.0	0	1	1	0 0	1	0	1	0 1	0	1
Volume Module:																
Base Vol:	130	1183	442	221	1365	214	158	93	244	115	48	76				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	130	1183	442	221	1365	214	158	93	244	115	48	76				
Added Vol:	0	154	21	16	173	0	0	4	0	4	1	3				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	130	1337	463	237	1538	214	158	97	244	119	49	79				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94				
PHF Volume:	139	1428	495	253	1643	229	169	104	261	127	52	84				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	139	1428	495	253	1643	229	169	104	261	127	52	84				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
FinalVolume:	139	1428	495	253	1643	229	169	104	261	127	52	84				
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600				
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.28	0.72	1.00	1.00	1.00				
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	455	1145	1600	1600	1600				
Capacity Analysis Module:																
Vol/Sat:	0.09	0.45	0.31	0.16	0.51	0.14	0.11	0.23	0.23	0.08	0.03	0.05				
Crit Moves:		****			****				****		****					

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.026
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	236	1291	628	412	1070	187	284	757	153	110	446	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	236	1291	628	412	1070	187	284	757	153	110	446	185
Added Vol:	0	151	95	0	170	7	25	198	2	19	174	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	236	1442	723	412	1240	194	309	955	155	129	620	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	245	1494	749	427	1285	201	320	990	161	134	642	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	1494	749	427	1285	201	320	990	161	134	642	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	245	1494	749	427	1285	201	320	990	161	134	642	192
OvlAdjVol:			675						25			0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.59	0.41	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	4151	649	2880	3200	1600	2880	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.31	0.47	0.15	0.31	0.31	0.11	0.31	0.10	0.05	0.20	0.12
OvlAdjV/S:			0.42						0.02			0.00
Crit Moves:			****	****				****		****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.138
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	159	1684	70	1	1120	277	407	76	416	113	108	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	1684	70	1	1120	277	407	76	416	113	108	12
Added Vol:	0	182	0	4	179	9	43	0	0	0	0	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	159	1866	70	5	1299	286	450	76	416	113	108	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	184	2155	81	6	1500	330	520	88	480	130	125	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	2155	81	6	1500	330	520	88	480	130	125	38
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	2155	81	6	1500	330	520	88	480	130	125	38
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.71	0.29	1.00	1.34	1.27	0.39
Final Sat.:	1600	3200	1600	1600	3200	1600	2738	462	1600	2138	2040	622
Capacity Analysis Module:												
Vol/Sat:	0.11	0.67	0.05	0.00	0.47	0.21	0.19	0.19	0.30	0.06	0.06	0.06
OvlAdjV/S:						0.00						
Crit Moves:		****		****					****			****

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.936
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	122	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	291	1364	364	207	938	396	401	500	169	167	1116	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	291	1364	364	207	938	396	401	500	169	167	1116	139
Added Vol:	4	101	178	46	107	26	75	10	18	269	7	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	295	1465	542	253	1045	422	476	510	187	436	1123	145
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	311	1545	0	267	1102	0	502	538	0	460	1185	153
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	311	1545	0	267	1102	0	502	538	0	460	1185	153
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	311	1545	0	267	1102	0	502	538	0	460	1185	153
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	2880	4800	1600	2880	4800	1600	2880	4800	1600	2880	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.32	0.00	0.09	0.23	0.00	0.17	0.11	0.00	0.16	0.25	0.10
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	1.055
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 1	1	0 3	0 1	2	0 1	0 1	1	0 1	0 1
Volume Module:												
Base Vol:	116	2253	0	0	1002	107	39	0	36	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	116	2253	0	0	1002	107	39	0	36	0	0	0
Added Vol:	168	205	353	118	186	84	17	0	34	99	0	33
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	284	2458	353	118	1188	191	56	0	70	99	0	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	300	2598	373	125	1256	202	59	0	0	105	0	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	300	2598	373	125	1256	202	59	0	0	105	0	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	300	2598	373	125	1256	202	59	0	0	105	0	35
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	2880	3200	1600	1600	4800	1600	2880	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.81	0.23	0.08	0.26	0.13	0.02	0.00	0.00	0.07	0.00	0.02
Crit Moves:		****			****				****		****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	1.073
Loss Time (sec):	10	Average Delay (sec/veh):	54.9
Optimal Cycle:	180	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	2	0 1	1 0	1	0 0	1 0	1	0 1!	0 1
Volume Module:												
Base Vol:	0	1796	320	349	679	2	0	1	1	262	0	572
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1796	320	349	679	2	0	1	1	262	0	572
Added Vol:	0	497	0	99	219	0	0	0	0	0	0	229
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2293	320	448	898	2	0	1	1	262	0	801
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	2434	340	476	953	2	0	1	1	278	0	850
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2434	340	476	953	2	0	1	1	278	0	850
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2434	340	476	953	2	0	1	1	278	0	850
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.92	0.95	0.95	1.00	0.93	0.93	0.88	1.00	0.88
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.50	0.50	1.25	0.00	1.75
Final Sat.:	1900	3610	1615	3502	3602	8	1900	879	879	2075	0	2920
Capacity Analysis Module:												
Vol/Sat:	0.00	0.67	0.21	0.14	0.26	0.26	0.00	0.00	0.00	0.13	0.00	0.29
Crit Moves:		****		****			****					****
Green/Cycle:	0.00	0.63	0.77	0.13	0.76	0.76	0.00	0.00	0.00	0.14	0.00	0.27
Volume/Cap:	0.00	1.07	0.27	1.07	0.35	0.35	0.00	0.93	0.93	0.93	0.00	1.07
Delay/Veh:	0.0	60.5	3.4	107.3	4.2	4.2	0.0	580	580.1	55.3	0.0	85.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	60.5	3.4	107.3	4.2	4.2	0.0	580	580.1	55.3	0.0	85.9
LOS by Move:	A	E	A	F	A	A	A	F	F	E	A	F
HCM2kAvgQ:	0	47	3	11	5	5	0	1	1	11	0	24

Note: Queue reported is the number of cars per lane.

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Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	1.062
Loss Time (sec):	10	Average Delay (sec/veh):	60.3
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 2	0 1	1	0 2	0 0	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	1177	267	312	676	0	905	0	281	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1177	267	312	676	0	905	0	281	0	0	0
Added Vol:	0	137	0	64	155	0	360	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1314	267	376	831	0	1265	0	281	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	0	1345	273	385	851	0	1295	0	288	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1345	273	385	851	0	1295	0	288	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1345	273	385	851	0	1295	0	288	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.17	0.21	0.24	0.00	0.37	0.00	0.18	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green/Cycle:	0.00	0.35	0.35	0.20	0.55	0.00	0.35	0.00	0.35	0.00	0.00	0.00
Volume/Cap:	0.00	1.06	0.48	1.06	0.43	0.00	1.06	0.00	0.51	0.00	0.00	0.00
Delay/Veh:	0.0	75.9	26.0	104.5	13.3	0.0	76.4	0.0	26.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	75.9	26.0	104.5	13.3	0.0	76.4	0.0	26.6	0.0	0.0	0.0
LOS by Move:	A	E	C	F	B	A	E	A	C	A	A	A
HCM2kAvgQ:	0	32	7	17	8	0	30	0	7	0	0	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.832
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	75	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	126	14	28	173	11	246	35	980	218	6	830	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	14	28	173	11	246	35	980	218	6	830	80
Added Vol:	9	0	10	10	0	9	45	204	45	50	176	50
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	135	14	38	183	11	255	80	1184	263	56	1006	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	141	15	40	191	11	266	84	1236	275	58	1050	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	15	40	191	11	266	84	1236	275	58	1050	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	141	15	40	191	11	266	84	1236	275	58	1050	136
OvlAdjVol:						183						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.91	0.09	1.00	0.94	0.06	1.00	1.00	1.64	0.36	1.00	2.00	1.00
Final Sat.:	1450	150	1600	1509	91	1600	1600	2618	582	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.02	0.13	0.13	0.17	0.05	0.47	0.47	0.04	0.33	0.08
OvlAdjV/S:						0.11						
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.720
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	0 1	2	0 1	0 1	2	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	21	13	21	80	18	74	381	725	130	119	952	424
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	13	21	80	18	74	381	725	130	119	952	424
Added Vol:	8	0	16	16	0	8	38	149	38	79	261	79
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	13	37	96	18	82	419	874	168	198	1213	503
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	31	14	39	102	19	88	447	933	179	211	1295	537
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	14	39	102	19	88	447	933	179	211	1295	537
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	31	14	39	102	19	88	447	933	179	211	1295	537
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.68	0.32	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	2880	1600	1600	2880	2684	516	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.02	0.04	0.01	0.05	0.16	0.35	0.35	0.13	0.40	0.34
OvlAdjV/S:						0.00						
Crit Moves:				****	****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[20.2]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		4	847	0		0	1530	199	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		4	847	0		0	1530	199	
Added Vol:	0	0	0		0	0	0		0	180	0		0	418	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		4	1027	0		0	1948	199	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	0	0	0		0	0	0		4	1058	0		0	2006	205	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		4	1058	0		0	2006	205	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	2069	3277	529		2543	3072	1003		2211	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Potent Cap.:	48	9	500		23	12	244		240	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Move Cap.:	47	9	500		22	12	244		240	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		0.02	xxxx	xxxx	xxxx	xxxx	xxxx		
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		20.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*		*	*	*		C	*	*	*	*	*		
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

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Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.168
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0		
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	2	1	0	1	0	2	1	0
Volume Module:																				
Base Vol:	172	572	45			99	586	288			111	327	157			37	1179	98		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	172	572	45			99	586	288			111	327	157			37	1179	98		
Added Vol:	130	38	4			0	120	174			168	496	154			23	527	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	302	610	49			99	706	462			279	823	311			60	1706	98		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.96	0.96	0.96			0.96	0.96	0.96			0.96	0.96	0.96			0.96	0.96	0.96		
PHF Volume:	314	634	51			103	734	480			290	856	323			62	1773	102		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	314	634	51			103	734	480			290	856	323			62	1773	102		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	314	634	51			103	734	480			290	856	323			62	1773	102		
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600			1600	1600	1600			1600	1600	1600			1600	1600	1600		
Adjustment:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Lanes:	1.00	2.00	1.00			1.00	2.00	1.00			1.00	2.18	0.82			1.00	2.84	0.16		
Final Sat.:	1600	3200	1600			1600	3200	1600			1600	3484	1316			1600	4539	261		
Capacity Analysis Module:																				
Vol/Sat:	0.20	0.20	0.03			0.06	0.23	0.30			0.18	0.25	0.25			0.04	0.39	0.39		
Crit Moves:	****							****			****							****		

Mt SAC PEP EIR
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.095
Loss Time (sec):	6	Average Delay (sec/veh):	43.7
Optimal Cycle:	180	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0 0 1	1	0	1! 0 1	0	0	2 1 0	1	0	3 0 1
Volume Module:												
Base Vol:	0	0	2	604	3	745	0	541	10	7	1225	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	2	604	3	745	0	541	10	7	1225	43
Added Vol:	0	0	0	257	0	268	0	499	0	0	282	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	2	861	3	1013	0	1040	10	7	1507	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.00
PHF Volume:	0	0	2	1054	4	1240	0	1273	12	9	1845	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	2	1054	4	1240	0	1273	12	9	1845	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	0	2	1054	4	1240	0	1273	12	9	1845	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.90	0.90	0.90	1.00	0.91	0.91	0.95	0.91	1.00
Lanes:	0.00	0.00	1.00	1.45	0.01	1.54	0.00	2.97	0.03	1.00	3.00	1.00
Final Sat.:	0	0	1644	2490	5	2628	0	5132	49	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.42	0.67	0.47	0.00	0.25	0.25	0.00	0.36	0.00
Crit Moves:					****		****				****	
Green/Cycle:	0.00	0.00	0.00	0.62	0.62	0.62	0.00	0.32	0.32	0.01	0.32	0.00
Volume/Cap:	0.00	0.00	xxxx	0.69	1.09	0.77	0.00	0.78	0.78	0.78	1.10	0.00
Delay/Veh:	0.0	0.0	0.0	13.4	70.3	15.2	0.0	33.3	33.3	198.9	86.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	13.4	70.3	15.2	0.0	33.3	33.3	198.9	86.6	0.0
LOS by Move:	A	A	A	B	E	B	A	C	C	F	F	A
HCM2kAvgQ:	0	0	0	22	11	16	0	15	15	1	32	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.219
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2 0 0	0	0	1 1 0	1	0	0 0 1	0	0	0 0 0
Volume Module:												
Base Vol:	397	739	0	0	1653	181	86	0	561	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	397	739	0	0	1653	181	86	0	561	0	0	0
Added Vol:	3	99	0	0	307	0	0	0	16	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	400	838	0	0	1960	181	86	0	577	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	435	911	0	0	2130	197	93	0	627	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	435	911	0	0	2130	197	93	0	627	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	435	911	0	0	2130	197	93	0	627	0	0	0
OvlAdjVol:									386			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.83	0.17	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	2929	271	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.15	0.28	0.00	0.00	0.73	0.73	0.06	0.00	0.39	0.00	0.00	0.00
OvlAdjV/S:									0.24			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.697
Loss Time (sec):	6	Average Delay (sec/veh):	18.0
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	0	1	0	2	1	1	0	0	2	1	0
Volume Module:												
Base Vol:	385	0	274	0	0	0	0	806	276	0	1599	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	385	0	274	0	0	0	0	806	276	0	1599	0
Added Vol:	245	0	114	0	0	0	0	271	244	0	73	61
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	630	0	388	0	0	0	0	1077	520	0	1672	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.00	0.85	0.85	0.85
PHF Volume:	738	0	454	0	0	0	0	1261	0	0	1958	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	738	0	454	0	0	0	0	1261	0	0	1958	71
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	738	0	454	0	0	0	0	1261	0	0	1958	71
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Lanes:	1.62	0.00	1.38	0.00	0.00	0.00	1.00	3.00	1.00	0.00	2.89	0.11
Final Sat.:	2813	0	2400	0	0	0	1900	5187	1729	0	4979	182
Capacity Analysis Module:												
Vol/Sat:	0.26	0.00	0.19	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.39	0.39
Crit Moves:	****										****	
Green/Cycle:	0.38	0.00	0.38	0.00	0.00	0.00	0.00	0.56	0.00	0.00	0.56	0.56
Volume/Cap:	0.70	0.00	0.50	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.70	0.70
Delay/Veh:	27.7	0.0	24.2	0.0	0.0	0.0	0.0	12.7	0.0	0.0	16.4	16.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.7	0.0	24.2	0.0	0.0	0.0	0.0	12.7	0.0	0.0	16.4	16.4
LOS by Move:	C	A	C	A	A	A	A	B	A	A	B	B
HCM2kAvgQ:	13	0	8	0	0	0	0	8	0	0	17	17

Note: Queue reported is the number of cars per lane.

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Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.803
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2	0	1	2	0	2	0	0	0	0	0	0	2	0	0	0	2
Volume Module:												
Base Vol:	0	1047	437	643	1700	0	0	0	0	134	0	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1047	437	643	1700	0	0	0	0	134	0	75
Added Vol:	0	72	86	166	172	0	0	0	0	17	0	33
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1119	523	809	1872	0	0	0	0	151	0	108
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	1151	538	832	1926	0	0	0	0	155	0	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1151	538	832	1926	0	0	0	0	155	0	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1151	538	832	1926	0	0	0	0	155	0	111
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	2880	3200	0	0	0	0	2880	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.36	0.34	0.29	0.60	0.00	0.00	0.00	0.00	0.05	0.00	0.03
OvlAdjV/S:												0.00
Crit Moves:		****		****						****		

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Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.775
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	0 1!	0 0	1	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	570	9	191	6	3	13	6	1118	481	129	960	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	570	9	191	6	3	13	6	1118	481	129	960	12
Added Vol:	4	0	14	0	0	0	0	76	5	6	124	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	574	9	205	6	3	13	6	1194	486	135	1084	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	593	9	212	6	3	13	6	1233	502	139	1120	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	593	9	212	6	3	13	6	1233	502	139	1120	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	593	9	212	6	3	13	6	1233	502	139	1120	12
OvlAdjVol:									201			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.97	0.03	1.00	0.27	0.14	0.59	1.00	2.00	1.00	1.00	1.98	0.02
Final Sat.:	3151	49	1600	436	218	945	1600	3200	1600	1600	3165	35
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.13	0.01	0.01	0.01	0.00	0.39	0.31	0.09	0.35	0.35
OvlAdjV/S:									0.13			
Crit Moves:		****			****			****			****	

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Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.697
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1 0	0 1	0	1 0	0 1	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	254	42	132	17	22	5	19	999	161	107	890	19
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	254	42	132	17	22	5	19	999	161	107	890	19
Added Vol:	0	0	20	0	0	0	0	101	1	10	136	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	254	42	152	17	22	5	19	1100	162	117	1026	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	258	43	155	17	22	5	19	1119	165	119	1044	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	258	43	155	17	22	5	19	1119	165	119	1044	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	258	43	155	17	22	5	19	1119	165	119	1044	19
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.72	0.28	1.00	0.44	0.56	1.00	1.00	1.74	0.26	1.00	2.00	1.00
Final Sat.:	2746	454	1600	697	903	1600	1600	2789	411	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.10	0.02	0.02	0.00	0.01	0.40	0.40	0.07	0.33	0.01
Crit Moves:			****		****			****			****	

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Grand Ave / I-10 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.828
Loss Time (sec):	6	Average Delay (sec/veh):	30.2
Optimal Cycle:	65	Level Of Service:	C

Street Name:	Grand Ave						I-10 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2.0	0 1	1	0 2.0	0 1	0	1 0.0	0 1	0	0 1!	0 0
Volume Module:												
Base Vol:	389	1090	34	3	815	385	282	11	117	18	17	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	389	1090	34	3	815	385	282	11	117	18	17	6
Added Vol:	187	14	0	0	20	0	0	0	52	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	576	1104	34	3	835	385	282	11	169	18	17	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	610	1169	36	3	885	408	299	12	179	19	18	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	610	1169	36	3	885	408	299	12	179	19	18	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	610	1169	36	3	885	408	299	12	179	19	18	6
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.96	0.96	0.96
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.96	0.04	1.00	0.44	0.41	0.15
Final Sat.:	1805	3610	1615	1805	3610	1615	1745	68	1615	800	756	267
Capacity Analysis Module:												
Vol/Sat:	0.34	0.32	0.02	0.00	0.25	0.25	0.17	0.17	0.11	0.02	0.02	0.02
Crit Moves:	****				****		****				****	
Green/Cycle:	0.41	0.70	0.70	0.00	0.30	0.30	0.21	0.21	0.21	0.03	0.03	0.03
Volume/Cap:	0.83	0.46	0.03	0.46	0.83	0.85	0.83	0.83	0.54	0.83	0.83	0.83
Delay/Veh:	34.2	6.8	4.6	91.9	38.3	47.0	52.1	52.1	37.1	113.3	113	113.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.2	6.8	4.6	91.9	38.3	47.0	52.1	52.1	37.1	113.3	113	113.3
LOS by Move:	C	A	A	F	D	D	D	D	D	F	F	F
HCM2kAvgQ:	17	8	0	1	16	15	12	12	6	3	3	3

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Note: Queue reported is the number of cars per lane.

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Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Grand Ave / I-10 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.766
Loss Time (sec):	6	Average Delay (sec/veh):	21.5
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 0	0	0 1	1 0	1	0 1!	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	52	1273	0	0	668	301	301	0	186	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	52	1273	0	0	668	301	301	0	186	0	0	0
Added Vol:	26	201	0	0	73	0	0	0	127	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	78	1474	0	0	741	301	301	0	313	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	83	1563	0	0	786	319	319	0	332	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1563	0	0	786	319	319	0	332	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	1563	0	0	786	319	319	0	332	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.91	0.91	0.90	1.00	0.90	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.42	0.58	1.32	0.00	0.68	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	2457	998	2270	0	1157	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.43	0.00	0.00	0.32	0.32	0.14	0.00	0.29	0.00	0.00	0.00
Crit Moves:		****			****				****			
Green/Cycle:	0.07	0.57	0.00	0.00	0.49	0.49	0.37	0.00	0.37	0.00	0.00	0.00
Volume/Cap:	0.65	0.77	0.00	0.00	0.65	0.65	0.38	0.00	0.77	0.00	0.00	0.00
Delay/Veh:	56.2	18.4	0.0	0.0	19.7	19.7	22.9	0.0	31.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.2	18.4	0.0	0.0	19.7	19.7	22.9	0.0	31.6	0.0	0.0	0.0
LOS by Move:	E	B	A	A	B	B	C	A	C	A	A	A
HCM2kAvgQ:	4	21	0	0	13	13	5	0	15	0	0	0

Note: Queue reported is the number of cars per lane.

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Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Grand Ave / San Jose Hills Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.939
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	124	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 0	1 0	1	0 1	0 1
Volume Module:												
Base Vol:	80	1628	109	81	1067	96	103	16	113	123	28	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	1628	109	81	1067	96	103	16	113	123	28	98
Added Vol:	0	242	17	13	125	0	0	3	0	9	1	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	1870	126	94	1192	96	103	19	113	132	29	104
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	83	1942	131	98	1238	100	107	20	117	137	30	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1942	131	98	1238	100	107	20	117	137	30	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	1942	131	98	1238	100	107	20	117	137	30	108
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.14	0.86	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	230	1370	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.61	0.08	0.06	0.39	0.06	0.07	0.09	0.09	0.09	0.02	0.07
Crit Moves:		****			****				****		****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.870
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 87 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 2	1 0	2	0 2	0 1	2	0 2	0 1
Volume Module:												
Base Vol:	327	1150	288	209	832	262	346	651	292	359	659	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	327	1150	288	209	832	262	346	651	292	359	659	326
Added Vol:	2	238	74	0	123	11	21	117	1	43	145	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	329	1388	362	209	955	273	367	768	293	402	804	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	338	1427	372	215	982	281	377	789	301	413	826	335
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	338	1427	372	215	982	281	377	789	301	413	826	335
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	338	1427	372	215	982	281	377	789	301	413	826	335
OvlAdjVol:			143						113			216
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.33	0.67	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	3733	1067	2880	3200	1600	2880	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.30	0.23	0.07	0.26	0.26	0.13	0.25	0.19	0.14	0.26	0.21
OvlAdjV/S:			0.09						0.07			0.13
Crit Moves:	****				****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.001
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	1	1 0	1 0
Volume Module:												
Base Vol:	233	1535	153	7	1259	190	245	63	350	85	35	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	233	1535	153	7	1259	190	245	63	350	85	35	12
Added Vol:	0	262	0	9	141	17	34	0	0	0	0	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1797	153	16	1400	207	279	63	350	85	35	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	252	1945	166	17	1515	224	302	68	379	92	38	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	1945	166	17	1515	224	302	68	379	92	38	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	252	1945	166	17	1515	224	302	68	379	92	38	31
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.63	0.37	1.00	1.72	0.70	0.58
Final Sat.:	1600	3200	1600	1600	3200	1600	2611	589	1600	2738	1128	935
Capacity Analysis Module:												
Vol/Sat:	0.16	0.61	0.10	0.01	0.47	0.14	0.12	0.12	0.24	0.03	0.03	0.03
OvlAdjV/S:						0.00						
Crit Moves:	****				****				****	****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Grand Ave / ValleyBlvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.072
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	261	1040	179	385	1042	209	666	1531	287	428	702	244
Added Vol:	18	164	179	7	80	54	49	6	10	207	9	48
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	279	1204	358	392	1122	263	715	1537	297	635	711	292
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	292	1262	0	411	1176	0	749	1611	0	666	745	306
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	292	1262	0	411	1176	0	749	1611	0	666	745	306
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	292	1262	0	411	1176	0	749	1611	0	666	745	306
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	2880	4800	1600	2880	4800	1600	2880	4800	1600	2880	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.26	0.00	0.14	0.25	0.00	0.26	0.34	0.00	0.23	0.16	0.19
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.928
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	117	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 1	1	0 3	0 1	2	0 1	0 1	1	0 1	0 1
Volume Module:												
Base Vol:	33	1261	0	0	1567	50	172	0	94	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	1261	0	0	1567	50	172	0	94	0	0	0
Added Vol:	50	109	262	87	174	25	77	0	153	458	0	153
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	83	1370	262	87	1741	75	249	0	247	458	0	153
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.00	0.93	0.93	0.93
PHF Volume:	89	1476	282	94	1876	81	268	0	0	494	0	165
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	89	1476	282	94	1876	81	268	0	0	494	0	165
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	89	1476	282	94	1876	81	268	0	0	494	0	165
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	2880	3200	1600	1600	4800	1600	2880	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.46	0.18	0.06	0.39	0.05	0.09	0.00	0.00	0.31	0.00	0.10
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Grand Ave / SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 1.036
Loss Time (sec): 10 Average Delay (sec/veh): 40.5
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	2	0 1	1 0	1	0 0	1 0	1	0 1!	0 1
Volume Module:												
Base Vol:	1	799	283	610	1382	5	4	2	4	186	1	495
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	799	283	610	1382	5	4	2	4	186	1	495
Added Vol:	0	275	0	395	389	0	0	0	0	0	0	146
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	1074	283	1005	1771	5	4	2	4	186	1	641
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	1	1197	315	1120	1974	6	4	2	4	207	1	715
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	1197	315	1120	1974	6	4	2	4	207	1	715
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	1197	315	1120	1974	6	4	2	4	207	1	715
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.95	0.95	0.95	0.90	0.90	0.87	0.87	0.87
Lanes:	1.00	2.00	1.00	2.00	1.99	0.01	1.00	0.33	0.67	1.22	0.01	1.77
Final Sat.:	1805	3610	1615	3502	3600	10	1805	570	1140	2034	4	2946
Capacity Analysis Module:												
Vol/Sat:	0.00	0.33	0.20	0.32	0.55	0.55	0.00	0.00	0.00	0.10	0.28	0.24
Crit Moves:		****		****			****				****	
Green/Cycle:	0.00	0.32	0.58	0.31	0.63	0.63	0.00	0.01	0.01	0.26	0.27	0.58
Volume/Cap:	0.87	1.04	0.34	1.04	0.87	0.87	1.04	0.39	0.39	0.39	1.04	0.42
Delay/Veh:	686.0	70.2	11.1	71.6	19.3	19.3	499.5	63.3	63.3	30.5	76.4	11.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	686.0	70.2	11.1	71.6	19.3	19.3	499.5	63.3	63.3	30.5	76.4	11.9
LOS by Move:	F	E	B	E	B	B	F	E	E	C	E	B
HCM2kAvgQ:	0	24	5	22	27	27	1	1	1	5	22	7

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 1.006
Loss Time (sec): 10 Average Delay (sec/veh): 40.5
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 2	0 1	1	0 2	0 0	2	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	933	619	380	1294	0	169	0	176	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	933	619	380	1294	0	169	0	176	0	0	0
Added Vol:	0	62	0	274	115	0	213	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	995	619	654	1409	0	382	0	176	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	1054	656	693	1493	0	405	0	186	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1054	656	693	1493	0	405	0	186	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1054	656	693	1493	0	405	0	186	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3610	1615	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.41	0.38	0.41	0.00	0.12	0.00	0.12	0.00	0.00	0.00
Crit Moves:			****	****			****					
Green/Cycle:	0.00	0.40	0.40	0.38	0.79	0.00	0.11	0.00	0.11	0.00	0.00	0.00
Volume/Cap:	0.00	0.72	1.01	1.01	0.53	0.00	1.01	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	0.0	26.9	66.6	66.7	4.1	0.0	90.6	0.0	111.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	26.9	66.6	66.7	4.1	0.0	90.6	0.0	111.6	0.0	0.0	0.0
LOS by Move:	A	C	E	E	A	A	F	A	F	A	A	A
HCM2kAvgQ:	0	15	28	24	8	0	11	0	10	0	0	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.798
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 66 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0 1	0	0 1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	6	7	1	94	38	102	303	1335	189	42	609	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	7	1	94	38	102	303	1335	189	42	609	237
Added Vol:	18	0	20	20	0	18	36	119	36	40	152	40
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	7	21	114	38	120	339	1454	225	82	761	277
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	24	7	21	115	38	121	343	1470	228	83	769	280
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	7	21	115	38	121	343	1470	228	83	769	280
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	7	21	115	38	121	343	1470	228	83	769	280
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.77	0.23	1.00	0.75	0.25	1.00	1.00	1.73	0.27	1.00	2.00	1.00
Final Sat.:	1239	361	1600	1200	400	1600	1600	2771	429	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.10	0.10	0.08	0.21	0.53	0.53	0.05	0.24	0.18
OvlAdjV/S:						0.00						
Crit Moves:		****			****			****			****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Bonita Ave / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.719
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 52 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	0 1	2 0	1	0 1	2 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	103	21	75	151	9	96	153	776	54	31	1097	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	103	21	75	151	9	96	153	776	54	31	1097	200
Added Vol:	15	0	31	31	0	15	30	99	30	63	202	63
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	118	21	106	182	9	111	183	875	84	94	1299	263
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	122	22	110	188	9	115	189	904	87	97	1342	272
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	22	110	188	9	115	189	904	87	97	1342	272
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	122	22	110	188	9	115	189	904	87	97	1342	272
OvlAdjVol:						10						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.82	0.18	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	2880	1600	1600	2880	2920	280	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.01	0.07	0.07	0.01	0.07	0.07	0.31	0.31	0.06	0.42	0.17
OvlAdjV/S:						0.01						
Crit Moves:			****	****				****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Lot F / Temple Ave

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	1	0	1	1 0	1	0	2	0 1
Volume Module:																
Base Vol:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	0	0		0	0	0		0	1029	0		0	1282	14	
Added Vol:	0	0	0		0	0	0		0	162	0		0	328	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		0	0	0		0	1191	0		0	1610	14	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93		0.93	0.93	0.93	
PHF Volume:	0	0	0		0	0	0		0	1275	0		0	1724	15	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	0	0		0	0	0		0	1275	0		0	1724	15	
Critical Gap Module:																
Critical Gp:	6.8	6.5	6.9		6.8	6.5	6.9		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	2137	3014	638		2361	2999	862		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	43	14	424		30	14	302		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	43	14	424		30	14	302		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		xxxx	xxxx	xxxx		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		*	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	0	xxxxx		xxxx	0	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Valley Blvd / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.922
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 112 Level Of Service: E

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0	2	0 1	1	0	2	0 1	1	0	2	1 0	1	0	2	1 0
Volume Module:																
Base Vol:	234	775	63		160	550	158		163	963	214		84	684	112	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	234	775	63		160	550	158		163	963	214		84	684	112	
Added Vol:	56	136	24		0	73	95		132	401	112		4	281	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	290	911	87		160	623	253		295	1364	326		88	965	112	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97	
PHF Volume:	301	944	90		166	646	262		306	1413	338		91	1000	116	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	301	944	90		166	646	262		306	1413	338		91	1000	116	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	301	944	90		166	646	262		306	1413	338		91	1000	116	
Saturation Flow Module:																
Sat/Lane:	1600	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	2.00	1.00		1.00	2.42	0.58		1.00	2.69	0.31	
Final Sat.:	1600	3200	1600		1600	3200	1600		1600	3874	926		1600	4301	499	
Capacity Analysis Module:																
Vol/Sat:	0.19	0.30	0.06		0.10	0.20	0.16		0.19	0.36	0.36		0.06	0.23	0.23	
Crit Moves:		****				****				****					****	

Mt SAC PEP EIR
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 SR-57 SB Ramps / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.036
Loss Time (sec): 6 Average Delay (sec/veh): 38.3
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	1	0 1! 0	1	0	2 1 0	1	0	3 0 1
Volume Module:												
Base Vol:	1	0	83	923	12	536	0	1796	72	18	576	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	0	83	923	12	536	0	1796	72	18	576	116
Added Vol:	0	0	0	72	0	127	0	425	0	0	158	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	83	995	12	663	0	2221	72	18	734	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00
PHF Volume:	1	0	86	1032	12	688	0	2304	75	19	761	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	86	1032	12	688	0	2304	75	19	761	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	1	0	86	1032	12	688	0	2304	75	19	761	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	1.00	0.87	0.91	0.91	0.91	1.00	0.91	0.91	0.95	0.91	1.00
Lanes:	0.01	0.00	0.99	1.60	0.01	1.39	0.00	2.91	0.09	1.00	3.00	1.00
Final Sat.:	20	0	1628	2760	25	2418	0	4999	162	1805	5187	1900
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.05	0.37	0.50	0.28	0.00	0.46	0.46	0.01	0.15	0.00
Crit Moves:					****			****		****		
Green/Cycle:	0.00	0.00	0.00	0.49	0.49	0.49	0.00	0.44	0.44	0.01	0.45	0.00
Volume/Cap:	xxxx	0.00	xxxx	0.77	1.04	0.59	0.00	1.04	1.04	1.03	0.32	0.00
Delay/Veh:	0.0	0.0	0.0	22.8	57.8	18.8	0.0	56.8	56.8	272.9	17.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	22.8	57.8	18.8	0.0	56.8	56.8	272.9	17.5	0.0
LOS by Move:	A	A	A	C	E	B	A	E	E	F	B	A
HCM2kAvgQ:	2	0	2	27	2	15	0	37	37	2	5	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.759
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 59 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2 0 0	0	0	1 1 0	1	0	0 0 1	0	0	0 0 0
Volume Module:												
Base Vol:	418	1243	0	0	808	115	81	0	407	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	418	1243	0	0	808	115	81	0	407	0	0	0
Added Vol:	6	233	0	0	212	0	0	0	13	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	424	1476	0	0	1020	115	81	0	420	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	453	1575	0	0	1089	123	86	0	448	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	453	1575	0	0	1089	123	86	0	448	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	453	1575	0	0	1089	123	86	0	448	0	0	0
OvlAdjVol:									197			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.80	0.20	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	2876	324	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.16	0.49	0.00	0.00	0.38	0.38	0.05	0.00	0.28	0.00	0.00	0.00
OvlAdjV/S:									0.12			
Crit Moves:	****				****				****			

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #190 SR-57 NB Ramps / Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.605
Loss Time (sec):	6	Average Delay (sec/veh):	10.4
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1! 0	1	0	0	1	0	2	1	1	0
Volume Module:												
Base Vol:	123	0	289	0	0	0	0	2097	621	0	969	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	123	0	289	0	0	0	0	2097	621	0	969	0
Added Vol:	124	0	42	0	0	0	0	96	213	0	162	280
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	247	0	331	0	0	0	0	2193	834	0	1131	280
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.00	0.96	0.96	0.96
PHF Volume:	257	0	344	0	0	0	0	2282	0	0	1177	291
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	257	0	344	0	0	0	0	2282	0	0	1177	291
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	257	0	344	0	0	0	0	2282	0	0	1177	291
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.88	0.88
Lanes:	1.43	0.00	1.57	0.00	0.00	0.00	1.00	3.00	1.00	0.00	2.40	0.60
Final Sat.:	2427	0	2674	0	0	0	1900	5187	1729	0	4033	998
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.13	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.29	0.29
Crit Moves:			****					****				
Green/Cycle:	0.21	0.00	0.21	0.00	0.00	0.00	0.00	0.73	0.00	0.00	0.73	0.73
Volume/Cap:	0.50	0.00	0.61	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.40	0.40
Delay/Veh:	35.0	0.0	36.6	0.0	0.0	0.0	0.0	6.9	0.0	0.0	5.3	5.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.0	0.0	36.6	0.0	0.0	0.0	0.0	6.9	0.0	0.0	5.3	5.3
LOS by Move:	C		A	D		A	A		A	A		A
HCM2kAvgQ:	5	0	7	0	0	0	0	13	0	0	6	6

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #600 Grand Ave / Mountaineer Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.869
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	87	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 0 1	2	0	2 0 0	0	0	0 0 0	2	0	0 0 2
Volume Module:												
Base Vol:	0	1712	118	106	1120	0	0	0	0	136	0	161
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1712	118	106	1120	0	0	0	0	136	0	161
Added Vol:	0	179	69	133	104	0	0	0	0	34	0	67
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1891	187	239	1224	0	0	0	0	170	0	228
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1984	196	251	1284	0	0	0	0	178	0	239
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1984	196	251	1284	0	0	0	0	178	0	239
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1984	196	251	1284	0	0	0	0	178	0	239
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00
Lanes:	0.00	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Final Sat.:	0	3200	1600	2880	3200	0	0	0	0	2880	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.62	0.12	0.09	0.40	0.00	0.00	0.00	0.00	0.06	0.00	0.07
OvlAdjV/S:												0.00
Crit Moves:		****			****						****	

MITIGATED CONDITIONS

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.785
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 63 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1	0	0	1	0	0	1! 0	0	1	0	2	1	0	1	0	2	1	0
Volume Module:																			
Base Vol:	594	4	140	18	10	12	4	1170	436	78	1018	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	594	4	140	18	10	12	4	1170	436	78	1018	3
Added Vol:	6	0	15	0	0	0	0	141	6	5	168	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	600	4	155	18	10	12	4	1311	442	83	1186	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	651	4	168	20	11	13	4	1423	480	90	1288	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	651	4	168	20	11	13	4	1423	480	90	1288	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	651	4	168	20	11	13	4	1423	480	90	1288	3
OvlAdjVol:									232			
Saturation Flow Module:																			
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.99	0.01	1.00	0.45	0.25	0.30	1.00	2.24	0.76	1.00	2.99	0.01
Final Sat.:	3179	21	1600	720	400	480	1600	3590	1210	1600	4788	12
Capacity Analysis Module:																			
Vol/Sat:	0.20	0.20	0.11	0.03	0.03	0.03	0.00	0.40	0.40	0.06	0.27	0.27
OvlAdjV/S:									0.19			
Crit Moves:	****						****		****			

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.688
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1	0	0	1	0	1	0	0	1	1	0	2	0	1	1	0	2	0	1
Volume Module:																			
Base Vol:	268	27	102	22	45	19	7	1045	292	53	790	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	268	27	102	22	45	19	7	1045	292	53	790	14
Added Vol:	0	0	25	0	0	0	0	170	0	5	175	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	268	27	127	22	45	19	7	1215	292	58	965	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	287	29	136	24	48	20	7	1299	312	62	1032	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	287	29	136	24	48	20	7	1299	312	62	1032	15
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	287	29	136	24	48	20	7	1299	312	62	1032	15
Saturation Flow Module:																			
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.82	0.18	1.00	0.33	0.67	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	2907	293	1600	525	1075	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:																			
Vol/Sat:	0.10	0.10	0.08	0.04	0.04	0.01	0.00	0.41	0.20	0.04	0.32	0.01
Crit Moves:	****			****			****			****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec): 100 | Critical Vol./Cap.(X): 1.037
Loss Time (sec): 10 | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 | Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	0	0	0	1	0	0	0	2	0
Volume Module:												
Base Vol:	397	739	0	0	1653	181	86	0	561	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	397	739	0	0	1653	181	86	0	561	0	0	0
Added Vol:	3	99	0	0	307	0	0	0	16	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	400	838	0	0	1960	181	86	0	577	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	435	911	0	0	2130	197	93	0	627	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	435	911	0	0	2130	197	93	0	627	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	435	911	0	0	2130	197	93	0	627	0	0	0
OvlAdjVol:									144			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	1.83	0.17	1.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	2929	271	1600	0	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.15	0.28	0.00	0.00	0.73	0.73	0.06	0.00	0.20	0.00	0.00	0.00
OvlAdjV/S:									0.05			
Crit Moves:	****				****		****					

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.982
Loss Time (sec): 10 | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 170 | Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	3	0	1	2	0	2	1	0	2	0
Volume Module:												
Base Vol:	236	1291	628	412	1070	187	284	757	153	110	446	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	236	1291	628	412	1070	187	284	757	153	110	446	185
Added Vol:	0	151	95	0	170	7	25	198	2	19	174	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	236	1442	723	412	1240	194	309	955	155	129	620	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	245	1494	749	427	1285	201	320	990	161	134	642	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	1494	749	427	1285	201	320	990	161	134	642	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	245	1494	749	427	1285	201	320	990	161	134	642	192
OvlAdjVol:		675							104			0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.59	0.41	2.00	2.58	0.42	2.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	4151	649	2880	4130	670	2880	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.31	0.47	0.15	0.31	0.31	0.11	0.24	0.24	0.05	0.20	0.12
OvlAdjV/S:			0.42						0.15			0.00
Crit Moves:			****	****			****				****	

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Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec): 100 | Critical Vol./Cap.(X): 1.028
Loss Time (sec): 10 | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 | Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	0	1	1	0	2	0	1	1	1	0	0	1	1	1	0	1	0
Volume Module:												
Base Vol:	159	1684	70	1	1120	277	407	76	416	113	108	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	1684	70	1	1120	277	407	76	416	113	108	12
Added Vol:	0	182	0	4	179	9	43	0	0	0	0	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	159	1866	70	5	1299	286	450	76	416	113	108	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	184	2155	81	6	1500	330	520	88	480	130	125	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	2155	81	6	1500	330	520	88	480	130	125	38
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	2155	81	6	1500	330	520	88	480	130	125	38
OvlAdjVol:						27			297			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.71	0.29	1.00	1.34	1.27	0.39
Final Sat.:	1600	3200	1600	1600	3200	1600	2738	462	1600	2138	2040	622
Capacity Analysis Module:												
Vol/Sat:	0.11	0.67	0.05	0.00	0.47	0.21	0.19	0.19	0.30	0.06	0.06	0.06
OvlAdjV/S:						0.02			0.19			
Crit Moves:		****			****			****				****

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Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.862
Loss Time (sec): 10 | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 84 | Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	1	0	1	0	3	0	1	2	0	1	0	1	1	0	1	0	1
Volume Module:												
Base Vol:	116	2253	0	0	1002	107	39	0	36	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	116	2253	0	0	1002	107	39	0	36	0	0	0
Added Vol:	168	205	353	118	186	84	17	0	34	99	0	33
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	284	2458	353	118	1188	191	56	0	70	99	0	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	300	2598	373	125	1256	202	59	0	0	105	0	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	300	2598	373	125	1256	202	59	0	0	105	0	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	300	2598	373	125	1256	202	59	0	0	105	0	35
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.62	0.38	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	2880	4197	603	1600	4800	1600	2880	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.62	0.62	0.08	0.26	0.13	0.02	0.00	0.00	0.07	0.00	0.02
Crit Moves:		****			****				****		****	

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Existing Plus 2025 Project Conditions And Cumulative Projects
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 1.003
Loss Time (sec): 10 Average Delay (sec/veh): 49.5
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 1 0	1	0	2 0 0	2	0	0 0 1	0	0	0 0 0
Volume Module:												
Base Vol:	0	1177	267	312	676	0	905	0	281	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1177	267	312	676	0	905	0	281	0	0	0
Added Vol:	0	137	0	64	155	0	360	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1314	267	376	831	0	1265	0	281	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	0	1345	273	385	851	0	1295	0	288	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1345	273	385	851	0	1295	0	288	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1345	273	385	851	0	1295	0	288	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.89	0.89	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.49	0.51	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	4203	854	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.32	0.21	0.24	0.00	0.37	0.00	0.18	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green/Cycle:	0.00	0.32	0.32	0.21	0.53	0.00	0.37	0.00	0.37	0.00	0.00	0.00
Volume/Cap:	0.00	1.00	1.00	1.00	0.44	0.00	1.00	0.00	0.48	0.00	0.00	0.00
Delay/Veh:	0.0	57.2	57.2	86.1	14.5	0.0	57.4	0.0	24.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	57.2	57.2	86.1	14.5	0.0	57.4	0.0	24.9	0.0	0.0	0.0
LOS by Move:	A	E	E	F	B	A	E	A	C	A	A	A
HCM2kAvgQ:	0	25	25	15	8	0	28	0	7	0	0	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.747
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	0 0 1	0	1	0 0 1	1	0	2 0 1	1	0	2 0 1
Volume Module:												
Base Vol:	126	14	28	173	11	246	35	980	218	6	830	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	14	28	173	11	246	35	980	218	6	830	80
Added Vol:	9	0	10	10	0	9	45	204	45	50	176	50
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	135	14	38	183	11	255	80	1184	263	56	1006	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	141	15	40	191	11	266	84	1236	275	58	1050	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	15	40	191	11	266	84	1236	275	58	1050	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	141	15	40	191	11	266	84	1236	275	58	1050	136
OvlAdjVol:						183						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.91	0.09	1.00	0.94	0.06	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1450	150	1600	1509	91	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.02	0.13	0.13	0.17	0.05	0.39	0.17	0.04	0.33	0.08
OvlAdjV/S:						0.11						
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Nogales St / Amar Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.751
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1	0	0	1	0	0	1!	0	1	0	2
Volume Module:												
Base Vol:	570	9	191	6	3	13	6	1118	481	129	960	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	570	9	191	6	3	13	6	1118	481	129	960	12
Added Vol:	4	0	14	0	0	0	0	76	5	6	124	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	574	9	205	6	3	13	6	1194	486	135	1084	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	593	9	212	6	3	13	6	1233	502	139	1120	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	593	9	212	6	3	13	6	1233	502	139	1120	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	593	9	212	6	3	13	6	1233	502	139	1120	12
OvlAdjVol:									241			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.97	0.03	1.00	0.27	0.14	0.59	1.00	2.13	0.87	1.00	2.97	0.03
Final Sat.:	3151	49	1600	436	218	945	1600	3411	1389	1600	4747	53
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.13	0.01	0.01	0.01	0.00	0.36	0.36	0.09	0.24	0.24
OvlAdjV/S:									0.17			
Crit Moves:		****			****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave / Amar Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.646
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1	0	0	1	0	1	0	0	1	0	2
Volume Module:												
Base Vol:	254	42	132	17	22	5	19	999	161	107	890	19
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	254	42	132	17	22	5	19	999	161	107	890	19
Added Vol:	0	0	20	0	0	0	0	101	1	10	136	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	254	42	152	17	22	5	19	1100	162	117	1026	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	258	43	155	17	22	5	19	1119	165	119	1044	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	258	43	155	17	22	5	19	1119	165	119	1044	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	258	43	155	17	22	5	19	1119	165	119	1044	19
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.72	0.28	1.00	0.44	0.56	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	2746	454	1600	697	903	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.10	0.02	0.02	0.00	0.01	0.35	0.10	0.07	0.33	0.01
Crit Moves:			****		****			****			****	

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #50 Grand Ave / Cameron Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.690
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Ovl				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	2	0 0	0	0	1	1 0	1	0	0	0 2	0	0	0	0 0
Volume Module:																
Base Vol:	418	1243		0	0	808		115	81		0	407	0		0	0
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Initial Bse:	418	1243		0	0	808		115	81		0	407	0		0	0
Added Vol:	6	233		0	0	212		0	0		0	13	0		0	0
PasserByVol:	0	0		0	0	0		0	0		0	0	0		0	0
Initial Fut:	424	1476		0	0	1020		115	81		0	420	0		0	0
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
PHF Adj:	0.94	0.94		0.94	0.94	0.94		0.94	0.94		0.94	0.94	0.94		0.94	0.94
PHF Volume:	453	1575		0	0	1089		123	86		0	448	0		0	0
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Reduced Vol:	453	1575		0	0	1089		123	86		0	448	0		0	0
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
FinalVolume:	453	1575		0	0	1089		123	86		0	448	0		0	0
OvlAdjVol:												0				
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600		1600	1600	1600		1600	1600
Adjustment:	0.90	1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Lanes:	2.00	2.00		0.00	0.00	1.80		0.20	1.00		0.00	2.00	0.00		0.00	0.00
Final Sat.:	2880	3200		0	0	2876		324	1600		0	3200	0		0	0
Capacity Analysis Module:																
Vol/Sat:	0.16	0.49		0.00	0.00	0.38		0.38	0.05		0.00	0.14	0.00		0.00	0.00
OvlAdjV/S:												0.00				
Crit Moves:	****					****			****							

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Grand Ave / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.870
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 87 Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Protected				Protected				Protected				Protected			
Rights:	Ovl				Include				Ovl				Ovl			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	2	0	3	0 1	2	0	2	1 0	2	0	2	1 0	2	0	2	0 1
Volume Module:																
Base Vol:	327	1150		288	209	832		262	346	651		292	359	659		326
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	327	1150		288	209	832		262	346	651		292	359	659		326
Added Vol:	2	238		74	0	123		11	21	117		1	43	145		0
PasserByVol:	0	0		0	0	0		0	0	0		0	0	0		0
Initial Fut:	329	1388		362	209	955		273	367	768		293	402	804		326
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97	0.97	0.97		0.97
PHF Volume:	338	1427		372	215	982		281	377	789		301	413	826		335
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	338	1427		372	215	982		281	377	789		301	413	826		335
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	338	1427		372	215	982		281	377	789		301	413	826		335
OvlAdjVol:				143								146				216
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600		1600
Adjustment:	0.90	1.00		1.00	0.90	1.00		1.00	0.90	1.00		1.00	0.90	1.00		1.00
Lanes:	2.00	3.00		1.00	2.00	2.33		0.67	2.00	2.17		0.83	2.00	2.00		1.00
Final Sat.:	2880	4800		1600	2880	3733		1067	2880	3474		1326	2880	3200		1600
Capacity Analysis Module:																
Vol/Sat:	0.12	0.30		0.23	0.07	0.26		0.26	0.13	0.23		0.23	0.14	0.26		0.21
OvlAdjV/S:				0.09								0.11				0.13
Crit Moves:	****					****			****					****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Grand Ave / La Puente Rd

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.880
Loss Time (sec): 10 | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 91 | Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	0	1	1	0	2	0	1	1	1	0	0	1	1	1	0	1	0
Volume Module:												
Base Vol:	233	1535	153	7	1259	190	245	63	350	85	35	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	233	1535	153	7	1259	190	245	63	350	85	35	12
Added Vol:	0	262	0	9	141	17	34	0	0	0	0	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1797	153	16	1400	207	279	63	350	85	35	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	252	1945	166	17	1515	224	302	68	379	92	38	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	1945	166	17	1515	224	302	68	379	92	38	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	252	1945	166	17	1515	224	302	68	379	92	38	31
OvlAdjVol:						39			127			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.63	0.37	1.00	1.72	0.70	0.58
Final Sat.:	1600	3200	1600	1600	3200	1600	2611	589	1600	2738	1128	935
Capacity Analysis Module:												
Vol/Sat:	0.16	0.61	0.10	0.01	0.47	0.14	0.12	0.12	0.24	0.03	0.03	0.03
OvlAdjV/S:						0.02			0.08			
Crit Moves:	****				****			****		****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Grand Ave / Baker Pkwy

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.833
Loss Time (sec): 10 | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 75 | Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	2	1	0	1	0	3	0	1	2	0	1	0	1	1	0	1	0	1
Volume Module:												
Base Vol:	33	1261	0	0	1567	50	172	0	94	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	1261	0	0	1567	50	172	0	94	0	0	0
Added Vol:	50	109	262	87	174	25	77	0	153	458	0	153
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	83	1370	262	87	1741	75	249	0	247	458	0	153
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.00	0.93	0.93	0.93
PHF Volume:	89	1476	282	94	1876	81	268	0	0	494	0	165
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	89	1476	282	94	1876	81	268	0	0	494	0	165
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	89	1476	282	94	1876	81	268	0	0	494	0	165
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.52	0.48	1.00	3.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	2880	4029	771	1600	4800	1600	2880	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.37	0.37	0.06	0.39	0.05	0.09	0.00	0.00	0.31	0.00	0.10
Crit Moves:		****		****				****		****		

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Grand Ave / SR-60 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 1.002
Loss Time (sec): 10 Average Delay (sec/veh): 38.6
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	2 1 0	1	0	2 0 0	2	0	0 0 1	0	0	0 0 0
Volume Module:												
Base Vol:	0	933	619	380	1294	0	169	0	176	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	933	619	380	1294	0	169	0	176	0	0	0
Added Vol:	0	62	0	274	115	0	213	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	995	619	654	1409	0	382	0	176	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	0	1054	656	693	1493	0	405	0	186	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1054	656	693	1493	0	405	0	186	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1054	656	693	1493	0	405	0	186	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.86	0.86	0.95	0.95	1.00	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3257	1629	1805	3610	0	3502	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.40	0.38	0.41	0.00	0.12	0.00	0.12	0.00	0.00	0.00
Crit Moves:			****	****			****					
Green/Cycle:	0.00	0.40	0.40	0.38	0.78	0.00	0.12	0.00	0.12	0.00	0.00	0.00
Volume/Cap:	0.00	0.81	1.00	1.00	0.53	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	0.0	28.8	52.2	65.6	4.1	0.0	89.6	0.0	110.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	28.8	52.2	65.6	4.1	0.0	89.6	0.0	110.5	0.0	0.0	0.0
LOS by Move:	A	C	D	E	A	A	F	A	F	A	A	A
HCM2kAvgQ:	0	18	30	24	8	0	11	0	10	0	0	0

Note: Queue reported is the number of cars per lane.

Mt SAC PEP EIR
Existing Plus 2025 Project Conditions And Cumulative Projects
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Mt SAC Way / Temple Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.727
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 54 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	0 0 1	0	1	0 0 1	1	0	2 0 1	1	0	2 0 1
Volume Module:												
Base Vol:	6	7	1	94	38	102	303	1335	189	42	609	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	7	1	94	38	102	303	1335	189	42	609	237
Added Vol:	18	0	20	20	0	18	36	119	36	40	152	40
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	7	21	114	38	120	339	1454	225	82	761	277
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	24	7	21	115	38	121	343	1470	228	83	769	280
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	7	21	115	38	121	343	1470	228	83	769	280
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	7	21	115	38	121	343	1470	228	83	769	280
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.77	0.23	1.00	0.75	0.25	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1239	361	1600	1200	400	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.10	0.10	0.08	0.21	0.46	0.14	0.05	0.24	0.18
OvlAdjV/S:						0.00						
Crit Moves:		****			****			****			****	

APPENDIX C:
CUMULATIVE PROJECT TRIP GENERATION

Mt SAC PEP EIR - Cumulative Project Trip Generation 2020															
								AM peak Hour Trips			PM Peak Hour Trips			
Agency	ID	Project Name	ITE Code	Land Use	Size	Unit		In	Out	Total	In	Out	Total	Daily
Walnut	1	Shea Homes Project	210	Single-Family Detached		Rates		0.19	0.56	0.75	0.63	0.37	1.00	9.52
					37	du		7	21	28	23	14	37	352
			230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					61	du		4	23	27	21	11	32	354
	2	Salamone Subdivision	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					6	du		0	3	3	2	1	3	35
			412	County Park		Rates		0.01	0.01	0.02	0.05	0.04	0.09	2.28
					1.55	acres		0	0	0	0	0	0	4
	3	Gregorian Subdivision	210	Single-Family Detached		Rates		0.19	0.56	0.75	0.63	0.37	1.00	9.52
					7	du		1	4	5	4	3	7	67
	4	The Olson Company Project	210	Single-Family Detached		Rates		0.19	0.56	0.75	0.63	0.37	1.00	9.52
					8	du		2	4	6	5	3	8	76
Pomona	5	22122 W. Valley Blvd.	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					141	tsf		114	16	130	17	120	137	983
	6	2001 W. Mission Blvd.	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					432.843	tsf		351	47	398	52	368	420	3,017
	7	2-16 Village Loop Rd.	210	Single-Family Detached		Rates		0.19	0.56	0.75	0.63	0.37	1.00	9.52
					124	du		24	69	93	78	46	124	1,180
			820	Shopping Center		Rates		0.60	0.36	0.96	1.78	1.93	3.71	42.70
					6	tsf		4	2	6	11	11	22	256
	8	92 Rio Rancho Rd.	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					56	du		4	21	25	20	9	29	325
	9	1943 S Towne Ave	210	Single-Family Detached		Rates		0.19	0.56	0.75	0.63	0.37	1.00	9.52
					48	du		9	27	36	30	18	48	457
	10	715 E Phillips Rd	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					4	du		0	2	2	1	1	2	23
	11	1041 S White Ave	210	Single-Family Detached		Rates		0.19	0.56	0.75	0.63	0.37	1.00	9.52
					20	du		4	11	15	13	7	20	190
	12	701 S Garvey Ave	820	Shopping Center		Rates		0.60	0.36	0.96	1.78	1.93	3.71	42.70
					37	tsf		22	14	36	66	71	137	1,580
	13	1439 S Palomares St	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					6	du		0	3	3	2	1	3	35
	14	1390 S Palomares St	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					12	du		1	4	5	4	2	6	70
	15	Rio Rancho Towne Center Phase II	820	Shopping Center		Rates		0.60	0.36	0.96	1.78	1.93	3.71	42.70
					64.717	tsf		39	23	62	115	125	240	2,763
	16	600 Dudley Ave	252	Senior Adult Housing - Attached		Rates		0.18	0.21	0.39	0.19	0.16	0.35	3.44
					84	du		15	18	33	16	13	29	289
	17	855 E Phillips Blvd	210	Single-Family Detached		Rates		0.19	0.56	0.75	0.63	0.37	1.00	9.52
					37	du		7	21	28	23	14	37	352
	18	675 E Mission Blvd	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					38	du		3	14	17	13	7	20	221
	19	22 Rio Rancho Rd	841	Automobile Sales		Rates		0.89	1.33	2.22	1.32	1.48	2.80	32.30
					5.75	tsf		5	8	13	8	8	16	186
	20	888 W Mission Blvd	820	Shopping Center		Rates		0.60	0.36	0.96	1.78	1.93	3.71	42.70
					20.239	tsf		12	7	19	36	39	75	864
	21	1368 W Mission Blvd	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					36	du		3	13	16	13	6	19	209
	22	1932/1936 S Garvey Ave	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					17	du		1	6	7	6	3	9	99
	23	1300 W Mission Blvd	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					33	du		2	13	15	12	5	17	192
	24	1365/1367 S Garvey Ave	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					2	du		0	1	1	1	0	1	12
	25	1940 S Garvey Ave	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					10	du		1	3	4	4	1	5	58
	26	424-446 W Commercial St	252	Senior Adult Housing - Attached		Rates		0.18	0.21	0.39	0.19	0.16	0.35	3.44
					61	du		11	13	24	12	9	21	210
	27	952 E 9th St	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					11	du		1	4	5	4	2	6	64
	28	1344 W Grand Ave	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					7	du		0	3	3	2	2	4	41
	29	1363 S Buena Vista Ave	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					3	du		0	1	1	1	1	2	17
	30	1480 W Mission Blvd	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					24	du		2	9	11	8	4	12	139
	31	1455 S White Ave	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					2	du		0	1	1	1	0	1	12
	32	1302 Hansen Ave	210	Single-Family Detached		Rates		0.19	0.56	0.75	0.63	0.37	1.00	9.52
					2	du		0	2	2	1	1	2	19
	33	Rio Rancho Towne Center Hotel (White & Rancho Valley)	310	Hotel		Rates		0.31	0.22	0.53	0.31	0.29	0.60	8.17
					149	Rooms		46	33	79	46	43	89	1,217
	34	1145 W 10th St	560	Church		Rates		0.48	0.39	0.87	0.51	0.43	0.94	9.11
					6.019	tsf		3	2	5	3	3	6	55
	35	40 Rio Rancho Rd	932	High-Turnover (Sit-Down) Restaurant		Rates		5.41	5.40	10.81	5.91	3.94	9.85	127.15
					1.608	tsf		9	8	17	10	6	16	204
	36	1491 E 9th St	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					193.5	tsf		157	21	178	23	165	188	1,349
Diamond Bar	37	TR 63623	230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					99	du		7	37	44	35	16	51	575
	38	TR 72295	210	Single-Family Detached		Rates		0.19	0.56	0.75	0.63	0.37	1.00	9.52
					47	du		9	26	35	30	17	47	447
			230	Condominium/Townhouse		Rates		0.07	0.37	0.44	0.35	0.17	0.52	5.81
					135	du		9	50	59	47	23	70	784
Industry	39	15000 Nelson: DP 15-7	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					125.344	tsf		102	13	115	15	107	122	874
	40	489 & 499 Parriott Place: DP 15-10 & ZE 15-2	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					130.17	tsf		105	15	120	16	110	126	907
	41	SE corner Azusa and Chestnut	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					614.597	tsf		498	67	565	74	522	596	4,284
	42	18421 Railroad Ave.: DP 15-13 & ZE 15-3	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					8.85	tsf		7	1	8	1	8	9	62
	43	12851 Crossroads Parkway South: DP 15-14 & ZE 15-4	710	General Office Building		Rates		1.37	0.19	1.56	0.25	1.24	1.49	11.03
					77.25	tsf		106	15	121	19	96	115	852
	44	3718 Capitol Ave.: DP 15-15 & ZE TBD	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					36.666	tsf		30	4	34	4	32	36	256
	45	Echelon	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					326.7	tsf		265	36	301	39	278	317	2,277
	46	14700 Nelson	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					232.45	tsf		188	26	214	28	197	225	1,620
	47	19782 Walnut Drive North: DP-15-17	934	Fast-food With Drive-Thru		Rates		23.16	22.26	45.42	16.98	15.67	32.65	496.12
					2.662	tsf		62	59	121	45	42	87	1,321
	48	1552 Azusa Ave.: DP 15-18	820	Shopping Center		Rates		0.60	0.36	0.96	1.78	1.93	3.71	42.70
					20.621	tsf		12	8	20	37	40	77	881
	49	17225 Arenth Avenue: DP 15-19	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					6.76	tsf		5	1	6	1	6	7	47
	50	Castleton: DP 15-20/CUP 15-19	934	Fast-food With Drive-Thru		Rates		23.16	22.26	45.42	16.98	15.67	32.65	496.12
					2.492	tsf		58	55	113	42	39	81	1,236
	51	16801 Gale Ave: DP 15-21	110	General Light Industrial		Rates		0.81	0.11	0.92	0.12	0.85	0.97	6.97
					39.15	tsf		32	4	36	5	33	38	273
Cal Poly Pomona	52	Cal Poly Enrollment Increase	550	University/College		Rates		0.13	0.04	0.17	0.05	0.12	0.17	1.71
					4,089	student		532	163	695	204	491	695	6,992
							Total	**2,891**	**1,075**	**3,966**	**1,349**	**3,200**	**4,549**	**41,264**

Mt SAC PEP EIR - Cumulative Project Trip Generation 2025

Agency	ID	Project Name	ITE Code	Land Use	Size	Unit	AM peak Hour Trips			PM Peak Hour Trips			Daily
							In	Out	Total	In	Out	Total	
Walnut	1	Shea Homes Project	210	Single-Family Detached		Rates	0.19	0.56	0.75	0.63	0.37	1.00	9.52
					37	du	7	21	28	23	14	37	352
			230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					61	du	4	23	27	21	11	32	354
	2	Salamone Subdivision	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					6	du	0	3	3	2	1	3	35
			412	County Park		Rates	0.01	0.01	0.02	0.05	0.04	0.09	2.28
					1.55	acres	0	0	0	0	0	0	4
	3	Gregorian Subdivision	210	Single-Family Detached		Rates	0.19	0.56	0.75	0.63	0.37	1.00	9.52
					7	du	1	4	5	4	3	7	67
	4	The Olson Company Project	210	Single-Family Detached		Rates	0.19	0.56	0.75	0.63	0.37	1.00	9.52
					8	du	2	4	6	5	3	8	76
Pomona	5	22122 W. Valley Blvd.	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					141	tsf	114	16	130	17	120	137	983
	6	2001 W. Mission Blvd.	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					432.843	tsf	351	47	398	52	368	420	3,017
	7	2-16 Village Loop Rd.	210	Single-Family Detached		Rates	0.19	0.56	0.75	0.63	0.37	1.00	9.52
					124	du	24	69	93	78	46	124	1,180
			820	Shopping Center		Rates	0.60	0.36	0.96	1.78	1.93	3.71	42.70
					6	tsf	4	2	6	11	11	22	256
	8	92 Rio Rancho Rd.	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					56	du	4	21	25	20	9	29	325
	9	1943 S Towne Ave	210	Single-Family Detached		Rates	0.19	0.56	0.75	0.63	0.37	1.00	9.52
					48	du	9	27	36	30	18	48	457
	10	715 E Phillips Rd	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					4	du	0	2	2	1	1	2	23
	11	1041 S White Ave	210	Single-Family Detached		Rates	0.19	0.56	0.75	0.63	0.37	1.00	9.52
					20	du	4	11	15	13	7	20	190
	12	701 S Garvey Ave	820	Shopping Center		Rates	0.60	0.36	0.96	1.78	1.93	3.71	42.70
					37	tsf	22	14	36	66	71	137	1,580
	13	1439 S Palomares St	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					6	du	0	3	3	2	1	3	35
	14	1390 S Palomares St	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					12	du	1	4	5	4	2	6	70
	15	Rio Rancho Towne Center Phase II	820	Shopping Center		Rates	0.60	0.36	0.96	1.78	1.93	3.71	42.70
					64.717	tsf	39	23	62	115	125	240	2,763
	16	600 Dudley Ave	252	Senior Adult Housing - Attached		Rates	0.18	0.21	0.39	0.19	0.16	0.35	3.44
					84	du	15	18	33	16	13	29	289
	17	855 E Phillips Blvd	210	Single-Family Detached		Rates	0.19	0.56	0.75	0.63	0.37	1.00	9.52
					37	du	7	21	28	23	14	37	352
	18	675 E Mission Blvd	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					38	du	3	14	17	13	7	20	221
	19	22 Rio Rancho Rd	841	Automobile Sales		Rates	0.89	1.33	2.22	1.32	1.48	2.80	32.30
					5.75	tsf	5	8	13	8	8	16	186
	20	888 W Mission Blvd	820	Shopping Center		Rates	0.60	0.36	0.96	1.78	1.93	3.71	42.70
					20.239	tsf	12	7	19	36	39	75	864
	21	1368 W Mission Blvd	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					36	du	3	13	16	13	6	19	209
	22	1932/1936 S Garvey Ave	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					17	du	1	6	7	6	3	9	99
	23	1300 W Mission Blvd	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					33	du	2	13	15	12	5	17	192
	24	1365/1367 S Garvey Ave	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					2	du	0	1	1	1	0	1	12
	25	1940 S Garvey Ave	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					10	du	1	3	4	4	1	5	58
	26	424-446 W Commercial St	252	Senior Adult Housing - Attached		Rates	0.18	0.21	0.39	0.19	0.16	0.35	3.44
					61	du	11	13	24	12	9	21	210
	27	952 E 9th St	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					11	du	1	4	5	4	2	6	64
	28	1344 W Grand Ave	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					7	du	0	3	3	2	2	4	41
	29	1363 S Buena Vista Ave	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					3	du	0	1	1	1	1	2	17
	30	1480 W Mission Blvd	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					24	du	2	9	11	8	4	12	139
	31	1455 S White Ave	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					2	du	0	1	1	1	0	1	12
	32	1302 Hansen Ave	210	Single-Family Detached		Rates	0.19	0.56	0.75	0.63	0.37	1.00	9.52
					2	du	0	2	2	1	1	2	19
	33	Rio Rancho Towne Center Hotel (White & Rancho Valley)	310	Hotel		Rates	0.31	0.22	0.53	0.31	0.29	0.60	8.17
					149	Rooms	46	33	79	46	43	89	1,217
	34	1145 W 10th St	560	Church		Rates	0.48	0.39	0.87	0.51	0.43	0.94	9.11
					6.019	tsf	3	2	5	3	3	6	55
	35	40 Rio Rancho Rd	932	High-Turnover (Sit-Down) Restaurant		Rates	5.41	5.40	10.81	5.91	3.94	9.85	127.15
					1.608	tsf	9	8	17	10	6	16	204
	36	1491 E 9th St	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					193.5	tsf	157	21	178	23	165	188	1,349
Diamond Bar	37	TR 63623	230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					99	du	7	37	44	35	16	51	575
	38	TR 72295	210	Single-Family Detached		Rates	0.19	0.56	0.75	0.63	0.37	1.00	9.52
					47	du	9	26	35	30	17	47	447
			230	Condominium/Townhouse		Rates	0.07	0.37	0.44	0.35	0.17	0.52	5.81
					135	du	9	50	59	47	23	70	784
Industry	39	15000 Nelson: DP 15-7	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					125.344	tsf	102	13	115	15	107	122	874
	40	489 & 499 Parriott Place: DP 15-10 & ZE 15-2	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					130.17	tsf	105	15	120	16	110	126	907
	41	SE corner Azusa and Chestnut	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					614.597	tsf	498	67	565	74	522	596	4,284
	42	18421 Railroad Ave.: DP 15-13 & ZE 15-3	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					8.85	tsf	7	1	8	1	8	9	62
	43	12851 Crossroads Parkway South: DP 15-14 & ZE 15-4	710	General Office Building		Rates	1.37	0.19	1.56	0.25	1.24	1.49	11.03
					77.25	tsf	106	15	121	19	96	115	852
	44	3718 Capitol Ave.: DP 15-15 & ZE TBD	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					36.666	tsf	30	4	34	4	32	36	256
	45	Echelon	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					326.7	tsf	265	36	301	39	278	317	2,277
	46	14700 Nelson	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					232.45	tsf	188	26	214	28	197	225	1,620
	47	19782 Walnut Drive North: DP-15-17	934	Fast-food With Drive-Thru		Rates	23.16	22.26	45.42	16.98	15.67	32.65	496.12
					2.662	tsf	62	59	121	45	42	87	1,321
	48	1552 Azusa Ave.: DP 15-18	820	Shopping Center		Rates	0.60	0.36	0.96	1.78	1.93	3.71	42.70
					20.621	tsf	12	8	20	37	40	77	881
	49	17225 Arenth Avenue: DP 15-19	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					6.76	tsf	5	1	6	1	6	7	47
	50	Castleton: DP 15-20/CUP 15-19	934	Fast-food With Drive-Thru		Rates	23.16	22.26	45.42	16.98	15.67	32.65	496.12
					2.492	tsf	58	55	113	42	39	81	1,236
	51	16801 Gale Ave: DP 15-21	110	General Light Industrial		Rates	0.81	0.11	0.92	0.12	0.85	0.97	6.97
					39.15	tsf	32	4	36	5	33	38	273
	52	Industry Business Center East	110	Warehousing & Distribution		Rates							
						tsf	421	85	506	124	383	507	4,593
	53	Industry Business Center Weset	110	Warehousing & Distribution		Rates							
						tsf	471	132	603	349	610	958	9,005
Cal Poly Pomona	54	Cal Poly Enrollment Increase	550	University/College		Rates	0.13	0.04	0.17	0.05	0.12	0.17	1.71
					8,889	student	1156	355	1511	444	1067	1,511	15,200
						Total	**4,407**	**1,484**	**5,891**	**2,061**	**4,769**	**6,830**	**63,071**

APPENDIX D:
FAIR-SHARE CALCULATIONS

Existing (2015) AM Peak Hour

ID	Intersection	Total
1	Nogales St/Amar Rd	3,487
2	Lemon Ave/Amar Rd	2,684
3	Grand Ave/I-10 WB Ramp	2,940
4	Grand Ave/I-10 EB Ramp	2,946
5	Grand Ave/Cameron Ave	3,617
6	Grand Ave/Mountaineer Rd	4,036
7	Grand Ave/San Jose Hills Rd	4,289
8	Grand Ave/Temple Ave	5,759
9	Grand Ave/La Puente Rd	4,443
10	Grand Ave/Valley Blvd	6,052
11	Grand Ave/Baker Pkwy	3,553
12	Grand Ave/SR-60 WB Ramps	3,982
13	Grand Ave/SR-60 EB Ramps	3,618
14	Mt. SAC Wy/Temple Ave	2,747
15	Bonita Ave/Temple Ave	2,958
16	Lot F/Temple Ave	2,580
17	Valley Blvd/Temple Ave	3,671
18	SR-57 SB Ramps/Temple Ave	3,180
19	SR-57 NB Ramps/Temple Ave	3,340

2020 Cumulative w/o Project AM Peak Hour Trips

ID	Intersection	Total
1	Nogales St/Amar Rd	3,587
2	Lemon Ave/Amar Rd	2,773
3	Grand Ave/I-10 WB Ramp	2,998
4	Grand Ave/I-10 EB Ramp	3,060
5	Grand Ave/Cameron Ave	3,731
6	Grand Ave/Mountaineer Rd	4,150
7	Grand Ave/San Jose Hills Rd	4,403
8	Grand Ave/Temple Ave	5,967
9	Grand Ave/La Puente Rd	4,564
10	Grand Ave/Valley Blvd	6,320
11	Grand Ave/Baker Pkwy	3,686
12	Grand Ave/SR-60 WB Ramps	4,114
13	Grand Ave/SR-60 EB Ramps	3,730
14	Mt. SAC Wy/Temple Ave	2,839
15	Bonita Ave/Temple Ave	3,050
16	Lot F/Temple Ave	2,672
17	Valley Blvd/Temple Ave	4,084
18	SR-57 SB Ramps/Temple Ave	3,688
19	SR-57 NB Ramps/Temple Ave	3,932

2020 Cumulative With Project AM Peak Hour Trips

ID	Intersection	Total
1	Nogales St/Amar Rd	3,609
2	Lemon Ave/Amar Rd	2,820
3	Grand Ave/I-10 WB Ramp	3,047
4	Grand Ave/I-10 EB Ramp	3,145
5	Grand Ave/Cameron Ave	3,836
6	Grand Ave/Mountaineer Rd	4,318
7	Grand Ave/San Jose Hills Rd	4,482
8	Grand Ave/Temple Ave	6,137
9	Grand Ave/La Puente Rd	4,671
10	Grand Ave/Valley Blvd	6,387
11	Grand Ave/Baker Pkwy	3,717
12	Grand Ave/SR-60 WB Ramps	4,145
13	Grand Ave/SR-60 EB Ramps	3,758
14	Mt. SAC Wy/Temple Ave	3,004
15	Bonita Ave/Temple Ave	3,259
16	Lot F/Temple Ave	2,834
17	Valley Blvd/Temple Ave	4,237
18	SR-57 SB Ramps/Temple Ave	3,797
19	SR-57 NB Ramps/Temple Ave	3,995

Equitable Share Responsibility	Impacted?
18%	
35%	
46%	
43%	
48%	Yes
60%	Yes
41%	Yes
45%	Yes
47%	Yes
20%	Yes
19%	Yes
19%	
20%	
64%	Yes
69%	
64%	
27%	Yes
18%	
10%	

Existing (2015) PM Peak Hour

ID	Intersection	Total
1	Nogales St/Amar Rd	3,498
2	Lemon Ave/Amar Rd	2,667
3	Grand Ave/I-10 WB Ramp	3,167
4	Grand Ave/I-10 EB Ramp	2,781
5	Grand Ave/Cameron Ave	3,072
6	Grand Ave/Mountaineer Rd	3,353
7	Grand Ave/San Jose Hills Rd	3,542
8	Grand Ave/Temple Ave	5,701
9	Grand Ave/La Puente Rd	4,167
10	Grand Ave/Valley Blvd	6,974
11	Grand Ave/Baker Pkwy	3,177
12	Grand Ave/SR-60 WB Ramps	3,772
13	Grand Ave/SR-60 EB Ramps	3,571
14	Mt. SAC Wy/Temple Ave	2,963
15	Bonita Ave/Temple Ave	2,766
16	Lot F/Temple Ave	2,325
17	Valley Blvd/Temple Ave	4,160
18	SR-57 SB Ramps/Temple Ave	4,133
19	SR-57 NB Ramps/Temple Ave	4,099

2020 Cumulative w/o Project PM Peak Hour Trips

ID	Intersection	Total
1	Nogales St/Amar Rd	3,602
2	Lemon Ave/Amar Rd	2,763
3	Grand Ave/I-10 WB Ramp	3,250
4	Grand Ave/I-10 EB Ramp	2,898
5	Grand Ave/Cameron Ave	3,190
6	Grand Ave/Mountaineer Rd	3,471
7	Grand Ave/San Jose Hills Rd	3,660
8	Grand Ave/Temple Ave	5,922
9	Grand Ave/La Puente Rd	4,294
10	Grand Ave/Valley Blvd	7,256
11	Grand Ave/Baker Pkwy	3,318
12	Grand Ave/SR-60 WB Ramps	3,913
13	Grand Ave/SR-60 EB Ramps	3,662
14	Mt. SAC Wy/Temple Ave	3,063
15	Bonita Ave/Temple Ave	2,866
16	Lot F/Temple Ave	2,425
17	Valley Blvd/Temple Ave	4,580
18	SR-57 SB Ramps/Temple Ave	4,464
19	SR-57 NB Ramps/Temple Ave	4,773

2020 Cumulative With Project PM Peak Hour Trips

ID	Intersection	Total
1	Nogales St/Amar Rd	3,624
2	Lemon Ave/Amar Rd	2,810
3	Grand Ave/I-10 WB Ramp	3,298
4	Grand Ave/I-10 EB Ramp	2,983
5	Grand Ave/Cameron Ave	3,294
6	Grand Ave/Mountaineer Rd	3,640
7	Grand Ave/San Jose Hills Rd	3,740
8	Grand Ave/Temple Ave	6,092
9	Grand Ave/La Puente Rd	4,401
10	Grand Ave/Valley Blvd	7,323
11	Grand Ave/Baker Pkwy	3,349
12	Grand Ave/SR-60 WB Ramps	3,944
13	Grand Ave/SR-60 EB Ramps	3,687
14	Mt. SAC Wy/Temple Ave	3,229
15	Bonita Ave/Temple Ave	3,075
16	Lot F/Temple Ave	2,587
17	Valley Blvd/Temple Ave	4,733
18	SR-57 SB Ramps/Temple Ave	4,572
19	SR-57 NB Ramps/Temple Ave	4,836

Equitable Share Responsibility	Impacted?
17%	
33%	
37%	
42%	
47%	
59%	Yes
40%	Yes
43%	Yes
46%	Yes
19%	Yes
18%	
18%	
22%	
62%	
68%	
62%	
27%	Yes
25%	
9%	

Existing (2015) AM Peak Hour

ID	Intersection	Total
1	Nogales St/Amar Rd	3,487
2	Lemon Ave/Amar Rd	2,684
3	Grand Ave/I-10 WB Ramp	2,940
4	Grand Ave/I-10 EB Ramp	2,946
5	Grand Ave/Cameron Ave	3,617
6	Grand Ave/Mountaineer Rd	4,036
7	Grand Ave/San Jose Hills Rd	4,289
8	Grand Ave/Temple Ave	5,759
9	Grand Ave/La Puente Rd	4,443
10	Grand Ave/Valley Blvd	6,052
11	Grand Ave/Baker Pkwy	3,553
12	Grand Ave/SR-60 WB Ramps	3,982
13	Grand Ave/SR-60 EB Ramps	3,618
14	Mt. SAC Wy/Temple Ave	2,747
15	Bonita Ave/Temple Ave	2,958
16	Lot F/Temple Ave	2,580
17	Valley Blvd/Temple Ave	3,671
18	SR-57 SB Ramps/Temple Ave	3,180
19	SR-57 NB Ramps/Temple Ave	3,340

2025 Cumulative w/o Project AM Peak Hour Trips

ID	Intersection	Total
1	Nogales St/Amar Rd	3,785
2	Lemon Ave/Amar Rd	2,969
3	Grand Ave/I-10 WB Ramp	3,020
4	Grand Ave/I-10 EB Ramp	3,171
5	Grand Ave/Cameron Ave	3,842
6	Grand Ave/Mountaineer Rd	4,261
7	Grand Ave/San Jose Hills Rd	4,514
8	Grand Ave/Temple Ave	6,274
9	Grand Ave/La Puente Rd	4,676
10	Grand Ave/Valley Blvd	6,770
11	Grand Ave/Baker Pkwy	4,789
12	Grand Ave/SR-60 WB Ramps	4,966
13	Grand Ave/SR-60 EB Ramps	4,280
14	Mt. SAC Wy/Temple Ave	3,037
15	Bonita Ave/Temple Ave	3,248
16	Lot F/Temple Ave	2,870
17	Valley Blvd/Temple Ave	5,212
18	SR-57 SB Ramps/Temple Ave	4,280
19	SR-57 NB Ramps/Temple Ave	4,227

2025 Cumulative With Project AM Peak Hour Trips

ID	Intersection	Total
1	Nogales St/Amar Rd	3,827
2	Lemon Ave/Amar Rd	3,059
3	Grand Ave/I-10 WB Ramp	3,112
4	Grand Ave/I-10 EB Ramp	3,334
5	Grand Ave/Cameron Ave	4,042
6	Grand Ave/Mountaineer Rd	4,582
7	Grand Ave/San Jose Hills Rd	4,666
8	Grand Ave/Temple Ave	6,600
9	Grand Ave/La Puente Rd	4,881
10	Grand Ave/Valley Blvd	6,900
11	Grand Ave/Baker Pkwy	4,849
12	Grand Ave/SR-60 WB Ramps	5,026
13	Grand Ave/SR-60 EB Ramps	4,334
14	Mt. SAC Wy/Temple Ave	3,355
15	Bonita Ave/Temple Ave	3,650
16	Lot F/Temple Ave	3,178
17	Valley Blvd/Temple Ave	5,503
18	SR-57 SB Ramps/Temple Ave	4,486
19	SR-57 NB Ramps/Temple Ave	4,348

Equitable Share Responsibility	Impacted?
12%	Yes
24%	Yes
53%	
42%	
47%	Yes
59%	Yes
40%	Yes
39%	Yes
47%	Yes
15%	Yes
5%	Yes
6%	
8%	Yes
52%	Yes
58%	
52%	
16%	Yes
16%	
12%	

Existing (2015) PM Peak Hour

ID	Intersection	Total
1	Nogales St/Amar Rd	3,498
2	Lemon Ave/Amar Rd	2,667
3	Grand Ave/I-10 WB Ramp	3,167
4	Grand Ave/I-10 EB Ramp	2,781
5	Grand Ave/Cameron Ave	3,072
6	Grand Ave/Mountaineer Rd	3,353
7	Grand Ave/San Jose Hills Rd	3,542
8	Grand Ave/Temple Ave	5,701
9	Grand Ave/La Puente Rd	4,167
10	Grand Ave/Valley Blvd	6,974
11	Grand Ave/Baker Pkwy	3,177
12	Grand Ave/SR-60 WB Ramps	3,772
13	Grand Ave/SR-60 EB Ramps	3,571
14	Mt. SAC Wy/Temple Ave	2,963
15	Bonita Ave/Temple Ave	2,766
16	Lot F/Temple Ave	2,325
17	Valley Blvd/Temple Ave	4,160
18	SR-57 SB Ramps/Temple Ave	4,133
19	SR-57 NB Ramps/Temple Ave	4,099

2025 Cumulative w/o Project PM Peak Hour Trips

ID	Intersection	Total
1	Nogales St/Amar Rd	3,684
2	Lemon Ave/Amar Rd	2,845
3	Grand Ave/I-10 WB Ramp	3,349
4	Grand Ave/I-10 EB Ramp	3,045
5	Grand Ave/Cameron Ave	3,336
6	Grand Ave/Mountaineer Rd	3,617
7	Grand Ave/San Jose Hills Rd	3,806
8	Grand Ave/Temple Ave	6,150
9	Grand Ave/La Puente Rd	4,441
10	Grand Ave/Valley Blvd	7,677
11	Grand Ave/Baker Pkwy	4,665
12	Grand Ave/SR-60 WB Ramps	4,917
13	Grand Ave/SR-60 EB Ramps	4,186
14	Mt. SAC Wy/Temple Ave	3,144
15	Bonita Ave/Temple Ave	2,947
16	Lot F/Temple Ave	2,506
17	Valley Blvd/Temple Ave	5,183
18	SR-57 SB Ramps/Temple Ave	4,709
19	SR-57 NB Ramps/Temple Ave	4,895

2025 Cumulative With Project PM Peak Hour Trips

ID	Intersection	Total
1	Nogales St/Amar Rd	3,727
2	Lemon Ave/Amar Rd	2,935
3	Grand Ave/I-10 WB Ramp	3,440
4	Grand Ave/I-10 EB Ramp	3,209
5	Grand Ave/Cameron Ave	3,536
6	Grand Ave/Mountaineer Rd	3,939
7	Grand Ave/San Jose Hills Rd	3,958
8	Grand Ave/Temple Ave	6,476
9	Grand Ave/La Puente Rd	4,647
10	Grand Ave/Valley Blvd	7,805
11	Grand Ave/Baker Pkwy	4,725
12	Grand Ave/SR-60 WB Ramps	4,977
13	Grand Ave/SR-60 EB Ramps	4,235
14	Mt. SAC Wy/Temple Ave	3,462
15	Bonita Ave/Temple Ave	3,345
16	Lot F/Temple Ave	2,815
17	Valley Blvd/Temple Ave	5,475
18	SR-57 SB Ramps/Temple Ave	4,915
19	SR-57 NB Ramps/Temple Ave	5,015

Equitable Share Responsibility	Impacted?
19%	
34%	
33%	
38%	
43%	
55%	Yes
37%	Yes
42%	Yes
43%	Yes
15%	Yes
4%	
5%	
7%	
64%	
69%	
63%	
22%	Yes
26%	
13%	

Fair Share Calculations Summary

ID	Intersection	2020		2025		Max.
		AM	PM	AM	PM	
1	Nogales St/Amar Rd			12%		**12%**
2	Lemon Ave/Amar Rd			24%		**24%**
3	Grand Ave/I-10 WB Ramp					
4	Grand Ave/I-10 EB Ramp					
5	Grand Ave/Cameron Ave	48%		47%		**48%**
6	Grand Ave/Mountaineer Rd	60%	59%	59%	55%	**60%**
7	Grand Ave/San Jose Hills Rd	41%	40%	40%	37%	**41%**
8	Grand Ave/Temple Ave	45%	43%	39%	42%	**45%**
9	Grand Ave/La Puente Rd	47%	46%	47%	43%	**47%**
10	Grand Ave/Valley Blvd	20%	19%	15%	15%	**20%**
11	Grand Ave/Baker Pkwy	19%		5%		**19%**
12	Grand Ave/SR-60 WB Ramps					
13	Grand Ave/SR-60 EB Ramps			8%		**8%**
14	Mt. SAC Wy/Temple Ave	64%		52%		**64%**
15	Bonita Ave/Temple Ave					
16	Lot F/Temple Ave					
17	Valley Blvd/Temple Ave	27%	27%	16%	22%	**27%**
18	SR-57 SB Ramps/Temple Ave					
19	SR-57 NB Ramps/Temple Ave					

MT. SAC
Mt. San Antonio College

Facilities Planning & Management
1100 North Grand Avenue • Walnut, CA 91789
909-274-4850 • www.mtsac.edu

DATE: June 6, 2016

TO: Responsible and Concerned Agencies

SUBJECT: Notice of Completion (NOC) of the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects Draft Subsequent Project and Environmental Impact Report (SCH 2002041161)

FROM: Mikaela Klein, Senior Facilities Planner
Facilities Planning & Management
Mt. San Antonio College
1100 North Grand Avenue
Walnut, California 91789-1399

The Mt. San Antonio Community College District (District) is the Lead Agency and has completed the Draft Subsequent Project and Program Environmental Impact Report (Draft EIR) for the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects. The CEQA documentation consists of two volumes: Volume 1: Draft EIR and Volume 2: Appendices. The Draft EIR evaluates the environmental impacts of buildout of the 2015 Facilities Master Plan Update (FMPU) in a Program EIR and the Physical Education Project (Phase 1, 2) in a Project EIR. The 420-acre campus is located in the City of Walnut, County of Los Angeles, near Grand Avenue and Temple Avenue.

The 2015 FMPU includes facilities for educational programs for a student enrollment of 39,731 fall enrollment headcount in academic year 2020-21 and a 43,139 enrollment in 2025-26. Current enrollment is 35,986. There was approximately 1,556,400 gsf of facilities on campus in August 2015, Buildout of the 2015 FMPU will results in a net increase of approximately 425,900 gsf in 2020 and 752,200 in 2025.

The Draft EIR also evaluates the potential environmental impacts of hosting the 2020 U. S. Track & Field Olympic Trials for 10-days during the Summer Term. The traffic and parking impacts of hosting up to 20,000 guest daily is also evaluated in the EIR.

The prior 2002, 2005, 2008 and 2012 Facility Master Plans were evaluated in the Final Program EIRs (SCH 2002041161) that were certified in December 2002, January 2006, September 2008 and December 2013. This Draft EIR will address only those issues needed to make the prior 2002–2012 documentation adequate for the current projects and the projected student enrollments.

Table 1.3: Summary of Impacts lists the potential impacts of buildout of the projects, the recommended mitigation measures and the level of significance with mitigation. A Statement of Overriding Considerations (SOC) is recommended for project impacts on historic resources and on traffic level of service (i.e. when further improvements are not feasible). The traffic study evaluates 2015 FMPU impacts at eighteen intersections based on trip increases due to the student enrollment increases and for nineteen intersections for the 2020 Olympic Trials.

Document Available for Review:

The NOC and the complete Draft EIR document is posted on the District's website:
http://www.mtsac.edu/construction/reports-and-publications/environmental-impact-reports.html

The Draft EIR document may also be reviewed at the following locations:

Walnut Public Library
Reference Desk
21155 La Puente Avenue
Walnut, California 91789

Mt. San Antonio College Library
Building 6, Library, 2nd floor, Reference Desk
1100 North Grand Avenue
Walnut, California 91789

Time for Review:

The Draft EIR is being circulated for a 45 day public review period from June 13 to July 28, 2016. All comments on the Draft EIR must be received by 5:00 pm on Thursday, July 28, 2016.

Since the number of public comments may be extensive, all comments should be forwarded as written correspondence or pdf attachments to e-mails. **Freestanding e-mail comments are discouraged**. Please include the name, and full mailing address, of the respondent in all communication and the date the comments are sent. If an agency is responding, please provide a person, e-mail address and phone number.

Please send your comments to Mikaela Klein, Senior Facilities Planner at the address below:

Project Title:	Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects SEIR
Project Applicant:	Mt. San Antonio Community College District 1100 North Grand Avenue Walnut, CA 91789-5611
Contact:	Mikaela Klein, Senior Facilities Planner
Telephone:	(909) 274-5720
Facsimile:	(909) 468-3931
E-Mail Address:	mikaela.klein@mtsac.edu
Comments Due:	5:00 pm, Thursday, July 28, 2016

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2002041161

Project Title: Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects EIR

Lead Agency: Mt. San Antonio Community College District | Contact Person: Mikaela Klein
Mailing Address: 1100 North Grand Avenue, Facilities Planning & Manage | Phone: (909) 274-5720
City: Walnut | Zip: 91789 | County: Los Angeles

Project Location: County: Los Angeles | City/Nearest Community: Walnut/Pomona
Cross Streets: North Grand Avenue and Temple Avenue | Zip Code: 91789
Longitude/Latitude (degrees, minutes and seconds): 34 ° 44 ′ 30 ″ N / 117 ° 50 ′ 45 ″ W | Total Acres: 420 ga
Assessor's Parcel No.: | Section: | Twp.: | Range: | Base:
Within 2 Miles: State Hwy #: 57/60 | Waterways:
Airports: | Railways: | Schools: Westhoff/Collegewood

Document Type:

CEQA: ☐ NOP ☒ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ☐ Early Cons ☐ Neg Dec ☐ Mit Neg Dec Other:
NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI Other: ☐ Joint Document ☐ Final Document ☐ Other:

2016 145339 FILED Jun 09 2016
Dean C. Logan, Registrar – Recorder/County Clerk

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☒ Master Plan ☐ Planned Unit Development ☒ Site Plan
☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopme ☐ Coastal Permit ☒ Other: 2015 Update

THIS NOTICE WAS POSTED ON June 09 2016 UNTIL July 11 2016
REGISTRAR – RECORDER/COUNTY CLE

Development Type:

☐ Residential: Units Acres
☐ Office: Sq.ft. Acres Employees
☐ Commercial: Sq.ft. Acres Employees
☐ Industrial: Sq.ft. Acres Employees
☒ Educational: Sq. Footage Added Unknown to Date
☐ Recreational:
☐ Water Facilities: Type MGD
☐ Transportation: Type
☐ Mining: Mineral
☐ Power: Type
☐ Waste Treatment: Type
☐ Hazardous Waste: Type
☒ Other: Demolition and new construction of a sports stadium

Project Issues Discussed in Document:

☒ Aesthetic/Visual ☐ Agricultural Land ☒ Air Quality ☒ Archeological/Historical ☒ Biological Resources ☐ Coastal Zone ☒ Drainage/Absorption ☐ Economic/Jobs
☐ Fiscal ☐ Flood Plain/Flooding ☐ Forest Land/Fire Hazard ☒ Geologic/Seismic ☐ Minerals ☒ Noise ☐ Population/Housing Balance ☒ Public Services/Facilities
☐ Recreation/Parks ☒ Schools/Universities ☐ Septic Systems ☒ Sewer Capacity ☒ Soil Erosion/Compaction/Grading ☒ Solid Waste ☐ Toxic/Hazardous ☒ Traffic/Circulation
☐ Vegetation ☒ Water Quality ☐ Water Supply/Groundwater ☒ Wetland/Riparian ☐ Growth Inducement ☒ Land Use ☒ Cumulative Effects ☒ Other: Greenhouse Gas

Present Land Use/Zoning/General Plan Designation:

City - School, RPD - 61,700 and 28,500 District - Primary Educational, Athletics and Agricultural and Open Space

Project Description: *(please use a separate page if necessary)*

The 2015 Facilities Master Plan Update will evaluate changes in land use, new projects and an enrollment increase of 3,745 from 2015-2020. As an urban area, the potential impacts are traffic and traffic-related noise and air quality impacts. The project includes demolition of Hilmer Lodge Stadium and new development on the 32.2-acre site: including the Athletic Complex East (Phase 1) and Physical Education Complex (Phase 2). Together, the two projects are named the Physical Education Project. The existing stadium had 11,940 permanent seats. The new stadium will include a 9-lane 400-meter track, permanent bleachers for 10,912. The net increase at buildout for the FMP Update is less than 500,000 gross square feet.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".
If you have already sent your document to the agency please denote that with an "S".

X	Air Resources Board	X	Office of Historic Preservation
	Boating & Waterways, Department of		Office of Public School Construction
	California Emergency Management Agency		Parks & Recreation, Department of
	California Highway Patrol		Pesticide Regulation, Department of
S	Caltrans District # 7		Public Utilities Commission
	Caltrans Division of Aeronautics	X	Regional WQCB # 4
	Caltrans Planning		Resources Agency
	Central Valley Flood Protection Board		Resources Recycling and Recovery, Department of
	Coachella Valley Mtns. Conservancy		S.F. Bay Conservation & Development Comm.
	Coastal Commission		San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
	Colorado River Board		San Joaquin River Conservancy
	Conservation, Department of		Santa Monica Mtns. Conservancy
	Corrections, Department of		State Lands Commission
	Delta Protection Commission		SWRCB: Clean Water Grants
	Education, Department of		SWRCB: Water Quality
X	Energy Commission		SWRCB: Water Rights
X	Fish & Game Region # 5		Tahoe Regional Planning Agency
	Food & Agriculture, Department of		Toxic Substances Control, Department of
	Forestry and Fire Protection, Department of		Water Resources, Department of
	General Services, Department of		
	Health Services, Department of	S	Other: CA Community College Chancellor's Office
	Housing & Community Development	S	Other: SCAQMD
X	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date June 13, 2016 Ending Date July 28, 2016

Lead Agency (Complete if applicable):

Consulting Firm: SID LINDMARK, AICP
Address: 10 Aspen Creek Lane
City/State/Zip: Laguna Hills, CA 92653
Contact: Sid Lindmark, AICP
Phone: (949) 855-0416

Applicant: Mt. San Antonio Community College District
Address: 1100 North Grand Avenue
City/State/Zip: Walnut, California 91789
Phone: (909) 274-5720 mikaela.klein@mtsac.edu

Signature of Lead Agency Representative: Mikaela Klein **Date:** June 3, 2016

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

2016 145339
FILED
Jun 09 2016
Dean C. Logan, Registrar – Recorder/County Clerk
Electronically signed by TIFFANY SHIH

Inland Valley Daily Bulletin
(formerly the Progress Bulletin)
9616 Archibald Avenue Suite 100
Rancho Cucamonga, CA 91730
909-987-6397.
legals@inlandnewspapers.com

(Space below for use of County Clerk Only)

PROOF OF PUBLICATION
(2015.5 C.C.P.)

STATE OF CALIFORNIA
County of Los Angeles

I am a citizen of the United States, I am over the age of eighteen years, and not a party to or interested in the above-entitled matter. I am the principal clerk of the printer of INLAND VALLEY DAILY BULLETIN, a newspaper of general circulation printed and published daily for the City of Pomona, County of Los Angeles, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Los Angeles, State of California, on the date of June 15, 1945, Decree No. Pomo C-606. The notice, of which the annexed is a true printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

6/10/2016

I declare under the penalty of perjury that the foregoing is true and correct.

Executed at Rancho Cucamonga, San Bernardino Co. California

On this 10 day of June, 2016.

KC

Signature

Legal Notice | Legal Notice

Notice of Completion (NOC) of the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects Draft Subsequent Project and Program Environmental Impact Report (SCH 2002041161)

Responsible and Concerned Agencies

The Mt. San Antonio Community College District (District) is the Lead Agency and has completed the Draft Subsequent Project and Program Environmental Impact Report (Draft EIR) for the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects. The CEQA documentation consists of two volumes: Volume 1: Draft EIR and Volume 2: Appendices. The Draft EIR evaluates the environmental impacts of buildout of the 2015 Facilities Master Plan Update (FMPU) in a Program EIR and the Physical Education Project (Phase 1, 2) in a Project EIR. The 420-acre campus is located in the City of Walnut, County of Los Angeles, near Grand Avenue and Temple Avenue.

The 2015 FMPU includes facilities for educational programs for a student enrollment of 39,731 fall enrollment headcount in academic year 2020-21 and a 43,139 enrollment in 2025-26. Current enrollment is 35,986. There was approximately 1,556,400 gsf of facilities on campus in August 2015, Buildout of the 2015 FMPU will results in a net increase of approximately 425,900 gsf in 2020 and 752,200 in 2025.

The Draft EIR also evaluates the potential environmental impacts of hosting the 2020 U. S. Track & Field Olympic Trials for 10-days during the Summer Term. The traffic and parking impacts of hosting up to 20,000 guest daily is also evaluated in the EIR.

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Table 1.3: Summary of Impacts lists the potential impacts of buildout of the projects, the recommended mitigation measures and the level of significance with mitigation. A Statement of Overriding Considerations (SOC) is recommended for project impacts on historic resources and on traffic level of service (i.e. when further improvements are not feasible).

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The traffic study evaluates 2015
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increases due to the student
enrollment increases and for
nineteen intersections for the 2020
Olympic Trials.

Document Available for Review:

The NOC and the complete Draft EIR document is posted on the District's website:
http://www.mtsac.edu/construction/reports-and-publications/environmental-impact-reports.html

The Draft EIR document may also be reviewed at the following locations:

Walnut Public Library
21155 La Puente Avenue
Walnut, California 91789

Mt. San Antonio College Library
Reference Desk
Building 6, Library, 2nd floor, Reference Desk
1100 North Grand Avenue
Walnut, California 91789

Time for Review:

The Draft EIR is being circulated for a 45 day public review period from June 13 to July 28, 2016. All comments on the Draft EIR must be received by 5:00 pm on Thursday, July 28, 2016.

Since the number of public comments may be extensive, all comments should be forwarded as written correspondence or pdf attachments to e-mails. Freestanding e-mail comments are discouraged. Please include the name, and full mailing address, of the respondent in all communication and the date the comments are sent. If an agency is responding, please provide a person, e-mail address and phone number.

Please send your comments to Mikaela Klein, Senior Facilities Planner at the address below:

Project Title: Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects SEIR
Project Applicant: Mt. San Antonio Community College District
1100 North Grand Avenue
Walnut, CA 91789-5611
Contact: Mikaela Klein, Senior Facilities Planner
Telephone: (909) 274-5720
Facsimile: (909) 468-3931
E-Mail Address:

Advertising Order Confirmation

San Gabriel Valley Newspaper Group
Valley Tribune•Star-News•Daily News•Highlander

Ad Order Number	*Customer*	*Payor Customer*	*PO Number*
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Sales Representative	*Customer Account*	*Payor Account*	*Ordered By*
Francois Fundora	5026827	5026827	email
Order Taker	*Customer Address*	*Payor Address*	*Customer Fax*
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Select Source	909-594-5611 909-274-5789	909-594-5611 909-274-5789	

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San Gabriel Valley Newspaper Group
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External Ad Number	Pick Up	Ad Type	Released for Publication
		Legal Liner	

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Contact: Mikaela Klein, Senior Facilities Planner
Telephone: (909) 274-5720
Facsimile: (909) 468-3931
E-Mail Address: mikaela.klein@mtsac.edu

Comments Due: 5:00 pm, Thursday, July 28, 2016

Michael D. Gregoryk
Vice President, Administrative Services
MT. SAN ANTONIO COMMUNITY COLLEGE DISTRICT
Los Angeles County, State of California

Publication Date: 6/10/16
San Gabriel Valley Tribune
AD#811963

Product	*Requested Placement*	*Requested Position*	*Run Dates*	*# Inserts*
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Order Charges:

Net Amount	*Tax Amount*	*Total Amount*	*Payment Amount*	***Amount Due***
771.76	0.00	771.76	0.00	**$771.76**

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Please note: To meet our printer's deadline, we must have your proof returned by the published deadline, and as indicated by your sales rep.

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Print Form

Summary Form for Electronic Document Submittal

Form F

Lead agencies may include 15 hardcopies of this document when submitting electronic copies of Environmental Impact Reports, Negative Declarations, Mitigated Negative Declarations, or Notices of Preparation to the State Clearinghouse (SCH). The SCH also accepts other summaries, such as EIR Executive Summaries prepared pursuant to CEQA Guidelines Section 15123. Please include one copy of the Notice of Completion Form (NOC) with your submission and attach the summary to each electronic copy of the document.

SCH #: 2002041161

Project Title: Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects EIR

Lead Agency: Mt. San Antonio Community College District

Contact Name: Mikaela Klein, Senior Facilities Planner

Email: mikaela.klein@mtsac.edu Phone Number: 909-274-5720

Project Location: City of Walnut and County of Los Angeles
City *County*

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Jun 09 2016
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Project Decription (Proposed actions, location, and/or consequences).

The 2015 Facilities Master Plan Update (FMPU) provides future facilities for a student enrollment increase of 3,745 students in 2020-21 and an increase of 7,153 students in 2025-26. The 2015-16 fall enrollment headcount is 35,986. The Physical Education Projects (Phase 1, 2) propose the demolition of Hilmer Lodge Stadium (11,940 seats) and new construction of a 19,752 seat facility with permanent, temporary and lawn seating. There will be 10,012 permanent seats in the new stadium. The interior stadium area will increase from 3.53 acres to 4.16 acres. Other changes in the 2015 FMPU include the relocation of the Public Transportation Center to Lot D3, an expanded Wildlife Sanctuary/Open Space area, and a pedestrian bridge across Temple Ave connecting the Physical Education Complex to Lot F.

There are approximately 1,556,400 gsf on campus today. Buildout of the 2015 FMPU will result a net increase of approximately 425,900 gsf in 2020 and 752,200 gsf in 2025.
The student enrollment increase results in an additional 4,606 trips (ADT) in 2020 and an additional 8,798 trips (ADT) in 2025. The traffic study evaluates eighteen local intersections for the existing, existing plus project and existing plus project plus cumulative scenarios. The project trips account for 23 and 19 percent of the total ADT peak hour trips of the cumulative trips for the study area for 2020 and 2025. The campus may also host the 2020 U. S. Track & Field Olympic Trials for ten days in the summer of 2020. Up to 20,000 guests may attend daily, with the largest attendance on the final weekend.

Identify the project's significant or potentially significant effects and briefly describe any proposed mitigation measures that would reduce or avoid that effect.

This EIR is a subsequent program and project EIR that evaluates all potential significant impacts of the 2015 FMPU that were not identified in the previous 2002, 2005, 2008 and 2012 EIRs. Table 1.3: Summary of Impacts lists the potential project impacts, the recommended mitigation measures and the level of significance. The entire list of mitigation measures (i.e. the recommended 2016 Mitigation Monitoring Program) is included as Appendix L1 in Volume 2.

Buildout of the 2015 FMPU in 2020 has impacts at six locations, with adverse impacts at two because further improvements are not feasible. In 2025, the locations are nine and four. For the cumulative scenario, the project impacts nine locations and five locations will be adverse because further improvemens are not feasible. In 2025 the locations are thirteen and six for the cumulative scenario. There may also be adverse pm peak impacts of hosting the 2020 Olympic Track & Field trials when guests leave an event during the evening commute.

Buildout of the 2015 FMPU may result in adverse cumulative impacts on buildings declared contributors to the Mt. SAC Historic District. The demolition of Hilmer Lodge Stadium is also adverse.

The SEIR includes evaluation of the air quality, greenhouse gas and noise impacts of the project. Since the SEIR is a Project EIR for the Physical Education Projects (PEP), soils/geology, biological resource, lighting and hydrology studies were also completed.

A separate traffic and parking analysis was completed for hosting the Olympic Track & Field event (Section 3.11).

If applicable, describe any of the project's areas of controversy known to the Lead Agency, including issues raised by agencies and the public.

the West Parcel Solar Project and Parking Structure J, Lot A (2,300 Spaces) are two projects approved in 2013 based on the 2012 Final EIR. These projects are controversial and are the subject of pending CEQA and land use litigation in Los Angeles County Superior Court (Case No. B576587 [consolidated]). The District has canceled the Parking Structure J Project as approved in the 2012 Final EIR and is now proposing a new 1,600 space parking structure on Lot A. The District expects a local neighborhood group organized as United Walnut Taxpayers will oppose the new parking project and other projects identified in the 2015 EIR as impacting the residential character of the neighborhood.

Another area of controversy is the authority of the City of Walnut to exercise land use and zoning authority over the projects identified in the 2015 EIR. The District believes it may relay on the land use and zoning exemptions in the Government Code as identified in the 2015 EIR.

Fourteen responses were received during circulation of the Notice of Preparation for the project. Numerous comments were received from the City of Walnut and from United Walnut Taxpayers, which have been addressed in the EIR if they are environmental issues related to the current project, and not related to prior projects or the lawsuit.

No substantial comments were received from South Coast Air Quality Management District, the State Clearinghouse, Los Angeles County Public Works, Los Angeles County Sheriff, Native American Heritage Commission and the Consolidated Sanitation Districts of Los Angeles County.

Provide a list of the responsible or trustee agencies for the project.

Army Corps of Engineers

California Department of Fish & Wildlife

California Department of Transportation-Region 7

California Regional Water Quality Control Board–Region 4

California EPA

South Coast Air Quality Management District

State Historical Preservation Office

United States Fish & Wildlife Service

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2002041161

Project Title: Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects EIR

Lead Agency: Mt. San Antonio Community College District | Contact Person: Mikaela Klein
Mailing Address: 1100 North Grand Avenue, Facilities Planning & Manage | Phone: (909) 274-5720
City: Walnut | Zip: 91789 | County: Los Angeles

Project Location: County: Los Angeles | City/Nearest Community: Walnut/Pomona
Cross Streets: North Grand Avenue and Temple Avenue | Zip Code: 91789
Longitude/Latitude (degrees, minutes and seconds): 34 ° 44 ′ 30 ″ N / 117 ° 50 ′ 45 ″ W | Total Acres: 420 ga
Assessor's Parcel No.: | Section: | Twp.: | Range: | Base:
Within 2 Miles: State Hwy #: 57/60 | Waterways:
Airports: | Railways: | Schools: Westhoff/Collegewood

Document Type:

CEQA: ☐ NOP ☒ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ☐ Early Cons ☐ Neg Dec ☐ Mit Neg Dec Other:
NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI Other: ☐ Joint Document ☐ Final Document ☐ Other:

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Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☒ Master Plan ☐ Planned Unit Development ☒ Site Plan
☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopme ☐ Coastal Permit ☒ Other: 2015 Update

THIS NOTICE WAS POSTED ON June 09 2016 UNTIL July 11 2016
REGISTRAR – RECORDER/COUNTY CLE

Development Type:

☐ Residential: Units Acres
☐ Office: Sq.ft. Acres Employees
☐ Commercial: Sq.ft. Acres Employees
☐ Industrial: Sq.ft. Acres Employees
☒ Educational: Sq. Footage Added Unknown to Date
☐ Recreational:
☐ Water Facilities: Type MGD
☐ Transportation: Type
☐ Mining: Mineral
☐ Power: Type
☐ Waste Treatment: Type
☐ Hazardous Waste: Type
☒ Other: Demolition and new construction of a sports stadium

Project Issues Discussed in Document:

☒ Aesthetic/Visual ☐ Agricultural Land ☒ Air Quality ☒ Archeological/Historical ☒ Biological Resources ☐ Coastal Zone ☒ Drainage/Absorption ☐ Economic/Jobs
☐ Fiscal ☐ Flood Plain/Flooding ☐ Forest Land/Fire Hazard ☒ Geologic/Seismic ☐ Minerals ☒ Noise ☐ Population/Housing Balance ☒ Public Services/Facilities
☐ Recreation/Parks ☒ Schools/Universities ☐ Septic Systems ☒ Sewer Capacity ☒ Soil Erosion/Compaction/Grading ☒ Solid Waste ☐ Toxic/Hazardous ☒ Traffic/Circulation
☐ Vegetation ☒ Water Quality ☐ Water Supply/Groundwater ☒ Wetland/Riparian ☐ Growth Inducement ☒ Land Use ☒ Cumulative Effects ☒ Other: Greenhouse Gas

Present Land Use/Zoning/General Plan Designation:

City - School, RPD - 61,700 and 28,500 District - Primary Educational, Athletics and Agricultural and Open Space

Project Description: *(please use a separate page if necessary)*

The 2015 Facilities Master Plan Update will evaluate changes in land use, new projects and an enrollment increase of 3,745 from 2015-2020. As an urban area, the potential impacts are traffic and traffic-related noise and air quality impacts. The project includes demolition of Hilmer Lodge Stadium and new development on the 32.2-acre site: including the Athletic Complex East (Phase 1) and Physical Education Complex (Phase 2). Together, the two projects are named the Physical Education Project. The existing stadium had 11,940 permanent seats. The new stadium will include a 9-lane 400-meter track, permanent bleachers for 10,912. The net increase at buildout for the FMP Update is less than 500,000 gross square feet.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".
If you have already sent your document to the agency please denote that with an "S".

X	Air Resources Board	X	Office of Historic Preservation
	Boating & Waterways, Department of		Office of Public School Construction
	California Emergency Management Agency		Parks & Recreation, Department of
	California Highway Patrol		Pesticide Regulation, Department of
S	Caltrans District # 7		Public Utilities Commission
	Caltrans Division of Aeronautics	X	Regional WQCB # 4
	Caltrans Planning		Resources Agency
	Central Valley Flood Protection Board		Resources Recycling and Recovery, Department of
	Coachella Valley Mtns. Conservancy		S.F. Bay Conservation & Development Comm.
	Coastal Commission		San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
	Colorado River Board		San Joaquin River Conservancy
	Conservation, Department of		Santa Monica Mtns. Conservancy
	Corrections, Department of		State Lands Commission
	Delta Protection Commission		SWRCB: Clean Water Grants
	Education, Department of		SWRCB: Water Quality
X	Energy Commission		SWRCB: Water Rights
X	Fish & Game Region # 5		Tahoe Regional Planning Agency
	Food & Agriculture, Department of		Toxic Substances Control, Department of
	Forestry and Fire Protection, Department of		Water Resources, Department of
	General Services, Department of		
	Health Services, Department of	S	Other: CA Community College Chancellor's Office
	Housing & Community Development	S	Other: SCAQMD
X	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date June 13, 2016 Ending Date July 28, 2016

Lead Agency (Complete if applicable):

Consulting Firm: SID LINDMARK, AICP
Address: 10 Aspen Creek Lane
City/State/Zip: Laguna Hills, CA 92653
Contact: Sid Lindmark, AICP
Phone: (949) 855-0416

Applicant: Mt. San Antonio Community College District
Address: 1100 North Grand Avenue
City/State/Zip: Walnut, California 91789
Phone: (909) 274-5720 mikaela.klein@mtsac.edu

Signature of Lead Agency Representative: Mikaela Klein **Date:** June 3, 2016

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

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Electronically signed by TIFFANY SHIH

MT. SAC
Mt. San Antonio College

Facilities Planning & Management
1100 North Grand Avenue • Walnut, CA 91789
909-274-4850 • www.mtsac.edu

DATE: June 6, 2016

TO: Responsible and Concerned Agencies

SUBJECT: Notice of Completion (NOC) of the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects Draft Subsequent Project and Environmental Impact Report (SCH 2002041161)

FROM: Mikaela Klein, Senior Facilities Planner
Facilities Planning & Management
Mt. San Antonio College
1100 North Grand Avenue
Walnut, California 91789-1399

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Contact Name: Mikaela Klein, Senior Facilities Planner

Email: mikaela.klein@mtsac.edu Phone Number: 909-274-5720

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City *County*

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The student enrollment increase results in an additional 4,606 trips (ADT) in 2020 and an additional 8,798 trips (ADT) in 2025. The traffic study evaluates eighteen local intersections for the existing, existing plus project and existing plus project plus cumulative scenarios. The project trips account for 23 and 19 percent of the total ADT peak hour trips of the cumulative trips for the study area for 2020 and 2025. The campus may also host the 2020 U. S. Track & Field Olympic Trials for ten days in the summer of 2020. Up to 20,000 guests may attend daily, with the largest attendance on the final weekend.

Identify the project's significant or potentially significant effects and briefly describe any proposed mitigation measures that would reduce or avoid that effect.

This EIR is a subsequent program and project EIR that evaluates all potential significant impacts of the 2015 FMPU that were not identified in the previous 2002, 2005, 2008 and 2012 EIRs. Table 1.3: Summary of Impacts lists the potential project impacts, the recommended mitigation measures and the level of significance. The entire list of mitigation measures (i.e. the recommended 2016 Mitigation Monitoring Program) is included as Appendix L1 in Volume 2.

Buildout of the 2015 FMPU in 2020 has impacts at six locations, with adverse impacts at two because further improvements are not feasible. In 2025, the locations are nine and four. For the cumulative scenario, the project impacts nine locations and five locations will be adverse because further improvemens are not feasible. In 2025 the locations are thirteen and six for the cumulative scenario. There may also be adverse pm peak impacts of hosting the 2020 Olympic Track & Field trials when guests leave an event during the evening commute.

Buildout of the 2015 FMPU may result in adverse cumulative impacts on buildings declared contributors to the Mt. SAC Historic District. The demolition of Hilmer Lodge Stadium is also adverse.

The SEIR includes evaluation of the air quality, greenhouse gas and noise impacts of the project. Since the SEIR is a Project EIR for the Physical Education Projects (PEP), soils/geology, biological resource, lighting and hydrology studies were also completed.

A separate traffic and parking analysis was completed for hosting the Olympic Track & Field event (Section 3.11).

If applicable, describe any of the project's areas of controversy known to the Lead Agency, including issues raised by agencies and the public.

the West Parcel Solar Project and Parking Structure J, Lot A (2,300 Spaces) are two projects approved in 2013 based on the 2012 Final EIR. These projects are controversial and are the subject of pending CEQA and land use litigation in Los Angeles County Superior Court (Case No. B576587 [consolidated]). The District has canceled the Parking Structure J Project as approved in the 2012 Final EIR and is now proposing a new 1,600 space parking structure on Lot A. The District expects a local neighborhood group organized as United Walnut Taxpayers will oppose the new parking project and other projects identified in the 2015 EIR as impacting the residential character of the neighborhood.

Another area of controversy is the authority of the City of Walnut to exercise land use and zoning authority over the projects identified in the 2015 EIR. The District believes it may relay on the land use and zoning exemptions in the Government Code as identified in the 2015 EIR.

Fourteen responses were received during circulation of the Notice of Preparation for the project. Numerous comments were received from the City of Walnut and from United Walnut Taxpayers, which have been addressed in the EIR if they are environmental issues related to the current project, and not related to prior projects or the lawsuit.

No substantial comments were received from South Coast Air Quality Management District, the State Clearinghouse, Los Angeles County Public Works, Los Angeles County Sheriff, Native American Heritage Commission and the Consolidated Sanitation Districts of Los Angeles County.

Provide a list of the responsible or trustee agencies for the project.

Army Corps of Engineers

California Department of Fish & Wildlife

California Department of Transportation-Region 7

California Regional Water Quality Control Board–Region 4

California EPA

South Coast Air Quality Management District

State Historical Preservation Office

United States Fish & Wildlife Service

MT. SAC
Mt. San Antonio College

Facilities Planning & Management
1100 North Grand Avenue • Walnut, CA 91789
909-274-4850 • www.mtsac.edu

DATE: September 23, 2016

TO: Responsible and Concerned Agencies and Interested Parties

SUBJECT: Notice of Public Hearing for the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects Subsequent Project and Program Final Environmental Impact Report (SCH 2002041161)

FROM: Gary Nellesen, Director, Facilities Planning & Management
Facilities Planning & Management
Mt. San Antonio College
1100 North Grand Avenue
Walnut, California 91789-1399

The Mt. San Antonio Community College District (District) is the Lead Agency and has completed the Subsequent Project and Program Final Environmental Impact Report (Final EIR) for the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects. The CEQA documentation consists of three volumes: Volume 1: Draft EIR, Volume 2: Draft EIR Appendices and Volume 3: Response to Comments. The Final EIR evaluates the environmental impacts of buildout of the 2015 Facilities Master Plan Update (FMPU) in a Program EIR and the Physical Education Project (Phase 1, 2) in a Project EIR. The 420-acre campus is located in the City of Walnut, County of Los Angeles, near Grand Avenue and Temple Avenue.

The 2015 FMPU Draft EIR was circulated for a 45-day public review period from June 13 to July 28, 2016. However, the public hearing date was not identified in the Notice of Completion. The Board of Trustees will consider certifying the Final EIR and adopting a Statement of Facts and Findings, a Statement of Overriding Consideration, and the Mitigation Monitoring Program. A Statement of Overriding Considerations is proposed for land use/planning, traffic, and historic resource impacts.

All CEQA documents related to the project are posted on the College's website at:
http://www.mtsac.edu/construction/reports-and-publications/environmental-impact-reports.html

The documents may also be viewed at Building 46, Facilities Planning & Management, during normal business hours.

Notice of Public Hearing

A public hearing for the 2015 FMPU Final EIR (SCH 2002041161) will be held in the Board Room, Founders Hall (Building 10) on the campus of Mt. San Antonio College, 1100 North Grand Avenue, at 6:30 pm, Wednesday, October 12, 2016.

If you challenge the action taken on this project in court, you may be limited to raising only those issues you or someone else raised at the public hearing or in written correspondence delivered to the District prior to the public hearing.

Public parking is available in Pay Lot B with the entrance on San Jose Hills Road or in Pay Lot A off of Mountaineer Road and Edinger Way.

Project Title:	Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects SEIR
Project Applicant:	Mt. San Antonio Community College District 1100 North Grand Avenue Walnut, CA 91789-5611
Public Hearing:	October 12, 2016
Contact:	Gary Nellesen, Facilities Planning & Management
Telephone:	(909) 274-5179
Facsimile:	(909) 468-3931
E-Mail Address:	facilitiesplanning@mtsac.edu

Inland Valley Daily Bulletin
(formerly the Progress Bulletin)
9616 Archibald Avenue Suite 100
Rancho Cucamonga, CA 91730
909-987-6397
legals@inlandnewspapers.com

PROOF OF PUBLICATION
(2015.5 C.C.P.)

STATE OF CALIFORNIA
County of Los Angeles

I am a citizen of the United States, I am over the age of eighteen years, and not a party to or interested in the above-entitled matter. I am the principal clerk of the printer of INLAND VALLEY DAILY BULLETIN, a newspaper of general circulation printed and published daily for the City of Pomona, County of Los Angeles, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Los Angeles, State of California, on the date of June 15, 1945, Decree No. Pomo C-606. The notice, of which the annexed is a true printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

9/23/16

I declare under the penalty of perjury that the foregoing is true and correct.

Executed at Rancho Cucamonga, San Bernardino Co. California

This 23 Day of September, 2016

Brenda Wade

Signature

r.LP8-12/01/15 72005:94 1

(S nly)

Notice of Public Hearing for the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects Subsequent Project and Program Final Environmental Impact Report (SCH 2002041161)

Responsible and Concerned Agencies and Interested Parties

The Mt. San Antonio Community College District (District) is the Lead Agency and has completed the Subsequent Project and Program Final Environmental Impact Report (Final EIR) for the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects. The CEQA documentation consists of three volumes: Volume 1: Draft EIR, Volume 2: Draft EIR Appendices and Volume 3: Response to Comments. The Final EIR evaluates the environmental impacts of buildout of the 2015 Facilities Master Plan Update (FMPU) in a Program EIR and the Physical Education Project (Phase 1, 2) in a Project EIR. The 420-acre campus is located in the City of Walnut, County of Los Angeles, near Grand Avenue and Temple Avenue.

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All CEQA documents related to the project are posted on the College's website at:

http://www.mtsac.edu/construction/reports-and-publications/environmental-impact-reports.html

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If you challenge the action taken on this project in court, you may be limited to raising only those issues you or someone else raised at the public hearing or in written correspondence delivered to the District prior to the public hearing. Public parking is available in Pay Lot B with the entrance on San Jose Hills Road or in Pay Lot A off of Mountaineer Road and Edinger Way.

Project Title: Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects SEIR

Project Applicant: Mt. San Antonio Community College District
1100 North Grand Avenue
Walnut, CA 91789-5611

Public Hearing: October 12, 2016

Contact: Gary Nellesen, Facilities Planning & Management
Telephone: (909) 274-5179
Facsimile: (909) 468-3931
E-Mail Address:
facilitiesplanning@mtsac.edu

Published: September 23, 2016
#846392

Advertising Order Confirmation

Ad Order Number
0010846392

Customer
MT SAN ANTONIO COLLEGE-LEGAL

Customer Account
5026814

Customer Address
ATTN: ACCOUNTS PAYABLE
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WALNUT, CA 91789

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PO Number
Impact Report (SCH 2002041161)

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External Ad Number	Pick Up	Ad Type	Released for Publication
		Legal Liner	

Ad Content

Notice of Public Hearing for the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects Subsequent Project and Program Final Environmental Impact Report (SCH 2002041161)

Responsible and Concerned Agencies and Interested Parties

The Mt. San Antonio Community College District (District) is the Lead Agency and has completed the Subsequent Project and Program Final Environmental Impact Report (Final EIR) for the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects. The CEQA documentation consists of three volumes: Volume 1: Draft EIR, Volume 2: Draft EIR Appendices and Volume 3: Response to Comments. The Final EIR evaluates the environmental impacts of buildout of the 2015 Facilities Master Plan Update (FMPU) in a Program EIR and the Physical Education Projec (Phase 1, 2) in a Project EIR. The 420-acre campus is located in the City of Walnut, County of Los Angeles, near Grand Avenue and Temple Avenue.

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Project Title: Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects SEIR

Project Applicant: Mt. San Antonio Community College District
1100 North Grand Avenue
Walnut, CA 91789-5611

Public Hearing: October 12, 2016

Contact: Gary Nellesen, Facilities Planning & Management
Telephone: (909) 274-5179
Facsimile: (909) 468-3931
E-Mail Address: facilitiesplanning@mtsac.edu

Published: September 23, 2016 #846392

Advertising Order Confirmation

Product	*Requested Placement*	*Requested Position*	*Run Dates*	*# Inserts*
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Order Charges:

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506.32	0.00	506.32	0.00	**$506.32**

If this confirmation includes an advertising proof, please check your proof carefully for errors, spelling, and/or typos. Errors not marked on the returned proof are not subject to credit or refunds.

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Signature Date

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San Gabriel Valley Newspaper Group
Valley Tribune•Star-News•Daily News•Highlander

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Sales Representative	*Customer Account*	*Payor Account*	*Ordered By*
Francois Fundora	5026827	5026827	email
Order Taker	*Customer Address*	*Payor Address*	*Customer Fax*
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Advertising Order Confirmation

San Gabriel Valley Newspaper Group
Valley Tribune•Star-News•Daily News•Highlander

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External Ad Number	Pick Up	Ad Type	Released for Publication
		Legal Liner	

Notice of Public Hearing for the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects Subsequent Project and Program Final Environmental Impact Report (SCH 2002041161)

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Project Title: Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects SEIR

Project Applicant: Mt. San Antonio Community College District
1100 North Grand Avenue
Walnut, CA 91789-5611

Public Hearing: October 12, 2016

Contact: Gary Nellesen, Facilities Planning & Management
Telephone: (909) 274-5179
Facsimile: (909) 468-3931
E-Mail Address: facilitiesplanning@mtsac.edu

Published: San Gabriel Valley Tribune Sept 23, 2016 Ad#847314

Product	Requested Placement	Requested Position	Run Dates	# Inserts
SGV Newspapers:San Gabriel Trib	Legals CLS	MiscellaneousNotices - 1076~	09/23/16	1

Order Charges:

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479.20	0.00	479.20	0.00	**$479.20**

If this confirmation includes an advertising proof, please check your proof carefully for errors, spelling, and/or typos. Errors not marked on the returned proof are not subject to credit or refunds.

Please note: To meet our printer's deadline, we must have your proof returned by the published deadline, and as indicated by your sales rep.

Please note: If you pay by bank card, your card statement will show the merchant as "LA NEWSPAPER GROUP".

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SEP 23 2016

Facilities Planning & Management
1100 North Grand Avenue • Walnut, CA 91789
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DATE: September 23, 2016

TO: Responsible and Concerned Agencies and Interested Parties

SUBJECT: Notice of Public Hearing for the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects Subsequent Project and Program Final Environmental Impact Report (SCH 2002041161)

FROM: Gary Nellesen, Director, Facilities Planning & Management
Facilities Planning & Management
Mt. San Antonio College
1100 North Grand Avenue
Walnut, California 91789-1399

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Project Title:	Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects SEIR
Project Applicant:	Mt. San Antonio Community College District 1100 North Grand Avenue Walnut, CA 91789-5611
Public Hearing:	October 12, 2016
Contact:	Gary Nellesen, Facilities Planning & Management
Telephone:	(909) 274-5179
Facsimile:	(909) 468-3931
E-Mail Address:	facilitiesplanning@mtsac.edu

Dean C. Logan
Los Angeles County Registrar / Recorder
12400 Imperial Highway, Norwalk, CA
(800)201-8999

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NORWALK

Cashier: L. MURGUIA

Friday, September 23, 2016 2:13 PM

Item(s)

Fee	Qty	Total
NoPH - County Posting Fee 1 2016235631		$75.00

Total **$75.00**

Total Documents: 1

Customer payment(s):

Check $75.00

Check List:
#7214411 $75.00

ENVIRONMENTAL NOTICE AND FEE SCHEDULE

California Environmental Quality Act document fees pursuant to Fish and Game Codes §711.4(a),(b), (c) and (e) and Ord. 91-0025 § 1, 1991, are as follows:

The following is a list of notices and requirements to be posted by the Los Angeles County Clerk's office:

NOD - Notice of Determination

- ⇨ **Original signatures are required on both** Notice and No Effect Form from the Department of **Fish & Game**
- ⇨ When filed with a No Effect Form from the Department of Fish & Game, filing fee is **$75.00**
- ⇨ When filed without a No Effect Form from the Department of Fish & Game fees are as follows:
  - ↳ If an **Environmental Impact Report (EIR)** was prepared for the project then the fee is **$3,070.00** plus the **$75.00** County posting fee = **$3,145.00**
  - ↳ If an **Negative Declaration (ND)** was prepared for the project then the fee is **$2210.25** plus the **$75.00** County posting fee = **$2,285.25**
  - ↳ If a **Mitigated Negative Declaration (MND)** was prepared for the project then the fee is **$2210.25** plus the **$75.00** county posting fee = **$2,285.25**

NOE - Notice of Exemption

- ⇨ Original signatures are required
- ⇨ **$75.00** County posting fee is required

NOP - Notice of Preparation

- ⇨ An **(NOP)** is given to inform the public that the lead agency is in the process of preparing either a **DRAFT EIR** or a **MITIGATED NEG DEC**
- ⇨ **$75.00** County posting fee is required
- ⇨ Original signature is not required

NOC - Notice of Completion

- ⇨ An **(NOC)** is issued to inform the public when the lead agency has completed a **NEG DEC** or **DRAFT EIR**
- ⇨ **$75.00** County posting fee is required
- ⇨ **Original signature is not required**

NPH - Notice of Public Hearing

- ⇨ **Normally issued to inform the public of a hearing date on a particular project**
- ⇨ **$75.00 County posting fee is required**
- ⇨ **Original signature is not required**

ND - Negative Declaration

- ⇨ **All NEG DEC filings are considered to be final negative documents unless otherwise indicated and are not accepted for filing without an NOD, unless NEG DEC is PROPOSED or MITIGATED**

PND - Proposed Negative Declaration

- ⇨ Name is self explanatory
- ⇨ **$75.00** County posting fee is required
- ⇨ Original signature is not required

EIR - Environmental Impact Report

- ⇨ **NEVER** accepted for filing without an **NOD**

DRAFT EIR - Draft Environmental Impact Report

- ⇨ **Not** accepted for filing alone, can only be accepted along with a Notice **(NOI, NPH, NOC and NOP)**

NOI - Notice of Intent (adopt an EIR, ND, DRAFT EIR or MND) normally issued to inform the public of the hearing date of a particular project

- ⇨ Original signature is not required
- ⇨ **$75.00** County posting fee is required

MT. SAC
Mt. San Antonio College

Facilities Planning & Management
1100 North Grand Avenue • Walnut, CA 91789
909-274-4850 • www.mtsac.edu

TO: Responsible and Concerned Agencies

SUBJECT: Notice of Availability (NOA) of Traffic Impact Study Technical Appendices A, B, C and D to Appendix B.1 to the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects Draft Subsequent Program/Project EIR (SCH 2002041161) and Time Extension of Public Comment Period for Traffic Impact Study Technical Appendices A, B, C and D

FROM: Gary Nellesen, Director, Facilities Planning & Management
Mt. San Antonio College
1100 North Grand Avenue
Walnut, California 91789-1399

The Mt. San Antonio Community College District (District) is the Lead Agency and has completed the Draft Subsequent Project and Program Environmental Impact Report (Draft EIR) for the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects.

The Draft EIR was circulated for a 45-day review period that began June 13, 2016 and ended on July 28, 2016. The 45-day public review period for the Draft EIR is closed and the purpose of this notice is to announce that the comment period which ended on July 28, 2016 has been extended twenty-one (21) days to receive public comments limited to the Traffic Impact Study Technical Appendices A, B, C and D (Traffic Impact Study Technical Appendices) referred to, but not included in, Appendix B.1 to the Draft EIR.

The District is now circulating the Traffic Impact Study Technical Appendices for additional public review for a period of twenty-one days (21) ending on September 9, 2016.

The Traffic Impact Study Technical Appendices consist of four items omitted in Appendix B.1 to the Draft EIR: Appendix A: Traffic Count Data, Appendix B: LOS Calculation Sheets, Appendix C: Cumulative Project Trip Generation and Appendix D: Fair-Share Calculations.

In accordance with the CEQA Guidelines, public comments should focus on identifying any new significant traffic effects of the project (Section 15204) identified in the Traffic Impact Study Technical Appendices and public comments are limited to information in the Technical Appendices.

Documents Available for Review:

This Notice of Availability and the Traffic Impact Study Technical Appendices, which are posted on the District's website:

http://www.mtsac.edu/construction/reports-and-publications/pdf/seir_pep/MtSAC_SEIR_PEP_NOA_Traffic_Appendices-2016-08-16-FINAL.pdf

http://www.mtsac.edu/construction/reports-and-publications/pdf/seir_pep/B1_Iteris_Traffic_Study_Appendices_040116.pdf

and available for review at the following locations:

Walnut Public Library
Reference Desk
21155 La Puente Avenue
Walnut, California 91789

Mt. San Antonio College Library
Building 6, Library, 2nd floor, Reference Desk
1100 North Grand Avenue
Walnut, California 91789

Time for Review:

All comments on the Traffic Impact Study Technical Appendices must be received by 5:00 pm on Friday, September 9, 2016.

Public comments are limited to the Traffic Impact Study Technical Appendices. All comments should be forwarded as written correspondence or pdf attachments to e-mails. **Freestanding e-mail comments are discouraged.** Please include the name, and full mailing address, of the respondent in all communication and the date the comments are sent. If an agency is responding, please provide a person, e-mail address, and phone number.

Please send your comments to Gary Nellesen, Director, Facilities Planning & Management at the address below:

Project Title: Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects Draft Subsequent Program/Project EIR (SCH 2002041161) Traffic Impact Study Technical Appendices A, B, C and D to Appendix B.1

Project Applicant: Mt. San Antonio Community College District
1100 North Grand Avenue
Walnut, CA 91789-5611

Contact: Gary Nellesen, Director, Facilities Planning & Management
Telephone: (909) 274-4850
Facsimile: (909) 468-3931
E-Mail Address: facilitiesplanning@mtsac.edu

Print Form

Appendix C

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2002041161

Project Title: Mt. SAC 2015 Facilities Master Plan Update and PE Projects EIR - Traffic Technical Appendices

Lead Agency: Mt. San Antonio Community College District
Contact Person: Mikaela Klein
Mailing Address: 1100 North Grand Avenue, Facilities Planning & Manageme
Phone: (909) 274-5720
City: Walnut
Zip: 91789
County: Los Angeles

Project Location: County: Los Angeles
City/Nearest Community: Walnut/Pomona
Cross Streets: North Grand Avenue and Temple Avenue
Zip Code: 91789
Longitude/Latitude (degrees, minutes and seconds): 34 ° 44 ′ 30 ″ N / 117 ° 50 ′ 45 ″ W
Total Acres: 420 ga
Assessor's Parcel No.:
Section: Twp.: Range: Base:
Within 2 Miles: State Hwy #: 57/60
Waterways:
Airports:
Railways:
Schools: Westhoff/Collegewood

Document Type:

CEQA: ☐ NOP ☐ Draft EIR
☐ Early Cons ☐ Supplement/Subsequent EIR
☐ Neg Dec (Prior SCH No.)
☐ Mit Neg Dec Other: Notice of Availability

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other:

Local Action Type:

☐ General Plan Update ☐ Specific Plan ☐ Rezone ☐ Annexation
☐ General Plan Amendment ☒ Master Plan ☐ Prezone ☐ Redevelopment
☐ General Plan Element ☐ Planned Unit Development ☐ Use Permit ☐ Coastal Permit
☐ Community Plan ☐ Site Plan ☐ Land Division (Subdivision, etc.) ☒ Other: Traffic Tech App

Development Type:

☐ Residential: Units Acres
☐ Office: Sq.ft. Acres Employees
☐ Commercial: Sq.ft. Acres Employees
☐ Industrial: Sq.ft. Acres Employees
☐ Educational:
☐ Recreational:
☐ Water Facilities: Type MGD

☐ Transportation: Type
☐ Mining: Mineral
☐ Power: Type MW
☐ Waste Treatment: Type MGD
☐ Hazardous Waste: Type
☒ Other: Demolition and new construction of a sports stadium

Project Issues Discussed in Document:

☐ Aesthetic/Visual ☐ Fiscal ☐ Recreation/Parks ☐ Vegetation
☐ Agricultural Land ☐ Flood Plain/Flooding ☐ Schools/Universities ☐ Water Quality
☐ Air Quality ☐ Forest Land/Fire Hazard ☐ Septic Systems ☐ Water Supply/Groundwater
☐ Archeological/Historical ☐ Geologic/Seismic ☐ Sewer Capacity ☐ Wetland/Riparian
☐ Biological Resources ☐ Minerals ☐ Soil Erosion/Compaction/Grading ☐ Growth Inducement
☐ Coastal Zone ☐ Noise ☐ Solid Waste ☐ Land Use
☐ Drainage/Absorption ☐ Population/Housing Balance ☐ Toxic/Hazardous ☐ Cumulative Effects
☐ Economic/Jobs ☐ Public Services/Facilities ☒ Traffic/Circulation ☐ Other:

Present Land Use/Zoning/General Plan Designation:

City - School, RPD - 61,700 and 28,500 District - Primary Educational, Athletics and Agricultural and Open Space

Project Description: *(please use a separate page if necessary)*

The 2015 Facilities Master Plan Update Draft EIR evaluated changes in land use, new projects and an enrollment increase of 3,745 from 2015–2020. The project includes demolition of Hilmer Lodge Stadium and new development on the 32.2-acre site: including the Athletic Complex East (Phase 1) and Physical Education Complex (Phase 2). The net increase at build-out for the FMP Update is less than 500,000 gross square feet. The Draft EIR (including the traffic impact study) was circulated for a period of 45-days, ending on July 28, 2016. However, the traffic technical appendices were not included in the Draft EIR Appendices and are now being circulated for a 21-day public comment period.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "**X**".
If you have already sent your document to the agency please denote that with an "**S**".

_____ Air Resources Board
_____ Boating & Waterways, Department of
_____ California Emergency Management Agency
_____ California Highway Patrol
s _____ Caltrans District # 7
_____ Caltrans Division of Aeronautics
_____ Caltrans Planning
_____ Central Valley Flood Protection Board
_____ Coachella Valley Mtns. Conservancy
_____ Coastal Commission
_____ Colorado River Board
_____ Conservation, Department of
_____ Corrections, Department of
_____ Delta Protection Commission
_____ Education, Department of
_____ Energy Commission
_____ Fish & Game Region # _____
_____ Food & Agriculture, Department of
_____ Forestry and Fire Protection, Department of
_____ General Services, Department of
_____ Health Services, Department of
_____ Housing & Community Development
_____ Native American Heritage Commission
_____ Office of Historic Preservation
_____ Office of Public School Construction
_____ Parks & Recreation, Department of
_____ Pesticide Regulation, Department of
_____ Public Utilities Commission
_____ Regional WQCB # 4
_____ Resources Agency
_____ Resources Recycling and Recovery, Department of
_____ S.F. Bay Conservation & Development Comm.
_____ San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
_____ San Joaquin River Conservancy
_____ Santa Monica Mtns. Conservancy
_____ State Lands Commission
_____ SWRCB: Clean Water Grants
_____ SWRCB: Water Quality
_____ SWRCB: Water Rights
_____ Tahoe Regional Planning Agency
_____ Toxic Substances Control, Department of
_____ Water Resources, Department of
s _____ Other: Community College Chancellor's Office
_____ Other: _____

Local Public Review Period (to be filled in by lead agency)

Starting Date August 19, 2016 Ending Date September 6, 2016

Lead Agency (Complete if applicable):

Consulting Firm: SID LINDMARK, AICP
Address: 10 Aspen Creek Lane
City/State/Zip: Laguna Hills, CA 92653
Contact: Sid Lindmark, AICP
Phone: (949) 855-0416

Applicant: Mt. San Antonio Community College District
Address: 1100 North Grand Avenue
City/State/Zip: Walnut, California 91789
Phone: (909) 274-5720 mikaela.klein@mtsac.edu

Signature of Lead Agency Representative: Mikaela Klein **Date:** 8/19/2016

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

Print Form

Summary Form for Electronic Document Submittal

Form F

Lead agencies may include 15 hardcopies of this document when submitting electronic copies of Environmental Impact Reports, Negative Declarations, Mitigated Negative Declarations, or Notices of Preparation to the State Clearinghouse (SCH). The SCH also accepts other summaries, such as EIR Executive Summaries prepared pursuant to CEQA Guidelines Section 15123. Please include one copy of the Notice of Completion Form (NOC) with your submission and attach the summary to each electronic copy of the document.

SCH #: 2002041161

Project Title: Mt. SAC 2015 Facilities Master Plan Update and PE Projects EIR: Traffic Technical Appendices A–D

Lead Agency: Mt. San Antonio Community College District

Contact Name: Mikaela Klein, Senior Facilities Planner

Email: mikaela.klein@mtsac.edu Phone Number: 909-274-5720

Project Location: City of Walnut (*City*) County of Los Angeles (*County*)

Project Decription (Proposed actions, location, and/or consequences).

The 2015 Facilities Master Plan Update (FMPU) provides future facilities for a student enrollment increase of 3,745 students in 2020–21 and an increase of 7,153 students in 2025–26. The 2015–16 fall enrollment headcount is 35,986. The Physical Education Projects (Phase 1, 2) propose the demolition of Hilmer Lodge Stadium (11,940 seats) and new construction of a 19,752 seat facility with permanent, temporary and lawn seating. There will be 10,012 permanent seats in the new stadium. The interior stadium area will increase from 3.53 acres to 4.16 acres. There is approximately 1,556,400 gsf on campus today. Build-out of the 2015 FMPU will result a net increase of approximately 425,900 gsf in 2020 and 752,200 gsf in 2025.

The Draft EIR was circulated for a 45-day public review period ending July 28, 2016. The traffic impact study was included in the Draft EIR, but without the traffic impact study technical appendices A, B, C, and D referenced in and attached to the traffic impact study.

The Notice of Availability is for the traffic impact study technical appendices A, B, C, and D and extends the public comment period 21-days for the traffic impact study technical appendices.

Identify the project's significant or potentially significant effects and briefly describe any proposed mitigation measures that would reduce or avoid that effect.

The traffic impact study technical appendices consist of the following four items:

1. Appendix A: Traffic Count Data
2. Appendix B: LOS Calculation Sheets
3. Appendix C: Cumulative Project Trip Generation
4. Appendix D: Fair-Share Calculations

The traffic impact study technical appendices is not "significant new information" under CEQA Guidelines 15088.5(a)(2) as the information in the traffic technical appendices was referenced and summarized in the traffic impact study and does not substantially increase the severity of the traffic impact analyzed in the traffic impact study.

College staff have discussed submittal requirements with the SCH, and agreed that submittal of only one (1) CD file is sufficient for the SCH files. The college sent the NOA and the Appendices to Caltrans directly on August 19, 2016.

If applicable, describe any of the project's areas of controversy known to the Lead Agency, including issues raised by agencies and the public.

Provide a list of the responsible or trustee agencies for the project.

California Department of Transportation (Caltrans) - District #7

Inland Valley Daily Bulletin
(formerly the Progress Bulletin)
9616 Archibald Avenue Suite 100
Rancho Cucamonga, CA 91730
909-987-6397
legals@inlandnewspapers.com

(Space below for use of County Clerk Only)

PROOF OF PUBLICATION
(2015.5 C.C.P.)

STATE OF CALIFORNIA
County of Los Angeles

I am a citizen of the United States, I am over the age of eighteen years, and not a party to or interested in the above-entitled matter. I am the principal clerk of the printer of INLAND VALLEY DAILY BULLETIN, a newspaper of general circulation printed and published daily for the City of Pomona, County of Los Angeles, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Los Angeles, State of California, on the date of June 15, 1945, Decree No. Pomo C-606. The notice, of which the annexed is a true printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

8/19/16

I declare under the penalty of perjury that the foregoing is true and correct.

Executed at Rancho Cucamonga, San Bernardino Co. California

This 19 Day of August, 2016

Signature

Notice of Availability (NOA) of Traffic Impact Study Technical Appendices A, B, C and D to Appendix B.1 to the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects Draft Subsequent Program/Project EIR (SCH 2002041161) and Time Extension of Public Comment Period for Traffic Impact Study Technical Appendices A, B, C and D

Responsible and Concerned Agencies
The Mt. San Antonio Community College District (District) is the Lead Agency and has completed the Draft Subsequent Project and Program Environmental Impact Report (Draft EIR) for the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects.

The Draft EIR was circulated for a 45-day review period that began June 13, 2016 and ended on July 28, 2016. The 45-day public review period for the Draft EIR is closed and the purpose of this notice is to announce that the comment period which ended on July 28, 2016 has been extended twenty-one (21) days to receive public comments limited to the Traffic Impact Study Technical Appendices A, B, C and D (Traffic Impact Study Technical Appendices) referred to, but not included in, Appendix B.1 to the Draft EIR.

The District is now circulating the Traffic Impact Study Technical Appendices for additional public review for a period of twenty-one days (21) ending on September 9, 2016.

The Traffic Impact Study Technical Appendices consist of four items omitted in Appendix B.1 to the Draft EIR: Appendix A: Traffic Count Data, Appendix B: LOS Calculation Sheets, Appendix C: Cumulative Project Trip Generation and Appendix D: Fair-Share Calculations.

In accordance with the CEQA Guidelines, public comments should focus on identifying any new significant traffic effects of the project (Section 15204) identified in the Traffic Impact Study Technical Appendices and public comments are limited to information in the Technical Appendices.

Documents Available for Review:

This Notice of Availability and the Traffic Impact Study Technical Appendices, which are posted on the District's website:

http://www.mtsac.edu/construction/reports-and-publications/pdf/seir_pep/MtSAC_SEIR_PEP_NOA_Traffic_Appendices-2016-08-16-FINAL.pdf

http://www.mtsac.edu/construction/reports-and-publications/pdf/seir_pep/B1_Iteris_Traffic_Study_Appendices_040116.pdf

and available for review at the following locations:

Walnut Public Library
Reference Desk
21155 La Puente Avenue
Walnut, California 91789

Mt. San Antonio College
Library
Building 6, Library, 2nd floor, Reference Desk
1100 North Grand Avenue
Walnut, California 91789

Time for Review:

All comments on the Traffic Impact Study Technical Appendices must be received by 5:00 pm on Friday, September 9, 2016.

Public comments are limited to the Traffic Impact Study Technical Appendices. All comments should be forwarded as written correspondence or pdf attachments to e-mails. Freestanding e-mail comments are discouraged. Please include the name, and full mailing address, of the respondent in all communication and the date the comments are sent. If an agency is responding, please provide a person, e-mail address, and phone number.

Please send your comments to Gary Nellesen, Director, Facilities Planning & Management at the address below:

Project Title: Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects Draft Subsequent Program/Project EIR (SCH 2002041161) Traffic Impact Study Technical Appendices A, B, C and D to Appendix B.1

Project Applicant: Mt. San Antonio Community College District
1100 North Grand Avenue
Walnut, CA 91789-5611

Contact: Gary Nellesen, Director, Facilities Planning & Management
Telephone: (909) 274-4850
Facsimile: (909) 468-3931
E-Mail Address: facilitiesplanning@mtsac.edu

Michael D. Gregoryk
Vice President, Administrative Services
MT. SAN ANTONIO COMMUNITY COLLEGE DISTRICT
Los Angeles County, State of California

Publication Date: 8/19/16 Inland Valley Daily Bulletin #835692

Advertising Order Confirmation

San Gabriel Valley Newspaper Group
Valley Tribune•Star-News•Daily News•Highlander

Ad Order Number	*Customer*	*Payor Customer*	*PO Number*
0010835848	MT. SAN ANTONIO COLLEGE	MT. SAN ANTONIO COLLEGE	
Sales Representative	*Customer Account*	*Payor Account*	*Ordered By*
Francois Fundora	5026827	5026827	email
Order Taker	*Customer Address*	*Payor Address*	*Customer Fax*
Francois Fundora	1100 N GRAND WALNUT, CA 91789	1100 N GRAND WALNUT, CA 91789	
Order Source	*Customer Phone*	*Payor Phone*	*Customer EMail*
Select Source	909-594-5611 909-274-5789	909-594-5611 909-274-5789	

Current Queue	*Invoice Text*	*Ad Order Notes*
Ready		

Tear Sheets	*Affidavits*	*Blind Box*	*Materials*	*Promo Type*	*Special Pricing*
0	0				

Advertising Order Confirmation

San Gabriel Valley Newspaper Group
Valley Tribune•Star-News•Daily News•Highlander

Ad Number	Ad Size	Color	Production Color	Ad Attributes	Production Method	Production Notes
0010835848-01	4 X 130 Li				AdBooker	

External Ad Number	Pick Up	Ad Type	Released for Publication
		Legal Liner	

Notice of Availability (NOA) of Traffic Impact Study Technical Appendices A, B, C and D to Appendix B.1 to the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects Draft Subsequent Program/Project EIR (SCH 2002041161) and Time Extension of Public Comment Period for Traffic Impact Study Technical Appendices A, B, C and D

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Walnut, California 91789

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Project Title: Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects Draft Subsequent Program/Project EIR (SCH 2002041161) Traffic Impact Study Technical Appendices A, B, C and D to Appendix B.1

Project Applicant: Mt. San Antonio Community College District

Advertising Order Confirmation

San Gabriel Valley Newspaper Group
Valley Tribune•Star-News•Daily News•Highlander

Project Applicant: Mt. San Antonio Community College District
1100 North Grand Avenue
Walnut, CA 91789-5611

Contact: Gary Nellesen, Director, Facilities Planning & Management
Telephone: (909) 274-4850
Facsimile: (909) 468-3931
E-Mail Address: facilitiesplanning@mtsac.edu

Michael D. Gregoryk
Vice President, Administrative Services
MT. SAN ANTONIO COMMUNITY COLLEGE DISTRICT
Los Angeles County, State of California

Publication Date: 8/19/16
San Gabriel Valley Tribune
AD#

Product	*Requested Placement*	*Requested Position*	*Run Dates*	*# Inserts*
SGV Newspapers:San Gabriel Trib	Legals CLS	MiscellaneousNotices - 1076~	08/19/16	1

Order Charges:

Net Amount	*Tax Amount*	*Total Amount*	*Payment Amount*	***Amount Due***
727.60	0.00	727.60	0.00	**$727.60**

If this confirmation includes an advertising proof, please check your proof carefully for errors, spelling, and/or typos. Errors not marked on the returned proof are not subject to credit or refunds.

Please note: To meet our printer's deadline, we must have your proof returned by the published deadline, and as indicated by your sales rep.

Please note: If you pay by bank card, your card statement will show the merchant as "LA NEWSPAPER GROUP".

MT. SAC
Mt. San Antonio College

Facilities Planning & Management
1100 North Grand Avenue • Walnut, CA 91789
909-274-4850 • www.mtsac.edu

TO: Responsible and Concerned Agencies

SUBJECT: Notice of Availability (NOA) of Traffic Impact Study Technical Appendices A, B, C and D to Appendix B.1 to the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects Draft Subsequent Program/Project EIR (SCH 2002041161) and Time Extension of Public Comment Period for Traffic Impact Study Technical Appendices A, B, C and D

FROM: Gary Nellesen, Director, Facilities Planning & Management
Mt. San Antonio College
1100 North Grand Avenue
Walnut, California 91789-1399

2016 208235
FILED
Aug 19 2016
Dean C. Logan, Registrar – Recorder/County Clerk
Electronically signed by MEEKIE FISHER

The Mt. San Antonio Community College District (District) is the Lead Agency and has completed the Draft Subsequent Project and Program Environmental Impact Report (Draft EIR) for the Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects.

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THIS NOTICE WAS POSTED

ON August 19 2016

UNTIL September 19 2016

REGISTRAR – RECORDER/COUNTY CLERK

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2002041161

Project Title: Mt. SAC 2015 Facilities Master Plan Update and PE Projects EIR - Traffic Technical Appendices

Lead Agency: Mt. San Antonio Community College District
Contact Person: Mikaela Klein
Mailing Address: 1100 North Grand Avenue, Facilities Planning & Manage
Phone: (909) 274-5720
City: Walnut
Zip: 91789
County: Los Angeles

Project Location: County: Los Angeles
City/Nearest Community: Walnut/Pomona
Cross Streets: North Grand Avenue and Temple Avenue
Zip Code: 91789
Longitude/Latitude (degrees, minutes and seconds): 34 ° 44 ′ 30 ″ N / 117 ° 50 ′ 45 ″ W Total Acres: 420 ga
Assessor's Parcel No.:
Section: Twp.: Range: Base:
Within 2 Miles: State Hwy #: 57/60
Waterways:
Airports:
Railways:
Schools: Westhoff/Collegewood

Document Type:

CEQA: ☐ NOP ☐ Early Cons ☐ Neg Dec ☐ Mit Neg Dec ☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ☐ Other: Notice of Availability
NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI
Other: ☐ Joint Document ☐ Final Document ☐ Other:

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
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Development Type:

☐ Residential: Units Acres
☐ Office: Sq.ft. Acres Employees
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☐ Transportation: Type
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☐ Power: Type MW
☐ Waste Treatment: Type MGD
☐ Hazardous Waste: Type
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☐ Fiscal ☐ Flood Plain/Flooding ☐ Forest Land/Fire Hazard ☐ Geologic/Seismic ☐ Minerals ☐ Noise ☐ Population/Housing Balance ☐ Public Services/Facilities
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☐ Vegetation ☐ Water Quality ☐ Water Supply/(☐ Wetland/Ripari ☐ Growth Induce ☐ Land Use ☐ Cumulative Ef ☐ Other:

Electronically signed by MELKIE FISHER
Dean C. Logan, Registrar – Recorder/County Clerk
FILED
Aug 19 2016
2016 208235

Present Land Use/Zoning/General Plan Designation:

City - School, RPD - 61,700 and 28,500 District - Primary Educational, Athletics and Agricultural and Op

Project Description: *(please use a separate page if necessary)*

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If you have already sent your document to the agency please denote that with an "S".

____	Air Resources Board	____	Office of Historic Preservation
____	Boating & Waterways, Department of	____	Office of Public School Construction
____	California Emergency Management Agency	____	Parks & Recreation, Department of
____	California Highway Patrol	____	Pesticide Regulation, Department of
S	Caltrans District # 7	____	Public Utilities Commission
____	Caltrans Division of Aeronautics	____	Regional WQCB # 4
____	Caltrans Planning	____	Resources Agency
____	Central Valley Flood Protection Board	____	Resources Recycling and Recovery, Department of
____	Coachella Valley Mtns. Conservancy	____	S.F. Bay Conservation & Development Comm.
____	Coastal Commission	____	San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
____	Colorado River Board	____	San Joaquin River Conservancy
____	Conservation, Department of	____	Santa Monica Mtns. Conservancy
____	Corrections, Department of	____	State Lands Commission
____	Delta Protection Commission	____	SWRCB: Clean Water Grants
____	Education, Department of	____	SWRCB: Water Quality
____	Energy Commission	____	SWRCB: Water Rights
____	Fish & Game Region # ____	____	Tahoe Regional Planning Agency
____	Food & Agriculture, Department of	____	Toxic Substances Control, Department of
____	Forestry and Fire Protection, Department of	____	Water Resources, Department of
____	General Services, Department of		
____	Health Services, Department of	S	Other: Community College Chancellor's Office
____	Housing & Community Development	____	Other: ____
____	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date August 19, 2016 Ending Date September 6, 2016

Lead Agency (Complete if applicable):

Consulting Firm: SID LINDMARK, AICP
Address: 10 Aspen Creek Lane
City/State/Zip: Laguna Hills, CA 92653
Contact: Sid Lindmark, AICP
Phone: (949) 855-0416

Applicant: Mt. San Antonio Community College District
Address: 1100 North Grand Avenue
City/State/Zip: Walnut, California 91789
Phone: (909) 274-5720 mikaela.klein@mtsac.edu

Signature of Lead Agency Representative: Mikaela Klein **Date:** 8/19/2016

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

2016 208235
FILED
Aug 19 2016
Dean C. Logan, Registrar – Recorder/County Clerk
Electronically signed by MEEKIE FISHER

Revised 2010

Documents Available for Review:

This Notice of Availability and the Traffic Impact Study Technical Appendices, which are posted on the District's website:

http://www.mtsac.edu/construction/reports-and-publications/pdf/seir_pep/MtSAC_SEIR_PEP_NOA_Traffic_Appendices-2016-08-16-FINAL.pdf

http://www.mtsac.edu/construction/reports-and-publications/pdf/seir_pep/B1_Iteris_Traffic_Study_Appendices_040116.pdf

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Walnut, California 91789

Mt. San Antonio College Library
Building 6, Library, 2nd floor, Reference Desk
1100 North Grand Avenue
Walnut, California 91789

Time for Review:

All comments on the Traffic Impact Study Technical Appendices must be received by 5:00 pm on Friday, September 9, 2016.

Public comments are limited to the Traffic Impact Study Technical Appendices. All comments should be forwarded as written correspondence or pdf attachments to e-mails. **Freestanding e-mail comments are discouraged.** Please include the name, and full mailing address, of the respondent in all communication and the date the comments are sent. If an agency is responding, please provide a person, e-mail address, and phone number.

Please send your comments to Gary Nellesen, Director, Facilities Planning & Management at the address below:

Project Title: Mt. San Antonio College 2015 Facilities Master Plan Update and Physical Education Projects Draft Subsequent Program/Project EIR (SCH 2002041161) Traffic Impact Study Technical Appendices A, B, C and D to Appendix B.1

2016 208235
FILED
Aug 19 2016
Dean C. Logan, Registrar—Recorder/County Clerk
Electronically signed by MEEKIE FISHER

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JUN 19 2016

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Friday, August 19, 2016 1:49 PM

Item(s)

Fee	Qty	Total
NoA - County Fee 2016208235	1	$75.00
Notice - Certified Copy 2016208235	1	$2.00
Total		**$77.00**

Total Documents: 1

Customer payment(s):

Credit Card $77.00

Table 1.0
2016 MITIGATION MONITORING PROGRAM
2015 Facility Master Plan and Physical Education Projects Final SEIR SCH 2002041161 – Appendix L1
CEQA Guidelines Section 15097
September 30, 2016

Notes: Includes all mitigation measures in 2012 MMP w/revisions and additions for 2015 FMPU
Titles revised to conform to revised CEQA Checklist, OPR, August 2016
All prior indices for mitigation measures have been changed

Mitigation Measures	Monitoring Action	Department Responsible
1. Aesthetics		
AES-01. All athletic field lighting (excluding the PEP: Phase 1, 2)) must employ automatic shutoff devices to ensure that facilities are not illuminated unless desired. Lighting levels and design shall comply with the recommendations of the Illuminating Engineers Society Standards of North America (IESN) *Recommended* Practice *for Sports and Recreational Area Lighting* (IESNA RP-6-01), Facilities Planning & Management shall monitor compliance.	Assure light and glare is minimized outside of the athletic fields.	Facilities Planning & Management
AES-02. All new construction contracts shall implement those provisions of the latest Facility Master Plan Landscape Plan applicable to their projects. Facilities Planning & Management shall ensure compliance.	Assuring the campus landscaping plans and guidelines are implemented.	Facilities Planning & Management
AES-03. Hilmar Lodge Stadium (D6) lighting fixtures shall be designed, located, installed, aimed downward or toward structures, and maintained in good order to prevent glare, light trespass, and light pollution offsite. Lighting fixtures shall be mounted, aimed and shielded so that their beams fall within the primary playing area and their immediate surroundings, and so that no significant off-site light trespass is produced. Stadium Lighting (D6) shall adhere to NCAA Lighting Guidelines, the Flex Field (D5) to 50 FC: 2:1 Uniformity, and the Practice Field (D5) to 30 FC 22:1 Uniformity Standards. The Stadium sports lighting shall be turned off as soon	Assure light and glare is minimized outside of the athletic fields.	Facilities Planning & Management

as possible following the end of the event and players and spectators are leaving the Stadium. Where feasible, a low-level lighting system shall be used to facilitate spectators leaving the facility, cleanup, nighttime maintenance and other closing activities. Facilities Planning & Management shall ensure compliance.		
AES-04. The lighting and programming for the soccer fields south of the Observatory (Building 60) shall be reviewed to determine if light and glare can be reduced for Observatory activities on the first Friday of each month for public viewing and on Tuesday, Wednesday nights for student research activities. Facilities Planning & Management shall ensure compliance.	Minimizing conflicts with observatory activities and soccer field lighting.	Facilities Planning & Management
AES-05. Exterior building materials, colors and signage shall be reviewed by the Campus Master Plan Coordinating Team (CMPCT). All construction contracts shall specify these items and implement CMPCT final recommendations. Facilities Planning & Management shall monitor compliance.	Ongoing provision for consistency between projects and the local built environment.	Facilities Planning & Management
AES-06. All future projects included in the 2015 FMPU that are located near the perimeter of the campus shall conform to the Campus Perimeter Night Lighting Guidelines (Table 3.7.12 in Draft EIR). The Guidelines do not supersede California Building Code Section 1205.6, the California Administrative Code Section for the LZA Z, or the Illuminating Engineering Society (IES) G-1-03 Standards for parking and sidewalks/walkway security illumination levels. Facilities Planning and Management shall ensure compliance.	Project compliance to reduce light or glare impacts off-campus.	Facilities Planning & Management
2. Air Quality		
AQ-01. All contractors shall comply with all feasible Best Available Control Measures (BACM) *included in* South Coast Air Quality Management District (SCAQMD) *Rule 403:* Fugitive Dust *included in Table* 1: Best Available Control Measures Applicable to All Construction Activity Sources. In addition, the project shall comply with at least one of the following Track-Out Control Options: (a) Install a pad consisting of washed gravel (minimum-size:	Ongoing compliance with Rule 403 to reduce air quality emissions.	Purchasing

one inch) maintained in a clean condition to a depth of at least six inches and extending at least 20 feet wide and 50 feet long, (b) Pave the surface extending at least 100 feet and a width of at least 20 feet wide, (c) Utilize a wheel shaker/wheel spreading device consisting of raised dividers (rails, pipe, or grates) at least 24 feet long and 10 feet wide to remove bulk material from tires and vehicle under carriages before vehicles exit the site, (d) Install and utilize a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the site, (e) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified items (a) through (d) above. Individual BACM in Table 1 that are not applicable to the project or infeasible, based on additional new project information, may be omitted only if Planning Facilities Planning & Management specifies in a written agreement with the applicant that specific BACM measures may be omitted. Any clarifications, additions, selections of alternative measures, or specificity required to implement the required BACM for the project shall be included in the written agreement. The written agreement shall be completed prior to demolition and/or grading for the project. Facilities Planning & Management shall include the written agreement within the Mitigation Monitoring Program for the project and Facilities Planning & Management shall ensure compliance.		
AQ-02. Project construction contracts shall prohibit off-road vehicle and engine idling in excess of five (5) minutes and ensure that all off-road equipment is compliant with the CARB's in-use off-road diesel vehicle regulations and SCAQMD Rule 1186 and 1186.1 certified street sweepers or roadway washing trucks, and all internal combustion engines/construction equipment operating on the project site shall meet EPA-Certified Tier 2 emissions standards, or higher according to the adopted project start date requirements. A copy of each unit's certified tier specification, BACT documentation and CARB or SCAQMD operating permit shall be	Ongoing compliance with CARB and EPA regulations to reduce air quality emissions.	Purchasing

provided to the construction manager at the time of mobilization of each applicable unit of equipment. Facilities Planning & Management shall ensure compliance.		
AQ-03. During construction, contractors shall minimize offsite air quality impacts by implementing the following measures: (a) encourage car pooling for construction workers, (b) limit lane closures to off-peak travel periods, (c) park construction vehicles off traveled roadways, (d) encourage receipt of materials during non-peak traffic hours and (e) sandbag construction sites for erosion control. These requirements shall be included in construction contracts and implemented. Facilities Planning & Management shall monitor compliance.	Ongoing compliance with recommendations to reduce air quality emissions.	Facilities Planning & Management
AQ-04. Truck deliveries and pickups shall be scheduled during off-peak hours whenever possible to alleviate traffic congestion and air quality emissions during peak hours. Facilities Planning & Management shall monitor compliance.	Ongoing compliance with recommendations to reduce vehicle trips during peak hours.	Facilities Planning & Management
AQ-05. During project construction, all off-road diesel-powered construction equipment greater than 50 hp shall meet the EPA-Certified Tier 4 emission standards where available. All construction equipment shall be outfitted with BACT devices certified by CARB. Any emission control devices used by a contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. A copy of each unit's certified tier specification, BACT documentation and CARB or SCAQQMD operating permit shall be provided by contractors before commencement of equipment use on campus. Facilities Planning & Management shall ensure compliance.	Ongoing compliance with EPA and CARB regulations to reduce diesel particulate emissions.	Facilities Planning & Management
AQ-06. Construction contracts shall specify that all diesel construction equipment used onsite shall use ultra-low sulfur diesel fuel. Facilities Planning & Management shall ensure compliance.	Ongoing compliance with recommendations to reduce diesel engine air quality emissions.	Purchasing

AQ-07. During grading and construction, fugitive dust from construction operations shall be reduced by watering at least twice daily using reclaimed water or chemical soil binder, where feasible, or water whenever substantial dust generation is evident. Grading sites of more than ten gross acres shall be watered at least three times daily. The project shall comply with Rule 403: Fugitive Dust (South Coast Air Quality Management District). Project contractors shall suspend grading operations, apply soil binders, and water the grading site when wind speeds (as instantaneous gusts) exceed 25 miles per hour. Traffic speeds on all unpaved graded surfaces shall not exceed 15 miles per hour. All grading operations shall be suspended during first and second stage smog alerts. All project contracts shall require project contractors to keep construction equipment engines tuned to ensure that air quality impacts generated by construction activities are minimized. Upon request, contractors shall submit equipment tuning logs to Facilities Planning & Management. Facilities Planning & Management shall ensure compliance.	Ongoing compliance with SCAQMD regulations to reduce particulate emissions.	Facilities Planning & Management
AQ-08. To reduce VOC emissions, all construction contracts shall limit painting to eight hours per day, specify the use of paints and coatings with a VOC content of 80 grams per liter (g/l) or less. Facilities Planning & Management shall ensure compliance.	Ongoing compliance with SCAQMD regulations to reduce VOC/ROG particulate emissions.	Purchasing
AQ-09. All off-road diesel-powered construction equipment greater than 50 hp (e.g., excavators, graders, dozers, scrappers, tractors, loaders, etc.) used during construction of PEP (Phase 1) shall comply with EPA-Certified Tier IV emission controls where available. The requirements shall be placed in construction contracts. Facilities Planning & Management shall ensure compliance.	Ongoing compliance with SCAQMD regulations for construction NOx emissions.	Purchasing
AQ-10. The college shall obtain all required permits for the Fire Training Academy from the South Coast Air Quality Management District. Fire Technology shall ensure compliance.	Compliance with SCAQMD permits for operation of fire suppression activities at the Training Academy.	Fire Technology
3. Biological Resources		

BIO-01. New permanent lighting standards in Parking Lot M and Lot W immediately adjacent to sensitive biological habitat areas (i.e. Wildlife Sanctuary/Open Space Zone) shall not exceed 0.2 foot- candles at five (5) feet outside of the parking lot boundary. Facilities Planning & Management shall ensure compliance.	Minimize light intrusion in open space areas.	Facilities Planning & Management
BIO-02. A pre-construction survey for Burrowing Owls shall be completed for construction areas with suitable habitat for the Burrowing Owl (e.g. Irrigation Well site, the Detention Basin site, and the Fire Training Academy site). If clearing, grading, or construction is planned to occur during the raptor and migratory bird breeding season (February 1 through July 31) or the burrowing owl breeding season (February 1 through August 31), pre-construction surveys should be conducted in the construction area and in appropriate nesting habitat within 500 feet of the construction area. A pre-construction nest/owl survey should be completed for each project or work area within 14 days prior to the start of construction. Multiple pre-construction surveys may be required because the start of specific projects may be separated in time by months or years. If there are no nesting owls, raptors or protected birds within each area, development would be allowed to proceed. However, if raptors or migratory birds are observed nesting within this area and within sight or sound of the work, development within 300 feet must be postponed either until all nesting has ceased, until after the breeding season, or until construction is moved far away enough so that the activity does not impact the birds. If burrowing owls are observed, impacts shall be avoided according to the Staff Report on Burrowing Owl Mitigation (CDFW 2012). All recommendations of the final studies shall be implemented. Facilities Planning & Management shall ensure compliance.	Project compliance with CDFG regulations for rare and sensitive biological resources.	Facilities Planning & Management
BIO-03. Prior to grading within areas of Venturan Coastal Sage Scrub, the college shall identify replacement 2:1 acreage. Replacement habitat shall be	Project compliance with CDFG regulations for rare and sensitive biological resources.	Facilities Planning & Management

completed prior to project completion. Planning & Facilities Management shall ensure compliance.		
BIO-04. Prior to grading within areas of non-native grassland, the college shall identify replacement 0.5:1 acreage habitat. Replacement habitat shall be completed prior to project completion. Planning & Facilities Management shall ensure compliance.	Project compliance with CDFG regulations for rare and sensitive biological resources.	Project compliance with CDFG regulations for rare and sensitive biological resources.
BIO-05. The college shall adopt a Land Management Plan to minimize impacts on California Black Walnut trees on campus. Any walnut trees with a diameter of six inches four feet above ground damaged or removed by construction activities shall be replaced according to the standards in Table 4 of the Mt. SAC California Black Walnut Management Plan (Helix Environmental Planning, September 2012). Replacement habitat shall be completed prior to project completion. The required mitigation acreage for replacement walnut trees is 2.018 acres. The replacement specimens shall be preserved, maintained and monitored for a period of five years to ensure vitality. Facilities Planning & Management shall ensure compliance.	Project compliance with CDFG regulations for rare and sensitive biological resources. Mitigation Measure 1b. above provides the Conservation Area for replacement of California black walnut trees removed elsewhere on campus.	Facilities Planning & Management
BIO-06. Prior to removal of any trees on campus in or near construction areas of the 2015 Facility Master Plan Update during March - May, a qualified biologist shall survey the trees for active nesting sites. All recommendations of the final biological report shall be completed. Facilities Planning & Management shall monitor compliance.	Project compliance with CDFG regulations for rare and sensitive biological resources.	Facilities Planning & Management
BIO-07. If construction is planned during February 1-July 31 in potential raptor nesting habitat, pre-construction surveys of habitat within 500 feet of the construction area shall be completed. All recommendations of the final report shall be implemented. Facilities Planning & Management shall monitor compliance.	Project compliance with CDFG and Bird Migration Act regulations for rare and sensitive biological resources.	Facilities Planning & Management
BIO-08. Permanent development adjacent to any future wetland mitigation areas shall incorporate a 100 foot buffer during final project design. If un-vegetated, the buffer shall be planted with non- invasive species that are compatible with the adjacent wetland mitigation area habitat. A qualified biologist shall review the final	Project compliance to reduce impacts on wetland habitat areas.	Facilities Planning & Management

landscape plans for the buffer area to conform that no species on the California Invasive Plan Council (Cal-IPC) list are present in the plan. Facilities Planning & Management shall monitor compliance.		
BIO-09. The limits of construction for projects adjacent to sensitive habitats should be delineated with silt fencing/fiber rolls and orange construction fencing. A qualified biologist should attend a pre-construction meeting to inform construction crews about the sensitivity of any adjacent habitat. A qualified biologist should also inspect the fencing upon installation and monitor clearing and grading of (and near) native habitat to prevent unauthorized impacts. Facilities Planning & Management shall monitor compliance.	Project compliance to reduce intrusion of construction equipment into sensitive adjacent habitats.	Facilities Planning & Management
BIO-10. Impacts to California Black Walnut trees, if they cannot be avoided, should be mitigated by the replacement of each impacted tree that has a diameter of 6 inches at 4 feet, 6 inches above the ground by a 24-inch boxed specimen (Table 5 in Appendix G1). These trees should be planted in the approved California Black Walnut Management Plan area and preserved, maintained and monitored for five years to ensure viability. Planning & Management shall ensure compliance.	Compliance with impacts on California Balck Walnut trees.	Facilities Planning & Management
BIO-11. A 25-foot buffer shall be incorporated into the project design for the Fire Training Academy to protect future wetland mitigation areas along Snow Creek. A qualified biologist shall also review the draft landscape plans for the buffer area to confirm that no species on the Cal-IPC list would be present during plan implementation. Facilities Planning & Management shall ensure compliance.	Compliance with efforts to reduce impacts on native habitat and sensitive bird species.	Facilities Planning & Management
BIO-12. When a preliminary site plan for the Fire Training Academy is available, the college shall have a qualified noise consultant evaluate the potential construction and operational noise impacts of the Fire Training Academy on threatened and special status birds in the adjacent coastal sage scrub on MSAC Hill and riparian habitat along Snow Creek. The study shall also assess any noise impacts on residential uses to the	Compliance with efforts to reduce impacts on a threatened or special status bird species.	Facilities Planning & Management

south. All recommended mitigation measures of the final report shall be implemented. Facilities Planning & Management shall monitor compliance.		
BIO-13. Construction noise adjacent to existing coastal sage scrub habitat within the West Parcel and on MSAC Hill that is retained (i.e. not graded) will be minimized whenever feasible by avoiding construction grading during the prime nesting season. Facilities Planning & Management shall monitor compliance.	Compliance with efforts to reduce impacts on a threatened or special status bird species.	Facilities Planning & Management
BIO-14: The District shall file information and exhibits on the animal and plants observed on campus completed for the SEIR with the California Natural Diversity Data Base (CNDDB) within six months of certification of the Final EIR. Facilities Planning & Management shall ensure compliance.	Compliance with CDFW request for filing information with CNDDB.	Facilities Planning & Management
BIO-15: The District shall file a written Notification with CDFW pursuant to Section 1602 for the proposed re-configuration of the detention basin northeast of the stadium by October 1, 2016. Facilities Planning & Management shall ensure compliance.	Compliance with CDFW request for filing a Notification pursuant to Section 1602 for the re-configured detention basin.	Facilities Planning & Management
4. Cultural Resources		
CR-01 During construction grading and site preparation activities, the Contractor shall monitor all construction activities. In the event that cultural resources (i.e., prehistoric sites, historic sites, and/or isolated artifacts) are discovered, work shall be halted immediately within 50 feet of the discovery and the Contractor shall inform the Project Manager. A qualified archaeologist that meets the Secretary of the Interior's Standards and Guidelines for Professional Qualifications in Archaeology shall be retained to analyze the significance of the discovery and recommend further appropriate measures to reduce further impacts on archaeological resources. Such measures may include avoidance, preservation in	Actions if cultural resources are discovered during grading.	Facilities Planning & Management

place, excavation, documentation, curation, data recovery, or other appropriate measures. Facilities Planning & Management shall monitor compliance.		
CR-02. If, during the course of implementing the project, human remains are discovered, all work shall be halted immediately within 50 feet of the discovery, the Contractor shall inform the Project Manager, and the County Coroner must be notified according to Section 5097.98 of the PRC and Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed. Facilities Planning & Management shall monitor compliance.	Actions if human remains are discovered during grading.	Facilities Planning & Management
CR-03. The recommended action for the adverse impact on historic resources and on the Mt. SAC Historic District due to buildout of the 2015 FMPU and the PEP is revision of the Land Use Plan to avoid demolition of a CEQA historic resource. An evaluation of feasible options shall be prepared for CMPCT prior to certification of the Final EIR. The college shall evaluate whether the impacts on 3CD or 3CB buildings proposed for removal or demolition in the recommended District may be reduced to Less than Significant. The alternatives to be considered include: (1) Redesign of the 2015 Facility Master Plan Update to avoid impacting the 3CD or 3CB buildings, (2) Redesign of the 2015 Facility Master Plan Update to reduce the project impacts on 3CD or 3CB buildings to Less than Significant, (3) Redesign of phases of the project to reduce impacts on 3CD or 3CB buildings to Less than Significant as more detailed planning for each phase comes up for review before the Campus Master Plan Coordinating Team (CMPCT), and (4) Evaluation of adaptive reuses of 3CD or 3CB buildings prior to construction. Planning Facilities & Management shall monitor compliance. The Facilities Planning & Management Department shall ensure compliance.	Assuring future projects have been assessed for cultural resource impacts	Facilities Planning & Management

CR-04. If project redesign is not feasible to achieve the Project and College's educational goals and facility needs, the following mitigation shall be implemented to reduce the significant impacts on historical resources: (a) HABS Level II History Report for the (1) Mt. SAC Historic District and for (2) Hilmer Lodge Stadium consistent with the *Historic American Buildings Survey Guidelines for Historical Reports* (National Park Service 2007); (b) HABS Level II Standard Photography following the *Secretary of Interior Standards and Guidelines for Architectural and Engineering Documentation* and HABS specific guidelines for the Mt. SAC Historic District and Hilmer Lodge Stadium; (c) Reproduction of select existing drawings for each building proposed for demolition or alteration following HABS Level II guidelines; (d) Creation of a interpretative exhibit within Heritage Hall (HH) including not only the history of Hilmer Lodge Stadium, but the entire Historic District as well, and (e) Development of a "Mt. SAC History" section on the campus website. The Facilities Planning & Management Department shall ensure compliance		Facilities Planning & Management
CR-05. Prior to demolition, removal, or remodeling of any 3CD or 3CB building on campus, the college shall enlist the services of a qualified architectural historian to prepare the HABS Narrative Historical Report as well as CA DPR 523 forms. Documentation through HABS is an important measure because it allows documentation of the resource before alterations begin. Given the relative historic significance of the resources, Level II HABS is the recommended documentation standard, to be prepared in accordance with the *Secretary of Interior Standards and Guidelines for Architectural and Engineering Documentation* and HABS specific guidelines (http://www.nps.gov/hdp/standards/habsguidelines.htm). A narrative historical report following the *Historic American Buildings Survey Guidelines for Historical Reports* (National Park Service 2007) should be prepared for the (1) Mt. SAC Historic District and (2) Hilmer Lodge Stadium. The college shall enlist the		Facilities Planning & Management

services of a qualified architectural historian to prepare the HABS Narrative Historical Report as well as CA DPR 523 forms. The DPR forms shall be submitted to the State Office of Historic Preservation (via the SCCIC) for their records. All other historic documents shall be made available to the public in the collection of the College's Learning Technology Center, including: the HABS Narrative Historical Report, DPR 523 forms, the *Historic Resources on the Campus of Mt. San Antonio College, Walnut, California* (The Building Biographer, June 1, 2003) and *The Historical Resources Analysis for Five Buildings at Mount San Antonio College, Los Angeles County, Walnut, California* (Davis 2012), and a copy of this report. Facilities Planning & Management shall ensure compliance.		
CR-06. Prior to demolition, removal or remodeling of any 3CD or 3CB building, the college shall hire a qualified HABS photographer to provide photo-documentation for the properties on campus identified as 3CD or 3CB which are proposed for removal or demolition in the 2012 Facilities Master Plan or 2015 FMP Update. The photo-documentation shall be made available to the public in the collection of the College's Learning Technology Center. The documentation should be done in accordance with the Guidelines provided in the *Photographic Specifications: Historic American Building Survey, Historic American Engineering Record, Division of National Register Programs, National Park Service, Western Region*. Facilities Planning & Management shall ensure compliance.	Project compliance with CEQA regulations and SHPO guidelines for historic resources.	Facilities Planning & Management
CR-07. Prior to demolition, removal or remodeling of any 3CD or 3CB building, the college shall prepare archivally stable reproduction of original as-built drawings. Reproductions of drawings shall be done in accordance with the *Secretary of the Interior's Guidelines for Architectural and Engineering Documentation*. Select existing drawings, where available, may be photographed with large-format negatives or photographically reproduced on Mylar in accordance with	Project compliance with CEQA regulations and SHPO guidelines for historic resources.	Facilities Planning & Management

the U.S. Copyright Act, as amended. Facilities Planning & Management shall ensure compliance.		
CR-08. To recognize the history of Mt. SAC, part of the facilities for the new Stadium will include Heritage Hall, an area dedicated to historical interpretation of the history of Hilmer Lodge Stadium and the college. The interpretative panels could utilize information from the HABS Level II Narrative Historical Report and large-format photographic documentation. Facilities Planning & Management shall ensure compliance.		
CR-09. To further recognition of the history of Mt. SAC, a page or series of pages should be developed for inclusion on the college's website. This project could be completed as a multi-disciplinary school project, prepared by students in the Technology and History departments utilizing the information from the HABS Level II Narrative Historical Report and large-format photographic documentation. Facilities Planning & Management shall ensure compliance.		
CR-10. An architectural historian or historical architect meeting the SOI Professional Qualification Standards for either discipline shall review the proposed architectural drawings and renderings of the Library (6), Bookstore (9A) and Technology Center (28 A/B) to ensure compliance with the SOI Treatment of Historic Properties. The person should be consulted during the early design of the renovation projects to ensure adherence to the Standards and to minimize plan alternations during the design process. Facilities Planning & Management shall ensure compliance.		
5. Energy		
EN-01. An energy management system shall be installed in all new facilities to reduce energy consumption and	Ongoing compliance with recommendations to reduce energy and air quality emissions.	Facilities Planning & Management

related pollutant emissions. Facilities Planning & Management shall monitor compliance.		
6. Greenhouse Gas Emissions		
GH-01. Future buildings exceeding 20,000 ASF shall have building roof coverings with a minimum three-year aged solar reflectance and thermal emittance, or a minimum reflectance index (SRI) greater than or equal to the values specified in Sections A5.106.11.2.1 and A5 106.11.2.2 or a minimum aged Solar Reflectance Index (SRI) 3 complying with Sections A5.106.11.2.3 as shown in Table A5.106.11.2.1 or A5.106.11.2.2 in Appendix A5 for Non-Residential Voluntary Measures in the 2010 California Green Building Standards Code (CalGreen). Facilities Planning & Management shall ensure compliance.	Ongoing compliance with CalGreen regulations to reduce cumulative GHG emissions in the SCAB.	Facilities Planning & Management
GH-02. Future buildings exceeding 20,000 ASF shall include occupant sensors, motion sensors and vacancy sensors capable of automatically turning off all the lights in an area no more than 30 minutes after the area has been vacated and shall have a visible status signal indicating that the device is operating properly or that it has failed or malfunctioned. The visible status signal may have an override switch that s turns the signal off. In addition, ultrasonic and microwave devices shall have a built-in mechanism that allows the calibration of the sensitivity of the device to room movement in order to reduce the false sensing of occupants and shall comply with either Subsection A5.209.1.4.1 or A5.209.1.4.2 as applicable. These measures are included in Appendix A5 for Non-Residential Voluntary Measures in the 2010 California Green Building Standards Code (CalGreen). Facilities Planning & Management shall ensure compliance.	Ongoing compliance with CalGreen regulations to reduce cumulative GHG emissions in the SCAB.	Facilities Planning & Management
GH-03. Future buildings exceeding 20,000 ASF shall include installation of field-fabricated fenestration (i.e. windows) and field-fabricated exterior doors only if the compliance documentation demonstrates compliance for the installation using U-factors from Table A5.205.1-A	Ongoing compliance with CalGreen regulations to reduce cumulative GHG emissions in the SCAB.	Facilities Planning & Management

and Solar Heat Gain Coefficient (SHGC) values from Table A5.205.1-B included in Appendix A5 for Non-Residential Voluntary Measures in the 2010 California Green Building Standards Code (CalGreen). Facilities Planning & Management shall ensure compliance.		
GH-04. Future buildings exceeding 70,000 ASF shall either have an energy efficiency of 30 percent above Title 24. Part 6 (e.g. Exceed CEC requirements (Performance Approach), based on the 2008 Energy Efficiency Standards by 30 percent and meet the requirements of Division A45.6) or exceed the latest edition of "Savings by Design, Healthcare Modeling Procedures" by 15 percent, in accordance with Section A.5.203.1.2 CalGreen Tier 2 (OSHPD), as listed in Appendix A5 for Non-Residential Voluntary Measures in the 2010 California Green Building Standards Code (CalGreen). Facilities Planning & Management shall ensure compliance.	Ongoing compliance with CalGreen regulations to reduce cumulative GHG emissions in the SCAB.	Facilities Planning & Management
7. Hazards & Hazardous Materials		
HAZ-01. Prior to demolition or remodeling, onsite inspection and sampling in all buildings included in the 2015 Facility Master Plan Update for renovation or demolition shall be completed by a qualified OSHA professional for asbestos contaminated building materials and the presence of lead-based paint. All final recommendations of the final approved report(s) shall be included in construction contracts and implemented. Facilities Planning & Management shall monitor compliance.	Ongoing compliance with OSHA and SCAQMD regulations for ACBM materials or lead-based paint hazards.	Facilities Planning & Management
HAZ-02. All building plans for laboratories on campus shall be reviewed by the Division of the State Architect (DSA), the State Fire Marshall and the County of Los Angeles Fire Department (Fire Prevention-Engineering Unit) for fire and hazard safety. All final recommendations of the final approved plan(s) shall be included in construction contracts and implemented. Facilities Planning & Management shall monitor compliance.	Ongoing compliance with DSA regulations for fire and hazard safety in campus laboratories.	Facilities Planning & Management

HAZ-03. Prior to construction all proposed storage areas onsite of potential hazardous chemicals and materials and operational plans shall be reviewed by the County of Los Angeles Fire Department. All recommendations of the final approved plans shall be included in construction documents, if applicable and implemented. Facilities Planning & Management shall monitor compliance.	Ongoing compliance with County of Los Angeles Fire Department regulations for storage of potential hazardous chemicals and materials on campus.	Facilities Planning & Management
HAZ-04. All materials generated onsite for the Fire Training Academy that are classified as hazardous by state regulations shall be disposed of consistent with OSHA, CALEPA and LACHA. Fire Technology shall ensure compliance.	Compliance with OSHA, CALEPA and LACHA requirements for operation of fire suppression activities at the Fire Training Academy.	Fire Technology
8. Hydrology/Water Quality		
HYD-01. Future development occurring for buildout of the 2015 FMPU shall install the drainage facilities required by the Utilities Master Plan Infrastructure Plan, as modified by the 2016 Hydrology Study, Psomas May 2016, and Future Hydrology Figure 2d, (Ibid) prior to occupancy. Facilities Planning & Management shall monitor compliance.	Providing adequate drainage facilities for all future development on campus.	Facilities Planning & Management
HYD-02. 7a. The *Master Campus Drainage Plan* shall be updated prior to commencement of grading for the Fire Training Academy and Athletics Education Building projects. The plan shall comply with the *State of California National Pollutant Discharge Elimination System (NPDES) Construction Activities Storm Water Discharge Permit (Construction Permit*) regulations. When construction activities on campus constitute acreage at or above the threshold acreage, the college shall prepare a *Storm Water Pollution Prevention Plan (SWPPP)* and a *Monitoring Program* for the 2012 Facility Master Plan. All recommendations of the final drainage plan(s) approved by DSA shall be included in construction contracts and implemented. Facilities Planning & Management shall monitor compliance.	Ongoing provisions for compliance with Water Quality Management Plans.	Facilities Planning & Management
HYD-03. All drainage improvements shall be consistent with the *Master Campus Drainage Plan*. All recommendations of the approved final drainage plan(s)	Ongoing provisions for compliance with campus drainage plans.	Facilities Planning & Management

shall be included in construction contracts and implemented. Facilities Planning & Management shall monitor compliance.		
HYD-04. Prior to excavation onsite for which the preliminary soils/geology report indicated groundwater may be encountered; any required permit for de-watering shall be obtained from the California Regional Water Quality Control Board, Los Angeles Region. If effluent concentrations exceed permit requirements, a carbon treatment system or equivalent system to remove pollutants shall be utilized prior to discharge. Facilities Planning & Management shall monitor compliance.	Ongoing provisions for compliance with RWQCB regulations.	Facilities Planning & Management
HYD-05. 21b. The college shall obtain all required permits for the Fire Training Academy from the Los Angeles Regional Water Quality Control Board. Fire Technology shall ensure compliance.	Compliance with RWQCB permits for wastewater disposal for Fire Training Academy fire suppression activities.	Fire Technology
9. Land Use/Planning		
LU-01. All future land uses on campus, building locations and square footage (ASF) shall be in substantially consistent with the 2015 Facilities Master Plan Update. Facilities Planning & Management shall monitor compliance.	Ongoing review of consistency between individual projects and 2015 Facility Master Plan Update	Facilities Planning & Management
LU-02. The following Master Plan elements shall be revised to conform to the 2015 Facilities Master Plan Update: (1) Land Use Plan, (2) Conservation Plan, (3) Circulation and Parking Plan. Facilities Planning & Management shall monitor compliance.	Assuring consistency between the 2015 FMPU Land Use Plan and other elements.	Facilities Planning & Management
LU-03. The City of Walnut should revise its General Plan designation for the campus in its next General Plan Update to Community College and the Zoning District to Community College (or another applicable) zoning district so the General Plan and Zoning District are consistent. The Community Development Department of the City of Walnut shall ensure compliance.	Resolving inconsistencies between General Plan designations and campus land uses.	City of Walnut
LU-04. The Facility Master Plan Conservation Plan shall be revised to include approximately 25.6 acre Habitat Mitigation Area for removal of existing California Black Walnut, Coastal Sage Scrub and Non-Native Grassland	The adopted Mt. San Antonio College California Black Walnut Management Plan, Helix Environmental Planning, Inc., September 21, 2012 defines the large 25.6 acres area and the smaller	Facilities Planning & Management

habitats. Facilities Planning & Management shall monitor compliance.	initial CBW replacement habit of 2.02 areas (Figure 4).	
LU-05. Prior to building construction for the Fire Training Academy, the CMPCT shall review the Preliminary Landscaping Plan and a Preliminary Operation and Management Plan for the Fire Training Academy. Facilities Planning & Management shall ensure compliance.	CMPCT oversight of the preliminary plans for the Fire Training Academy.	Facilities Planning & Management
LU-06. Programming for the Auditorium should establish if an adjacent Parking Structure is desirable in Lot B within six months of certification of the Final EIR. A site specific study is required for the Auditorium and/or an adjacent parking structure. Facilities Planning & Management shall ensure compliance.		
10. Noise		
NO-01. All construction activities, except in emergencies or special circumstances, shall be limited to the hours of 7 am to 7 pm Monday-Saturday. Staging areas for construction shall be located away from existing off-site residences. All construction equipment shall use properly operating mufflers. These requirements shall be included in construction contracts and implemented. Facilities Planning & Management shall monitor compliance.	Ongoing of limitation on construction hours to reduce construction noise impacts on adjacent areas.	Facilities Planning & Management
NO-02. Loudspeaker and other public address systems on campus shall be located and adjusted to register no more than 70 dB Lmax at the nearest offsite residences. Facilities Planning & Management shall monitor compliance.	Ongoing restriction of loudspeaker and public address system noise levels to minimize noise impacts on adjacent areas.	Facilities Planning & Management
NO-03. Weekend special events within any athletic field complex such as tournaments, day-long meets, etc. shall be planned to not begin before 7 am on Saturday or 8 am on Sunday. Event Services shall monitor compliance.	Ongoing restriction of event hours to minimize early morning noise impacts on adjacent areas.	Event Services
NO-04. Concrete pouring for Parking Structure J shall be located as far away from residences as possible. Concrete trucks shall use Bonita Drive and Walnut Drive for access. Construction of the parking structure is	Ongoing limitations on location of concrete pouring to minimize noise impacts on adjacent offsite residential areas.	Facilities Planning & Management

limited to the hours of 7 am to 7 pm Monday-Saturday. Planning & Management shall monitor compliance.		
NO-05. The college shall adopt policies and post signs in the parking structure indicating vehicles with alarms may be towed from parking areas if alarms sound for more than five minutes. The Public Safety Department shall ensure compliance.	Ongoing restriction on vehicle alarms to minimize noise impacts on adjacent areas.	Public Safety
NO-06. Construction contracts shall specify that construction equipment vibration impacts with a peak particle velocity (PPV) of 0.04 inches per second or more occurring offsite in a sensitive receptor area shall not exceed 15 minutes in any one hour. Facilities Planning & Management shall monitor compliance.	Minimization of vibration offsite for sensitive receptors from construction equipment operations.	Facilities Planning & Management
11. Open Space, Managed Resources and Working Landscapes		
MR-01. All recommendations in the final geotechnical report(s) for projects included in the 2015 Facility Master Plan Update shall be included in construction contracts and implemented. Facilities Planning & Management shall monitor compliance.	Ongoing requirements to assure public safety from seismic hazards.	Facilities Planning & Management
MR-02. During construction grading and site preparation activities, the Contractor shall monitor all construction activities. In the event a paleontological find or a potential paleontological find is discovered, construction activities shall cease and the Contractor shall inform the Project Manager. A qualified paleontologist shall be contacted to analyze the find and recommend further appropriate measures to reduce further impacts on paleontological resources. Facilities Planning & Management shall monitor compliance.	Ongoing during construction	Facilities Planning & Management
12. Population/Housing		
PH-01. Beginning on January 2016, on January 2020 and every five years, projections of future campus employment shall be forwarded to the Southern California Association of Governments. Human Resources shall monitor compliance.	Ongoing provision for employment projections for SCAG forecasts.	Human Resources

13. Public Services		
PS-01. The net increase in campus wastewater flows shall be projected whenever the Mt. SAC Utility Infrastructure Master Plan (UIMP) is updated for a new campus Facility Master Plan, or within ten years of the last UIMP Update. The District shall obtain the required permits from the Consolidated Sanitation District of Los Angeles County, and pay the required capital facilities fees for the net increase projected in the UIMP Update. Facilities Planning & Management shall ensure compliance.	Ongoing communication of campus circulation and parking conditions for sheriff vehicular response.	Public Safety
PS-02. The Public Safety Department shall project their Department personnel and equipment needs to accommodate the student, staff and facility increases projected in the 2015 Facility Master Plan Update**.** The plan shall provide for student, staff and visitor security upon buildout of the 2015 Facility Master Plan Update. (Expansions of the Code Blue Emergency Phone System and revisions to the assignment of Evening Escorts shall be included in the plan). Public Safety shall ensure compliance	Ongoing provision for maintaining safety for personnel and equipment to serve campus needs at buildout.	Facilities Planning & Management
PS-03. Within six months of certification of the 2015 Final EIR, the Public Safety Department shall complete a security construction plan to address direct and indirect security needs for all construction activities on campus associated with the 2015 Facility Master Plan Update. The special public safety needs of buildings (i.e. demolition, new construction and remodeling), construction sites, transport of construction materials and equipment, construction parking and use of construction equipment shall be addressed. Facilities Planning & Management shall ensure compliance	Ongoing provision for maintaining safety for personnel and equipment to serve campus needs during construction.	Facilities Planning & Management
PS-04. The Athletics Division and the Campus Security Department shall prepare a Security Plan for all new Special Events (i.e. does not include the 2020 Olympic Track & Field Trials) with a maximum daily attendance of 10,000 persons or more. The Security Plan shall be approved by the Board of Trustees a minimum of three	Ongoing provision for maintaining safety for personnel and equipment for any future new special events. None are currently planned. -	Facilities Planning & Management

(3) months prior to the event. Facilities Planning & Management shall ensure compliance.		
PS-05. The Athletics Division and the Campus Security Department shall prepare a Security Plan for the 2020 Olympic Track & Field Trials. The Security Plan shall be approved by the Board of Trustees a minimum of nine (9) months prior to the event. Facilities Planning & Management shall ensure compliance.	Provision for maintaining safety for guests, athletes, students, faculty , staff and volunteers during the event.	Facilities Planning & Management
14. Transportation		
TR-01 to TR-14 are intersection improvements or ramp improvements required for buildout of the 2015 Facilities Master Plan Update		
TR-01. A second EB right-turn lane shall be added to the Grand Avenue and Cameron Avenue intersection. The City of Industry is the Lead Agency and the County of Los Angeles is an interested agency. The City of Industry shall ensure compliance.	Complete required traffic improvements by 2020	Facilities Planning & Management
TP-02. The college shall provide a minimum of 8,017 parking spaces by 2020 and a minimum of 8,716 spaces by 2025. The parking totals exclude the 50 on-street metered spaces along Temple Avenue. The 2025 student headcount projections and parking requirements shall be updated by 1/1/2020. Facilities Planning & Management shall ensure compliance.	Complete required traffic improvements by 2020	Facilities Planning & Management
TR-03. The EB right-turn lane at the Grand Avenue and Temple Avenue intersection shall be converted to a through/right-turn lane. The City of Walnut is the Lead Agency.	Complete required traffic improvements by 2020	Facilities Planning & Management
TR-04. The signal phasing for the Grand Avenue and La Puente Road intersection shall be modified to include an EB right-turn overlap phase (i.e. a right-turn protected arrow). The City of Walnut shall ensure compliance.	Complete required traffic improvements by 2020	Facilities Planning & Management
TR-05. The EB approach shall be restriped to include a dedicated right-turn lane at the Temple Avenue and Mt. SAC Way intersection. The City of Walnut is the Lead Agency.	Complete required traffic improvements by 2020	Facilities Planning & Management
TR-06. Additional improvements at the Temple Avenue and Valley Boulevard intersection are not feasible due to	Complete required traffic improvements by 2020	Facilities Planning & Management

the ROW constraints near the adjacent railroad line. Therefore, further improvements are not feasible. The City of Pomona is the Lead Agency.		
TR-07. When a site plan is completed, a site-specific analysis shall be completed for the Public Transit Center. All recommendations of the traffic analysis shall be completed and the project coordinated with the college, the City of Walnut, the Foothill Transit Agency and if required, the County of Los Angeles Metro Transit Authority. Facilities Planning & Management shall ensure compliance.	Complete required traffic improvements by 2020	Facilities Planning & Management
TR-08. A third NB through-lane is required att he Grand Avenue and Mountaineer Road intersection. However, insufficient ROW is available within the current curb width. Therefore, further improvements are not feasible. The City of Walnut is the Lead Agency.	Complete required traffic improvements by 2025	Facilities Planning & Management
TR-09. The NB approach of the Grand Avenue and Baker Parkway intersection shall be restriped to include a third through-lane. However, this improvement would not fully mitigate the cumulative impact.	Complete required traffic improvements by 2025	Facilities Planning & Management
TR-10. When the preliminary design of the pedestrian bridge on Temple east of Bonita Avenue is available, it shall be reviewed by the Executive Board of Officers of Associated Students, by CMPCT, by the City of Walnut, and DSA. All recommendations of a site-specific traffic analysis shall be implemented. The Lead Agency is the City of Walnut.	Complete required traffic improvements by 2025	Facilities Planning & Management
TR-11. Convert the existing EB right-turn lane to a through/right-turn lane at the Nogales/Amar Road intersection (#1). There is sufficient roadway width at the intersection departure lane in the eastbound direction to accommodate the third through-lane. The City of Walnut is the Lead Agency.	Complete required traffic improvements by 2025	Facilities Planning & Management
TR-12. Restripe the EB approach lane to include a dedicated right-turn lane at the Lemon Avenue and Amar Road intersection (#2). The City of Walnut is the Lead Agency.	Complete required traffic improvements by 2025	Facilities Planning & Management
TR-13. Convert the existing NB right-turn lane to a shared through/right-turn lane at the Grand Avenue and SR-60 EB Ramps (#13). There is sufficient roadway	Complete required traffic improvements by 2025	Facilities Planning & Management

width at the intersection departure in the northbound direction to accommodate the third through lane. The California Department of Transportation is the Lead Agency.		
TR-14. Modify the traffic signal at the Bonita Avenue and Temple Avenue intersection (#15) to include a NB right-turn overlap phase. The City of Walnut is the Lead Agency.	Complete required traffic improvements by 2025	Facilities Planning & Management
TR-15. A third NB through-lane is required at the Grand Avenue and Mountaineer Road intersection. However, insufficient ROW is available within the current curb width. Therefore, further improvements are not feasible. The City of Walnut is the Lead Agency.	Assure pedestrian and vehicular safety during truck hauling activities for the PEP (Phase 1).	Facilities Planning & Management
TR-16 to TR-27 are requirements for hosting the 2020 Olympic Track & Field Trials		
TR-16. Facilities Planning & Management, along with the Local Organizing Committee (LOC) shall prepare a Transportation and Parking Management Plan for the 2020 Olympics Track & Field Trials. All campus parking locations and parking or shuttle fees shall be included in the Plan. If needed, additional security shall be provided at off-campus shuttle lots. All parking attendants (i.e. a minimum of one for each lot) shall have communication devices to communicate with a Campus Parking Supervisor. The Executive Board Officers of the Associated Students (AS) of Mt. SAC shall be given an opportunity to review and comment on the preliminary plan. The Plan shall be substantially complete at least a year (12 months) before the Trials begin and be approved by the Board of Trustees. The timeframe relates to the preparation of registration materials and event websites. Facilities Planning & Management shall ensure compliance.	Implement a traffic and parking plan that provides adequate parking, minimizes congestion and provides opportunities for shuttle use.	Facilities Planning & Management
TR-17. Parking lot locations, vehicle occupancy requirements, and Parking Pass fees shall be published in all registration and event materials, on the event websites, and included in all media information. The Local Organizing Committee (LOC) shall hire students	Distributing information to all registrants, media and the public on parking availability.	Facilities Planning & Management

part-time as parking attendants or if qualified, as shuttle drivers. Event Services shall monitor compliance.		
TR-18. The Local Organizing Committee (LOC) shall provide shuttle bus service as described in Section 3.11.2. The off-campus shuttles shall operate at least three (3.0) hours before the first event of the day for the 2020 Olympic Track & Field Trials and for at least three (3.0) hours after the last event ends. Event Services shall monitor compliance.		Facilities Planning & Management
TR-19. The Local Organizing Committee (LOC) shall conduct two or more workshops for local Chamber of Commerce members and area Hotel Managers at least nine (9) months before the 2020 Olympic Track & Field Trials to inform them of the events, Shuttle Routes and time tables, distribute media packets, answer questions and encourage hotel managers to offer special hotel packages and morning and evening hotel shuttle services between their hotel and the campus free or for a limited fee. The Director of the Local Organizing Committee (LOC) shall ensure compliance.	Distributing information to businesses that provide services to athletics and guests during the event.	Facilities Planning & Management
TR-20. The Transportation and Parking Management Plan for the 2020 Olympic Track & Field Trials shall be based on the information in the Parking Plan in Section 3.11.2. With the stated minimum persons per vehicle, the designated lots provide parking for at least 14,174 guests and 490 faculty/staff on campus during the 2020 Summer Intersession if classes are not in session. The Planning Plan provides sufficient parking without Parking Structure J. Facilities Planning & Management shall ensure compliance.	Implement a traffic and parking plan that provides adequate parking, minimizes congestion and provides opportunities for shuttle use.	Facilities Planning & Management
TR-21. If the 2020 Olympic Track & Field Trials are held during the Summer Intersession and classes are in session, the Local Organizing Committee (LOC) shall implement a Parking Plan based on Section 3.11.2. The Plan shall pre-register faculty and staff for parking on-campus for the week (i.e. not daily). Faculty and staff do not need to pre-register for the weekend. This procedure assures all faculty and staff have easy access to reserved parking during the week. Facilities Planning & Management shall ensure compliance.	Implement a traffic and parking plan that provides adequate parking, minimizes congestion and provides opportunities for shuttle use.	Facilities Planning & Management

TR-22. During registration for the 2020 Olympic Track & Field Trials, registrants may purchase a Parking Pass for a specific on-campus Parking Lot (e.g. Lot F) for an off-campus Parking Pass (e.g. Cal Poly Pomona, Lanterman Developmental Center, Diamond Bar High School or Walnut High School etc.). Parking Passes will be sold for the entire 10-day event, for Session 1 (Day 1 – 4), Day 5 - 6 or Session 2 (Day 7 – 10). No Parking Passes will be issued for the other off-campus shuttle locations. Each registrant who purchases a Parking Pass shall receive a windshield Parking Pass for a specific Parking Lot. Each Parking Pass shall state the Minimum Persons per Vehicle (e. g., Minimum 3.0 Persons per Vehicle). Registration for Athletes and Officials shall begin two (2) weeks before registration for the general public. Facilities Planning & Management shall ensure compliance.	Implement a traffic and parking plan that provides adequate parking, minimizes congestion and provides opportunities for shuttle use.	Facilities Planning & Management
TR-23. With classes not scheduled in the Summer Intersession, the recommended parking plan for the 2020 Olympics Track & Field is Plan B in Section 3.11.2. The plan shall be refined when the Shuttle Route system is finalized (i.e. SE-04). Facilities Planning & Management shall ensure compliance.	Implement a traffic and parking plan that provides adequate parking, minimizes congestion and provides opportunities for shuttle use.	Facilities Planning & Management
TR-24. With classes scheduled in the Summer Intersession, the recommenced parking plan for the 2020 Olympics Track & Field Trials is Plan C in Section 3.11.2. The plan shall be refined when the Shuttle Route system is finalized (i.e. SE-04). An updated focused traffic analysis is required. Facilities Planning & Management shall ensure compliance.	Implement a traffic and parking plan that provides adequate parking, minimizes congestion and provides opportunities for shuttle use.	Facilities Planning & Management
TR-25. For additional reduction in pm peak period conflicts between area commuter traffic and 2020 Olympics Track & Field Trials traffic leaving the final event on Friday or Monday during Session 1, the event schedule shall be revised so guest traffic leaves before the commute period begins after the pm peak commute period ends. Either event schedule revision will result in reducing the number of pm peak period conflicts by two days, and only two of the ten event days during Session	If feasible, revising the preliminary schedule to reduce traffic congestion weekdays during the pm peak period.	Facilities Planning & Management

2 have pm peak conflicts (Table 3.11.8). Facilities Planning & Management shall ensure compliance.		
TR-26. Prior to installation of the Lot F traffic signal, the City of Walnut shall consider lowering the posted travel speed along Temple Avenue near Lot F from 50 mph to 35-40 mph to facilitate access to the Lot F east entry driveway. The Public Works Department of the City of Walnut shall monitor compliance.	Consideration of lower posted travel speeds on Temple Avenue when a signal is warranted at Lot F and Temple Avenue.	City of Walnut
TR-27. Prior to completion of Parking Structure J, the northside leg at the Lot F and Temple Avenue driveway shall be widened. Facilities Planning & Management shall ensure compliance.	Complete required traffic improvements when required	Facilities Planning & Management
TR-28 to TR-40 are requirements for general parking, construction, and transportation impacts		
TR-28. Beginning in 2015, whenever a traffic/parking study for a FMP has not been completed in five (5) years, a new parking study shall be completed. The parking study shall specify the total parking supply required and a timeframe for providing the required number of campus parking spaces. Facilities Planning & Management shall ensure compliance.	Ongoing provision for adequate parking based on the college's recommended most recent headcount parking standard.	Facilities Planning & Management
TR-29. Site specific traffic and parking studies are required by the District for all new Special Events (i.e. excluding the 2020 Olympic Track & Field Trials) with projected maximum daily attendance above 15,000 weekdays (excludes Summer Intersession and campus holidays). Facilities Planning & Management shall ensure compliance.	Studies for new Special Events other than the 2020 Olympics Track & Field Trials	Facilities Planning & Management
TR-30. The following recommendations from the 2002 Mt. San Antonio College Parking Lot and Access Study shall be implemented for onsite improvements: (1) Preferential carpool parking permits and spaces for Special Events and/or special recognition of student and faculty achievements, (2) Additional parking spaces for motorcycles, (3) Additional bicycle racks, (4) Bicycle lockers and/or showers and lockers for cyclists, and (5) Evaluation of reduction in free parking, raising parking fees and/or demand parking prices. The evaluation shall be completed by July 1, 2017 and CMPCT shall issue a		Facilities Planning & Management

recommendation to the Board of Trustees by September 1, 2017. Facilities Planning & Management shall ensure compliance.		
TR-31. For hauling operations of more than 15 trucks per hour or more than 100,000 cubic yards, a Truck Haul Plan (THP) approved by the Director of Facilities Planning & Management, with consultation with adjacent cities, shall be implemented. The Plan shall consider traffic counts, routes, hours/day of hauling, avoidance of am and pm peak hours, intersection geometrics, access/egress constraints, and pieces construction equipment onsite. Recommendations shall be made concerning all hauling operations to minimize traffic and pedestrian congestion on-campus and off-campus and included in construction logistics plans. If required, all haul trucks shall be radio-dispatched. Light duty trucks with a weight of no more than 8,500 pounds are exempt from the THP requirements. Facilities Planning & Management shall ensure compliance	Assure pedestrian safety and reduce vehicular congestion along haul routes for campus construction hauling during peak hour traffic.	Facilities Planning & Management
TR-32. Contractors shall submit traffic handling plans and other construction documents to Facilities Planning & Management prior to commencement of demolition or grading. The plans and documents shall comply with the *Work Area Traffic Control Handbook (WATCH)*. Facilities Planning & Management shall monitor compliance.	Ongoing assurance of public safety at or near project construction sites.	Facilities Planning & Management
TR-33. Demolition and construction contracts shall include plans for temporary sidewalk closure, pedestrian safety on adjacent sidewalks, vehicle and pedestrian safety along the project perimeter, and along construction equipment haul routes on campus. These plans shall be reviewed by the Public Safety Department and approved by Facilities Planning & Management. Facilities Planning & Management shall monitor compliance.	Ongoing assurance of public safety at or near project construction sites.	Facilities Planning & Management
TR-34. Demolition and construction contracts shall include plans for construction worker parking areas on campus. Facilities Planning & Management shall monitor compliance.	Ongoing provisions for construction employee parking areas near construction sites or in designated areas with permits.	Facilities Planning & Management

TR-35. Each project site shall be adequately barricaded with temporary fencing to secure construction equipment, minimize trespassing, vandalism, short-cut attractions, and reduce hazards during demolition and construction. Facilities Planning & Management shall monitor compliance.	Ongoing provisions for construction security for individual projects and assurance of public safety.	Facilities Planning & Management
TR-36. Construction contractors shall post a flag person at locations near a construction site during major truck hauling activities to protect pedestrians from conflicts with heavy equipment entering or leaving the project site. Facilities Planning & Management shall monitor compliance.	Ongoing provision for public safety from truck hauling activities near pedestrian paths.	Facilities Planning & Management
TR-37. Upon completion of construction documents, the Public Safety Department shall complete a parking, pedestrian, circulation and signage plan to address direct and indirect public safety needs for parking on campus during the construction period. For each major project, the changing parking demands created by construction, increased student enrollments and new building locations shall be addressed. Facilities Planning & Management shall ensure compliance.	Ongoing provision for maintaining adequate parking during construction periods.	Facilities Planning & Management
TR-38. During the preparation of campus grading, landscape and street improvement plans, the sight distance at each project access on campus shall be reviewed with respect to Caltrans standards. Facilities Planning & Management shall monitor compliance.	Provision for sight distances for public safety on campus near construction sites.	Facilities Planning & Management
TR-39. Onsite traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project. Facilities Planning & Management shall monitor compliance.	Provision for required onsite traffic signs and striping.	Facilities Planning & Management
TR-40. The *Master Facilities Transportation Plan* shall be updated and shall specify all revisions and additions to parking areas, parking controls, public bus stops, private shuttle operations, shuttle stops and signage within the campus needed for buildout of the 2015 Facility Master Plan Update. All recommendations of the approved transportation plan shall be included in construction contracts and implemented. Facilities Planning & Management shall monitor compliance.	Provision for adequate transportation facilities and services for buildout of the 2015 Facility Master Plan Update.	Facilities Planning & Management

TR-41 to TR-48 are requirements for public transit impacts		
TR-41. The Bursar Office at Mt. San Antonio College shall participate in the Metrolink College Student Discount Pass Program. Registration materials for each term shall inform student of its availability. Auxiliary Services shall monitor compliance.	Ongoing provision for bus passes for campus students.	Auxiliary Services
TR-42. Schedule/fee information for Foothill Transit (including the Go Pass), Metrolink and the County of Los Angeles Metropolitan Transit Authority shall be made available for students for each semester. Auxiliary Services shall monitor compliance.	Ongoing provision for up to date information on area transportation services.	Auxiliary Services
TR-43. The Campus Master Plan Coordination Team (CMPCT) shall review the preliminary site plan for the Public Transportation Center and recommend any changes needed in the Pedestrian Circulation and Vehicular Circulation exhibits in the 2015 Facility Master Plan Update to provide safe pedestrian paths, including Americans with Disability Act requirements for students to access the Public Transportation Center. Facilities Planning & Management shall ensure compliance.	Ongoing provision for adequate pedestrian paths and vehicular circulation near the Public Transit Center.	Facilities Planning & Management
TR-44. The Mt. San Antonio College District shall complete a Memorandum of Understanding (MOU) with participating transit agencies for campus public transit center projects. The MOU shall specify all financial, legal, insurance, operation and maintenance responsibilities for each party. Facilities Planning & Management shall ensure compliance.	Provision for legal agreements for operation and funding of the Public Transit Center.	Facilities Planning & Management
TR-45. The District shall negotiate an agreement with additional transit agencies serving the campus to provide an unlimited bus pass for a fixed student transportation fee per semester by January 1, 2018. Facilities Planning & Management shall ensure compliance.	Complete required traffic improvements by 2018	Facilities Planning & Management
TR-46. The Executive Board of Associated Students shall be given an opportunity to review and comment on campus public transit center issues prior to CMPCT final review. Facilities Planning & Management shall ensure compliance.	Provide opportunities for student feedback on preliminary plans for the public transit center.	Facilities Planning & Management

TR-47. The College shall meet with Cal Poly to discuss a joint Cal Poly campus shuttle service by July 1, 2017. Facilities Planning & Management shall monitor compliance.	Explore opportunities for shuttle use between Mt. SAC and Cal Poly.	Facilities Planning & Management
TR-49 to TR-58 are requirements for other transportation issues (TR-48 is no longer being used as an index)		
TR-49. When traffic access is allowed (gate controlled) at the southside leg of the Temple Avenue and Lot F driveway, manual traffic control (campus or City provided traffic control personnel) shall be utilized. The Athletics Department and Facilities Planning & Management shall ensure compliance.	Provision for required traffic controls along Temple Avenue at the Lot F intersection during special events when the Lot F intersection is not signalized.	Athletics Department and Facilities Planning & Management
TR-50. All truck hauling from the borrow site to the West Parcel shall have radio-communication to assure that trucks do not create traffic congestion at area intersections, in the left-turn pocket at Grand Avenue and Temple Avenue and at the West Parcel driveway. In addition, haul trucks on the designated haul route shall be spaced to assure that trucks do not impede traffic flow along the haul route, (a) All construction hauling for the West Parcel project shall occur between the hours of 8:30 am to 4:30 pm Monday-Saturday to avoid the am and pm peak hour traffic along the haul route, (b) The hauling contractor shall maintain radio-communication with all trucks at all times, and have a designated person at the West Parcel and at the borrow site who can inform truck drivers at the borrow site if the spacing needs to be adjusted. All truck drivers shall be oriented to the hauling and communication procedures prior to initiating haul activities. The project manager shall monitor truck hauling to assure spacing requirements and hauling activities do not exceed the requirements, (c) Truck haul drivers shall be instructed to maintain proper spacing along the entire return route from the	Assure pedestrian and vehicular safety during truck hauling activities for the West Parcel Solar project.	Facilities Planning & Management

West Parcel to the borrow site. When needed, the drivers should be in radio-communication along the return route to prevent congestion. However, visual contract between trucks may be sufficient to provide spacing without a lot of radio communication on the return haul route and; (d) For 95% of the time, driver, drivers shall maintain a minimum of 80 feet separation between trucks on the return route from the West Parcel to the borrow site on roadway links. This restriction does not apply to intersections, which signalization may cause delays. Facilities Planning & Management shall monitor compliance.		
TR-51. Programming for the Auditorium should establish if an adjacent Parking Structure is desirable in Lot B within six months of certification of the Final EIR. A site specific study is required for the Auditorium and/or an adjacent parking structure. Facilities Planning & Management shall ensure compliance.	Explore advance planning needs for an additional parking structure near the Auditorium.	Facilities Planning & Management
TR-52. The City of Walnut shall consider restricting left-turn movements eastbound along Amar Road east of Country Hollow during the am peak hour, implementation of a resident parking program or restrictions on street parking during certain hours, to minimize student-related traffic in the adjacent neighborhoods west of Grand Avenue south of Collegewood Drive. The Public Works Department of the City of Walnut shall monitor compliance.	Provision for required vehicle turning movement restrictions for vehicular safety.	City of Walnut
TR-53. Truck hauling for Phase 2 grading of the PEP site shall be limited to 8 hours a day and a maximum of 18 trucks per hour. Facilities Planning & Management shall ensure compliance.	Truck hauling for PEP (Phase 2)	Facilities Planning & Management
TR-54. When a site plan is completed, a site specific analysis shall be completed for the Public Transit Center. All recommendations of the traffic analysis shall be completed and the project coordinated with the college, the City of Walnut, the Foothill Transit Agency and if required, the County of Los Angeles Metro Transit		

Authority. Facilities Planning & Management shall ensure compliance.		
TR-55. The Public Safety Department shall update their evacuation plans for an extreme emergency by January 1, 2017. The updated emergency evacuation plan shall refine the preliminary plan included in the Final EIR and distribute vehicular traffic from campus lots to Grand Avenue and Temple Avenue in the most efficient and safe manner as possible. Public safety officers shall be deployed to pre-assigned locations and tasks to direct vehicular traffic in pre-determined directions defined in the plan. Facilities Planning & Management shall ensure compliance.	Update emergency evacuation plans for immediate campus evacuation of all parked vehicles.	Facilities Planning & Management
TR-56. For hauling operations of more than 15 trucks per hour and more than 100,000 cubic yards, a Truck Haul Plan (THP) approved by the Director of Facilities Planning & Management, shall be implemented. The THP shall consider traffic counts, haul routes, hours/days of hauling, avoidance of peak hours, intersection geometrics, access/egress constraints, truck load capacity, and pieces of construction equipment on-site and shall specify requirements to minimize traffic and pedestrian congestion on-campus and off-campus. The THP shall be required in all applicable construction logistics plans. If necessary, all haul trucks shall utilize radio communication to improve traffic flow and minimize congestion. Light duty trucks with a weight of no more than 8,500 pounds are exempted from a THP. Facilities Planning & Management shall ensure compliance.	Minimizing traffic impacts from truck hauling.	Facilities Planning & Management
TR-57. Beginning in 2015, whenever a traffic/parking study for a Facilities Master Plan has not been completed in five (5) years, a new parking study shall be completed. The parking study shall specify the total parking supply required and a timeframe for providing the required number of campus parking spaces. Facilities Planning & Management shall ensure compliance.	Providing ample parking supply when enrollment changes.	Facilities Planning & Management
TR-58. The Public Safety Department shall update their evacuation plans for an extreme emergency by Janury 1, 2017. The updated emergency evacuation plan shall refine the preliminary plan included in the Final EIR and	Having a current plan for minimizing the time required to evacuate vehicles and personnel away from campus in an emergency evacuation.	Facilities Planning & Management

distribute vehicular traffic from campus lots to Grand Avenue and Temple Avenue in the most efficient and safe manner as possible. Public safety officers shall be deployed to pre-assigned locations and tasks to direct vehicular traffic in pre-determined directions defined in the plan. Facilities Planning & Management shall ensure compliance.		
15. Utilities/Service Systems		
SS-01: Within six months of certification of the Final EIR, the Utilities Master Infrastructure Plan shall be updated to accommodate the projected 2019 – 2020 student enrollment and the facilities included in the buildout of the Facilities Master Plan Update in 2020. Facilities Planning & Management shall monitor compliance.	Resolution of phasing issues related to infrastructure, new facilitates and student enrollment increases.	Facilities Planning & Management
SS-02. The *Master Facilities Infrastructure Plan* shall be revised for buildout of the 2015 Facility Master Plan Update. The plan shall specify all revisions and additions to water lines from Three Valleys Municipal Water District's PM-1 connector to the campus, and lines within the campus needed for buildout of the 2015 Facility Master Plan Update. All recommendations of the approved infrastructure plan shall be included in construction contracts and implemented. Facilities Planning & Management shall monitor compliance.	Ongoing provision for ample water supplies on campus.	Facilities Planning & Management
SS-03. The college shall obtain permits and water commitments required by the Three Valleys Municipal Water District for water service to all projects. These requirements shall be included I construction contracts. TVMWD has requested advance notification whenever demand may increase by more than 50 percent so future planning may be completed. Facilities Planning & Management shall monitor compliance.	Ongoing provision for ample water supplies on campus.	Facilities Planning & Management
SS-04. The *Master Facilities Infrastructure Plan* shall be updated and shall specify all revisions and additions to sewer lines within the campus needed for buildout of the 2015 Facility Master Plan Update. All recommendations of the approved infrastructure plan shall be included in	Ongoing provision for adequate sewer line capacity on campus.	Facilities Planning & Management

construction contracts and implemented. Facilities Planning & Management shall monitor compliance.		
SS-05. The *Master Facilities Infrastructure Plan* shall be updated and shall specify all revisions and additions to the electrical distribution system within the campus needed for buildout of the 2015 Facility Master Plan Update. All recommendations of the approved infrastructure plan shall be included in construction contracts and implemented. Facilities Planning	Provision for adequate electrical system for buildout of the 2015 Facility Master Plan Update.	Facilities Planning & Management
SS-06. For each project, the college shall obtain all approval(s) required by Southern California Edison for electrical service. These requirements shall be included in construction contracts for each project. Facilities Planning & Management shall monitor compliance.	Ongoing provision for electrical service for new projects from SCE.	Facilities Planning & Management
SS-07. For each project**,** the college shall obtain all permits required by the Southern California Gas Company for natural gas service. These requirements shall be included in construction contracts and implemented. Facilities Planning & Management shall monitor compliance.	Ongoing provision for natural gas service for new projects from SCG.	Facilities Planning & Management
SS-08. The *Master Facilities Infrastructure Plan* shall be updated and shall specify all revisions and additions to solid waste collection systems, storage and transfer within the campus needed for buildout of the 2015 Facility Master Plan Update. All recommendations of the approved infrastructure plan shall be included in construction contracts and implemented. (Contracts with independent trash haulers are not included in these requirements). Facilities Planning & Management shall monitor compliance.	Provision for adequate solid waste facilities on campus for buildout of the 2015 Facility Master Plan Update.	Facilities Planning & Management
Source: SID LINDMARK, AICP, September 29, 2016		