Winery and Farm Brewery Zoning Text Amendment Project

SCH# 2015072019

Draft Environmental Impact Report

Volume II of II
Appendices E - G

Prepared for
Placer County

April 2019

Prepared by

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APPENDIX E

Winery Ordinance (Existing)

Placer County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Quality Restaurant	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Grading - Construction not modeled

Trips and VMT - Construction not modeled

Vehicle Trips - Based on Traffic Report prepared by KD Anderson

Table Name	Column Name	Default Value	New Value
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	VendorTripLength	6.60	0.00
tblTripsAndVMT	WorkerTripLength	16.80	0.00
tblVehicleTrips	ST_TR	94.36	904.00
tblVehicleTrips	SU_TR	72.16	904.00
tblVehicleTrips	WD_TR	89.95	904.00

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					
2018	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
Maximum	**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**

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					
2018	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
Maximum	**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**

	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	4.3700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	5.9000e-004	5.3600e-003	4.5100e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	14.9586	14.9586	5.2000e-004	1.9000e-004	15.0290
Mobile	0.2667	1.6055	2.3187	6.4200e-003	0.3989	8.3200e-003	0.4072	0.1073	7.8700e-003	0.1152	0.0000	590.1592	590.1592	0.0364	0.0000	591.0682
Waste						0.0000	0.0000		0.0000	0.0000	0.1847	0.0000	0.1847	0.0109	0.0000	0.4576
Water						0.0000	0.0000		0.0000	0.0000	0.0963	0.4975	0.5938	9.9100e-003	2.4000e-004	0.9126
Total	**0.2716**	**1.6108**	**2.3232**	**6.4500e-003**	**0.3989**	**8.7300e-003**	**0.4077**	**0.1073**	**8.2800e-003**	**0.1156**	**0.2810**	**605.6153**	**605.8963**	**0.0577**	**4.3000e-004**	**607.4676**

2.2 Overall Operational

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	4.3700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	5.9000e-004	5.3600e-003	4.5100e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	14.9586	14.9586	5.2000e-004	1.9000e-004	15.0290
Mobile	0.2667	1.6055	2.3187	6.4200e-003	0.3989	8.3200e-003	0.4072	0.1073	7.8700e-003	0.1152	0.0000	590.1592	590.1592	0.0364	0.0000	591.0682
Waste						0.0000	0.0000		0.0000	0.0000	0.1847	0.0000	0.1847	0.0109	0.0000	0.4576
Water						0.0000	0.0000		0.0000	0.0000	0.0963	0.4975	0.5938	9.9100e-003	2.4000e-004	0.9126
Total	**0.2716**	**1.6108**	**2.3232**	**6.4500e-003**	**0.3989**	**8.7300e-003**	**0.4077**	**0.1073**	**8.2800e-003**	**0.1156**	**0.2810**	**605.6153**	**605.8963**	**0.0577**	**4.3000e-004**	**607.4676**

	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	Site Preparation	Site Preparation	12/15/2018	12/17/2018	5	1	

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; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	0.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37

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
Site Preparation	0	0.00	0.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 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	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	**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**

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	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
Total	**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**

3.2 Site Preparation - 2018

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	**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**

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	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
Total	**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**

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	0.2667	1.6055	2.3187	6.4200e-003	0.3989	8.3200e-003	0.4072	0.1073	7.8700e-003	0.1152	0.0000	590.1592	590.1592	0.0364	0.0000	591.0682
Unmitigated	0.2667	1.6055	2.3187	6.4200e-003	0.3989	8.3200e-003	0.4072	0.1073	7.8700e-003	0.1152	0.0000	590.1592	590.1592	0.0364	0.0000	591.0682

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Quality Restaurant	904.00	904.00	904.00	1,073,414	1,073,414
Total	904.00	904.00	904.00	1,073,414	1,073,414

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
Quality Restaurant	14.70	6.60	6.60	12.00	69.00	19.00	38	18	44

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Quality Restaurant	0.483320	0.042482	0.220179	0.137288	0.028029	0.006922	0.026094	0.044447	0.001489	0.001255	0.006257	0.000793	0.001444

5.0 Energy Detail

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	9.1201	9.1201	4.1000e-004	9.0000e-005	9.1558
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	9.1201	9.1201	4.1000e-004	9.0000e-005	9.1558
NaturalGas Mitigated	5.9000e-004	5.3600e-003	4.5100e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	5.8385	5.8385	1.1000e-004	1.1000e-004	5.8732
NaturalGas Unmitigated	5.9000e-004	5.3600e-003	4.5100e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	5.8385	5.8385	1.1000e-004	1.1000e-004	5.8732

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					
Quality Restaurant	109410	5.9000e-004	5.3600e-003	4.5100e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	5.8385	5.8385	1.1000e-004	1.1000e-004	5.8732
Total		**5.9000e-004**	**5.3600e-003**	**4.5100e-003**	**3.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**5.8385**	**5.8385**	**1.1000e-004**	**1.1000e-004**	**5.8732**

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					
Quality Restaurant	109410	5.9000e-004	5.3600e-003	4.5100e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	5.8385	5.8385	1.1000e-004	1.1000e-004	5.8732
Total		**5.9000e-004**	**5.3600e-003**	**4.5100e-003**	**3.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**5.8385**	**5.8385**	**1.1000e-004**	**1.1000e-004**	**5.8732**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Quality Restaurant	31350	9.1201	4.1000e-004	9.0000e-005	9.1558
Total		**9.1201**	**4.1000e-004**	**9.0000e-005**	**9.1558**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Quality Restaurant	31350	9.1201	4.1000e-004	9.0000e-005	9.1558
Total		**9.1201**	**4.1000e-004**	**9.0000e-005**	**9.1558**

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	4.3700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	4.3700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

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	4.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**4.3700e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

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	tons/yr										MT/yr					
Architectural Coating	4.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**4.3700e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.5938	9.9100e-003	2.4000e-004	0.9126
Unmitigated	0.5938	9.9100e-003	2.4000e-004	0.9126

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Quality Restaurant	0.303534 / 0.0193745	0.5938	9.9100e-003	2.4000e-004	0.9126
Total		**0.5938**	**9.9100e-003**	**2.4000e-004**	**0.9126**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Quality Restaurant	0.303534 / 0.0193745	0.5938	9.9100e-003	2.4000e-004	0.9126
Total		**0.5938**	**9.9100e-003**	**2.4000e-004**	**0.9126**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.1847	0.0109	0.0000	0.4576
Unmitigated	0.1847	0.0109	0.0000	0.4576

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Quality Restaurant	0.91	0.1847	0.0109	0.0000	0.4576
Total		**0.1847**	**0.0109**	**0.0000**	**0.4576**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Quality Restaurant	0.91	0.1847	0.0109	0.0000	0.4576
Total		**0.1847**	**0.0109**	**0.0000**	**0.4576**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Winery Ordinance (Existing)

Placer County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Quality Restaurant	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Grading - Construction not modeled

Trips and VMT - Construction not modeled

Vehicle Trips - Based on Traffic Report prepared by KD Anderson

Table Name	Column Name	Default Value	New Value
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	VendorTripLength	6.60	0.00
tblTripsAndVMT	WorkerTripLength	16.80	0.00
tblVehicleTrips	ST_TR	94.36	904.00
tblVehicleTrips	SU_TR	72.16	904.00
tblVehicleTrips	WD_TR	89.95	904.00

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					
2018	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
Maximum	**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**

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					
2018	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
Maximum	**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**

	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	0.0240	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747
Mobile	1.8114	8.6597	12.7113	0.0375	2.2907	0.0452	2.3359	0.6138	0.0427	0.6565		3,803.6605	3,803.6605	0.2133		3,808.9939
Total	**1.8385**	**8.6891**	**12.7361**	**0.0377**	**2.2907**	**0.0474**	**2.3381**	**0.6138**	**0.0449**	**0.6588**		**3,838.9258**	**3,838.9258**	**0.2140**	**6.5000e-004**	**3,844.4688**

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	0.0240	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747
Mobile	1.8114	8.6597	12.7113	0.0375	2.2907	0.0452	2.3359	0.6138	0.0427	0.6565		3,803.6605	3,803.6605	0.2133		3,808.9939
Total	**1.8385**	**8.6891**	**12.7361**	**0.0377**	**2.2907**	**0.0474**	**2.3381**	**0.6138**	**0.0449**	**0.6588**		**3,838.9258**	**3,838.9258**	**0.2140**	**6.5000e-004**	**3,844.4688**

	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	Site Preparation	Site Preparation	12/15/2018	12/17/2018	5	1	

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; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	0.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37

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
Site Preparation	0	0.00	0.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 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					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**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**

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	0.0000	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
Total	**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**

3.2 Site Preparation - 2018

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	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
Total	**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**

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	0.0000	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
Total	**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**

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	1.8114	8.6597	12.7113	0.0375	2.2907	0.0452	2.3359	0.6138	0.0427	0.6565		3,803.6605	3,803.6605	0.2133		3,808.9939
Unmitigated	1.8114	8.6597	12.7113	0.0375	2.2907	0.0452	2.3359	0.6138	0.0427	0.6565		3,803.6605	3,803.6605	0.2133		3,808.9939

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Quality Restaurant	904.00	904.00	904.00	1,073,414	1,073,414
Total	904.00	904.00	904.00	1,073,414	1,073,414

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
Quality Restaurant	14.70	6.60	6.60	12.00	69.00	19.00	38	18	44

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Quality Restaurant	0.483320	0.042482	0.220179	0.137288	0.028029	0.006922	0.026094	0.044447	0.001489	0.001255	0.006257	0.000793	0.001444

5.0 Energy Detail

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	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747
NaturalGas Unmitigated	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747

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					
Quality Restaurant	299.753	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747
Total		**3.2300e-003**	**0.0294**	**0.0247**	**1.8000e-004**		**2.2300e-003**	**2.2300e-003**		**2.2300e-003**	**2.2300e-003**		**35.2651**	**35.2651**	**6.8000e-004**	**6.5000e-004**	**35.4747**

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					
Quality Restaurant	0.299753	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747
Total		**3.2300e-003**	**0.0294**	**0.0247**	**1.8000e-004**		**2.2300e-003**	**2.2300e-003**		**2.2300e-003**	**2.2300e-003**		**35.2651**	**35.2651**	**6.8000e-004**	**6.5000e-004**	**35.4747**

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	0.0240	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.0240	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

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	2.5400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0240**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

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	2.5400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0240**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

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 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Winery Ordinance (Existing)

Placer County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Quality Restaurant	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Grading - Construction not modeled

Trips and VMT - Construction not modeled

Vehicle Trips - Based on Traffic Report prepared by KD Anderson

Table Name	Column Name	Default Value	New Value
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	VendorTripLength	6.60	0.00
tblTripsAndVMT	WorkerTripLength	16.80	0.00
tblVehicleTrips	ST_TR	94.36	904.00
tblVehicleTrips	SU_TR	72.16	904.00
tblVehicleTrips	WD_TR	89.95	904.00

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					
2018	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
Maximum	**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**

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					
2018	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
Maximum	**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**

	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	0.0240	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747
Mobile	1.4202	8.8613	13.8115	0.0344	2.2907	0.0466	2.3373	0.6138	0.0441	0.6579		3,482.1044	3,482.1044	0.2327		3,487.9217
Total	**1.4474**	**8.8907**	**13.8363**	**0.0346**	**2.2907**	**0.0489**	**2.3395**	**0.6138**	**0.0463**	**0.6601**		**3,517.3697**	**3,517.3697**	**0.2334**	**6.5000e-004**	**3,523.3966**

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	0.0240	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747
Mobile	1.4202	8.8613	13.8115	0.0344	2.2907	0.0466	2.3373	0.6138	0.0441	0.6579		3,482.1044	3,482.1044	0.2327		3,487.9217
Total	**1.4474**	**8.8907**	**13.8363**	**0.0346**	**2.2907**	**0.0489**	**2.3395**	**0.6138**	**0.0463**	**0.6601**		**3,517.3697**	**3,517.3697**	**0.2334**	**6.5000e-004**	**3,523.3966**

	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	Site Preparation	Site Preparation	12/15/2018	12/17/2018	5	1	

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; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	0.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37

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
Site Preparation	0	0.00	0.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 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					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**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**

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	0.0000	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
Total	**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**

3.2 Site Preparation - 2018

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	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
Total	**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**

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	0.0000	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
Total	**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**

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	1.4202	8.8613	13.8115	0.0344	2.2907	0.0466	2.3373	0.6138	0.0441	0.6579		3,482.1044	3,482.1044	0.2327		3,487.9217
Unmitigated	1.4202	8.8613	13.8115	0.0344	2.2907	0.0466	2.3373	0.6138	0.0441	0.6579		3,482.1044	3,482.1044	0.2327		3,487.9217

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Quality Restaurant	904.00	904.00	904.00	1,073,414	1,073,414
Total	904.00	904.00	904.00	1,073,414	1,073,414

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
Quality Restaurant	14.70	6.60	6.60	12.00	69.00	19.00	38	18	44

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Quality Restaurant	0.483320	0.042482	0.220179	0.137288	0.028029	0.006922	0.026094	0.044447	0.001489	0.001255	0.006257	0.000793	0.001444

5.0 Energy Detail

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	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747
NaturalGas Unmitigated	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747

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					
Quality Restaurant	299.753	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747
Total		**3.2300e-003**	**0.0294**	**0.0247**	**1.8000e-004**		**2.2300e-003**	**2.2300e-003**		**2.2300e-003**	**2.2300e-003**		**35.2651**	**35.2651**	**6.8000e-004**	**6.5000e-004**	**35.4747**

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					
Quality Restaurant	0.299753	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747
Total		**3.2300e-003**	**0.0294**	**0.0247**	**1.8000e-004**		**2.2300e-003**	**2.2300e-003**		**2.2300e-003**	**2.2300e-003**		**35.2651**	**35.2651**	**6.8000e-004**	**6.5000e-004**	**35.4747**

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	0.0240	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.0240	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

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	2.5400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0240**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

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	2.5400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0240**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

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 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Winery Ordinance (Existing)

Placer County APCD Air District, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Graders	Diesel	No Change	0	0	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	0	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/ Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction			
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction			
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction		Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			

No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	100.00
No	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Mitigation Measures	Input Value

Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

Winery Ordinance (Cumulative)

Placer County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Quality Restaurant	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Trips and VMT - Construction not modeled

Grading - Construction not modeled

Vehicle Trips - Based on Traffic Report prepared by KD Anderson

Table Name	Column Name	Default Value	New Value
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	VendorTripLength	6.60	0.00
tblTripsAndVMT	WorkerTripLength	16.80	0.00
tblVehicleTrips	ST_TR	94.36	3,728.00
tblVehicleTrips	SU_TR	72.16	3,728.00
tblVehicleTrips	WD_TR	89.95	3,728.00

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					
2018	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
Maximum	**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**

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					
2018	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
Maximum	**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**

	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	4.3700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	5.9000e-004	5.3600e-003	4.5100e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	14.9586	14.9586	5.2000e-004	1.9000e-004	15.0290
Mobile	0.4304	4.2345	3.6476	0.0196	1.6447	8.8600e-003	1.6535	0.4423	8.2600e-003	0.4505	0.0000	1,817.0008	1,817.0008	0.0639	0.0000	1,818.5991
Waste						0.0000	0.0000		0.0000	0.0000	0.1847	0.0000	0.1847	0.0109	0.0000	0.4576
Water						0.0000	0.0000		0.0000	0.0000	0.0963	0.4975	0.5938	9.9100e-003	2.4000e-004	0.9126
Total	**0.4353**	**4.2399**	**3.6521**	**0.0196**	**1.6447**	**9.2700e-003**	**1.6540**	**0.4423**	**8.6700e-003**	**0.4510**	**0.2810**	**1,832.4570**	**1,832.7380**	**0.0853**	**4.3000e-004**	**1,834.9985**

2.2 Overall Operational

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	4.3700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	5.9000e-004	5.3600e-003	4.5100e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	14.9586	14.9586	5.2000e-004	1.9000e-004	15.0290
Mobile	0.4304	4.2345	3.6476	0.0196	1.6447	8.8600e-003	1.6535	0.4423	8.2600e-003	0.4505	0.0000	1,817.0008	1,817.0008	0.0639	0.0000	1,818.5991
Waste						0.0000	0.0000		0.0000	0.0000	0.1847	0.0000	0.1847	0.0109	0.0000	0.4576
Water						0.0000	0.0000		0.0000	0.0000	0.0963	0.4975	0.5938	9.9100e-003	2.4000e-004	0.9126
Total	**0.4353**	**4.2399**	**3.6521**	**0.0196**	**1.6447**	**9.2700e-003**	**1.6540**	**0.4423**	**8.6700e-003**	**0.4510**	**0.2810**	**1,832.4570**	**1,832.7380**	**0.0853**	**4.3000e-004**	**1,834.9985**

	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	Site Preparation	Site Preparation	12/15/2018	12/17/2018	5	1	

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; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	0.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37

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
Site Preparation	0	0.00	0.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 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	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	**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**

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	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
Total	**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**

3.2 Site Preparation - 2018

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	**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**

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	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
Total	**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**

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	0.4304	4.2345	3.6476	0.0196	1.6447	8.8600e-003	1.6535	0.4423	8.2600e-003	0.4505	0.0000	1,817.0008	1,817.0008	0.0639	0.0000	1,818.5991
Unmitigated	0.4304	4.2345	3.6476	0.0196	1.6447	8.8600e-003	1.6535	0.4423	8.2600e-003	0.4505	0.0000	1,817.0008	1,817.0008	0.0639	0.0000	1,818.5991

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Quality Restaurant	3,728.00	3,728.00	3728.00	4,426,644	4,426,644
Total	3,728.00	3,728.00	3,728.00	4,426,644	4,426,644

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
Quality Restaurant	14.70	6.60	6.60	12.00	69.00	19.00	38	18	44

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Quality Restaurant	0.527250	0.035836	0.222225	0.107731	0.011132	0.004467	0.036101	0.046533	0.001298	0.001082	0.005056	0.000682	0.000607

5.0 Energy Detail

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	9.1201	9.1201	4.1000e-004	9.0000e-005	9.1558
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	9.1201	9.1201	4.1000e-004	9.0000e-005	9.1558
NaturalGas Mitigated	5.9000e-004	5.3600e-003	4.5100e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	5.8385	5.8385	1.1000e-004	1.1000e-004	5.8732
NaturalGas Unmitigated	5.9000e-004	5.3600e-003	4.5100e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	5.8385	5.8385	1.1000e-004	1.1000e-004	5.8732

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					
Quality Restaurant	109410	5.9000e-004	5.3600e-003	4.5100e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	5.8385	5.8385	1.1000e-004	1.1000e-004	5.8732
Total		**5.9000e-004**	**5.3600e-003**	**4.5100e-003**	**3.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**5.8385**	**5.8385**	**1.1000e-004**	**1.1000e-004**	**5.8732**

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					
Quality Restaurant	109410	5.9000e-004	5.3600e-003	4.5100e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	5.8385	5.8385	1.1000e-004	1.1000e-004	5.8732
Total		**5.9000e-004**	**5.3600e-003**	**4.5100e-003**	**3.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**5.8385**	**5.8385**	**1.1000e-004**	**1.1000e-004**	**5.8732**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Quality Restaurant	31350	9.1201	4.1000e-004	9.0000e-005	9.1558
Total		**9.1201**	**4.1000e-004**	**9.0000e-005**	**9.1558**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Quality Restaurant	31350	9.1201	4.1000e-004	9.0000e-005	9.1558
Total		**9.1201**	**4.1000e-004**	**9.0000e-005**	**9.1558**

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	4.3700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	4.3700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

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	4.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**4.3700e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

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	tons/yr										MT/yr					
Architectural Coating	4.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**4.3700e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.5938	9.9100e-003	2.4000e-004	0.9126
Unmitigated	0.5938	9.9100e-003	2.4000e-004	0.9126

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Quality Restaurant	0.303534 / 0.0193745	0.5938	9.9100e-003	2.4000e-004	0.9126
Total		**0.5938**	**9.9100e-003**	**2.4000e-004**	**0.9126**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Quality Restaurant	0.303534 / 0.0193745	0.5938	9.9100e-003	2.4000e-004	0.9126
Total		**0.5938**	**9.9100e-003**	**2.4000e-004**	**0.9126**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.1847	0.0109	0.0000	0.4576
Unmitigated	0.1847	0.0109	0.0000	0.4576

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Quality Restaurant	0.91	0.1847	0.0109	0.0000	0.4576
Total		**0.1847**	**0.0109**	**0.0000**	**0.4576**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Quality Restaurant	0.91	0.1847	0.0109	0.0000	0.4576
Total		**0.1847**	**0.0109**	**0.0000**	**0.4576**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Winery Ordinance (Cumulative)

Placer County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Quality Restaurant	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Trips and VMT - Construction not modeled

Grading - Construction not modeled

Vehicle Trips - Based on Traffic Report prepared by KD Anderson

Table Name	Column Name	Default Value	New Value
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	VendorTripLength	6.60	0.00
tblTripsAndVMT	WorkerTripLength	16.80	0.00
tblVehicleTrips	ST_TR	94.36	3,728.00
tblVehicleTrips	SU_TR	72.16	3,728.00
tblVehicleTrips	WD_TR	89.95	3,728.00

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					
2018	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
Maximum	**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**

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					
2018	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
Maximum	**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**

	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	0.0240	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747
Mobile	3.0761	23.1885	20.6154	0.1140	9.4442	0.0486	9.4928	2.5302	0.0453	2.5754		11,638.4947	11,638.4947	0.3742		11,647.8491
Total	**3.1033**	**23.2179**	**20.6402**	**0.1141**	**9.4442**	**0.0508**	**9.4950**	**2.5302**	**0.0475**	**2.5776**		**11,673.7600**	**11,673.7600**	**0.3749**	**6.5000e-004**	**11,683.3240**

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	0.0240	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747
Mobile	3.0761	23.1885	20.6154	0.1140	9.4442	0.0486	9.4928	2.5302	0.0453	2.5754		11,638.4947	11,638.4947	0.3742		11,647.8491
Total	**3.1033**	**23.2179**	**20.6402**	**0.1141**	**9.4442**	**0.0508**	**9.4950**	**2.5302**	**0.0475**	**2.5776**		**11,673.7600**	**11,673.7600**	**0.3749**	**6.5000e-004**	**11,683.3240**

	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	Site Preparation	Site Preparation	12/15/2018	12/17/2018	5	1	

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; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	0.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37

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
Site Preparation	0	0.00	0.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 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					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**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**

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	0.0000	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
Total	**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**

3.2 Site Preparation - 2018

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	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
Total	**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**

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	0.0000	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
Total	**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**

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	3.0761	23.1885	20.6154	0.1140	9.4442	0.0486	9.4928	2.5302	0.0453	2.5754		11,638.4947	11,638.4947	0.3742		11,647.8491
Unmitigated	3.0761	23.1885	20.6154	0.1140	9.4442	0.0486	9.4928	2.5302	0.0453	2.5754		11,638.4947	11,638.4947	0.3742		11,647.8491

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Quality Restaurant	3,728.00	3,728.00	3728.00	4,426,644	4,426,644
Total	3,728.00	3,728.00	3,728.00	4,426,644	4,426,644

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
Quality Restaurant	14.70	6.60	6.60	12.00	69.00	19.00	38	18	44

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Quality Restaurant	0.527250	0.035836	0.222225	0.107731	0.011132	0.004467	0.036101	0.046533	0.001298	0.001082	0.005056	0.000682	0.000607

5.0 Energy Detail

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	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747
NaturalGas Unmitigated	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747

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					
Quality Restaurant	299.753	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747
Total		**3.2300e-003**	**0.0294**	**0.0247**	**1.8000e-004**		**2.2300e-003**	**2.2300e-003**		**2.2300e-003**	**2.2300e-003**		**35.2651**	**35.2651**	**6.8000e-004**	**6.5000e-004**	**35.4747**

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					
Quality Restaurant	0.299753	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747
Total		**3.2300e-003**	**0.0294**	**0.0247**	**1.8000e-004**		**2.2300e-003**	**2.2300e-003**		**2.2300e-003**	**2.2300e-003**		**35.2651**	**35.2651**	**6.8000e-004**	**6.5000e-004**	**35.4747**

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	0.0240	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.0240	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

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	2.5400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0240**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

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	2.5400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0240**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

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 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Winery Ordinance (Cumulative)

Placer County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Quality Restaurant	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Trips and VMT - Construction not modeled

Grading - Construction not modeled

Vehicle Trips - Based on Traffic Report prepared by KD Anderson

Table Name	Column Name	Default Value	New Value
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	VendorTripLength	6.60	0.00
tblTripsAndVMT	WorkerTripLength	16.80	0.00
tblVehicleTrips	ST_TR	94.36	3,728.00
tblVehicleTrips	SU_TR	72.16	3,728.00
tblVehicleTrips	WD_TR	89.95	3,728.00

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					
2018	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
Maximum	**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**

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					
2018	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
Maximum	**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**

	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	0.0240	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747
Mobile	2.2117	23.1711	21.3791	0.1048	9.4442	0.0490	9.4932	2.5302	0.0457	2.5758		10,703.6956	10,703.6956	0.4098		10,713.9405
Total	**2.2389**	**23.2005**	**21.4039**	**0.1050**	**9.4442**	**0.0512**	**9.4954**	**2.5302**	**0.0479**	**2.5780**		**10,738.9609**	**10,738.9609**	**0.4105**	**6.5000e-004**	**10,749.4154**

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	0.0240	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747
Mobile	2.2117	23.1711	21.3791	0.1048	9.4442	0.0490	9.4932	2.5302	0.0457	2.5758		10,703.6956	10,703.6956	0.4098		10,713.9405
Total	**2.2389**	**23.2005**	**21.4039**	**0.1050**	**9.4442**	**0.0512**	**9.4954**	**2.5302**	**0.0479**	**2.5780**		**10,738.9609**	**10,738.9609**	**0.4105**	**6.5000e-004**	**10,749.4154**

	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	Site Preparation	Site Preparation	12/15/2018	12/17/2018	5	1	

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; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	0.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37

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
Site Preparation	0	0.00	0.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 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					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**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**

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	0.0000	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
Total	**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**

3.2 Site Preparation - 2018

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	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
Total	**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**

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	0.0000	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
Total	**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**

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	2.2117	23.1711	21.3791	0.1048	9.4442	0.0490	9.4932	2.5302	0.0457	2.5758		10,703.6956	10,703.6956	0.4098		10,713.9405
Unmitigated	2.2117	23.1711	21.3791	0.1048	9.4442	0.0490	9.4932	2.5302	0.0457	2.5758		10,703.6956	10,703.6956	0.4098		10,713.9405

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Quality Restaurant	3,728.00	3,728.00	3728.00	4,426,644	4,426,644
Total	3,728.00	3,728.00	3,728.00	4,426,644	4,426,644

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
Quality Restaurant	14.70	6.60	6.60	12.00	69.00	19.00	38	18	44

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Quality Restaurant	0.527250	0.035836	0.222225	0.107731	0.011132	0.004467	0.036101	0.046533	0.001298	0.001082	0.005056	0.000682	0.000607

5.0 Energy Detail

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	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747
NaturalGas Unmitigated	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747

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					
Quality Restaurant	299.753	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747
Total		**3.2300e-003**	**0.0294**	**0.0247**	**1.8000e-004**		**2.2300e-003**	**2.2300e-003**		**2.2300e-003**	**2.2300e-003**		**35.2651**	**35.2651**	**6.8000e-004**	**6.5000e-004**	**35.4747**

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					
Quality Restaurant	0.299753	3.2300e-003	0.0294	0.0247	1.8000e-004		2.2300e-003	2.2300e-003		2.2300e-003	2.2300e-003		35.2651	35.2651	6.8000e-004	6.5000e-004	35.4747
Total		**3.2300e-003**	**0.0294**	**0.0247**	**1.8000e-004**		**2.2300e-003**	**2.2300e-003**		**2.2300e-003**	**2.2300e-003**		**35.2651**	**35.2651**	**6.8000e-004**	**6.5000e-004**	**35.4747**

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	0.0240	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.0240	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

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	2.5400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0240**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

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	2.5400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0240**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

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 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Winery Ordinance (Cumulative)

Placer County APCD Air District, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Graders	Diesel	No Change	0	0	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	0	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/ Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction			
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction			
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction		Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			

No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	100.00
No	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Mitigation Measures	Input Value

Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

APPENDIX F

Environmental Noise Assessment

Placer County Winery & Farm Brewery Zoning Text Amendment

Placer County, California

BAC Job # 2017-092

Prepared For:

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Paul Bollard, President

April 16, 2019

Introduction and Project Description

This report provides an evaluation of the potential noise effects of implementing the proposed Winery and Farm Brewery Zoning Text Amendment Project (Project).

The proposed project consists of a revision to the existing Winery Ordinance that regulates wineries located in unincorporated Placer County. The existing Winery Ordinance consists of Section 17.56.330 (Wineries) and Section 17.04.030 (Definitions) of the Placer County Code. Generally, the proposed amendments include the following substantive changes: redefine the term Events; define the term Farm Brewery; modify the minimum parcel size; create a table outlining special event allowances and maximum capacity at certain types of events; clarify the hours of operation; update the standards for potable water and waste disposal; and update the standards for access.

In general, the proposed amendment to the Placer County Winery Ordinance is intended to provide additional flexibility with respect to holding events at existing and future wineries and farm breweries. From a standpoint of noise, the amendments do not change the day-to-day operation of wineries and farm breweries (e.g., production, normal tasting room activities, etc.) nor does the amendment change the process undertaken by the County to process new winery and farm brewery applications. Thus, this analysis is not intended to address the regular day-to-day noise levels of existing and new wineries or farm breweries. Whereas the current Winery ordinance allows up to six promotional events per year with an Administrative Review Permit, the proposed ordinance would modify the promotional event definition to create a separate definition for Agricultural Promotional Events and Special Events, as follows:

> *An "Agricultural Promotional Event" is directly related to the education and marketing of wine and craft beer to consumers including but not limited to winemaker/brewmaster dinners, pick-up parties, release parties, and membership club parties. An Agricultural Promotional Event accommodates 50 people or less at one time (excluding staff). If greater than 50 people are in attendance at one time, those events shall be regulated in the same manner as a Special Event. See Table 1.*
>
> *A "Special Event" is an event of greater than 50 people where the agricultural-related component is subordinate to the primary purpose of the event. Included in this definition are events such as private parties, fundraisers, social or educational gatherings where outside alcohol may be allowed, and events where the property owner is compensated in exchange for the use of the site and facility (referred to as a facility rental). Special Events do not include industry-wide events, the normal patronage of a tasting room, and private gatherings of the owner where the general public does not attend.*

As discussed in the Project Description chapter of the EIR, while Agricultural Promotional Events (attendance <50) are not limited in number, it is unrealistic for the analysis to assume that wineries and farm breweries will host back-to-back events all day, every day. There are several factors that limit a particular facility's ability to host events, including number of staff, budget, parking capacity, overlap with regular tasting room hours, etc. In an effort to conduct a reasonable,

conservative analysis in this EIR, based upon reasonable forecasts, the County solicited input from a variety of facilities currently operating in the County. Considering several factors discussed in the Project Description, the EIR conservatively assumes that each facility would host up to two additional agricultural promotional events per day as a result of the proposed Zoning Text Amendment. Further differentiation has been made in the project traffic study with respect to the two different types of Agricultural Promotional Events evaluated in this EIR. Please refer to Table 10 of the traffic study for additional detail.

With respect to Special Events, the EIR will evaluate the potential environmental effects that could result from a maximum of 12 Special Events or Agricultural Promotional Events with attendance >50, at facilities on large parcels (>20 acres). While the ordinance currently allows six Special Events, and thus the net increase for facilities on large parcels is only six events, this ordinance amendment would enable facilities to host *new* types of uses under the Special Event category, namely weddings and similar events having amplified music. Thus, it was determined that the traffic analysis should evaluate traffic from all 12 potential Special Events on large parcels. The maximum attendance for a Special Event on large parcels is 200 people. While wineries and farm breweries on medium parcels would not be afforded additional Special Events, as compared to their current allowance, they would be able to host new types of uses under the Special Event category, namely weddings and similar events having amplified music. Per Table 3-2, on medium parcels, Special Events have a maximum attendance of 100 people. In order to evaluate the potential impacts of weddings and like events for medium parcels, it was determined that the traffic analysis should also evaluate traffic from up to six Special Events on medium parcels. It should be noted that some existing wineries are situated on small parcels (4.6-9.9 acres), as defined in the proposed ordinance. Under the current ordinance, existing wineries on parcels 4.6-9.9 acres are allowed to conduct up to six promotional events per year with an Administrative Review Permit. If no Administrative Review Permit or other permit exists that allows the event activity, any proposal for events after the adoption date of the proposed ordinance would constitute an expansion of operation and require compliance with the new regulation (i.e., the facility would need to obtain a minor use permit). Given that wine production facilities with tasting rooms on 4.6-9.9 acres are already allowed six events under the currently adopted ordinance (with an Administrative Review Permit), there is no net change to the operations of these facilities on 4.6-9.9 acre parcels associated with the proposed Winery and Farm Brewery Zoning Text Amendment. Thus, wine production facilities, with tasting rooms on 4.6-9.9 acre parcels, are not being evaluated in this traffic study because further environmental review would be conducted with any future use permit application. Rather, this study focuses on the effects of by-right winery event allowances at facilities on medium and large parcels.

The two existing farm breweries are not situated on small parcels. Any future proposals for farm breweries on small parcels would also require a Minor Use Permit, and thus would need to undergo discretionary review. As a result, the cumulative analysis herein is not required to evaluate future farm breweries on small parcels.

Cumulative (future) Conditions

All future winery/farm brewery applications would be subject to the proposed Winery and Farm Brewery Zoning Text Amendment. Under the proposed project, future facilities on medium- and large-sized parcels would now be afforded the ability to host an unlimited number of Agricultural Promotional Events, and medium and large wineries/breweries would be afforded the ability to host new types of Special Events each year. Therefore, while the Zoning Text Amendment would not directly induce the development of additional medium or large wineries/farm breweries, as they are already permitted by-right in certain zones, and the project is not expanding the number of zones where by-right development can occur, the proposed project would provide greater flexibility with respect to the amount of Agricultural Promotional Events and Special Events that may occur at future wineries/farm breweries. As a result, the EIR will evaluate the potential environmental effects associated with the ability to conduct Agricultural Promotional Events and Special Events at future wineries/farm breweries subject to the proposed project.

The Cumulative traffic noise analysis contained herein is based upon volumes provided by KD Anderson, which, for reasons set forth in the EIR Project Description, assumes 1.5 new facilities per year, for a cumulative horizon of 20 years. This equates to 30 new facilities.

The following environmental assessment includes an evaluation of the ambient noise environments in the general vicinities of representative existing wineries and breweries in Placer County. It also includes an analysis of changes in traffic noise environments resulting from implementation of the project, including cumulative traffic noise environments resulting from concurrent winery and brewery events occurring at all winery and breweries simultaneously. In addition, an evaluation of the potential noise generation of both agricultural promotional events and special events is provided.

Acoustic Fundamentals and Terminology

Sound, Noise and Acoustics

Sound is a process that consists of three components: the sound source, the sound path, and the sound receiver. All three components must be present for sound to exist. Without a source to produce sound or a medium to transmit sound-pressure waves, there is no sound. Sound also must be received; a hearing organ, sensor, or object must be present to perceive, register or be affected by sound or noise. In most situations, there are many different sound sources, paths and receivers, not only one of each.

Noise is generally defined as loud, unpleasant, unexpected, or undesired sound.

Acoustics is the field of science that deals with the production, propagation, reception, effects, and control of sound.

Frequency

A continuous sound can be described by its frequency (pitch) and its amplitude (loudness). Frequency relates to the number of pressure oscillations per second. Low-frequency sounds are

low in pitch, like the low notes on a piano or bass drum, whereas high-frequency sounds are high in pitch, like the high notes on a piano. Frequency is expressed in terms of oscillations, or cycles, per second. Cycles per second are commonly referred to as Hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz (kHz), or thousands of hertz. The extreme range of frequencies that can be heard by the healthiest human ears spans from 16 to 20 Hz on the low end to about 20,000 Hz (20 kHz) on the high end.

Sound Pressure Level and Decibels

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and hence are called sound. Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals of pressure), as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers is a practical range.

The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in levels (dB) correspond closely to human perception of relative loudness. The amplitude of a sound determines its loudness. Loudness of sound increases and decreases with increasing and decreasing amplitude.

Addition of Decibels

Because decibels are logarithmic units, SPL cannot be added or subtracted by ordinary arithmetic means. For example, if one automobile produces an SPL of 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dB; rather, they would combine to produce 73 dB. When two sounds of equal SPL are combined, they produce a combined SPL 3 dB greater than the original individual SPL. In other words, sound energy must be doubled to produce a 3 dB increase. If two sound levels differ by 10 dB or more, the combined SPL is equal to the higher SPL; the lower sound level would not increase the higher sound level.

A-Weighted Decibels

SPL alone is not a reliable indicator of loudness. The frequency of a sound also has a substantial effect on how humans respond. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the SPL in that range. In general, the healthy human ear is most sensitive to sounds from 1,000 to 5,000 Hz and perceives a sound within that range as being more intense than a sound of higher or lower frequency with the same magnitude. To approximate the frequency response of the human ear, a series of SPL adjustments is usually applied to the sound measured by a sound level meter. The adjustments, referred to as a weighting network, are frequency-dependent.

The A-scale weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Other weighting networks have been devised to address high noise levels or other special problems (e.g., B-, C- and D-scales), but these scales are rarely used in conjunction with normal environmental noise levels experienced in our day to day lives. Noise levels for environmental noise studies are typically reported in terms of A-weighted decibels (dBA). In environmental noise studies, A-weighted SPLs are commonly referred to as noise levels. Table 1 shows typical A-weighted noise levels.

Human Response to Changes in Noise Levels

Under controlled conditions in an acoustics laboratory, the trained, healthy human ear is able to discern 1-dB changes in sound levels when exposed to steady, single-frequency ("pure tone") signals in the midfrequency range. Outside such controlled conditions, the trained ear can detect 2-dB changes in normal environmental noise. However, it is widely accepted that the average healthy ear can barely perceive 3-dB noise level changes for similar sources. A 5-dB change is readily perceptible, and a 10-dB increase is perceived as being twice as loud. As discussed above, doubling sound energy results in a 3-dB increase in sound; therefore, doubling sound energy (e.g., doubling the volume of traffic on a highway) would result in a barely perceptible change in sound level.

Noise Descriptors

Noise in our daily environment fluctuates over time. Some fluctuations are minor, but some are substantial. Some noise levels occur in regular patterns, but others are random. Some noise levels fluctuate rapidly, but others slowly. Some noise levels vary widely, but others are relatively constant. Various noise descriptors have been developed to describe time-varying noise levels. The following are the noise descriptors most commonly used in noise analysis:

Equivalent sound level (L_{eq}): L_{eq} represents an average of the sound energy occurring over a specified period. In effect, L_{eq} is the steady-state sound level that in a stated period would contain the same acoustical energy as the time-varying sound that actually occurs during the same period. The 1-hour A-weighted equivalent sound level (L_{eq}[h]) is the energy average of the A-weighted sound levels occurring during a 1-hour period.

Percentile-exceeded sound level (L_x): L_x represents the sound level exceeded for a given percentage of a specified period (e.g., L_{10} is the sound level exceeded 10 percent of the time, L_{90} is the sound level exceeded 90 percent of the time).

Maximum sound level (L_{max}): L_{max} is the highest instantaneous sound level measured during a specified period.

Day-night level (L_{dn}): L_{dn} is the energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring between 10 p.m. and 7 a.m.

Table 1
Typical Noise Levels Associated with Common Noise Sources

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	— 110 —	Rock band
Jet flyover at 300 meters (1,000 feet)		
	— 100 —	
Gas lawn mower at 1 meter (3 feet)		
	— 90 —	
Diesel truck at 15 meters (50 feet) at 80 kilometers per hour (50 miles per hour)		Food blender at 1 meter (3 feet)
	— 80 —	Garbage disposal at 1 meter (3 feet)
Noisy urban area, daytime		
Gas lawn mower, 30 meters (100 feet)	— 70 —	Vacuum cleaner at 3 meters (10 feet)
Commercial area		Normal speech at 1 meter (3 feet)
Heavy traffic at 90 meters (300 feet)	— 60 —	
		Large business office
Quiet urban daytime	— 50 —	Dishwasher next room
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library
Quiet rural nighttime		Bedroom at night, concert
	— 20 —	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing

Source: Caltrans 2009.

Existing Noise Environment in the Project Vicinity

Major Noise Sources Affecting the Project Area

The major source of noise affecting ambient conditions within the immediate vicinity of the project-area wineries and breweries is local surface traffic. Distant railroad and aircraft noise is periodically audible at locations within the project area but these sources are not dominant and do not appreciably affect local ambient conditions relative to local traffic noise source. In addition, agricultural operations can temporarily result in increased ambient noise levels in the immediate vicinity of such activities or operations, but such activities tend to be intermittent and highly localized.

Noise Sensitive Land Uses in the Project Vicinity

Noise-sensitive land uses are generally defined as locations where people reside or where the presence of unwanted sound could adversely affect the primary intended use of the land. Places where people live, sleep, recreate, worship, and study are generally considered to be sensitive to noise because intrusive noise can be disruptive to these activities.

Because of the rural nature of the portion of Placer County in which the wineries and breweries are located, the noise-sensitive land uses which would potentially be affected by the project consist primarily of rural residential uses.

Existing Traffic Noise Levels along Project Area Roadway Network

The FHWA Traffic Noise Model (FHWA-RD-77-108) was used to develop existing noise contours expressed in terms of L_{dn} for major roadways within the project study area. The FHWA model predicts hourly L_{eq} values for free-flowing traffic conditions. Estimates of the hourly distribution of traffic for a typical 24-hour period were used to develop L_{dn} values from L_{eq} values.

Traffic data representing average daily traffic volumes for existing conditions were obtained from K.D. Anderson & Associates (KDA - the project traffic engineers). Using these data and the FHWA model, traffic noise levels were calculated. The traffic noise level at 100 feet from the roadway centerline and distances from the centerlines of selected roadways to the 60 dB, 65 dB, and 70 dB L_{dn} contours are summarized in Table 2 for weekday conditions and in Table 3 for weekend conditions.

In many cases, the actual distances to noise level contours may vary from the distances predicted by the FHWA model. Factors such as roadway curvature, roadway grade, shielding from local topography or structures, elevated roadways, or elevated receivers may affect actual sound propagation. The distances reported in Table 2 are considered to be conservative estimates of noise exposure along roadways in the project study area.

It is also recognized that existing sensitive land uses within the project vicinity are located varying distances from the centerlines of the local roadway network. The 100 foot reference distance is utilized in this analysis to provide a reference position at which changes in existing and future traffic noise levels resulting from the project can be evaluated.

Table 2
Existing Weekday Traffic Volumes and Traffic Noise Modeling Results
Placer County Winery and Farm Brewery Roadway Network

Roadway	Segment	Average Daily Traffic	Ldn at 100 feet from Centerline	Distance to Contour (feet)		
				70 dB Ldn	65 dB Ldn	60 dB Ldn
Auburn Folsom Rd	Dick Cook Rd to Horseshoe Bar Rd	8,573	63	33	72	154
Ayers Holmes Rd	Mt. Vernon Rd to Wise Rd	412	47	3	6	14
Bald Hill Rd	Crater Hill Rd to Valle Vista Ct	1,309	52	6	14	30
Baxter Grade Rd	Wise Rd to Mt. Vernon Rd	971	51	5	11	24
Bell Rd	Coyote Ridge Ct to Miracle Ln	1,400	57	14	30	64
Bell Rd	Mallard Way to Cramer Rd	614	54	8	17	37
Chili Hill Rd	Lozanos Rd to Gold Hill Rd	355	46	3	6	12
Combie Rd	Placer Hills Rd to Wooley Creek Ln	2,688	55	10	22	48
Cramer Rd	Bell Rd to SR 49	558	48	4	8	17
Crosby Herold Rd	Wise Rd to Meadow Creek Rd	525	48	3	7	16
Del Mar Ln	Sierra College Blvd to Rock Hill Winery	1,126	51	6	12	27
Fowler Rd	Virginiatown Rd to SR 193	3,412	56	12	26	56
Fleming Rd	Gladding Rd to McCourtney Rd	43	37	1	1	3
Fruitvale Rd	Fowler Rd to Gold Hill Rd	1,486	57	14	31	67
Gold Hill Rd	Virginiatown Rd to SR 193	1,542	58	15	32	69
Horseshoe Bar Rd	Val Verde Rd to Auburn Folsom Rd	3,545	56	12	27	57
Lone Star Rd	Bell Rd to SR 49	1,328	52	6	14	30
McCourtney Rd	Wise Rd to Big Ben Rd	1,192	56	12	27	58
Millertown Rd	Wise Rd to Vada Ranch Rd	150	43	2	3	7
Mt. Vernon Rd	Hastings Ln to Meyers Ln	2,021	59	18	38	82
Mt. Vernon Rd	Vineyard Dr to Millerstown Rd	2,995	60	23	50	107
Nicolaus Rd	Canal to Maverick Ln	3,064	61	23	50	109
Placer Hills Rd	Pinewood Wy to Winchester Club Dr	9,470	63	35	76	165
Ridge Rd	Gold Hill Rd to Ophir Rd	789	50	5	10	21
Sierra College Blvd	Del Mar Rd to King Rd	12,762	66	52	111	239
SR 193	Sierra College Blvd to Fowler Rd	6,700	64	39	85	183
Virginiatown Rd	Coyote Ln to Fowler Rd	773	52	7	14	31
Wise Rd	McCourtney Rd to Crosby Herold Rd	2,575	60	21	45	97
Wise Rd	Crosby Herold Rd to Garden Bar Rd	1,857	58	17	36	78
Wise Rd	Garden Bar Rd to Wally Allan Rd	1,394	55	10	21	46
Wise Rd	County Lane to Crater Hill Rd	1,168	53	7	16	34
Wise Rd	Bald Hill Rd to Ophir Rd	1,000	51	5	11	25

Source: FHWA-RD-77-108 with inputs from KDA and BAC file data. A complete listing of traffic model inputs is provided in Appendix D.

Table 3
Existing Weekend Traffic Volumes and Traffic Noise Modeling Results
Placer County Winery and Farm Brewery Roadway Network

Roadway	Segment	Average Daily Traffic	Ldn at 100 feet from Centerline	Distance to Contour (feet)		
				70 dB Ldn	65 dB Ldn	60 dB Ldn
Auburn Folsom Rd	Dick Cook Rd to Horseshoe Bar Rd	8,355	63	33	70	151
Ayers Holmes Rd	Mt. Vernon Rd to Wise Rd	485	48	3	7	15
Bald Hill Rd	Crater Hill Rd to Valle Vista Ct	1,038	51	5	12	25
Baxter Grade Rd	Wise Rd to Mt. Vernon Rd	634	49	4	8	18
Bell Rd	Coyote Ridge Ct to Miracle Ln	1,329	57	13	29	62
Bell Rd	Mallard Way to Cramer Rd	543	53	7	16	34
Chili Hill Rd	Lozanos Rd to Gold Hill Rd	262	45	2	5	10
Combie Rd	Placer Hills Rd to Wooley Creek Ln	2,477	55	10	21	45
Cramer Rd	Bell Rd to SR 49	549	48	4	8	17
Crosby Herold Rd	Wise Rd to Meadow Creek Rd	582	49	4	8	17
Del Mar Ln	Sierra College Blvd to Rock Hill Winery	1,171	52	6	13	27
Fowler Rd	Virginiatown Rd to SR 193	3,440	56	12	26	56
Fleming Rd	Gladding Rd to McCourtney Rd	92	41	1	2	5
Fruitvale Rd	Fowler Rd to Gold Hill Rd	1,186	56	12	27	58
Gold Hill Rd	Virginiatown Rd to SR 193	1,857	58	17	36	78
Horseshoe Bar Rd	Val Verde Rd to Auburn Folsom Rd	2,485	55	10	21	45
Lone Star Rd	Bell Rd to SR 49	1,223	52	6	13	28
McCourtney Rd	Wise Rd to Big Ben Rd	1,207	56	13	27	58
Millertown Rd	Wise Rd to Vada Ranch Rd	135	42	1	3	6
Mt. Vernon Rd	Hastings Ln to Meyers Ln	2,679	60	21	46	99
Mt. Vernon Rd	Vineyard Dr to Millerstown Rd	2,676	60	21	46	99
Nicolaus Rd	Canal to Maverick Ln	2,374	59	20	43	92
Placer Hills Rd	Pinewood Wy to Winchester Club Dr	7,407	62	30	65	140
Ridge Rd	Gold Hill Rd to Ophir Rd	640	49	4	9	18
Sierra College Blvd	Del Mar Rd to King Rd	10,642	65	46	98	212
SR 193	Sierra College Blvd to Fowler Rd	6,700	64	39	85	183
Virginiatown Rd	Coyote Ln to Fowler Rd	994	53	8	17	37
Wise Rd	McCourtney Rd to Crosby Herold Rd	2,714	60	22	46	100
Wise Rd	Crosby Herold Rd to Garden Bar Rd	1,978	59	17	38	81
Wise Rd	Garden Bar Rd to Wally Allan Rd	1,304	55	9	20	44
Wise Rd	County Lane to Crater Hill Rd	931	52	6	13	29
Wise Rd	Bald Hill Rd to Ophir Rd	915	51	5	11	23

Source: FHWA-RD-77-108 with inputs from KDA and BAC file data. A complete listing of traffic model inputs is provided in Appendix D.

Existing Ambient Noise Environment at Representative Wineries and Breweries

In addition to the off-site noise-generation of project traffic, noise is also generated during events held at wineries and breweries located within the county by on-site activities. The most common noise sources associated with such events are music and speech, either amplified or natural. The degree by which noise generated during events affects noise-sensitive land uses located in the vicinity of the those events depends on the noise-generation of the event and the existing ambient conditions at those noise-sensitive uses.

To quantify existing ambient noise conditions in the immediate vicinity of existing representative wineries and breweries, noise surveys were conducted at six (6) wineries and one (1) brewery in Placer County between September 2017 and March 2018. The monitoring consisted of long-term (24-hour) samples using Larson Davis Model 820, Lxt and 831 Type I sound level meters during days when no events were being held at the venues.

The calibration of each meter was checked before each measurement to ensure the accuracy of the measurement results. The measurement systems comply with all pertinent requirements of the American National Standards Institute (ANSI) for Type I sound level meters. Table 4 summarizes the ambient noise survey results. The detailed ambient noise measurement results are presented in tabular and graphical formats in Appendices B and C, respectively.

Table 4
Long-Term Noise Measurement Results
Vicinities of Representative Placer County Wineries and Breweries

		Daytime (7 am – 7 pm)		Evening (7 pm – 10 pm)		
Location	**Date**	**Leq**	**Lmax**	**Leq**	**Lmax**	**L_{dn}, dB**
Lone Buffalo Winery	September 11, 2017	42	58	58	63	63
Wise Villa Winery	October 8, 2017	48	64	36	54	46
Dono Dal Cielo Winery	December 16, 2017	52	70	48	67	52
Hillenbrand Brewery	March 11, 2018	55	74	45	62	54
Mount Vernon Winery	March 10, 2018	49	68	45	64	52
Rancho Roble Winery	March 11, 2018	46	65	46	56	48
Vina Castellano Winery	March 28, 2018	48	66	43	61	49
	Average	**49**	**66**	**46**	**61**	**52**

Source: Bollard Acoustical Consultants, Inc. (BAC) 2017-2018

The ambient noise measurement results in Table 4 indicate that ambient noise levels in the immediate vicinity of the representative Placer County wineries and farm breweries averaged approximately 49 dB L_{eq} during daytime hours and 46 dB L_{eq} during evening hours. Measured maximum noise levels averaged 66 and 61 dB L_{max} during daytime and evening periods, respectively, and the average L_{dn} for the monitoring sites was 52 dB L_{dn}.

It should be noted that the ambient noise surveys were intentionally conducted on days when no events were occurring at the wineries and farm breweries. This was because the purpose of the ambient noise surveys was to document background noise conditions at representative locations near the existing wineries and farm breweries to establish a baseline for comparison against noise generated by events held at these locations. Although events held at the County wineries and

farm breweries occur more frequently during spring, summer and fall periods, because the focus of the ambient surveys was to avoid periods when events were occurring, the time of year when the surveys were conducted is considered appropriate for this survey.

With the exception of the data collected at the Lone Buffalo Winery, average ambient noise levels during evening hours were consistently lower than ambient conditions during daytime hours. The elevated ambient conditions noted at Lone Buffalo Winery were caused by natural sounds (crickets) which were present on the warm evening.

Criteria for Acceptable Noise Exposure in Placer County

Criteria for acceptable noise exposure in Placer County are included in both the County General Plan Noise Element and the County Noise Ordinance. In addition, the current Placer County Winery Ordinance references compliance with the County Noise Ordinance. Those criteria are described below.

Placer County General Plan Noise Element

The Noise Element of the Placer County General Plan provides goals and policies to ensure that county residents are not subjected to noise beyond acceptable levels. The General Plan includes noise criteria for the evaluation of proposed land uses subjected to non-transportation noise levels (Table 4) and transportation noise sources (Table 6). The General Plan Noise Element Policies which would be most applicable to the project are reproduced below:

Policies

9.A.1. New development of noise-sensitive uses shall not be permitted where the noise level due to non-transportation noise sources will exceed the noise level standards of Table 5 as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards specified in Table 5.

9.A.2 Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table 5 as measured immediately within the property line of lands designated for noise-sensitive uses: provided, however, the noise created by occasional events occurring within a stadium on land zoned for university purposes may temporarily exceed these standards as provided in an approved Specific Plan.

9.A.3 The County shall continue to enforce the State Noise Insulation Standards (California Code of Regulations, Title 24) of the California Building Code and Placer County Code Article 9.36, Noise.

9.A.5 Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table 5 at existing or planned noise-sensitive uses, the County shall require submission of an acoustical analysis as part of the environmental review process so that noise mitigation may be included

in the project design. The requirements for the content of an acoustical analysis are listed in Table 6.

9.A.6 The feasibility of proposed projects with respect to existing and future transportation noise levels shall be evaluated by comparison to Table 7.

9.A.8. New development of noise-sensitive land uses shall not be permitted in areas exposed to existing or projected levels of noise from transportation noise sources, including airports, which exceed the levels specified in Table 7, unless the project design includes effective mitigation measures to reduce noise in outdoor activity areas and interior spaces to the levels specified in Table 7.

9.A.9. Noise created by new transportation noise sources, including roadway improvement projects, shall be mitigated so as not to exceed the levels specified in Table 7 at outdoor activity areas or interior spaces of existing noise-sensitive land uses.

9.A.10. Where noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels specified in Table 5 or 7, the County shall require submission of an acoustical analysis as part of the environmental review process so that noise mitigation may be included in the project design. At the discretion of the County, the requirement for an acoustical analysis may be waived provided that all of the following conditions are satisfied:

a. The development is for less than five single-family dwellings or less than 10,000 square feet of total gross floor area for office buildings, churches, or meeting halls;

b. The noise source in question consists of a single roadway or railroad for which up-to-date noise exposure information is available. An acoustical analysis will be required when the noise source in question is a stationary noise source or airport, or when the noise source consists of multiple transportation noise sources;

c. The existing or projected future noise exposure at the exterior of buildings which will contain noise-sensitive uses or within proposed outdoor activity areas (other than outdoor sports and recreation areas) does not exceed 65 dB Ldn (or CNEL) prior to mitigation. For outdoor sports and recreation areas, the existing or projected future noise exposure may not exceed 75 dB Ldn (or CNEL) prior to mitigation;

d. The topography in the project area is essentially flat; that is, noise source and receiving land use are at the same grade; and e. Effective noise mitigation, as determined by the County, is incorporated into the project design to reduce noise exposure to the levels specified in Table 5 or 7. Such measures may include the use of building setbacks, building orientation, noise barriers, and the standard noise mitigations contained in

the Placer County Acoustical Design Manual. If closed windows are required for compliance with interior noise level standards, air conditioning or a mechanical ventilation system will be required.

9.A.11 The County shall require one or more of the following mitigation measures where existing noise levels significantly impact existing noise-sensitive land uses, or where the cumulative increase in noise levels resulting from new development significantly impacts noise-sensitive land uses:

a. Rerouting traffic onto streets that have available traffic capacity and that do not adjoin noise-sensitive land uses;

b. Lowering speed limits, if feasible and practical;

c. Programs to pay for noise mitigation such as low cost loans to owners of noise-impacted property or establishment of developer fees;

d. Acoustical treatment of buildings; or;

e. Construction of noise barriers.

9.A.12 Where noise mitigation measures are required to achieve the standards of Tables 5 and 7, the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered as a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.

Table 5
Allowable Ldn Noise Levels Within Specified Zone Districts[1]
Applicable to New Projects Affected by or Including Non-Transportation Noise Sources

Zone District of Receptor	Property Line of Receiving Use	Interior Spaces[2]
Residential Adjacent to Industrial[3]	60	45
Other Residential[4]	50	45
Office/Professional	70	45
Transient Lodging	65	45
Neighborhood Commercial	70	45
General Commercial	70	45
Heavy Commercial	75	45
Limited Industrial	75	45
Highway Service	75	45
Shopping Center	70	45
Industrial	--	45
Industrial Park	75	45
Industrial Reserve	--	45
Airport	--	45
Unclassified	--	--
Farm	(see footnote 6)	--
Agriculture Exclusive	(see footnote 6)	--
Forestry	--	--
Timberland Preserve	--	--
Recreation & Forestry	70	--
Open Space	--	--
Mineral Reserve	--	--

- Except where noted otherwise, noise exposures will be those which occur at the property line of the receiving use.
- Where existing transportation noise levels exceed the standards of this table, the allowable Ldn shall be raised to the same level as that of the ambient level.
- If the noise source generated by, or affecting, the uses shown above consists primarily of speech or music, of if the noise source is impulsive in nature, the noise standards shown above shall be decreased by 5 dB.
- Where a use permit has established noise level standards for an existing use, those standards shall supersede the levels specified in Table 4 and Table 5. Similarly, where an existing use which is not subject to a use permit causes noise in excess of the allowable levels in Tables 4 and 5, said excess noise shall be considered the allowable level. If a new development is proposed which will be affected by noise from such an existing use, it will ordinarily be assumed that the noise levels already existing or those levels allowed by the existing use permit, whichever are greater, are those levels actually produced by the existing use.
- Existing industry located in industrial zones will be given the benefit of the doubt in being allowed to emit increased noise consistent with the state of the art at the time of expansion. In no case will expansion of an existing industrial operation because to decrease allowable noise emission limits. Increased emissions above those normally allowable should be limited to a one-time 5 dB increase at the discretion of the decision making body.
- The noise level standards applicable to land uses containing incidental residential uses, such as caretaker dwellings at industrial facilities and homes on agriculturally zoned land, shall be the standards applicable to the zone district, not those applicable to residential uses.
- Where no noise level standards have been provided for a specific zone district, it is assumed that the interior and/or exterior spaces of these uses are effectively insensitive to noise.

1. Overriding policy on interpretation of allowable noise levels: Industrial-zoned properties are confined to unique areas of the County, and are irreplaceable. Industries which provide primary wage-earner jobs in the County, if forced to relocate, will likely be forced to leave the County. For this reason, industries operating upon industrial zoned properties must be afforded reasonable opportunity to exercise the rights/privileges conferred upon them be their zoning. Whenever the allowable noise levels herein fall subject to interpretation relative to industrial activities, the benefit of the doubt shall be afforded to the industrial use.

   Where an industrial use is subject to infrequent and unplanned upset or breakdown of operations resulting in increased noise emissions, where such upsets and breakdowns are reasonable considering the type of industry, and where the industrial use exercises due diligence in preventing as well as correcting such upsets and breakdowns, noise generated during such upsets and breakdowns shall not be included in calculations to determine conformance with allowable noise levels. Interior spaces are defined as any locations where some degree of noise-sensitivity exists. Examples include all habitable rooms of residences, and areas where communication and speech intelligibility are essential, such as classrooms and offices.

2. Interior spaces are defined as any locations where some degree of noise-sensitivity exists. Examples include all habitable rooms of residences, and areas where communication and speech intelligibility are essential, such as classrooms and offices.

3. Noise from industrial operations may be difficult to mitigate in a cost-effective manner. In recognition of this fact, the exterior noise standards for residential zone districts immediately adjacent to industrial, limited industrial, industrial park, and industrial reserve zone districts have been increased by 10 dB as compared to residential districts adjacent to other land uses.

   For purposes of the Noise Element, residential zone districts are defined to include the following zoning classifications: AR, R-1, R-2, R-3, FR, RP, TR-1, TR-2, TR-3, and TR-4.

4 Where a residential zone district is located within an -SP combining district, the exterior noise level standards are applied at the outer boundary of the -SP district. If an existing industrial operation within an -SP district is expanded or modified, the noise level standards at the outer boundary of the -SP district may be increased as described above in these standards.

   Where a new residential use is proposed in an -SP zone, an Administrative Review Permit is required, which may require mitigation measures at the residence for noise levels existing and/or allowed by use permit as described under "NOTES," above, in these standards.

5 State of the art should include the use of modern equipment with lower noise emissions, site design, and plant orientation to mitigate offsite noise impacts, and similar methodology.

6 Normally, agricultural uses are noise insensitive and will be treated in this way. However, conflicts with agricultural noise emissions can occur where single-family residences exist within agricultural zone districts. Therefore, where effects of agricultural noise upon residences located in these agricultural zones is a concern, an Ldn of 70 dBA will be considered acceptable outdoor exposure at a residence.

Table 6
Requirements for an Acoustical Analysis
(See Policy 9.A.5)

An acoustical analysis prepared pursuant to Policy 9.A.5 shall:	
1.	Be the financial responsibility of the applicant.
2.	Be prepared by a qualified person experience in the fields of environmental noise assessment and architectural acoustics.
3.	Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions and the predominant noise sources.
4.	Estimate existing and projected cumulative (20 years) noise levels in terms of Ldn or CNEL and/or the standards of Table 9-1, and compare those levels to policies in this section. Noise prediction methodology must be consistent with the *Placer County Acoustical Design Manual*.
5.	Recommend appropriate mitigation to achieve compliance with the policies and standards of this section, giving preference to proper site planning and design over mitigation measures which require the construction of noise barriers or structural modifications to buildings which contain noise-sensitive land uses. Where the noise source in question consists of intermittent single events, the report must address the effects of maximum noise levels in sleeping rooms in terms of possible sleep disturbance.
6.	Estimate noise exposure after the prescribed mitigation measures have been implemented.
7.	Describe a post-project assessment program which could be used to evaluate the effectiveness of the proposed mitigation measures.

Table 7
Maximum Allowable Noise Exposure
Transportation Noise Sources

	Outdoor Activity Areas[1]	**Interior Spaces**	
Noise Sensitive Land Uses (FY)	**L_{dn} /CNEL, dB**	**L_{dn} /CNEL, dB**	**L_{eq}, dB[2]**
Residential	60[3]	45	--
Transient Lodging[4]	60[3]	45	--
Hospitals, Nursing Homes	60[3]	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls	60[3]	--	40
Office Buildings	--	--	45
Schools, Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

[1] Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.
[2] As determined for a typical worst-case hour during period of use.
[3] Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn} / CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn} / CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

Placer County Code (Noise Ordinance)

The provisions of the Placer County Noise Ordinance which would be most applicable to this project are reproduced below. The complete text of the County Noise Ordinance is provided in Appendix E.

9.36.060 Sound limits for sensitive receptors

A. It is unlawful for any person at any location to create any sound, or to allow the creation of any sound, on property owned, leased, occupied or otherwise controlled by such person that:

   1. Causes the exterior sound level when measured at the property line of any affected sensitive receptor to exceed the ambient sound level by five dBA; or
   2. Exceeds the sound level standards as set forth in Table 8, whichever is the greater.

Table 8
Sound Level Standards (On-Site)
Placer County Noise Ordinance

Sound Level Descriptor	Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
Hourly Average, (L_{eq}), dB	55	45
Maximum, (L_{max}) dB	70	65

B. Each of the sound level standards specified in Table 8 shall be reduced by five dB for simple tone noises, consisting of speech and music. However, in no case shall the sound level standard be lower than the ambient sound level plus five dB.

C. If the intruding sound source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient sound level can be measured, the sound level measured while the source is in operation shall be compared directly to the sound level standards of Table 1. (Ord. 5280-B, 2004)

Placer County Code (Winery Ordinance)

The provisions of the Current Placer County Winery Ordinance which would be most applicable to this project are reproduced below:

17.56.330 Wineries

A. Purpose. The purpose of this section is to provide for the orderly development of wineries within agricultural zoning districts and certain commercial, industrial and residential zoning districts; to encourage the economic development of the local agricultural industry; provide for the sampling and sales of value-added products; and protect the agricultural character and long-term agricultural production of agricultural lands.

B. Definitions.

"**Administrative Review Permit**" - See Zoning Ordinance Section 17.58.100.

"**Conditional Use Permit**" - See Zoning Ordinance Section 17.58.130.

"**Large Winery**" refers to a winery with annual production of 20,000 cases or greater.

"**Minor Use Permit**" - See Zoning Ordinance Section 17.58.120.

"**Promotional Event**" means an event sponsored by the property owner, an association of agricultural property owners, or similar organizations formed to assist the agricultural industry in the area, to promote the sale of Placer County wines, and which is intended to allow for the sampling and direct marketing and sales of wines produced on the premises or produced elsewhere from grapes grown on site. Such events include "winemaker's dinners."

"**Public Tasting**" refers to wine sampling by the general public.

"**Small Winery**" refers to a winery with annual production less than 20,000 cases.

"**Temporary Outdoor Events**" are events that are of limited duration and located primarily outdoors. If any buildings are used for the event, such use shall not exceed the occupancy load. Two events per year can be authorized on any given site through the Temporary Outdoor Event Permit process as described in Section 17.56.300(B)(1)(b). Any such authorization would be in addition to the promotional events authorized by this Section.

"**Wine Case**" contains 12 standard wine bottles (750 milliliters each).

"**Winery**" means a bonded winery facility comprising the building or buildings used to convert fruit juices (all or part of which are produced on the property) to wine, and to age, bottle, store, distribute and sell said wine. A winery, for the purposes of this section, includes crushing, fermenting and refermenting, bottling, blending, bulk and bottle storage, aging, shipping, receiving, laboratory equipment and maintenance facilities, sales, and administrative office functions, and may include tasting and promotional events.

D. **Development and Operational Standards**. The following development and operational standards shall apply to all wineries. These standards will be applied with flexibility to encourage wine grape growing, consistent with the agricultural use of the property. For wineries on commercially and industrially-zoned parcels, commercial standards will apply. Wineries established prior to the adoption date of this ordinance will be afforded maximum flexibility in establishing reasonable standards when adding new uses.

7. Promotional Events

a. Application Requirements. The application shall include the following information:

i. number of annual events;

ii. estimated number of participants,

iii. description of parking and circulation, and

iv. sanitation provisions.

b. Standards

i. Duration. No single promotional event shall exceed more than two consecutive days.

ii. Parking Requirements. Temporary, overflow parking may be utilized. The applicant shall demonstrate to the Development Review Committee the ability to provide safe access and parking, including providing attendants to monitor proper parking and access road clearance for emergency vehicles.

iii. Noise Standards. Any promotional event proposing outdoor amplified music shall be subject to Placer County Code Article 9.36 (Noise Ordinance).

Placer County Community Plans

Various Community Plans have been adopted in Placer County over the years. These plans include the Auburn-Bowman Community Plan (1994), the Dry Creek West Placer Community Plan (1990), the Horseshoe Bar Community Plan (1994), the Meadow Vista Community Plan (1996), and the Ophir Community Plan (1983). With the exception of the Auburn-Bowman Community Plan, the Community Plans either reference the noise standards contained in the Placer County General Plan Noise Element or Noise Ordinance, or do not contain numeric noise standards. As a result, the Noise Standards referenced above in the County Noise Ordinance are applied to existing and future wineries and farm breweries, with the exception of the portion of the Auburn-Bowman Community Plan which is located within unincorporated Placer County.

As noted above in Table 8, the Placer County Noise Ordinance applies a 55 dB hourly average (L_{eq}) noise level standard to non-transportation noise sources during daytime hours (7 am – 10 pm). Table 14 of the Auburn-Bowman Community Plan indicates that the daytime standard for non-transportation noise sources is 50 dB L_{eq}. This more restrictive noise standard likely resulted from ambient conditions in Placer County being lower at the time the Auburn-Bowman Community Plan was adopted 25 years ago than they are today. Nonetheless, the more restrictive 50 dB L_{eq} daytime noise standard is applied to any existing or future wineries and farm breweries in the unincorporated areas within the Auburn-Bowman Community Plan boundaries.

Noise Impacts and Mitigation Measures

Significance Criteria

The following criteria have been established to quantify the level of significance of an adverse effect to noise and vibration evaluated pursuant to the California Environmental Quality Act

Criteria (CEQA). According to the CEQA guidelines, a project would result in significant noise or vibration impacts if the project would result in any of the following:

A. Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan, noise ordinance, or applicable standards of other agencies.

   For this project, Compliance with the applicable provisions of the Noise Ordinance is required. The Noise Ordinance standards identified in Table 8 are reduced by five dB because the on-site noise sources consist of speech and music.

   It should be noted that the current winery ordinance requires compliance with the County's Noise Ordinance and that the proposed Winery and Farm Ordinance has the same requirement.

   For existing or future wineries and farm breweries in the unincorporated areas within the Auburn-Bowman Community Plan boundaries, the noise standards contained in Table 14 of the Auburn-Bowman Community Plan are applied. It should be noted that these standards are identical to the County's Noise Ordinance standards except that the daytime average (L_{eq}) noise standard is 5 dB lower than the Noise Ordinance standard. The same 5 dB adjustment is applied to the Auburn-Bowman Community Plan standards for on-site noise sources consisting of speech or music.

B. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

   The existing ambient vibration environment in the vicinities of the wineries and farm breweries was evaluated as being imperceptible. Because the project does not propose the introduction of any perceptible vibration sources, an analysis of vibration impacts relative to CEQA is not warranted.

C. A substantial permanent increase in ambient noise levels in the project vicinity above levels without the project.

   For noise generated by on-site activities, the Noise Ordinance establishes a standard of 5 dB above ambient as the threshold of significance. For noise generated by off-site traffic noise, see discussion of what constitutes a substantial increase in ambient noise levels following CEQA Criteria D.

D. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

   For noise generated by on-site activities, the Noise Ordinance establishes a standard of 5 dB above ambient as the threshold of significance. For noise generated by off-site traffic noise, the following discussion is provided:

   CEQA guidelines C and D above require identification of significant noise impacts if the project would result in substantial permanent or temporary increases in noise. However, the CEQA guidelines do not specify the numeric noise level increase which is considered substantial.

It is generally recognized that an increase of at least 3 dB for similar noise sources is usually required before most people will perceive a change in noise levels, and an increase of 6 dB is required before the change will be clearly noticeable.

The Federal Interagency Commission on Noise (FICON) has developed a graduated scale for use in the assessment of project related noise level increases. Table 9 was developed by FICON as a means of developing thresholds for impact identification for project related noise level increases. The FICON standards have been used extensively in recent years in the preparation of noise sections of Environmental Impact Reports that have been certified in many California Cities and Counties, including Placer County.

The rationale for the graduated scale used in the FICON standards is that test subjects' reactions to increases in noise levels varied depending on the starting level of noise. Specifically, with lower ambient noise environments, such as those below 60 dB Ldn, a larger increase in noise levels was required to achieve a negative reaction than was necessary in more elevated noise environments.

The use of the FICON standards are considered conservative relative to thresholds used by other agencies in the State of California. For example, the California Department of Transportation (Caltrans) requires a project related traffic noise level increase of 12 dB for a finding of significance, and the California Energy Commission (CEC) considers project related noise level increases between 5-10 dB significant, depending on local factors. Therefore, the use of the FICON standards, which set the threshold for finding of significant noise impacts as low as 1.5 dB, provides a conservative approach to impact assessment.

Table 9
Significance of Changes in Cumulative Noise Exposure

Ambient Noise Level Without Project, Ldn	Increase Required for Significant Impact
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

Source: Federal Interagency Committee on Noise (FICON)

Based on the FICON research, as shown in Table 9, a 5 dB increase in noise levels due to a project is required for a finding of significant noise impact where ambient noise levels without the project are less than 60 dB Ldn. Where pre-project ambient conditions are between 60 and 65 dB Ldn, a 3 dB increase is applied as the standard of significance. Finally, in areas already exposed to higher noise levels, specifically pre-project noise levels in excess of 65 dB Ldn, a 1.5 dB increase is considered by FICON as the threshold of significance.

This graduated scale indicates that in quieter noise environments, test subjects tolerated a higher increase in noise levels due to a project before the onset of adverse noise impacts than did test subjects in louder environments.

According to the FICON study, if screening analysis shows that noise-sensitive areas will be at or above DNL 65 dB and will have an increase of DNL 1.5 or more, further analysis should be conducted. The FICON study also reported the following: Every change in the noise environment does not necessarily impact public health and welfare.

Audibility is not a test of significance according to CEQA. If this were the case, any project which added any audible amount of noise to the environment would be considered unacceptable according to CEQA. Because every physical process creates noise, whether by the addition of a single vehicle on a roadway, or a tractor in an agricultural field, the use of audibility alone as significance criteria would be unworkable. CEQA requires a substantial increase in noise levels before noise impacts are identified, not simply an audible change.

E. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of people residing or working in the area to excessive noise levels resulting from the proposed project.

F. For a project within the vicinity of a private airstrip, exposure of people residing or working in the project area to excessive noise levels.

Because the subject wineries and farm breweries are not located within 2 miles of a public use airport or in the vicinity of private airstrips, consideration of noise impacts relative to CEQA criteria E and F would not be warranted for this evaluation. If, however, future wineries or farm breweries were proposed in close proximity to a County airport, the County Noise Element provisions applicable to aircraft noise exposure would be applicable to such applications.

Analysis Methodology

Because this Draft EIR considers the impacts associated with adoption of the Proposed Winery and Farm Brewery Zoning Text Amendment Project, the following methodology is employed: Noise impacts are identified if the proposed project would result in a substantial increase in off-site traffic noise levels, or if noise generated by on-site activities at existing or future wineries or farm breweries would either exceed the applicable County noise standards or result in a substantial increase in ambient noise levels.

Off-Site Traffic Noise Impacts: Agricultural Promotional and Special Events

Impact 1: Project-Related Changes in Off-Site Traffic Noise Levels Associated with Winery and Farm Brewery Events

To assess noise impacts due to project-related traffic increases on the local roadway network, traffic noise levels are predicted at a representative distance for both existing and future (cumulative), project and no-project condition. Noise impacts are identified at existing noise-sensitive areas if the noise level increases which result from the project exceed the significance

thresholds shown in Table 9. More specifically, this analysis estimates the increase in traffic noise levels along the off-site roadway network as a result of the traffic generated by additional events held by-right at *existing* winery and farm brewery facilities. The number of additional by-right events assumed to occur at existing facilities under the proposed ordinance, and the related traffic estimates, are described in the KD Anderson Traffic Study.

To describe existing and projected noise levels due to traffic, the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used. The model is based upon the Calveno reference noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA model was developed to predict hourly Leq values for free-flowing traffic conditions. To predict traffic noise levels in terms of Ldn, it is necessary to adjust the input volume to account for the day/night distribution of traffic.

Traffic volumes for the short-term conditions and scenarios were obtained from KDA transportation consultants. Tables 10 and 11 show the predicted changes in existing traffic noise levels resulting from the project relative to both weekday and weekend conditions. Tables 10-11 are provided in terms of L_{dn} at a standard distance of 100 feet from the centerlines of the project-area roadways. Appendix D contains the FWHA model inputs for both existing and cumulative conditions.

Table 10
Traffic Noise Modeling Results and Project-Related Traffic Noise Increases
Existing (Baseline) Weekday Conditions

Roadway	Segment Description	Traffic Noise Level at 100 feet, dB Ldn			Substantial Increase?
		Existing	Existing + Project	Increase	
Auburn Folsom Rd	Dick Cook Rd to Horseshoe Bar Rd	62.8	62.8	0.0	No
Ayers Holmes Rd	Mt. Vernon Rd to Wise Rd	47.0	47.0	0.0	No
Bald Hill Rd	Crater Hill Rd to Valle Vista Ct	52.1	52.3	0.3	No
Baxter Grade Rd	Wise Rd to Mt. Vernon Rd	50.8	50.9	0.1	No
Bell Rd	Coyote Ridge Ct to Miracle Ln	57.1	57.1	0.0	No
Bell Rd	Mallard Way to Cramer Rd	53.6	53.6	0.0	No
Chili Hill Rd	Lozanos Rd to Gold Hill Rd	46.4	47.2	0.8	No
Combie Rd	Placer Hills Rd to Wooley Creek Ln	55.2	55.2	0.0	No
Cramer Rd	Bell Rd to SR 49	48.4	48.4	0.0	No
Crosby Herold Rd	Wise Rd to Meadow Creek Rd	48.1	48.8	0.7	No
Del Mar Ln	Sierra College Blvd to Rock Hill Winery	51.4	51.4	0.0	No
Fowler Rd	Virginiatown Rd to SR 193	56.2	56.4	0.2	No
Fleming Rd	Gladding Rd to McCourtney Rd	37.2	37.2	0.0	No
Fruitvale Rd	Fowler Rd to Gold Hill Rd	57.4	57.6	0.2	No
Gold Hill Rd	Virginiatown Rd to SR 193	57.6	58.0	0.4	No
Horseshoe Bar Rd	Val Verde Rd to Auburn Folsom Rd	56.4	56.4	0.0	No
Lone Star Rd	Bell Rd to SR 49	52.1	52.1	0.0	No
McCourtney Rd	Wise Rd to Big Ben Rd	56.4	56.6	0.2	No
Millertown Rd	Wise Rd to Vada Ranch Rd	42.6	42.6	0.0	No
Mt. Vernon Rd	Hastings Ln to Meyers Ln	58.7	58.8	0.1	No

Table 10
Traffic Noise Modeling Results and Project-Related Traffic Noise Increases
Existing (Baseline) Weekday Conditions

Roadway	Segment Description	Traffic Noise Level at 100 feet, dB Ldn			Substantial Increase?
		Existing	Existing + Project	Increase	
Mt. Vernon Rd	Vineyard Dr to Millerstown Rd	60.4	60.5	0.1	No
Nicolaus Rd	Canal to Maverick Ln	60.5	60.5	0.0	No
Placer Hills Rd	Pinewood Wy to Winchester Club Dr	63.2	63.2	0.0	No
Ridge Rd	Gold Hill Rd to Ophir Rd	49.9	49.9	0.0	No
Sierra College Blvd	Del Mar Rd to King Rd	65.7	65.8	0.1	No
SR 193	Sierra College Blvd to Fowler Rd	63.9	64.0	0.1	No
Virginiatown Rd	Coyote Ln to Fowler Rd	52.4	52.5	0.1	No
Wise Rd	McCourtney Rd to Crosby Herold Rd	59.8	60.0	0.2	No
Wise Rd	Crosby Herold Rd to Garden Bar Rd	58.4	58.7	0.3	No
Wise Rd	Garden Bar Rd to Wally Allan Rd	54.9	55.2	0.3	No
Wise Rd	County Lane to Crater Hill Rd	52.9	53.1	0.2	No
Wise Rd	Bald Hill Rd to Ophir Rd	50.9	51.0	0.1	No

Source: FHWA Model with inputs from KDA. Complete listing of FHWA Model inputs is provided in Appendix D.

Table 11
Traffic Noise Modeling Results and Project-Related Traffic Noise Increases
Existing (Baseline) Weekend Conditions

Roadway	Segment Description	Traffic Noise Level at 100 feet, dB Ldn			Substantial Increase?
		Existing	Existing + Project	Increase	
Auburn Folsom Rd	Dick Cook Rd to Horseshoe Bar Rd	62.7	62.7	0.0	No
Ayers Holmes Rd	Mt. Vernon Rd to Wise Rd	47.7	47.7	0.0	No
Bald Hill Rd	Crater Hill Rd to Valle Vista Ct	51.0	51.4	0.4	No
Baxter Grade Rd	Wise Rd to Mt. Vernon Rd	48.9	49.1	0.2	No
Bell Rd	Coyote Ridge Ct to Miracle Ln	56.9	56.9	0.0	No
Bell Rd	Mallard Way to Cramer Rd	53.0	53.1	0.1	No
Chili Hill Rd	Lozanos Rd to Gold Hill Rd	45.1	46.2	1.1	No
Combie Rd	Placer Hills Rd to Wooley Creek Ln	54.8	54.8	0.0	No
Cramer Rd	Bell Rd to SR 49	48.3	48.3	0.0	No
Crosby Herold Rd	Wise Rd to Meadow Creek Rd	48.5	49.1	0.6	No
Del Mar Ln	Sierra College Blvd to Rock Hill Winery	51.6	51.6	0.0	No
Fowler Rd	Virginiatown Rd to SR 193	56.3	56.5	0.2	No
Fleming Rd	Gladding Rd to McCourtney Rd	40.5	40.5	0.0	No
Fruitvale Rd	Fowler Rd to Gold Hill Rd	56.4	56.7	0.3	No
Gold Hill Rd	Virginiatown Rd to SR 193	58.4	58.7	0.3	No
Horseshoe Bar Rd	Val Verde Rd to Auburn Folsom Rd	54.8	54.9	0.1	No
Lone Star Rd	Bell Rd to SR 49	51.8	51.8	0.0	No
McCourtney Rd	Wise Rd to Big Ben Rd	56.5	56.7	0.2	No
Millertown Rd	Wise Rd to Vada Ranch Rd	42.2	42.2	0.0	No
Mt. Vernon Rd	Hastings Ln to Meyers Ln	60.0	60.0	0.1	No

Table 11
Traffic Noise Modeling Results and Project-Related Traffic Noise Increases
Existing (Baseline) Weekend Conditions

Roadway	Segment Description	Traffic Noise Level at 100 feet, dB Ldn			Substantial Increase?
		Existing	Existing + Project	Increase	
Mt. Vernon Rd	Vineyard Dr to Millerstown Rd	59.9	60.0	0.1	No
Nicolaus Rd	Canal to Maverick Ln	59.4	59.4	0.0	No
Placer Hills Rd	Pinewood Wy to Winchester Club Dr	62.2	62.2	0.0	No
Ridge Rd	Gold Hill Rd to Ophir Rd	48.9	48.9	0.0	No
Sierra College Blvd	Del Mar Rd to King Rd	64.9	65.0	0.1	No
SR 193	Sierra College Blvd to Fowler Rd	63.9	64.0	0.1	No
Virginiatown Rd	Coyote Ln to Fowler Rd	53.5	53.6	0.1	No
Wise Rd	McCourtney Rd to Crosby Herold Rd	60.0	60.2	0.2	No
Wise Rd	Crosby Herold Rd to Garden Bar Rd	58.6	58.9	0.3	No
Wise Rd	Garden Bar Rd to Wally Allan Rd	54.6	54.9	0.3	No
Wise Rd	County Lane to Crater Hill Rd	51.9	52.1	0.2	No
Wise Rd	Bald Hill Rd to Ophir Rd	50.5	50.6	0.1	No

Source: FHWA Model with inputs from KDA. Complete listing of FHWA Model inputs is provided in Appendix D.

The data in Tables 10 through 11 indicate that traffic generated by concurrent activities at each winery and farm brewery would result in traffic noise level increases ranging from 0.0 to 0.8 dB L_{dn} on weekdays and 0.0 to 1.1 dB L_{dn} on weekends. Relative to the significance criteria identified in Table 9, these increases would not be considered substantial. As a result, off-site traffic noise impacts related to increases in traffic resulting from the implementation of the project are identified as being ***less than significant***.

Noise Impacts Associated with Parking and Vehicle Movements on Winery and Farm Brewery Sites: Ag-Promotional and Special Events (Including Weddings).

Impact 2: Noise Generated by Onsite Circulation during Winery and Farm Brewery Events

Two different types of events are being defined as part of the Proposed Winery and Farm Brewery Zoning Text Amendment Project. Agricultural Promotional Events would be limited to 50 attendees at one time per event and are predicted to generate a total of 20 peak hour vehicle trips. Special Events on large parcels (20+ acres) would be limited to 200 attendees at one time and are predicted to generate a total of 80 peak hour vehicle trips. Under the new Ordinance, weddings would be permitted as special events provided the noise generation of the wedding events do not exceed the County's Noise Ordinance standards at the nearest residences.

Using the FHWA Model with an assumed on-site vehicle speed of 15 mph the peak hour average noise generation of the Agricultural Promotional and Special events were computed to be 40 and 46 dB Leq at a reference distance of 50 feet from the on-site traffic route. Noise levels in this range would be satisfactory relative to the Placer County 55 dB Leq daytime noise level standard at the nearest off-site noise-sensitive receptors to the winery and farm brewery sites. These noise levels would also be satisfactory relative to the 5 dB more restrictive daytime noise standard

contained within the Auburn-Bowman Community Plan Area. In addition, the predicted on-site traffic noise generation would be at or below measured ambient noise levels in the project vicinity (Table 4). As a result, noise impacts related to on-site traffic during both Agricultural Promotional and Special Events are identified as being ***less than significant.***

Noise Impacts Related to Proposed Ordinance Text Amendments

Impact 3: Noise Impacts Related to Implementation of the Proposed Winery and Farm Brewery Zoning Text Amendment at Existing Wineries and Farm Breweries

The proposed Winery and Farm Brewery Zoning Text Amendments would include the following substantive changes to the current Winery Ordinance:

- Add Definition of Farm Brewery to the Ordinance
- Add Definition of Boutique Winery to the Ordinance
- Define New 10-Acre Minimum Parcel Size
- Modify Event Definition
- Create Table Outlining Event Allowances, Maximum Capacity, and Use Permit Requirement
- Clarify Hours of Operation
- Update the standards for Potable Water and Waste Disposal
- Update the standards for Access Standards

While the proposed text amendments would provide clarification to the items listed above, no changes to the provisions of the existing Winery Ordinance which require all winery and farm brewery facilities to comply with the County's Noise Ordinance are proposed. As a result, events occurring at existing wineries and farm breweries within the County would still be required to fully comply with the County Noise Ordinance, just as such compliance is required currently. Similarly, these changes would not change the level of noise generation considered acceptable for existing or proposed uses located within the unincorporated areas of the Auburn-Bowman Community Plan Area.

Although no increase in the allowable noise generation of events is proposed as part of the proposed text amendments, the addition of "weddings" as special events does introduce a new type of noise source which could potentially generate more noise than other types of special events.

Although Agricultural Promotional events could occur with greater frequency than they may currently occur under the existing ordinance, the County Noise Ordinance does not require mitigation for events which are in compliance with the applicable noise standards, regardless of the number of events. The same is true regarding special events, which would also be subject to the County Noise Ordinance standards. The proposed text amendments do not affect the protection provided to the nearby residences by continuing to require that all events maintain compliance with the Noise Ordinance standards. However, weddings are now being included under the category of "special event", and weddings have the potential to generate higher noise levels than typical events. Noise generated by weddings is discussed under Noise Impact 5. However, because all types of events must comply with the County's Noise Ordinance under the

new Ordinance, just as they must under the existing Ordinance, this impact is considered ***less than significant***.

Noise Impacts Associated with On-Site Activities at Agricultural Promotional Events

Impact 4: Noise Impacts Related to Onsite Speech and Music Generated at Ag-Promotional Events for Future Facilities.

Under the proposed Ordinance language, an "Agricultural Promotional Event" is directly related to the education and marketing of wine and craft beer to consumers including but not limited to winemaker/brewmaster dinners, release parties, membership club parties, and private parties where the only alcohol served is produced by the winery/farm brewery. An Agricultural Promotional Event accommodates 50 people or less at one time. There are limited occurrences when greater than 50 people are in attendance and those shall be regulated in the same manner as a Special Event.

Due to the relatively small size and nature of the event, it is considered unlikely that events such as winemaker's dinners would include amplified music similar to that which might occur at larger special events. It is more likely that, if music is to be present at agricultural-promotional events, it would be of the acoustic variety (acoustic guitar = 50 dBA at 100 feet). Furthermore, with 50 attendees or less present at one time, it is also unlikely that a public address system would be required for the speakers to be heard (person speaking in loud voice = 43 dBA at 100 feet). Finally, with half of the attendees speaking in normal voices during casual conversation (58 dBA at 3 feet), the computed hourly average noise level at a reference distance of 100 feet would be 41 dBA. The combined noise level of these sources would be approximately 51 dBA at a distance of 100 feet from the event. These computations assume the agricultural promotional event is occurring outside, as sound generated by events held indoors would be substantially contained within the building.

In light of the analysis presented above, noise generated by agricultural promotional events is predicted to be in compliance with the County's Noise Ordinance standards provided such events occur beyond 100 feet from the property line of a noise-sensitive land use if they are held outdoors. For events located within the unincorporated areas of the Auburn-Bowman Community Plan Area, the noise generated by agricultural promotional events is predicted to be in compliance with the Auburn-Bowman Plan Standards provided such events occur beyond 200 feet from the property line of a noise-sensitive land use if they are held outdoors. As a result, this impact is considered ***less than significant***.

Noise Impacts Associated with On-Site Activities at Special Events

Impact 5: Noise Impacts Related to Onsite Speech and Music Generated at Special Events, Including Weddings, for both Existing and Future Facilities.

Sound levels generated during special events held at wineries and farm breweries can vary considerably at nearby noise-sensitive properties depending on the size and nature of the event.

For example, larger wedding receptions where amplified music is present tend to generate higher noise levels than smaller events where unamplified, acoustic music is present.

The proposed Winery and Farm Brewery Ordinance Text Amendments set maximum attendance limits for Special Events, such as a wedding, at 100 people for medium sized parcels (10-20 acres) and 200 people for large sized parcels (20+ acres).

Typical sound levels for a range of activities comparable to what might occur at special events of sizes similar to those allowed by the proposed Winery and Farm Brewery Zoning Text Amendment are shown below in Table 14. These data include a combination of noise measurement results conducted by BAC in recent years as well as published sound level data for persons conversing at various levels (*Handbook of Acoustical Measurements and Noise Control, Harris, McGraw Hill, 1998).*

Table 14
Typical Sound Sources Levels for Winery / Ag Promotional Events

Event or Activity	Typical Noise Level at 50 feet (dBA L_{eq})
Amplified speech / music at louder event (i.e. 200 person wedding reception)	75
Amplified speech/music at smaller event (i.e. 100 person reception)	72
Amplified speech only (no amplified music)	65
Non-amplified music (i.e. acoustic ensemble)	60
Non-amplified music (single acoustic guitar)	56
Raised conversations (100 people)	60
Raised conversations (50 people)	57
Source: Bollard Acoustical Consultants file data for similar types of events.	

Noise levels generated during special events occurring at three existing Placer County wineries were monitored in September and October of 2017, and March of 2018. Although the numbers of attendees at these events varied throughout the course of each event, event attendance reportedly exceeded 50 people and amplified music was present during each of the events. The measured average noise level during these events was 55 dB L_{eq} at the reference measurement distance of 200 feet from the approximate acoustic center of the event areas. Measured instantaneous maximum noise levels during these same events were 10-15 dB higher than the measured average noise levels, but the distances to the source of the maximum noise levels is more uncertain because the location of instantaneous maximum noise levels cannot be exactly pinpointed.

The measured special event noise levels, which were all within compliance with the County Noise Ordinance standards at the nearest noise-sensitive property lines, correspond to approximately 67 dB L_{eq} at a reference distance of 50 feet. The test results indicate that the measured special event noise levels were approximately 5-8 dB lower than the reference sound levels shown in Table 14 for amplified music. This difference may have been caused in part by additional sound absorption by intervening vineyards or variations in amplifier settings. To provide reasonably

conservative estimates of the potential noise generation of special events, the reference noise level data contained in Table 14 was applied to this analysis.

Sound radiating away from a fixed location decreases at a rate of approximately 6 dB for each doubling of distance from the noise source. So for a sound source (i.e. amplified music), that generates a median noise level of 75 dB at a distance of 50 feet from the speakers, the sound level at a distance of 100 feet from that same source would be 6 dB lower, or 69 dB. At a distance of 200 feet from the speakers (a doubling of distance from the 100 foot location), the expected sound level would be 6 dB lower still, or approximately 63 dB.

This 6 dB per doubling of distance attenuation rate assumes a direct line of sight between the noise source and receiver (i.e. no shielding by intervening buildings, topography, or vegetation), and does not include further decreases in sound which occur over distance with atmospheric absorption of sound. This 6 dB per doubling of distance attenuation rate was used to provide a conservative estimate of the distances to the critical noise contours for the various types of sound sources identified in Table 14.

According to the ambient noise level data contained in Table 2, daytime average ambient conditions in the rural areas of Placer County averaged approximately 50 dB L_{eq}. Given this general ambient condition, satisfaction with the County's 55 dB L_{eq} daytime threshold and 50 dB Leq daytime threshold for events within the Auburn-Bowman Community Plan Area, would ensure that the noise level increase associated with winery and farm brewery events would be approximately 5 dB, which is consistent with the Noise Ordinance threshold. However, because the noise source in question consists of speech and/or music, a -5 dB penalty is applied to the County noise standard. As a result, the critical daytime noise threshold for speech or music generated during events would be 50 dB L_{eq} during daytime hours (45 dB L_{eq} for the Auburn-Bowman Community Plan Area). During evening hours (7 pm – 10 pm), average measured ambient conditions were approximately 45 dB L_{eq}. After upward adjustment by 5 dB for the allowable increase and downward adjustment by 5 dB because the noise source consists of speech or music, this analysis concludes that the appropriate evening sound level threshold for special events would be 45 dB L_{eq} at nearby sensitive areas, including uses within the Auburn-Bowman Community Plan Area. The 5 dB threshold is identified as the limit for noise level increases in the County Code section 9.36.060.A.1 (County Noise Ordinance discussion previously provided in this report). As a result, the distances to the 45 and 50 dB L_{eq} noise contours are identified in Table 15.

It should be noted that, while the County's General Plan noise standards shown in Table 5 would be applicable to new applications for wineries or farm breweries intending to hold special events, and to weddings held at both existing and future venues, the County's Noise Ordinance standards shown in Table 8, and the Auburn-Bowman Community Plan standards, are more restrictive than the General Plan standards shown in Table 5. As a result, compliance with the County's Noise Ordinance standards identified in Table 8 and the 5 dB more restrictive daytime average noise standard of the Auburn-Bowman Community Plan, would ensure compliance with the County's General Plan standards as well. Therefore, the focus of this impact statement is on compliance with the County's Noise Ordinance standards and Auburn-Bowman Community Plan noise standards, rather than the General Plan standards.

Table 15
Distances Required to Attenuate Typical Agricultural Promotional and Special Events Sound Levels to a State of Compliance with Daytime 50 dB Leq and Evening 45 dB Leq Noise Standard

	Distance to Contour (feet)	
Event or Activity	**50 dB Leq**	**45 dB Leq**
Amplified speech / music at louder event (i.e. wedding reception)	750	1,225
Amplified speech/music at quieter event (i.e. wine industry dinner)	550	925
Amplified speech only (no amplified music)	275	450
Non-amplified music (i.e. acoustic ensemble)	150	275
Non-amplified music (single acoustic guitar)	100	175
Raised conversations (100 people)	150	275
Raised conversations (50 people)	125	200

Source: Table 14 data with 6 dB decrease in sound levels per doubling of distance from the source and an offset of -1.5 dB per thousand feet to account for atmospheric absorption.
Note: These distances do not include any additional attenuation which would result from shielding by intervening topography, structures, or vegetation.
Evening hours are defined as 7 pm to 10 pm.

As shown in Table 15, the distances from the noise source, which are required to meet County noise standards, vary depending on the noise source. Non-amplified music requires relatively modest setbacks to meet County noise standards; and future winery and farm brewery facilities are generally expected to meet these distances due to parcel size and/or site planning. As would be expected, with amplification, the setback requirements increase, with the greatest setbacks being required for wedding receptions having amplified speech and music. Given the relatively large setback distances, between amplified noise sources and nearby sensitive receptors, that are required to meet County noise standards, it is possible that applications for new wineries and/or farm breweries could propose event venues within those setback distances.

With respect to existing facilities, except for weddings, the types of special events listed in Table 15 are currently allowed under the Winery Ordinance, and are required to comply with the County's Noise Ordinance. As discussed in Impact 3, the proposed Zoning Text Amendment would continue to require compliance with the County's Noise Ordinance for these events that are allowable under the current Winery Ordinance. Thus, as is appropriate, the special event discussion for existing facilities focuses only on weddings, as they would be a new special event use category under the proposed Zoning Text Amendment. Based upon a review of aerial photographs, it is anticipated that some existing facilities would not meet the setback distances, identified in Table 15, for wedding events. As a result, noise impacts associated with speech and music activities related to special events at winery and farm breweries are identified as being ***potentially significant***.

Mitigation for Impact 3: Project Specific Noise Measurements or Analysis

New Winery and Farm Brewery Applications. When reviewing applications for new winery and/or farm brewery building permits, Placer County should compare the appropriate Table 15 setback requirements to the actual distances between the proposed sound source location and nearest sensitive receptors property line. If the actual setback distances are greater than those identified in Table 15 for the proposed type of sound

source(s), then no additional acoustical analysis would typically be required. If, however, the actual distances between the proposed sound source locations and nearest sensitive receptor locations are less than those shown in Table 15, then a site-specific noise analysis should be required to evaluate compliance with the County's noise standards.

Existing Winery and Farm Brewery Applications. Prior to hosting any weddings under the special event allowances set forth in Table 3 of the Winery and Farm Brewery Ordinance, the owner/operator shall submit a site plan of the existing facility to the Placer County Community Development Resource Agency. The Site Plan shall identify the proposed outdoor location of the wedding reception and distance(s) to nearest residential receptors. The County shall review the Site Plan and compare the appropriate Table 15 setback requirements for wedding receptions to the actual distance(s) between the proposed sound source location and nearest sensitive receptor property line(s). If the actual setback distances are greater than those identified in Table 15, then no additional acoustical analysis shall be required. If, however, the actual distances between the proposed sound source location and nearest sensitive receptor locations are less than those shown in Table 15, then a site-specific noise analysis should be required to evaluate compliance with the County's noise standards.

As noted previously, the distances to the noise contours shown in Table 15 do not include any attenuation of sound caused by intervening structures, vegetation, or topography. In addition, the Table 15 contours do not take into account the directionality of amplified sound system speakers, which can be 10-15 dB lower behind the speaker than in front of the speaker. As a result, the Table 15 data should be considered worst-case. Therefore, it is likely that in most cases, the actual distances to the noise contours will be considerably less than those shown in Table 15. It is the function of the site-specific noise analysis to quantify the additional sound attenuation which would result from natural features, such as intervening topography (i.e. hills), structures, or vegetation, which are specific to the location for which the event permit is being processed. Specific information which should be included in project-specific noise analyses is as follows:

1. Shielding by Barriers, Structures or Topography

Shielding of noise sources, which results in reduced sound levels at locations affected by such shielding, can result from intervening noise barriers, structures or topography. Site specific noise studies should include an evaluation of such shielding. If needed for compliance with the County's noise standards, additional shielding of sound sources can be obtained by placing walls or other structures between the noise source and the receiver. The effectiveness of a barrier depends upon blocking line-of-sight between the source and receiver, and is improved with increasing the distance the sound must travel to pass over the barrier as compared to a straight line from source to receiver. The difference between the distance over a barrier and a straight line between source and receiver is called the "path length difference," and is the basis for calculating barrier noise reduction.

Barrier effectiveness depends upon the relative heights of the source, barrier and receiver. In general, barriers are most effective when placed close to either the receiver or the source. An intermediate barrier location yields a smaller path-length-

difference for a given increase in barrier height than does a location closer to either source or receiver.

As a rule of thumb, sound barriers located relatively close to the source or sensitive receptor generally provide an initial noise reduction of 5 dB once line of sight between the noise source and receiver has been interrupted by the barrier, and an additional noise reduction of approximately 1 dB per foot of barrier height after the barrier intercepts line of sight.

2. Shielding and Absorption Provided by Vegetation

Trees and other vegetation are often thought to provide significant noise attenuation. However, approximately 50 - 100 feet of dense foliage (so that no visual path extends through the foliage) is typically required to achieve a 5 dB attenuation of noise. Thus the use of vegetation as a noise barrier is, therefore, frequently an impractical method of noise control unless large tracts of dense foliage are part of the existing landscape. However, in cases where such vegetation exists between the proposed events and nearby sensitive receptors, an evaluation of the sound attenuation provided by such vegetation should be included in the project-specific noise analysis.

Vegetation can be used to acoustically "soften" intervening ground between a noise source and receiver, increasing ground absorption of sound and thus increasing the attenuation of sound with distance. Planting of trees and shrubs is also of aesthetic and psychological value, and may reduce adverse public reaction to a noise source by removing the source from view, even though noise levels will be largely unaffected.

In summary, the effects of vegetation upon noise transmission are minor unless there is considerable intervening vegetation between the source and receptor. Where the amount of intervening vegetation is not substantial, the benefits may be limited to some increased absorption of high frequency sounds and in reducing adverse public reaction to the noise by providing aesthetic benefits.

3. Direction of Sound Travel

Sound propagation is not affected by gravity. As a result, sound travels uphill similar to sound traveling downhill, provided all other variables are equal. In cases where sensitive receptors are located above or below a noise source with no intervening structures, topography, or substantial vegetation, no additional shielding offsets should be applied for these features.

4. Other Sound Mitigation Options

Other options for sound attenuation which should be considered when evaluating permit applications for winery and farm brewery events include the following:

- Locating the events or loudest components of those events indoors.
- Orienting speakers in directions away from the nearest sensitive receptors.
- Locating speakers in positions which provide the maximum distances to the nearest noise-sensitive receptors.

- Using a larger number of speakers with lower individual output arranged in such a manner as to focus the sound at the desired locations rather than fewer speakers with higher sound output.
- Setting limits on the sound level output of the amplified speech or music equipment.
- Restricting sound amplification equipment entirely.

Significance of Impact 3 following Mitigation: *Less than Significant*

Impact 6: Cumulative Changes in Traffic Noise Levels Associated with Winery and Farm Brewery Events

Tables 12 and 13 show the predicted changes in future (cumulative) traffic noise levels resulting from increased events at existing winery and farm brewery facilities and 30 new cumulative facilities, as well as cumulative background growth, relative to both weekday and weekend conditions. Traffic volumes for the cumulative conditions and scenarios were obtained from KDA transportation consultants.

The data in Tables 12 and 13 indicate that traffic generated by concurrent activities at each existing and future winery and farm brewery would result in traffic noise level increases ranging from 0.0 to 2.2 dB L_{dn} on weekdays and 0.0 to 1.2 dB L_{dn} on weekends. Relative to the significance criteria identified in Table 9, these increases would not be considered substantial. As a result, the project's incremental contribution to off-site traffic noise levels would be ***less than significant***.

Table 12
Traffic Noise Modeling Results and Project-Related Traffic Noise Increases
Future (Cumulative) Weekday Conditions

Roadway	Segment Description	Traffic Noise Level at 100 feet, dB Ldn			Substantial Increase?
		Cumulative	Cumulative + Project	Increase	
Auburn Folsom Rd	Dick Cook Rd to Horseshoe Bar Rd	64.5	64.6	0.0	No
Ayers Holmes Rd	Mt. Vernon Rd to Wise Rd	48.9	49.6	0.7	No
Bald Hill Rd	Crater Hill Rd to Valle Vista Ct	53.8	54.0	0.2	No
Baxter Grade Rd	Wise Rd to Mt. Vernon Rd	52.7	53.3	0.6	No
Bell Rd	Coyote Ridge Ct to Miracle Ln	58.9	59.3	0.5	No
Bell Rd	Mallard Way to Cramer Rd	55.3	56.3	1.0	No
Chili Hill Rd	Lozanos Rd to Gold Hill Rd	48.1	49.0	0.9	No
Combie Rd	Placer Hills Rd to Wooley Creek Ln	56.9	56.9	0.0	No
Cramer Rd	Bell Rd to SR 49	51.2	52.1	0.8	No
Crosby Herold Rd	Wise Rd to Meadow Creek Rd	50.3	50.8	0.5	No
Del Mar Ln	Sierra College Blvd to Rock Hill Winery	53.1	53.1	0.0	No
Fowler Rd	Virginiatown Rd to SR 193	58.0	58.6	0.6	No
Fleming Rd	Gladding Rd to McCourtney Rd	39.0	41.3	2.2	No
Fruitvale Rd	Fowler Rd to Gold Hill Rd	59.1	59.5	0.4	No
Gold Hill Rd	Virginiatown Rd to SR 193	59.3	60.0	0.7	No
Horseshoe Bar Rd	Val Verde Rd to Auburn Folsom Rd	58.1	58.1	0.0	No
Lone Star Rd	Bell Rd to SR 49	54.4	54.6	0.2	No
McCourtney Rd	Wise Rd to Big Ben Rd	58.2	58.6	0.4	No
Millertown Rd	Wise Rd to Vada Ranch Rd	44.4	44.4	0.0	No
Mt. Vernon Rd	Hastings Ln to Meyers Ln	60.6	60.9	0.3	No
Mt. Vernon Rd	Vineyard Dr to Millerstown Rd	62.2	62.4	0.3	No
Nicolaus Rd	Canal to Maverick Ln	62.3	62.3	0.0	No
Placer Hills Rd	Pinewood Wy to Winchester Club Dr	65.0	65.0	0.0	No
Ridge Rd	Gold Hill Rd to Ophir Rd	51.6	51.6	0.0	No
Sierra College Blvd	Del Mar Rd to King Rd	67.9	68.1	0.2	No
SR 193	Sierra College Blvd to Fowler Rd	66.1	66.4	0.3	No
Virginiatown Rd	Coyote Ln to Fowler Rd	54.1	55.1	1.0	No
Wise Rd	McCourtney Rd to Crosby Herold Rd	61.5	62.3	0.8	No
Wise Rd	Crosby Herold Rd to Garden Bar Rd	60.2	60.7	0.5	No
Wise Rd	Garden Bar Rd to Wally Allan Rd	56.9	57.5	0.6	No
Wise Rd	County Lane to Crater Hill Rd	54.6	54.9	0.2	No
Wise Rd	Bald Hill Rd to Ophir Rd	52.6	52.7	0.1	No

Source: FHWA Model with inputs from KDA. Complete listing of FHWA Model inputs is provided in Appendix D.

Table 13
Traffic Noise Modeling Results and Project-Related Traffic Noise Increases
Future (Cumulative) Weekend Conditions

Roadway	Segment Description	Traffic Noise Level at 100 feet, dB Ldn			Substantial Increase?
		Cumulative	Cumulative + Project	Increase	
Auburn Folsom Rd	Dick Cook Rd to Horseshoe Bar Rd	64.4	64.4	0.0	No
Ayers Holmes Rd	Mt. Vernon Rd to Wise Rd	49.7	50.3	0.6	No
Bald Hill Rd	Crater Hill Rd to Valle Vista Ct	52.7	53.0	0.2	No
Baxter Grade Rd	Wise Rd to Mt. Vernon Rd	51.4	52.2	0.8	No
Bell Rd	Coyote Ridge Ct to Miracle Ln	59.7	60.1	0.4	No
Bell Rd	Mallard Way to Cramer Rd	54.9	56.0	1.1	No
Chili Hill Rd	Lozanos Rd to Gold Hill Rd	46.7	47.9	1.1	No
Combie Rd	Placer Hills Rd to Wooley Creek Ln	56.5	56.5	0.0	No
Cramer Rd	Bell Rd to SR 49	52.4	53.0	0.7	No
Crosby Herold Rd	Wise Rd to Meadow Creek Rd	51.5	51.9	0.4	No
Del Mar Ln	Sierra College Blvd to Rock Hill Winery	53.2	53.2	0.0	No
Fowler Rd	Virginiatown Rd to SR 193	58.1	58.7	0.6	No
Fleming Rd	Gladding Rd to McCourtney Rd	42.2	43.4	1.2	No
Fruitvale Rd	Fowler Rd to Gold Hill Rd	58.1	58.6	0.5	No
Gold Hill Rd	Virginiatown Rd to SR 193	60.0	60.6	0.6	No
Horseshoe Bar Rd	Val Verde Rd to Auburn Folsom Rd	56.5	56.6	0.0	No
Lone Star Rd	Bell Rd to SR 49	55.0	55.0	0.0	No
McCourtney Rd	Wise Rd to Big Ben Rd	58.2	58.6	0.4	No
Millertown Rd	Wise Rd to Vada Ranch Rd	43.9	43.9	0.0	No
Mt. Vernon Rd	Hastings Ln to Meyers Ln	61.8	62.1	0.2	No
Mt. Vernon Rd	Vineyard Dr to Millerstown Rd	61.6	61.9	0.3	No
Nicolaus Rd	Canal to Maverick Ln	61.1	61.1	0.0	No
Placer Hills Rd	Pinewood Wy to Winchester Club Dr	63.8	63.8	0.0	No
Ridge Rd	Gold Hill Rd to Ophir Rd	50.6	50.6	0.0	No
Sierra College Blvd	Del Mar Rd to King Rd	67.5	67.7	0.2	No
SR 193	Sierra College Blvd to Fowler Rd	66.3	66.6	0.3	No
Virginiatown Rd	Coyote Ln to Fowler Rd	55.1	55.9	0.8	No
Wise Rd	McCourtney Rd to Crosby Herold Rd	62.1	62.8	0.7	No
Wise Rd	Crosby Herold Rd to Garden Bar Rd	60.6	61.1	0.5	No
Wise Rd	Garden Bar Rd to Wally Allan Rd	57.0	57.6	0.5	No
Wise Rd	County Lane to Crater Hill Rd	53.6	53.9	0.3	No
Wise Rd	Bald Hill Rd to Ophir Rd	52.2	52.3	0.2	No

Source: FHWA Model with inputs from KDA. Complete listing of FHWA Model inputs is provided in Appendix D.

Appendix A

Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
Loudness	A subjective term for the sensation of the magnitude of sound.
Masking	The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.
Noise	Unwanted sound.
Peak Noise	The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the Maximum level, which is the highest RMS level.
RT_{60}	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 sabin.
SEL	A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy of the event into a 1-s time period.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.

Appendix B-1
Placer County Wine Ordinance
Ambient Noise Monitoring Results - Lone Buffalo Winery
Monday, September 11, 2017

Hour	Leq	Lmax	L50	L90
0:00	51	56	50	49
1:00	59	62	58	55
2:00	61	63	61	60
3:00	60	63	61	57
4:00	46	55	45	43
5:00	46	58	42	34
6:00	42	64	37	34
7:00	45	60	41	37
8:00	45	60	42	38
9:00	42	55	40	37
10:00	40	58	37	34
11:00	43	61	38	34
12:00	41	58	37	33
13:00	38	59	34	30
14:00	39	54	34	32
15:00	39	58	33	30
16:00	41	61	35	31
17:00	39	56	35	31
18:00	40	61	34	32
19:00	54	62	41	31
20:00	60	64	60	58
21:00	58	63	55	52
22:00	54	59	54	52
23:00	56	59	56	54

	Statistical Summary								
	Daytime (7 a.m. - 7 p.m.)			Evening (7 p.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average	High	Low	Average
Leq (Average)	45	38	42	60	54	58	61	42	57
Lmax (Maximum)	61	54	58	64	62	63	64	55	60
L50 (Median)	42	33	37	60	41	52	61	37	51
L90 (Background)	38	30	33	58	31	47	60	34	49

Computed CNEL, dB	63
% Daytime Energy	3%
% Evening Energy	31%
% Nighttime Energy	66%

BOLLARD
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Appendix B-2
Placer County Wine Ordinance
Ambient Noise Monitoring Results - Wise Villa Winery
Sunday, October 08, 2017

Hour	Leq	Lmax	L50	L90
0:00	30	41	28	26
1:00	38	69	28	26
2:00	29	48	27	25
3:00	29	37	26	25
4:00	28	41	26	25
5:00	30	49	27	26
6:00	34	47	31	28
7:00	37	49	34	30
8:00	44	67	34	31
9:00	46	66	39	34
10:00	45	60	42	38
11:00	47	65	42	37
12:00	48	63	45	39
13:00	49	72	44	40
14:00	49	64	47	43
15:00	49	61	46	41
16:00	49	64	46	42
17:00	50	68	46	41
18:00	47	66	42	35
19:00	36	55	32	30
20:00	37	56	33	30
21:00	35	52	32	29
22:00	34	54	31	28
23:00	32	49	29	27

	Statistical Summary								
	Daytime (7 a.m. - 7 p.m.)			Evening (7 p.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average	High	Low	Average
Leq (Average)	50	37	48	37	35	36	38	28	33
Lmax (Maximum)	72	49	64	56	52	54	69	37	48
L50 (Median)	47	34	42	33	32	32	31	26	28
L90 (Background)	43	30	38	30	29	29	28	25	26

Computed CNEL, dB	46
% Daytime Energy	96%
% Evening Energy	2%
% Nighttime Energy	2%

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Appendix B-3
Placer County Wine Ordinance
Ambient Noise Monitoring Results - Dono Dal Cielo Vineyard
Saturday, December 16, 2017

Hour	Leq	Lmax	L50	L90
0:00	30	44	27	25
1:00	39	65	27	25
2:00	35	56	30	27
3:00	32	47	30	27
4:00	40	64	30	28
5:00	44	67	31	27
6:00	43	67	35	30
7:00	47	67	38	35
8:00	54	68	47	42
9:00	50	69	44	38
10:00	53	70	50	45
11:00	50	67	46	40
12:00	54	73	50	44
13:00	54	71	49	43
14:00	55	76	51	46
15:00	54	79	49	42
16:00	49	68	40	35
17:00	47	65	34	28
18:00	47	67	31	26
19:00	50	70	41	29
20:00	48	67	35	28
21:00	42	64	32	27
22:00	44	68	28	25
23:00	44	65	27	24

	Statistical Summary								
	Daytime (7 a.m. - 7 p.m.)			Evening (7 p.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average	High	Low	Average
Leq (Average)	55	47	52	50	42	48	44	30	41
Lmax (Maximum)	79	65	70	70	64	67	68	44	61
L50 (Median)	51	31	44	41	32	36	35	27	29
L90 (Background)	46	26	39	29	27	28	30	24	26

Computed CNEL, dB	52
% Daytime Energy	87%
% Evening Energy	8%
% Nighttime Energy	5%

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Appendix B-4
Placer County Wine Ordinance
Ambient Noise Monitoring Results - Hillenbrand Brewery
Sunday, March 11, 2018

Hour	Leq	Lmax	L50	L90
0:00	41	61	40	38
1:00	40	50	39	37
1:00	39	45	38	36
3:00	40	59	38	37
4:00	39	59	38	36
5:00	43	66	38	35
6:00	47	71	41	37
7:00	47	69	43	39
8:00	48	68	41	36
9:00	52	76	39	34
10:00	45	64	38	34
11:00	50	67	44	37
12:00	52	69	47	43
13:00	53	79	46	43
14:00	55	82	47	44
15:00	56	79	47	44
16:00	63	88	54	46
17:00	53	81	41	36
18:00	47	67	44	39
19:00	45	62	43	40
20:00	43	57	42	40
21:00	45	66	42	39
22:00	43	56	41	38
23:00	43	56	41	37

	Statistical Summary								
	Daytime (7 a.m. - 7 p.m.)			Evening (7 p.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average	High	Low	Average
Leq (Average)	63	45	55	45	43	45	47	39	42
Lmax (Maximum)	88	64	74	66	57	62	71	45	58
L50 (Median)	54	38	44	43	42	43	41	38	39
L90 (Background)	46	34	40	40	39	40	38	35	37

Computed CNEL, dB	54
% Daytime Energy	94%
% Evening Energy	2%
% Nighttime Energy	4%

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Appendix B-5
Placer County Wine Ordinance
Ambient Noise Monitoring Results - Mt. Vernon Winery
Saturday, March 10, 2018

Hour	Leq	Lmax	L50	L90
0:00	42	60	38	37
1:00	47	69	38	37
2:00	46	62	37	36
3:00	39	51	37	35
4:00	38	56	36	35
5:00	41	60	38	36
6:00	49	74	43	40
7:00	47	61	44	41
8:00	51	73	46	42
9:00	50	72	46	42
10:00	49	64	46	41
11:00	48	65	45	37
12:00	48	63	45	39
13:00	47	61	44	37
14:00	49	65	46	38
15:00	49	69	43	37
16:00	49	70	45	36
17:00	50	73	44	36
18:00	52	80	44	35
19:00	46	68	38	36
20:00	45	58	40	37
21:00	45	65	39	36
22:00	44	60	38	35
23:00	45	65	37	36

	Statistical Summary								
	Daytime (7 a.m. - 7 p.m.)			Evening (7 p.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average	High	Low	Average
Leq (Average)	52	47	49	46	45	45	49	38	45
Lmax (Maximum)	80	61	68	68	58	64	74	51	62
L50 (Median)	46	43	45	40	38	39	43	36	38
L90 (Background)	42	35	38	37	36	36	40	35	36

Computed CNEL, dB	52
% Daytime Energy	75%
% Evening Energy	7%
% Nighttime Energy	19%

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Appendix B-6
Placer County Wine Ordinance
Ambient Noise Monitoring Results - Rancho Roble Winery
Sunday, March 11, 2018

Hour	Leq	Lmax	L50	L90
0:00	43	53	41	38
1:00	40	54	40	37
2:00	37	50	36	32
3:00	35	46	33	30
4:00	31	49	30	28
5:00	33	49	30	27
6:00	39	58	38	30
7:00	42	56	41	38
8:00	43	64	41	36
9:00	44	64	38	35
10:00	46	70	38	36
11:00	47	69	37	34
12:00	48	68	38	35
13:00	48	66	38	35
14:00	45	66	37	34
15:00	48	66	39	35
16:00	46	67	37	32
17:00	39	59	34	30
18:00	48	65	46	36
19:00	48	60	46	43
20:00	45	59	44	41
21:00	42	51	42	39
22:00	40	55	39	36
23:00	37	45	36	32

	Statistical Summary								
	Daytime (7 a.m. - 7 p.m.)			Evening (7 p.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average	High	Low	Average
Leq (Average)	48	39	46	48	42	46	43	31	39
Lmax (Maximum)	70	56	65	60	51	56	58	45	51
L50 (Median)	46	34	39	46	42	44	41	30	36
L90 (Background)	38	30	35	43	39	41	38	27	32

Computed CNEL, dB	48
% Daytime Energy	73%
% Evening Energy	17%
% Nighttime Energy	10%

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Appendix B-7
Placer County Wine Ordinance
Ambient Noise Monitoring Results - Vina Castellano Winery
Wednesday, March 28, 2018

Hour	Leq	Lmax	L50	L90
0:00	35	46	34	33
1:00	37	58	33	31
2:00	35	55	33	31
3:00	34	57	30	29
4:00	39	60	31	30
5:00	42	66	32	30
6:00	45	69	38	33
7:00	49	66	45	39
8:00	47	66	43	38
9:00	46	62	42	35
10:00	50	69	43	37
11:00	49	66	41	35
12:00	49	71	39	32
13:00	48	66	42	34
14:00	47	64	41	33
15:00	47	64	42	34
16:00	47	67	42	34
17:00	47	62	42	33
18:00	47	73	38	31
19:00	43	61	37	32
20:00	44	66	39	37
21:00	42	58	39	37
22:00	42	62	37	35
23:00	37	55	35	34

	Statistical Summary								
	Daytime (7 a.m. - 7 p.m.)			Evening (7 p.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average	High	Low	Average
Leq (Average)	50	46	48	44	42	43	45	34	40
Lmax (Maximum)	73	62	66	66	58	61	69	46	59
L50 (Median)	45	38	42	39	37	39	38	30	34
L90 (Background)	39	31	35	37	32	35	35	29	32

Computed CNEL, dB	49
% Daytime Energy	82%
% Evening Energy	7%
% Nighttime Energy	10%

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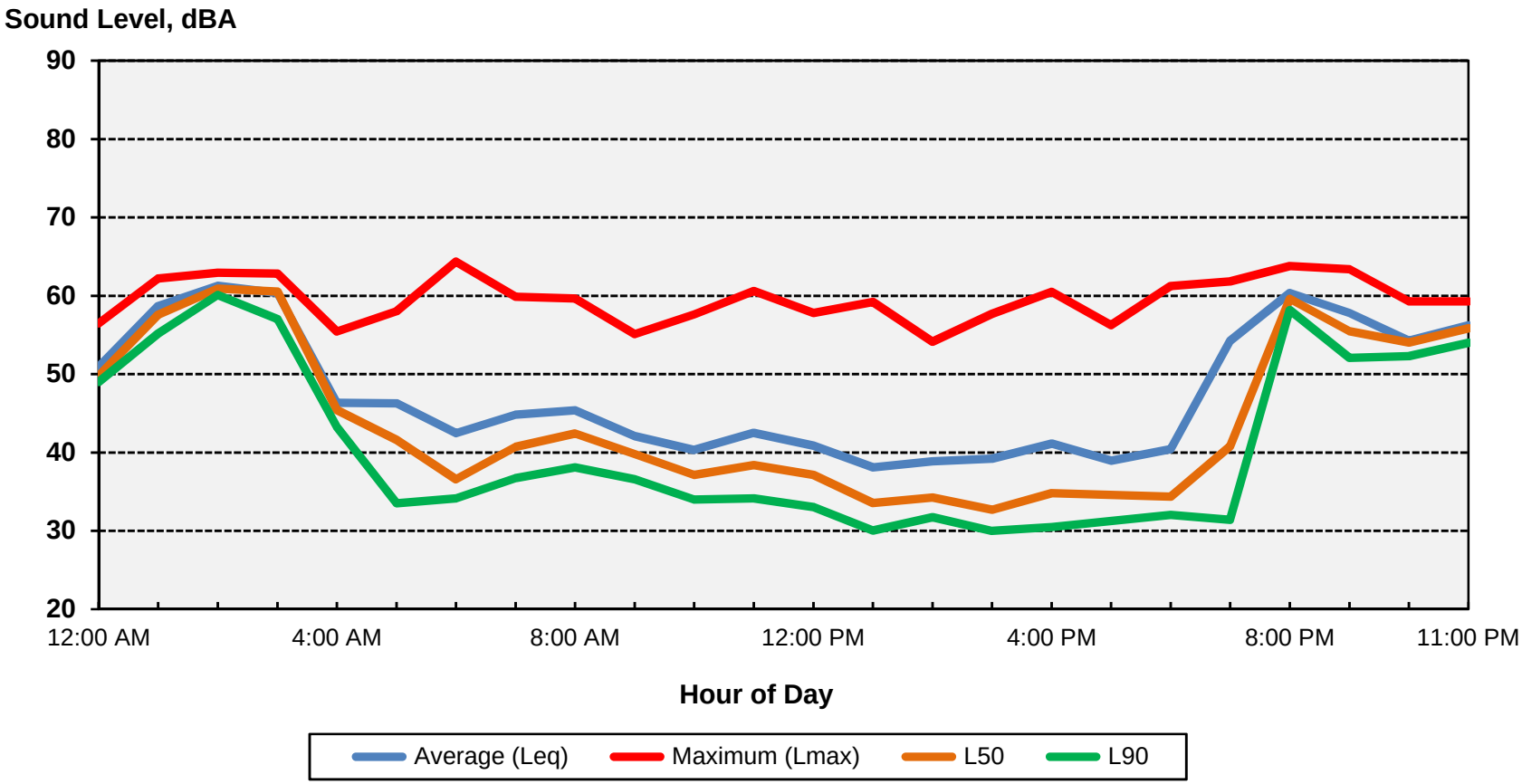
Appendix C-1
Placer County Wine Ordinance
Ambient Noise Monitoring Results - Lone Buffalo Winery
Monday, September 11, 2017



CNEL: 63 dB

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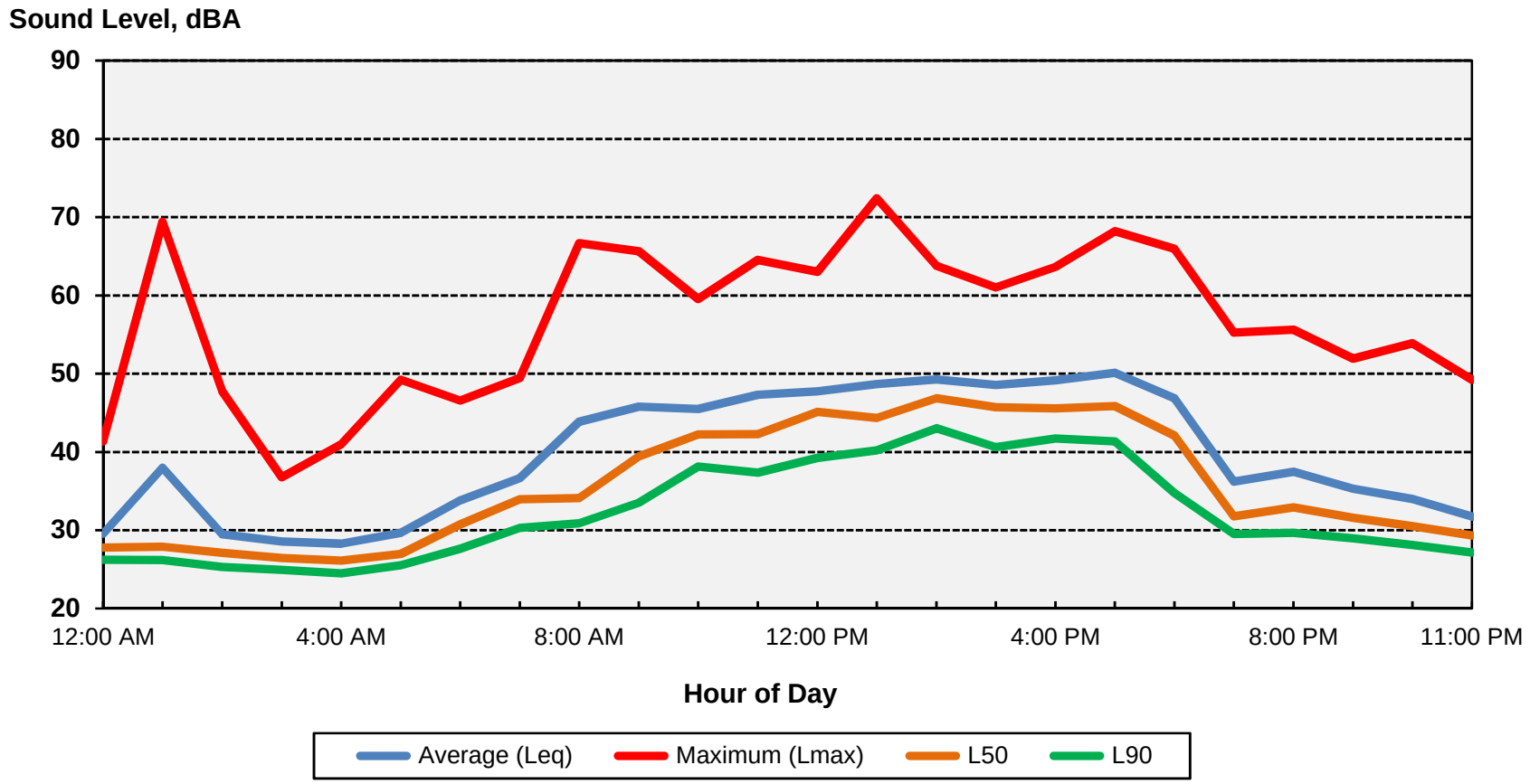
Appendix C-2
Placer County Wine Ordinance
Ambient Noise Monitoring Results - Wise Villa Winery
Sunday, October 08, 2017



CNEL: 46 dB

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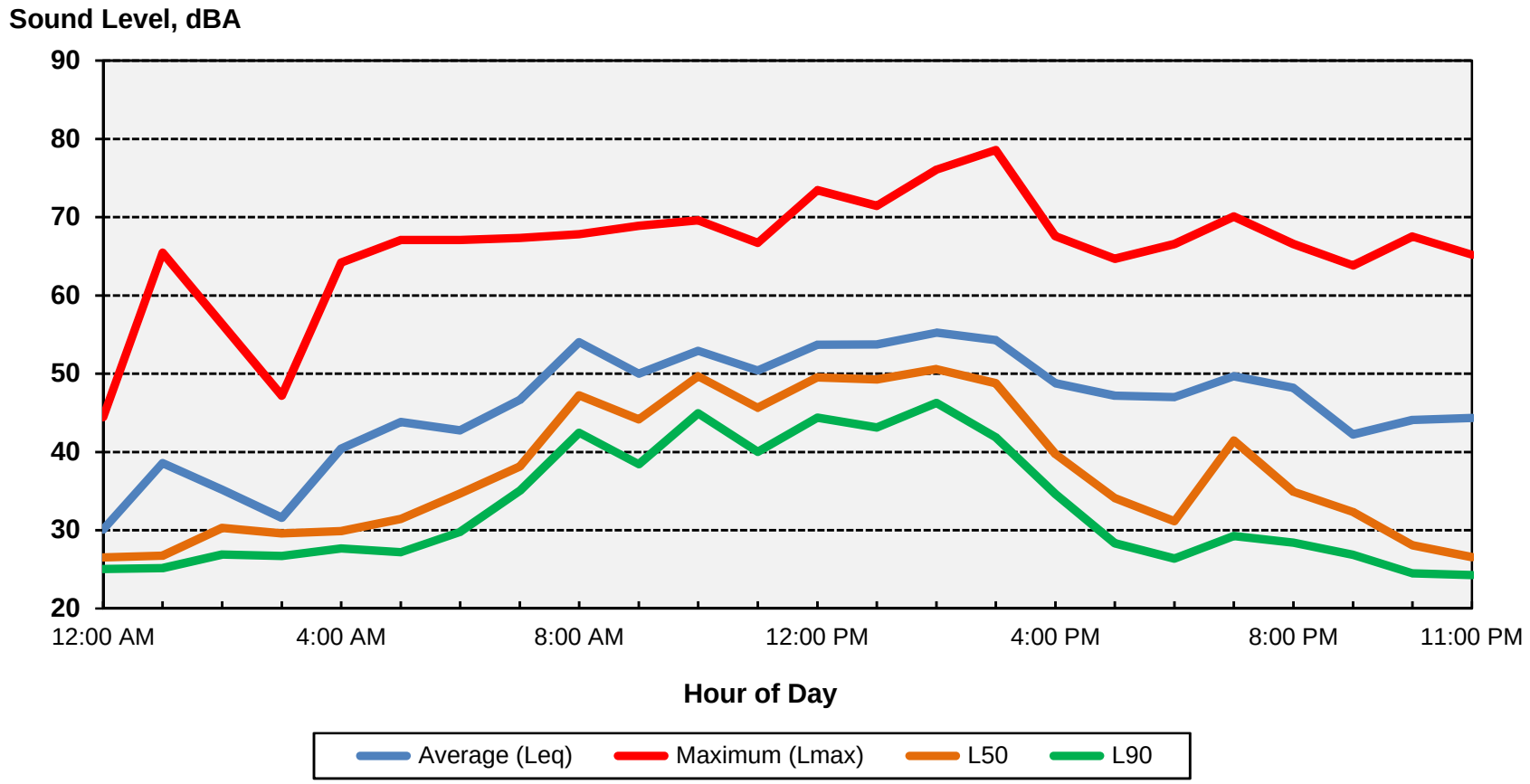
Appendix C-3
Placer County Wine Ordinance
Ambient Noise Monitoring Results - Dono Dal Cielo Vineyard
Saturday, December 16, 2017



CNEL: 52 dB

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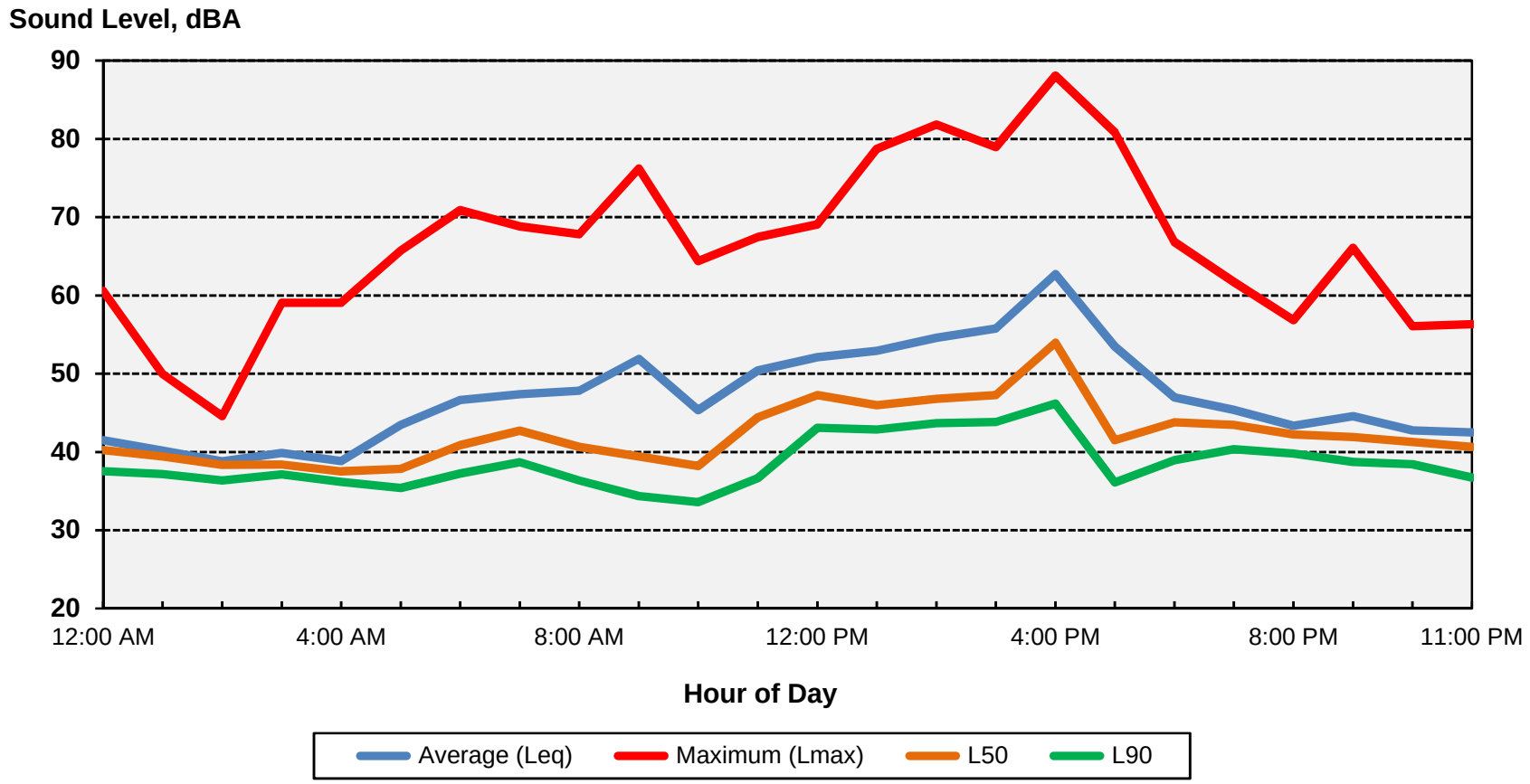
Appendix C-4
Placer County Wine Ordinance
Ambient Noise Monitoring Results - Hillenbrand Brewery
Sunday, March 11, 2018



CNEL: 54 dB

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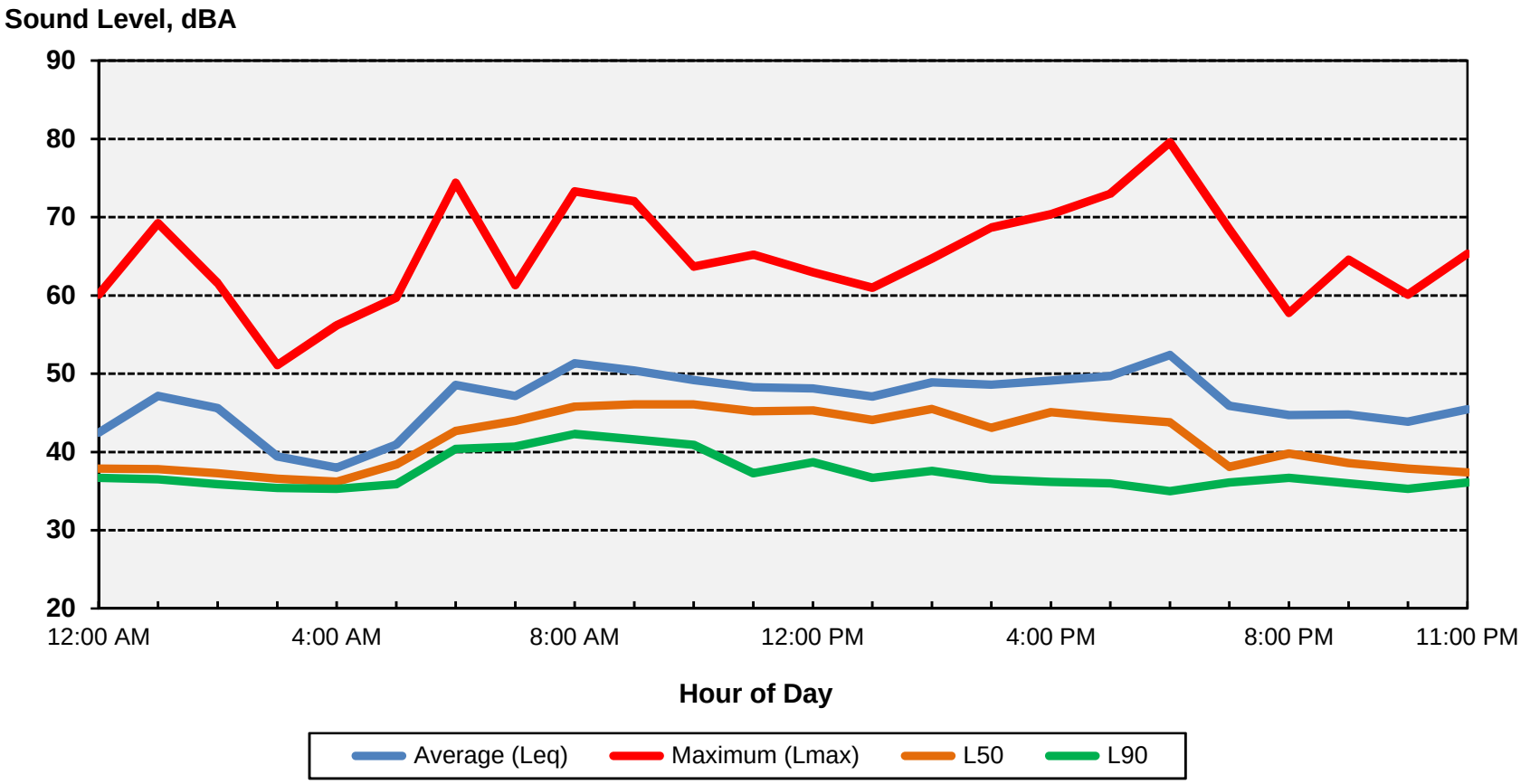
Appendix C-5
Placer County Wine Ordinance
Ambient Noise Monitoring Results - Mt. Vernon Winery
Saturday, March 10, 2018



CNEL: 52 dB

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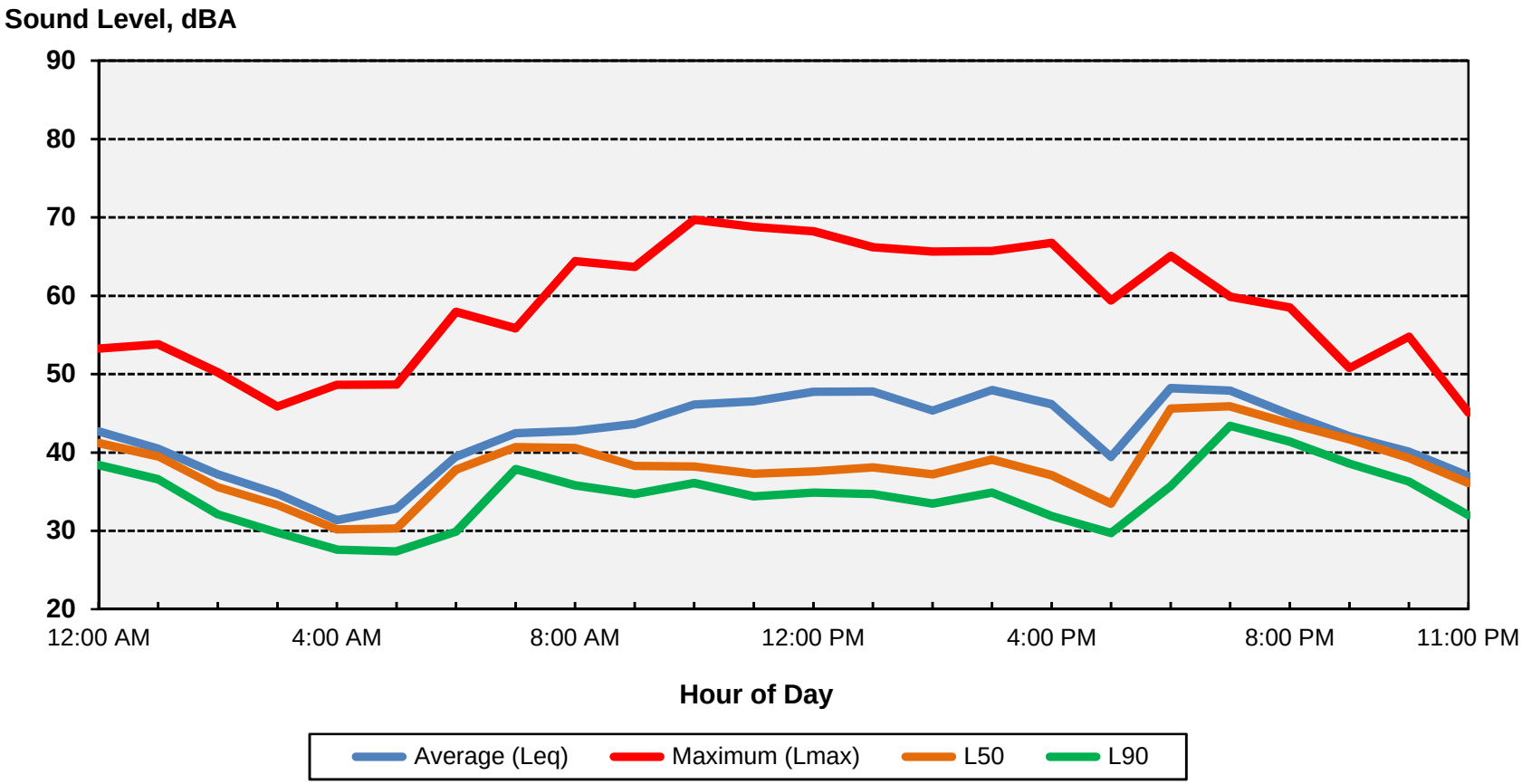
Appendix C-6
Placer County Wine Ordinance
Ambient Noise Monitoring Results - Rancho Roble Winery
Sunday, March 11, 2018



CNEL: 48 dB

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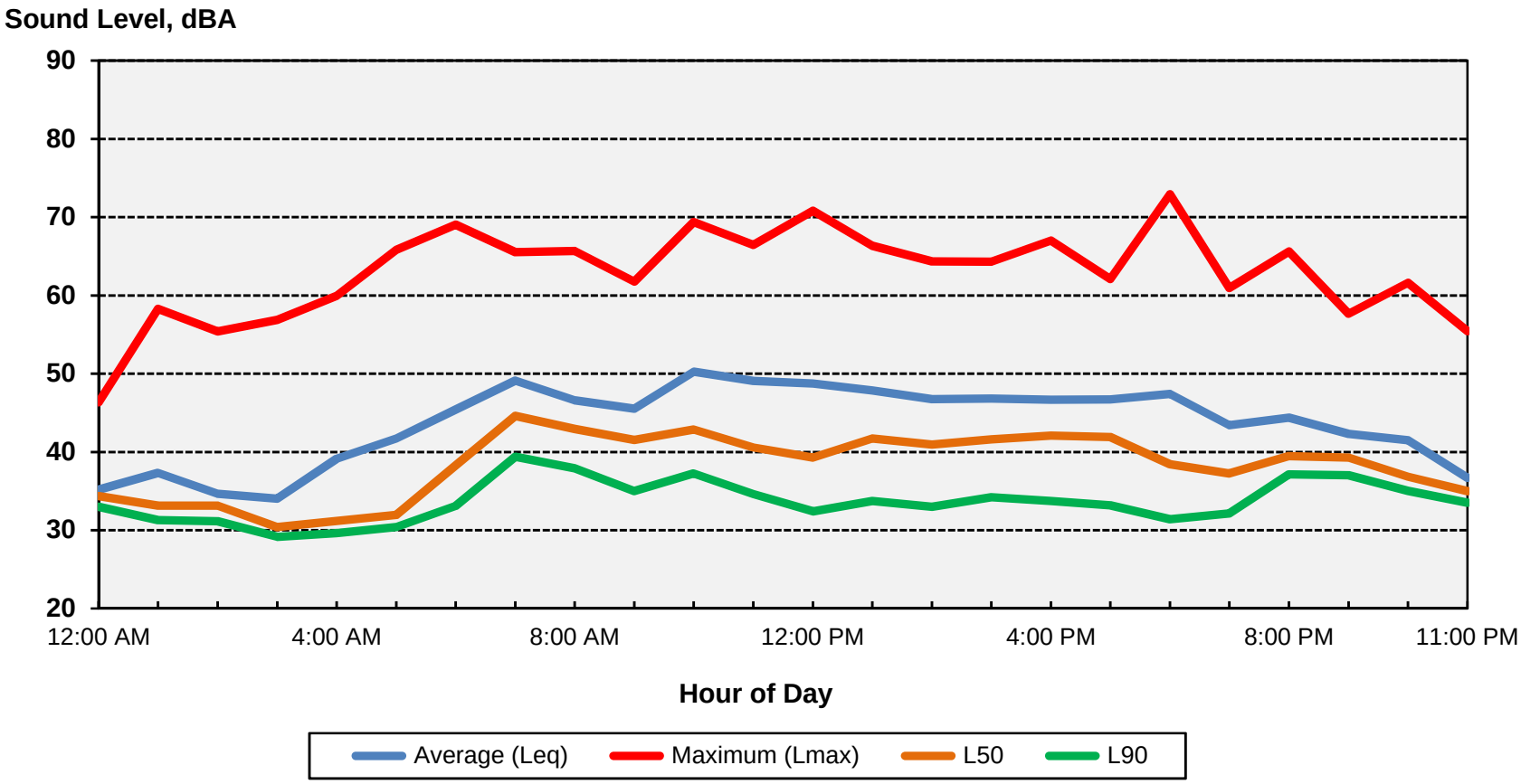
Appendix C-7
Placer County Wine Ordinance
Ambient Noise Monitoring Results - Vina Castellano Winery
Wednesday, March 28, 2018



CNEL: 49 dB

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Appendix D-1

FHWA Traffic Noise Prediction Model Inputs - Existing Conditions

Roadway Name	Segment Description	Weekday	Weekday Plus Project	Weekend	Weekend Plus Project	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance
Auburn Folsom Rd	Dick Cook Rd to Horseshoe Bar Rd	8,573	8,617	8,355	8,399	80	20	2	1	45	100
Ayers Holmes Rd	Mt. Vernon Rd to Wise Rd	412	412	485	485	80	20	2	1	35	100
Bald Hill Rd	Crater Hill Rd to Valle Vista Ct	1,309	1,387	1,038	1,116	80	20	2	1	35	100
Baxter Grade Rd	Wise Rd to Mt. Vernon Rd	971	997	634	660	80	20	2	1	35	100
Bell Rd	Coyote Ridge Ct to Miracle Ln	1,400	1,400	1,329	1,329	80	20	2	1	55	100
Bell Rd	Mallard Way to Cramer Rd	614	618	543	547	80	20	2	1	55	100
Chili Hill Rd	Lozanos Rd to Gold Hill Rd	355	431	262	338	80	20	2	1	35	100
Combie Rd	Placer Hills Rd to Wooley Creek Ln	2,688	2,688	2,477	2,477	80	20	2	1	35	100
Cramer Rd	Bell Rd to SR 49	558	560	549	551	80	20	2	1	35	100
Crosby Herold Rd	Wise Rd to Meadow Creek Rd	525	613	582	670	80	20	2	1	35	100
Del Mar Ln	Sierra College Blvd to Rock Hill Winery	1,126	1,126	1,171	1,171	80	20	2	1	35	100
Fowler Rd	Virginiatown Rd to SR 193	3,412	3,592	3,440	3,620	80	20	2	1	35	100
Fleming Rd	Gladding Rd to McCourtney Rd	43	43	92	92	80	20	2	1	35	100
Fruitvale Rd	Fowler Rd to Gold Hill Rd	1,486	1,556	1,186	1,256	80	20	2	1	55	100
Gold Hill Rd	Virginiatown Rd to SR 193	1,542	1,704	1,857	2,019	80	20	2	1	55	100
Horseshoe Bar Rd	Val Verde Rd to Auburn Folsom Rd	3,545	3,589	2,485	2,529	80	20	2	1	35	100
Lone Star Rd	Bell Rd to SR 49	1,328	1,330	1,223	1,225	80	20	2	1	35	100
McCourtney Rd	Wise Rd to Big Ben Rd	1,192	1,240	1,207	1,255	80	20	2	1	55	100
Millertown Rd	Wise Rd to Vada Ranch Rd	150	150	135	135	80	20	2	1	35	100
Mt. Vernon Rd	Hastings Ln to Meyers Ln	2,021	2,069	2,679	2,727	80	20	2	1	55	100
Mt. Vernon Rd	Vineyard Dr to Millerstown Rd	2,995	3,057	2,676	2,738	80	20	2	1	55	100
Nicolaus Rd	Canal to Maverick Ln	3,064	3,064	2,374	2,374	80	20	2	1	55	100
Placer Hills Rd	Pinewood Wy to Winchester Club Dr	9,470	9,470	7,407	7,407	80	20	2	1	45	100
Ridge Rd	Gold Hill Rd to Ophir Rd	789	789	640	640	80	20	2	1	35	100
Sierra College Blvd	Del Mar Rd to King Rd	12,762	13,014	10,642	10,894	80	20	2	1	50	100
SR 193	Sierra College Blvd to Fowler Rd	6,700	6,858	6,700	6,858	80	20	2	1	55	100
Virginiatown Rd	Coyote Ln to Fowler Rd	773	795	994	1,016	80	20	2	1	45	100
Wise Rd	McCourtney Rd to Crosby Herold Rd	2,575	2,697	2,714	2,838	80	20	2	1	55	100
Wise Rd	Crosby Herold Rd to Garden Bar Rd	1,857	1,985	1,978	2,106	80	20	2	1	55	100
Wise Rd	Garden Bar Rd to Wally Allan Rd	1,394	1,490	1,304	1,400	80	20	2	1	45	100
Wise Rd	County Lane to Crater Hill Rd	1,168	1,214	931	977	80	20	2	1	40	100
Wise Rd	Bald Hill Rd to Ophir Rd	1,000	1,016	915	931	80	20	2	1	35	100

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Appendix D-2

FHWA Traffic Noise Prediction Model Inputs - Cumulative Conditions

Roadway Name	Segment Description	Weekday	Weekday Plus Project	Weekend	Weekend Plus Project	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance
Auburn Folsom Rd	Dick Cook Rd to Horseshoe Bar Rd	12,740	12,784	12,250	12,294	80	20	2	1	45	100
Ayers Holmes Rd	Mt. Vernon Rd to Wise Rd	630	738	760	868	80	20	2	1	35	100
Bald Hill Rd	Crater Hill Rd to Valle Vista Ct	1,945	2,031	1,525	1,611	80	20	2	1	35	100
Baxter Grade Rd	Wise Rd to Mt. Vernon Rd	1,520	1,749	1,115	1,344	80	20	2	1	35	100
Bell Rd	Coyote Ridge Ct to Miracle Ln	2,080	2,318	2,535	2,773	80	20	2	1	55	100
Bell Rd	Mallard Way to Cramer Rd	915	1,157	835	1,077	80	20	2	1	55	100
Chili Hill Rd	Lozanos Rd to Gold Hill Rd	530	646	385	501	80	20	2	1	35	100
Combie Rd	Placer Hills Rd to Wooley Creek Ln	3,995	3,995	3,630	3,630	80	20	2	1	35	100
Cramer Rd	Bell Rd to SR 49	1,080	1,308	1,410	1,638	80	20	2	1	35	100
Crosby Herold Rd	Wise Rd to Meadow Creek Rd	880	988	1,150	1,258	80	20	2	1	35	100
Del Mar Ln	Sierra College Blvd to Rock Hill Winery	1,675	1,675	1,720	1,720	80	20	2	1	35	100
Fowler Rd	Virginiatown Rd to SR 193	5,155	5,893	5,290	6,028	80	20	2	1	35	100
Fleming Rd	Gladding Rd to McCourtney Rd	65	109	135	179	80	20	2	1	35	100
Fruitvale Rd	Fowler Rd to Gold Hill Rd	2,210	2,432	1,740	1,962	80	20	2	1	55	100
Gold Hill Rd	Virginiatown Rd to SR 193	2,290	2,682	2,725	3,117	80	20	2	1	55	100
Horseshoe Bar Rd	Val Verde Rd to Auburn Folsom Rd	5,270	5,310	3,645	3,685	80	20	2	1	35	100
Lone Star Rd	Bell Rd to SR 49	2,255	2,369	2,560	2,574	80	20	2	1	35	100
McCourtney Rd	Wise Rd to Big Ben Rd	1,770	1,958	1,770	1,958	80	20	2	1	55	100
Millertown Rd	Wise Rd to Vada Ranch Rd	225	225	200	200	80	20	2	1	35	100
Mt. Vernon Rd	Hastings Ln to Meyers Ln	3,085	3,303	4,140	4,358	80	20	2	1	55	100
Mt. Vernon Rd	Vineyard Dr to Millerstown Rd	4,450	4,752	3,925	4,227	80	20	2	1	55	100
Nicolaus Rd	Canal to Maverick Ln	4,555	4,555	3,480	3,480	80	20	2	1	55	100
Placer Hills Rd	Pinewood Wy to Winchester Club Dr	14,075	14,075	10,860	10,860	80	20	2	1	45	100
Ridge Rd	Gold Hill Rd to Ophir Rd	1,175	1,175	940	940	80	20	2	1	35	100
Sierra College Blvd	Del Mar Rd to King Rd	21,370	22,408	19,180	20,218	80	20	2	1	50	100
SR 193	Sierra College Blvd to Fowler Rd	10,980	11,856	11,420	12,296	80	20	2	1	55	100
Virginiatown Rd	Coyote Ln to Fowler Rd	1,150	1,448	1,460	1,758	80	20	2	1	45	100
Wise Rd	McCourtney Rd to Crosby Herold Rd	3,840	4,600	4,360	5,120	80	20	2	1	55	100
Wise Rd	Crosby Herold Rd to Garden Bar Rd	2,840	3,204	3,125	3,489	80	20	2	1	55	100
Wise Rd	Garden Bar Rd to Wally Allan Rd	2,205	2,503	2,260	2,558	80	20	2	1	45	100
Wise Rd	County Lane to Crater Hill Rd	1,735	1,831	1,365	1,461	80	20	2	1	40	100
Wise Rd	Bald Hill Rd to Ophir Rd	1,485	1,533	1,340	1,388	80	20	2	1	35	100

BOLLARD
Acoustical Consultants

Appendix E – Placer County Noise Ordinance

9.36.010 Declaration of findings, purposes, and policy.

Excessive sound and vibration are a serious hazard to the public health and welfare, safety, and the quality of life. The people of Placer County have a right to and should be ensured an environment free from unnecessary, offensive and excessive sound and vibration that may jeopardize their health or welfare or safety or degrade the quality of life.

Therefore, it is declared to be the policy of Placer County in its exercise of the police poser to prohibit unnecessary, excessive and offensive sounds. At certain levels, such sounds become noise and are detrimental to the health and welfare of the citizenry and, in the public interest, are systematically proscribed. This article is intended to work in concert with and supplement Penal Code Section 370 (Public Nuisances) and Section 415 (Disturbing the Peace) and to establish local community standards for noise regulation. (Ord. 5280-B, 2004)

9.36.020 Definitions

The following words, phrases and terms as used in this article shall have the following meanings:

"Acoustic specialist" means a person or persons trained in acoustic sampling, qualified to measure sound levels consistent with criteria contained within this article.

"Ambient sound level" means the composite of normal or existing sound from all sources measured at a given location for a specified time of the day or night. The ambient sound level shall be measured with a sound level meter, using slow response and "A" weighting. The ambient sound level shall be determined with the sound source at issue silent.

"Approving authority" means the designated body or persons authorized to grant approval or deny a discretionary permit or an exception to this article.

"A-weighting" means the standard A-weighted frequency response of a sound level meter, which de-emphasizes low and high frequencies of sound in a manner similar to the human ear for moderate sounds.

"C-weighting" means the standard C-weighted frequency response of a sound level meter, which de-emphasizes high frequencies of sound in a manner similar to the human ear for relatively loud sounds.

"Decibel" means a unit for measuring the relative amplitude of sound equal approximately to the smallest difference normally detectable by the human ear, whose range includes approximately one hundred thirty (130) decibels on a scale beginning with zero decibels for the faintest detectable sound. The sound pressure associated with zero decibels is twenty (20) micropascals.

“Discretionary permit” means a permit issued by the county other than ministerial permits, including but not limited to conditional use permits, tentative subdivision maps, design review permits and administrative permits.

“Enforcement officer” means the Placer County sheriff, the planning director, and/or the health officer and the employee(s) designated by the sheriff, the planning director, and/or the health officer as code enforcement officer(s) to enforce the provisions of this article.

“Equivalent hourly sound level (Leq)” means the sound level corresponding to a steady state A-weighted sound level containing the same total energy as the actual time-varying sound level over a one-hour period.

“Fixed sound source” means a device or machine which creates sounds while fixed or stationary, including but not limited to residential, agricultural, industrial and commercial machinery and equipment, pumps, fans, compressors, air conditioners and refrigeration equipment, also includes motor vehicles operated on private property.

“Impulsive sound” means a single noise event or series of single noise events, which result in a high peak sound level of short duration (less than one second). Examples include, but are not limited to guns shots, blasting, or hammering.

“Intruding sound level” means the sound level created, caused, maintained or originating from an alleged offensive source, measured in decibels, at a specified location while the alleged offensive source is in operation.

“Maximum sound level (Lmax)” means the maximum noise level measured on a sound level meter.

“Motor vehicle” means any vehicle that is propelled by other than human or animal power on land.

“Noise” means any loud discordant or disagreeable sound or sounds.

“One-third octave band” means a band of frequencies, in hertz (Hz), which is one-third of an octave wide. The center frequencies of one-third-octave bands increase by a factor of 1.26 (cube root of 2). Examples ozone-third octave band center frequencies in the range of audible sound include 20, 25, 31.5, 40 and 63 hertz. Describing sound pressure levels in one-third octave bands provides information as to the tone or pitch, of noise (low frequency versus high frequency), as well as the amplitude of the sound.

“Pleasure motor boat” means any boat which is powered by an in-board, out-board or in-board/out-board motor and is used for recreational purposes, including boats that are or may be used commercially to support recreational use. This includes, but is not limited to, commercial fishing and sightseeing. A vessel competing in a regatta, boat race, or trial runs pursuant to the terms of a duly authorized government permit shall not be considered a “pleasure motor boat” for purposes of this article.

“Property line or plane” means a vertical plane including the property line that determines the property boundaries in space.

"Public property" means any property owned by a public agency and held open to the public, including but not limited to parks, streets, sidewalks, and alleys.

"Residential property" means a parcel of real property that is zoned for residential use.

"School" means institutions conducting regular academic instruction at preschool, kindergarten, elementary, secondary or collegiate levels.

"Sensitive receptor" means a land use in which there is a reasonable degree of sensitivity to noise. Such uses include single-family and multi-family residential uses, frequently used outbuildings, schools, hospitals, churches, rest homes, cemeteries, public libraries and other sensitive uses as determined by the enforcement officer.

"Simple tone noise" means any sound that is distinctly audible as a single pitch (frequency) or set of pitches. Includes sound consisting of speech and music.

"Sound level" means the sound pressure level in decibels as measured with a sound level meter using the A-weighting and C-weighting networks or one-third-octave band frequency. The unit of measurement is referred to herein as dBA, dBC or one-third octave band.

"Sound level meter" means an instrument meeting American National Standard Institute standard S1 .4A-1985 for Type 1 or Type 2 sound level meters or an instrument and the associated recording and analyzing equipment that will provide equivalent data. (Ord. 5280-B, 2004)

9.36.030 Exemptions.

A. Sound or noise emanating from the following sources and activities are exempt from the provisions of this title:

1. Sound sources typically associated with residential uses (e.g., children at play, air conditioners in good working order, etc.);

2. Sound sources associated with property maintenance (e.g., lawn mowers, edgers, snow blowers, blowers, pool pumps, power tools, etc.) provided such activities take place between the hours of seven a.m. and nine p.m.;

3. Safety, warning and alarm devices, including house and car alarms, and other warning devices that are designed to protect the health, safety and welfare, provided such devices are not negligently maintained or operated;

4. The normal operation of public and private schools typically consisting of classes and other school-sponsored activities;

5. Maintenance (e.g., lawn mowers, edgers, aerators, blowers, etc.) of golf courses, provided such activities take place between the hours of five a.m. and nine p.m. May through September, and seven a.m. and six p.m. October through April;

6. Emergencies, involving the execution of the duties of duly authorized governmental personnel and others providing emergency response to the general public, including but not limited to sworn peace officers, emergency personnel, utility personnel, and the operation of emergency response vehicles and equipment;

7. Construction (e.g., construction, alteration or repair activities) between the hours of six a.m. and eight a.m. Monday through Friday, and between the hours of eight a.m. and eight p.m. Saturday and Sunday provided, however, that all construction equipment shall be fitted with factory installed muffling devices and that all construction equipment shall be maintained in good working order.

9.36.040 Sound measurement methodology.

A. Compliance with this article shall be determined using methodology described in this section. Sound measurement, except as otherwise provided in this article, shall be made with a sound level meter using the A-weighting network at slow meter response, except that fast meter response shall be used for impulsive type sounds.

B. Calibration of the measurement equipment utilizing an acoustical calibrator meeting American National Standards Institute (ANSI) Type 1 or Type 2 standard shall be performed immediately prior to recording any sound data. Calibration equipment shall be certified annually.

C. Exterior sound levels shall be measured at the property line or at any location within the property of the affected sensitive receptor. Sound measurements shall be taken in such a manner and location so that it can be determined whether sound level standards are exceeded at the property line. Where practical, the microphone of the sound level meter shall be positioned three to five feet above ground and away from reflective surfaces. The actual location of the sound level measurements shall be at the discretion of the enforcement officer. (Ord. 5280-B, 2004)

9.36.050 Duty to cooperate.

It is unlawful for any person to refuse to cooperate with or to obstruct any governmental agent, officer or employee in determining the ambient sound level of a sound source. Such cooperation shall include, but is not limited to, the shutting off or quieting of any sound source so that an ambient sound level can be measured. (Ord. 5280-B, 2004)

9.36.060 Sound limits for sensitive receptors

A. It is unlawful for any person at any location to create any sound, or to allow the creation of any sound, on property owned, leased, occupied or otherwise controlled by such person that:

1. Causes the exterior sound level when measured at the property line of any affected sensitive receptor to exceed the ambient sound level by five dBA; or

2. Exceeds the sound level standards as set forth in Table 8, whichever is the greater.

Table 8 Sound Level Standards (On-Site) Placer County Noise Ordinance		
Sound Level Descriptor	**Daytime (7:00 a.m. to 10:00 p.m.)**	**Nighttime (10:00 p.m. to 7:00 a.m.)**
Hourly Average, (L_{eq}), dB	55	45
Maximum, (L_{max}) dB	70	65

B. Each of the sound level standards specified in Table 8 shall be reduced by five dB for simple tone noises, consisting of speech and music. However, in no case shall the sound level standard be lower than the ambient sound level plus five dB.

C. If the intruding sound source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient sound level can be measured, the sound level measured while the source is in operation shall be compared directly to the sound level standards of Table 1. (Ord. 5280-B, 2004)

9.36.080 Exceptions.

A. An exception may be requested from any provision of this article. Requests for exceptions shall be made on forms provided by the county. Notice of the request for exception must be given to all the surrounding properties that would be impacted by the exception, i.e., those properties that would experience a noise level at their property line that exceeds Table 1 of Section 9.36.060.

B. If the applicant can show to the county that a diligent investigation of available sound suppression techniques for construction-related noise indicates that immediate compliance with the requirements of this article would be impractical or unreasonable, due to the temporary nature or short duration of the exception, a permit to allow exception from the provisions contained in all or a portion of this article may be issued. Factors that the approving authority must consider for construction related exceptions shall include but not be limited to the following:

1. Conformance with the intent of this article;
2. Uses of property and existence of sensitive receptors within the area affected by sound;
3. Factors related to initiating and completing all remedial work;
4. The time of the day or night the exception will occur;
5. The duration of the exception; and
6. The general public interest, welfare and safety.

C. If the applicant can show to the county that the characteristics of a special event indicate that immediate compliance with the requirements of this article would be impractical due to the type of event or unreasonable due to its temporary nature or short duration, a permit allowing an exception from the provisions of this article may be issued. Factors considered for special events related exceptions shall include but not be limited to the following:

1. Conformance with the intent of this article;
2. Uses of property and existence of sensitive receptors within the area affected by sound;
3. Hardship to the applicant, or community of not granting the exception;
4. The time of the day or night the exception will occur;
5. The duration of the exception; and
6. The general public interest, welfare and safety.

D. If the applicant can show to the county, or his or her designee that immediate compliance with the requirements of this article would not result in a hazardous condition or nuisance, and strict compliance would be unreasonable due to the circumstances of the requested exception, a permit to allow exception from the provisions contained in all or a portion of this article may be issued. Factors considered for all requests for exceptions, other than construction or special events, shall include but not be limited to the following:

1. Conformance with the intent of this article and general plan policies;
2. Uses of property and existence of sensitive receptors within the area affected by sound;
3. Factors related to initiating and completing all remedial work;
4. Age and useful life of the existing sound source;
5. Hardship to the applicant, or community of not granting the exception;
6. The time of the day or night the exception will occur;
7. The duration of the exception; and
8. The general public interest, welfare and safety.

E. Within thirty (30) days of receipt of the application, the county shall either (1) approve or conditionally approve such request in whole or in part, (2) deny the request, or (3) refer the request directly to the board of supervisors for action at the next available board meeting. In the event the exception is approved, reasonable conditions may be imposed which minimize the public detriment and may include restrictions on sound level, sound duration and operating hours, an approved method of achieving compliance and a time schedule for its implementation.

F. Where a request for exception is associated with a discretionary permit, the exception shall be processed concurrently with the discretionary permit. The approving authority for the discretionary permit shall also be the approving authority for the exception. Factors that the approving authority must consider for requests for exception shall be those factors identified above, depending upon the type of exception requested. The approving authority for an exception processed with a discretionary permit shall either (1) approve or conditionally approve such request in whole or in part, or (2) deny the request.

G. Where an approving authority has approved an exception and complaints are received related to the exception the approving body has the authority to take action, as he or she deems necessary to reduce the sound impacts including modification or revocation of the exception.

H. Any person aggrieved by the decision of the approving authority may appeal to the board of supervisors by filing written notice of appeal with the board clerk within ten (10) days of the decision. The board of supervisor's decision shall be final and shall be based upon the considerations set forth in this section. (Ord. 5280-B, 2004)

APPENDIX G

TRAFFIC IMPACT ANALYSIS

FOR

PLACER COUNTY WINERY AND FARM BREWERY ORDINANCE

Placer County, California

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Job No. 5765-19

Placer County Winery Ordinance.rpt

TRAFFIC IMPACT ANALYSIS FOR
PLACER COUNTY WINERY AND FARM BREWERY ORDINANCE
Placer County, CA

TABLE OF CONTENTS

INTRODUCTION 1
Project Description 1
Study Approach 2

EXISTING SETTING 4
Locations of Existing and Pending Wineries 4
Study Area Circulation System - Roads 5
Study Area Circulation System - Intersections 8
Planned Improvements / Funding Sources 9
Standards of Significance: Levels of Service - Methodology 10
Other Evaluation Criteria 14
Existing Traffic Volumes and Levels of Service 14
Traffic Signal Warrants 19
Alternative Transportation Modes 22
Bicycle Facilities 22
Collision History 25

PROJECT CHARACTERISTICS 28
Assumptions 28
Project Characteristics 31
Existing Plus Project Traffic Conditions and Levels of Service 42
Impacts to Alternative Transportation Modes 46
Summary of Existing Plus Project Impacts / Mitigations 46

CUMULATIVE TRAFFIC IMPACTS 47
Background 47
Traffic Volume Forecasts 49
Cumulative Traffic Conditions – No Project 50
Cumulative Traffic Conditions – Plus Project 54
Summary of Cumulative Plus Project Impacts / Mitigations 57

APPENDIX 58

April 10, 2019

KDA

TRAFFIC IMPACT ANALYSIS FOR
PLACER COUNTY WINERY AND FARM BREWERY ORDINANCE
Placer County, CA

INTRODUCTION

This report documents KD Anderson & Associates' assessment of traffic impacts associated with implementing changes to **Placer County's Winery and Farm Brewery Ordinance**. This analysis is intended to quantify the traffic impacts of this action and identify applicable mitigation within the context of both current and future background conditions.

Project Description

In general, the proposed amendment to the Placer County Winery Ordinance is intended to provide additional flexibility with respect to holding events at existing and future wineries and farm breweries. From a standpoint of traffic and transportation, the amendments do not change the day-to-day operation of wineries and farm breweries nor does the amendment change the process undertaken by the County to process new winery and farm brewery applications. Thus, this analysis is not intended to address the regular day-to-day traffic impacts of new wineries or farm breweries. The amendment will change the number of agricultural promotion events permitted at wineries and farm breweries and will increase the number of special events that are allowed at existing and future facilities located on large parcel sizes. This analysis addresses the effect of allowing more events at existing medium (10-20 acre) and large (20+ acres) wineries and farm breweries and evaluates the cumulative impacts of event trips associated with existing wineries and farm breweries and at wineries and farm breweries that may be developed in the future.

Some existing wineries are situated on small parcels (4.6-9.9 acres), as defined in the proposed ordinance. Under the current ordinance, existing wineries on parcels 4.6-9.9 acres are allowed to conduct up to six promotional events per year with an Administrative Review Permit. If no Administrative Review Permit or other permit exists that allows the event activity, any proposal for events after the adoption date of the proposed ordinance would constitute an expansion of operation and require compliance with the new regulation (i.e., the facility would need to obtain a minor use permit). Given that wine production facilities with tasting rooms on 4.6-9.9 acres are already allowed six events under the currently adopted ordinance (with an Administrative Review Permit), there is no net change to the operations of these facilities on 4.6-9.9 acre parcels associated with the proposed Winery and Farm Brewery Zoning Text Amendment. Thus, wine production facilities, with tasting rooms on 4.6-9.9 acre parcels, are not being evaluated in this traffic study because further environmental review would be conducted with any future use permit application. Rather, this study focuses on the effects of by-right winery event allowances at facilities on medium and large parcels.

The two existing farm breweries are not situated on small parcels. Any future proposals for farm breweries on small parcels would also require a Minor Use Permit, and thus would need to undergo discretionary review. As a result, the cumulative analysis herein is not required to evaluate future farm breweries on small parcels.

Study Approach

The analysis addresses traffic conditions occurring within Placer County's winery region on a weekday and weekend basis. Today rural wineries have generally been developed across western Placer County ranging from the Meadow Vista area off of Interstate 80 on the east to rural Lincoln on the west and south towards Granite Bay, but wineries and farm breweries are generally concentrated in the area bounded by State Route 65 on the west, Interstate 80 and the City of Auburn on the east, the Bear River on the north and Interstate 80 and the Town of Loomis to the south, as noted in Figure 1 (vicinity map). Within that area various state highways, rural arterials, rural collectors and local roads providing access to existing wineries and farm breweries were identified for analysis in consultation with Placer County staff. In addition, 11 key intersections whose operation affects the overall flow of traffic in this area were included in the analysis.

The approach to this analysis identifies the immediate impacts of implementing the ordinance at existing facilities as well as the long-term cumulative effect of operating new, existing and pending wineries and farm breweries with the change in events permitted under the ordinance. Very conservative assumptions for the activity associated with additional events were identified based on data collected at existing wineries and farm breweries and permitted attendance. Additional events were assumed to occur at each existing winery and farm brewery because of the proposed amendments to the ordinance, and the resulting vehicle trips were assigned to the study area circulation system as the "Existing plus Project" condition. These conditions were evaluated with regards to adopted Placer County significance criteria, and the impacts associated with implementing the amendment were identified.

The cumulative impacts of developing new wineries and farm breweries under the amended ordinance were also evaluated. The cumulative traffic background conditions assumed continuation of historic traffic growth trends identified by Placer County for study area roads, as well as occupancy of other approved and pending projects that would not be part of continuing rural development. Because the number and exact locations of possible new future wineries and farm breweries is unknown, the analysis assumed continuation of current trends regarding annual winery and farm brewery development to identify the number of new facilities that might reasonably be expected over the next twenty years. The amount of vehicular traffic associated with events at these new wineries and farm breweries was quantified based on very conservative assumptions for events being held concurrently at new and existing and pending wineries and farm breweries. The areas where new facilities were most likely to be developed were identified by Placer County staff, and new trips associated with events under the amended ordinance were superimposed onto the cumulative background condition. Resulting traffic operations were valuated against adopted significance criteria to identify the cumulative impacts of the proposed ordinance amendment.

Figure 1 – vicinity map (prepared by Placer County)

EXISTING SETTING

Regionally, the existing Placer County winery and farm brewery area is served by a variety of state highways, rural arterial roads, rural collector roads and local rural roads that link wineries with a customer base that extends into and beyond the Sacramento Metropolitan area. The text which follows provides information regarding the area circulation system, evaluates the operation of the circulation system based on adopted methods and significance criteria and considers alternative transportation modes in order to provide a basis against which to evaluate the impacts of implementing the proposed ordinance amendment.

Locations of Existing and Pending Wineries

Existing Wineries and Farm Breweries. A total of 13 rural wineries and farm breweries exist in Placer County as this analysis is being prepared, along with two existing rural breweries and a third brewery that was under construction. These wineries are listed below along with their size in regards to the amendments classification system, while their location is noted in Figure 1. The medium and large wineries, which are the subject of this analysis are:

Medium Parcel Size (10- to 20-acre)

1. Wise Villa Winery and Bistro
2. Lone Buffalo Vineyards
3. Rancho Roble Vineyards
4. Vina Castellano Winery
5. Goathouse Brewery
6. Hillenbrand Farmhaus Brewery
7. Casque at Flower Farm
8. Ciotti Cellars

Large Parcel Size (>20 acres)

9. Mt. Vernon Winery
10. Dono dal Cielo Vineyard and Winery

It should be noted that Wise Villa has a conditional use permit to operate as a "community center". Notwithstanding this, Wise Villa has been included in the EIR analysis because in addition to the allowable events specified in its current CUP, Wise Villa will be afforded additional flexibility under the proposed Zoning Text Amendment with respect to agricultural promotional events. Casque at Flower Farm also has a conditional use permit to operate as a community center, though specification on number of allowable events is not provided. Similar to Wise Villa, Casque has been included in the EIR analysis because it will be afforded additional flexibility under the proposed Zoning Text Amendment with respect to agricultural promotional events.

Study Area Circulation System - Roads

The areas of existing wineries and farm breweries are served by a combination of state highways, Rural Arterials, Rural Collectors and local roads, as noted in Figure 2.

Regional access to the study area is served by four state highways that traverse Placer County and two Placer County arterials.

Interstate 80 (I-80) is the primary east-west arterial across Placer County and Northern California. In the vicinity of the proposed project, I-80 is a six-lane controlled access freeway. Access for the winery area to the interstate is available via interchanges at SR 193 in Newcastle and at Ophir Road near the City of Auburn.

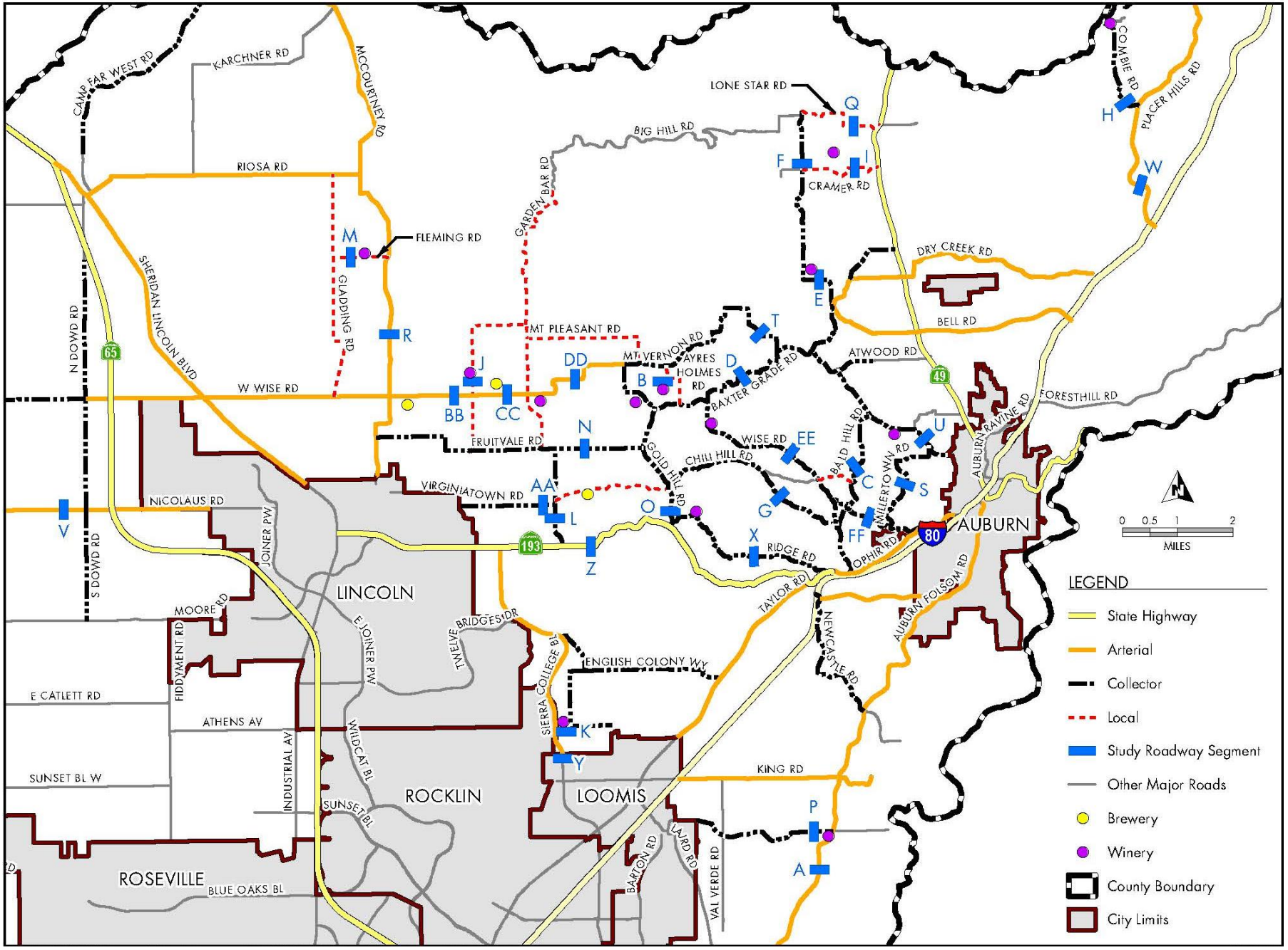
The California Department of Transportation (Caltrans) provides annual reports of the volume of traffic on the state highway system. Recent counts available from Caltrans report an *Annual Average Daily Traffic (AADT - 2016)* volume of 85,500 vehicles per day west of the SR 193 junction, 88,700 between SR 193 and Ophir Road and 88,300 AADT east of the Ophir Road interchange. (source: http://www.dot.ca.gov/trafficops/census/volumes2016/)

State Route 193 (SR 193) is an east-west route that connects the City of Lincoln with I-80 across the study area. SR 193 originates in Lincoln as McBean Park Drive and becomes SR 193 roughly 1.4 miles west of the Sierra College Blvd intersection and continues from that point to I-80. In the area of the proposed project SR 193 is a two-lane conventional highway. Caltrans data indicate that in 2016 SR 193 carries 9,500 AADT west of Sierra College Blvd and 5,000 AADT between Sierra College Blvd and Newcastle. Trucks comprise 9% of the daily traffic on SR 193 east of Sierra College Blvd.

State Route 49 (SR 49) is a principal arterial that is the primary north-south route through the Auburn – North Auburn area. SR 49 links I-80 with the Grass Valley – Nevada City area to the north. Through North Auburn SR 49 is generally a 4 – 6 lane conventional highway with a continuous center two-way left-turn (TWLT) lane or median, and SR 49 is a 4-lane rural highway.

The most recent traffic counts published by Caltrans indicate that in 2016 SR 49 carried more than 40,000 AADT through North Auburn with the volume north of Bell Road dropping to 34,700 AADT and the volume at the Nevada County line reported to be 30,700 AADT. Trucks comprise 5% of the daily volume on SR 49 north of Bell Road.

State Route 65. (SR 65) is an important north-south route that extends from I-80 across the western portion of the winery area to its northern terminus at a junction with SR 70 in Yuba County. SR 65 is a four or six-lane controlled access freeway in the urban Rocklin / Roseville area and continues that configuration through Placer County to the City of Lincoln. Beyond West Wise Road SR 65 is a two-lane expressway or conventional highway to a location north of Wheatland where a four-lane controlled access freeway is again available.



STUDY AREA ROADWAY CLASSIFICATION

KD Anderson & Associates, Inc.
Transportation Engineers

0040-01 RA 9/7/2018

figure 2

The most recent traffic counts published by Caltrans indicate that in 2016 SR 65 carried 117,400 AADT north of I-80 with 76,800 AADT north of the Blue Oaks Blvd – Washington Blvd interchange and 21,700 AADT at the Placer County – Yuba Countyline. Trucks comprise 15% to 20% of the daily volume on SR 65.

Sierra College Blvd is a north-south arterial road that connects SR 193 with I-80 and then continues southerly through Rocklin and Roseville before becoming Hazel Avenue in Sacramento County.

In the area of the proposed project Sierra College Blvd is transitioning from a two-lane rural highway to a six-lane limited access urban arterial street. At its intersection with SR 193 Sierra College Blvd is a two-lane rural arterial and continues in that configuration to the Taylor Road intersection in Loomis. Beyond Taylor Road Sierra College Blvd is a four lane facility to the I-80 interchange. Sierra College Blvd is a designated Truck Route, with STAA terminal access available in the area of the I-80 interchange. The posted speed limit on Sierra College Blvd ranges from 40 mph at the I-80 interchange to 50 mph south of Rocklin Road and 45 mph near Douglas Blvd.

Ophir Road is a two-lane arterial that runs north of and parallel to I-80 from SR 193 to an interchange on I-80.

McCourtney Road is a two-lane north-south rural arterial that extends north of Lincoln to Camp Far West Lake.

Three regional facilities provide access to isolated wineries that are outside of the area of primary winery concentration.

Auburn Folsom Road is a north-south Rural Arterial road that connects the Granite Bay Community Plan area with the City of Auburn. Auburn Folsom Road is a four-lane facility south of Douglas Blvd and a two-lane facility from Douglas Blvd to Indian Hill Road in Auburn.

Placer Hills Road is a two-lane Rural Arterial that links I-80 with the community of Meadow Vista.

Nicolaus Road is an east-west Rural Arterial that extends west from the City of Lincoln to the Sutter County line.

Another road designated as a Rural Arterial also traverses the area of winery concentration with regional facilities.

Wise Road is a Rural Arterial that extends west from an intersection on Sheridan - Lincoln Blvd (Old SR 65) to the center of the study area.

The balance of the roads serving existing wineries and farm breweries are rural collectors or local roads. Rural Collectors are noted below and those selected to be addressed quantitatively in this analysis based on the presence of wineries are highlighted in **Bold:**

- Atwood Road – Richardson Drive to Mr. Vernon Road
- **Bald Hill Road – Lozanos Road to Mt. Vernon Road**
- **Baxter Grade Road – Wise Road to Mt Vernon Road**
- **Bell Road – Joeger Road to Lone Star Road**
- **Chili Hill Road – Lozanos Road to Gold Hill Road**
- **Delmar Avenue - English Colony Way to Citrus Colony Road**
- **Combie Road – Placer Hills Road to end**
- Citrus Colony Road – Delmar Avenue to Humphrey Road
- **Fowler Road – SR 193 to Fruitvale Road**
- **Fruitvale Road – McCourtney Road to Gold Hill Road**
- **Gold Hill Road – SR 193 to Wise Road**
- **Horseshoe Bar Road - Loomis Town limits to Auburn Folsom Road**
- Joeger Road – Dry Creek to SR 49
- **Lozanos Road – Wise Road to Ophir Road**
- **Millertown Road – Wise Road to Mt. Vernon Road**
- **Mt. Vernon Road – Wise Road to Auburn City limit**
- **Ridge Road – SR 193 to Gold Hill Road**
- **Virginiatown Road – Lincoln City limits to Fowler Road**
- **Wise Road – Ophir Road to Mt. Vernon Road**

Other local roads not addressed by the General Plan but maintained by Placer County and providing local circulation or access in the winery areas are available and are noted. Those selected to be addressed quantitatively in this analysis are highlighted in **Bold:**

- **Ayers Holmes Road – Mt. Vernon Road to Wise Road**
- **Cramer Road – Bell Road to SR 49**
- **Crater Hill Road – Wise Road to Bald Hill Road**
- **Crosby Herold Road – Fruitvale Road to Mt. Pleasant Road**
- Garden Bar Road – Fruitvale Road to Mt. Pleasant Road
- **Gladding Road to Riosa Road**
- **Lone Star Road – Bell Road to SR 49**
- Mt. Pleasant Road – Crosby Herold Road to Mt. Vernon Road
- **Virginiatown Road – Fowler Road to Gold Hill Road**

<u>Study Area Circulation System - Intersections</u>

Even in rural areas the quality of traffic flow is often governed by the operation of key intersections, particularly where all-way stop control is employed. The following intersections have been identified for evaluation in this study in consultation with Placer County based on their location along primary routes to area wineries.

The **SR 49 / Cramer Road intersection** is a "tee" intersection controlled by a stop sign on the single lane eastbound Cramer Road approach. A continuous Two-Way Left-Turn exists on SR 49 in this area.

The **Placer Hills Road / Combie Road intersection** is a "tee" controlled by a stop sign on the eastbound Combie Road approach. A left turn lane exists on Placer Hills Road.

The **Wise Road / McCourtney Road intersection** is controlled by an All-Way Stop, and each approach is a single lane.

The **Wise Road / Crosby Herold Road intersection** is controlled by an All-Way Stop, and each approach is a single lane.

The **Wise Road / Garden Bar Road intersection** is controlled by an All-Way Stop. An eastbound right turn lane exists on Wise Road.

The **Bell Road / Joeger Road intersection** is controlled by an All-Way Stop, and each approach is a single lane.

The **Atwood Road / Mt. Vernon Road intersection** is controlled by stop signs on the northbound Mt. Vernon Road and southbound Old Post Lane approaches. Separate right turn lanes exist on the northbound and eastbound approaches.

The **SR 193 / Fowler Road intersection** is a "tee" intersection controlled by a stop sign on the single lane southbound Fowler Road approach. A separate left turn lane exists on the eastbound SR 193 approach.

The **SR 193 / Gold Hill Road intersection** is a "tee" intersection controlled by a stop sign on the single lane southbound Gold Hill Road approach. A separate left turn lane exists on the eastbound SR 193 approach.

The **Wise Road / Crater Hill Road intersection** is controlled by an All-Way Stop, a separate northbound right turn lane is available, but the other approaches have single lanes.

The **Sierra College Blvd / Delmar Avenue intersection** is controlled by side street stop signs on the Delmar Avenue approaches. Sierra College Blvd has separate northbound and southbound left turn lanes, and a northbound right turn lane is available. The Delmar Avenue approaches are single lanes, but widening to accommodate truck turns creates space for right turning vehicles.

<u>Planned Improvements / Funding Sources</u>

South Placer Regional Transportation Authority (SPRTA) Fee Program. Placer County and the cities of Lincoln, Rocklin and Roseville have joined to form the South Placer Regional

Transportation Authority (SPRTA). (SPRTA) is a Joint Powers Authority (JPA) formed for the purpose of implementing a Regional Transportation and Air Quality Mitigation Fee to fund specified regional transportation projects.

SPRTA funding is directed towards projects such as Placer Parkway, Sierra College Blvd widening, Lincoln Bypass, I-80 / Douglas Blvd interchange, SR 65 widening, I-80 / Rocklin Road interchange, Auburn Folsom Road widening and HOV lanes on I-80 through Roseville.

Locally, SPRTA funding is part of the ultimate plan for improving Sierra College Blvd from SR 193 to the Sacramento County line. While the SPRTA program outlines the ultimate improvements that will eventually be provided, actual implementation is directed by member agencies in a phased manner.

Placer County Traffic Impact Fee Program and CIP. In April 1996, the Placer County Board of Supervisors adopted the Countywide Traffic Impact Fee Program, requiring new development within the County to mitigate impacts to the roadway system by paying traffic impact fees. The fees collected through this program, in addition to other funding sources, make it possible for the County to construct roads and other transportation facilities and improvements needed to accommodate new development. Additional information regarding the fee program is included in the cumulative analysis.

Standards of Significance: Levels of Service - Methodology

To assess the quality of existing traffic conditions and provide a basis for analyzing project impacts, Levels of Service were calculated at study area intersections, the project access and on individual roadway segments identified by Placer County in response to the EIR Notice of Preparation. "Level of Service" is a qualitative measure of traffic operating conditions whereby a letter grade "A" through "F", corresponding to progressively worsening operating conditions, is assigned to an intersection or roadway segment.

Standards of Significance. Agencies adopt their own minimum LOS standards and standards of significance.

Placer County General Plan. Minimum acceptable Level of Service standards within this area of Placer County are defined by the General Plan. The minimum standard for roadway and intersections is LOS C except at locations within ½ mile of a state highway where LOS D is acceptable

Placer County has adopted a methodology for determining the significance of traffic impacts within the context of the Level of Service goals established by the General Plan and local community plans. This methodology is noted below.

Roadway Segment Assessment Methodology:

A project may be considered to exceed the minimum LOS policies if;

1) *A roadway segment operating at or above the established Placer County policy without the project will decrease to an unacceptable LOS with the project; or*
2) *A roadway segment currently operating below the applicable established policy will experience an increase in V/C (volume to capacity) ratio of 0.05 or greater; or*
3) *A roadway segment currently operating below the established acceptable LOS Policy experiences an increase in ADT of 100 or more project generated trips, per lane.*

Signalized Intersections Assessment Methodology:

A project may be considered to exceed the minimum LOS policies if;

1) *An intersection operating at or above the established Placer County policies without the project will decrease to an unacceptable LOS with the project; or*
2) *An intersection currently operating below the acceptable LOS established policy will experience an increase in V/C (volume to capacity) ratio of 0.05 (5%) or greater; or*
3) *An intersection currently operating below the established acceptable LOS policy will experience an increase in overall average intersection delay of 4 seconds or greater.*

Un-signalized Intersection Assessment Methodology:

A project may be considered to exceed the minimum LOS policies if;

1) *An all-way stop or side street controlled intersection which currently operates at or above the established Placer County policies without the project will deteriorate to an unacceptable LOS with the project and cause the intersection to meet MUTCD traffic signal warrant(s) (1); or*
2) *An all-way stop or side-street controlled intersection which currently operates below the established acceptable LOS policy and meets MUTCD signal warrant(s) will experience an overall increase of 2.5 seconds or more with the project.*

Further consideration will be given in situations where the existing level of service is just above or at the approved minimum level of service and any increase in vehicle trips, or even daily fluctuations in traffic, will deteriorate the level of service to an unacceptable level. In such cases, it may be determined by the County that part (2) or (3) of the above exceptions is more applicable and should be used to analyze a proposed project's impacts.

Analysis Methodologies Intersections. Different methodologies are available to address intersection operations and Level of Service based on the type of traffic control.

Table 1 presents general characteristics associated with each LOS grade.

TABLE 1 LEVEL OF SERVICE DEFINITIONS			
Level of Service	**Signalized Intersection**	**Unsignalized Intersection**	**Roadway (Daily)**
"A"	Uncongested operations, all queues clear in a single-signal cycle. Volume / capacity (V/C) < 0.60 Average Delay ≤ 10 seconds per vehicle	Little or no delay. Average Delay ≤ 10 sec/veh	Completely free flow.
"B"	Uncongested operations, all queues clear in a single cycle. 0.60 ≤ v/c < 0.70 Delay > 10 sec/veh and ≤ 20 sec/veh	Short traffic delays. Delay > 10 sec/veh and ≤ 15 sec/veh	Free flow, presence of other vehicles noticeable.
"C"	Light congestion, occasional backups on critical approaches. 0.70 ≤ V/C < 0.80 Delay >20 sec/veh and <35 sec/veh	Average traffic delays. Delay > 15 sec/veh and ≤ 25 sec/veh	Ability to maneuver and select operating speed affected.
"D"	Significant congestions of critical approaches but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed). 80 ≤ V.C < 0.90 Delay > 35 sec/veh and < 55 sec/veh	Long traffic delays. Delay > 25 sec/veh and ≤ 35 sec/veh	Unstable flow, speeds and ability to maneuver restricted.
"E"	Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). 0.90 ≤ V/C < 1.00 Delay >55 sec and ≤ 80 sec/veh	Very long traffic delays, failure, extreme congestion. Delay > 35 sec/veh and ≤ 50 sec/veh	At or near capacity, flow quite unstable.
"F"	Total breakdown, stop-and-go operation. V/C > 1.00 Delay > 80 sec/veh	Intersection often blocked by external causes. Delay > 50 sec/veh	Forced flow, breakdown.
Sources: 6th Edition Highway Capacity Manual, and Transportation Research Board (TRB) Special Report 209.			

Signalized Intersections. No study intersection is currently signalized, but accepted methodologies would govern evaluation if a traffic signal was found to be needed. Various methodologies exist to determine operating Levels of Service at intersections. The available techniques for addressing intersection vary with regard to factors such as traffic signal timing, interaction between adjoining signals, etc. The Caltrans makes use of the procedures contained in the *Highway Capacity Manual (6th Edition)* for determining operating Level of Service. This methodology expresses the quality of intersection traffic operations in terms of average delay per vehicle. The Placer County General Plan makes use of the techniques contained in *TRB Circular No. 212*, which is more commonly identified as "critical movement analysis". This methodology categorizes traffic operations in terms of the ratio of intersection volume to capacity (i.e., v/c ratio).

Un-signalized Intersections. At un-signalized intersections the number of gaps in through traffic, gap acceptance time and corresponding length of delays for motorists waiting to turn are used for Level of Service analysis. Procedures used for calculating un-signalized intersection Level of Service are as presented the *Highway Capacity Manual (6th Edition).*

At un-signalized intersections controlled by side street stop signs HCM methodology identifies the average delay, and the Level of Service for all movements that must yield the right of way can be determined. Typically the "worst case" Level of Service is associated with side street traffic waiting to turn onto the major street. For environmental analysis Placer County also identified the overall average delay experienced by those motorists who yield the right of way, and this is the measure used to determine the significance of traffic impacts to un-signalized intersections in Placer County.

Methodology for Evaluating Roadway Segment Level of Services. The Placer County General Plan presents daily traffic volume levels that are to be indicative of Levels of Service on arterials streets. These volume thresholds are shown in Table 2.

TABLE 2
PLACER COUNTY EVALUATION CRITERIA FOR ROADWAY SEGMENT LEVEL OF SERVICE

	Maximum Daily Traffic Volume Per Lane Level of Service				
Roadway Capacity Class	**A**	**B**	**C**	**D**	**E**
1. Freeway – Level Terrain	6,300	10,620	13,680	17,740	18,000
2. Freeway – Rolling Terrain	5,290	8,920	11,650	14,070	15,120
3. Freeway – Mountainous Terrain	3,400	5,740	7,490	9,040	9,720
4. Arterial – High Access Control	6,000	7,000	8,000	9,000	10,000
5. Arterial – Moderate Access Control	5,400	6,300	7,200	8,100	9,000
6. Arterial – Low Access Control	4,500	5,250	6,000	6,870	7,500
7. Rural 2-lane Highway – Level Terrain	1,500	2,950	4,800	7,750	12,500
8. Rural 2-lane Highway – Rolling Terrain	800	2,100	3,800	5,700	10,500
9. Rural 2-lane Highway – Mountainous Terrain	400	1,200	2,100	3,400	7,000

Source: Placer County General Plan FEIR

The applicable thresholds for arterial roadways are based on the level of access control. For this analysis regional facilities such as Sierra College Blvd and Auburn Folsom Road have a high level of access control, and other arterials have moderate access control.

Placer County thresholds account for the general terrain and alignment of rural collector and local roads. The roads towards the western portion of the study area are typically straight and level, while the roads toward the east follow the rolling terrain of the foothills. For this analysis it has been assumed that roadways located west of Fowler Road can be classified as "level" while roadways to the east will be classified as "rolling". Specific classifications are noted in Table 3.

Other Evaluation Criteria

Traffic Signal Warrants. Evaluation of un-signalized Level of Service has been supplemented by consideration of the need for traffic signals based on the Traffic Signal Warrant criteria published in the *California Manual of Uniform Traffic Control Devices (MUTCD).*

Existing Traffic Volumes and Levels of Service

Traffic Volumes. Recognizing the operational characteristics of existing wineries and the changes that may accompany implementation of the proposed ordinance amendment, traffic operations have been assessed under both weekday and weekend (Saturday) conditions. Daily traffic volumes were tabulated on key roadway segments, and hourly traffic volume counts were conducted at intersections during the typical weekday p.m. peak hour (4:00 to 6:00 p.m.). Based on review of traffic volume counts at existing winery driveways, Saturday turning movement counts were conducted during the hour of peak winery traffic on Saturday (noon to 2:00 p.m.).

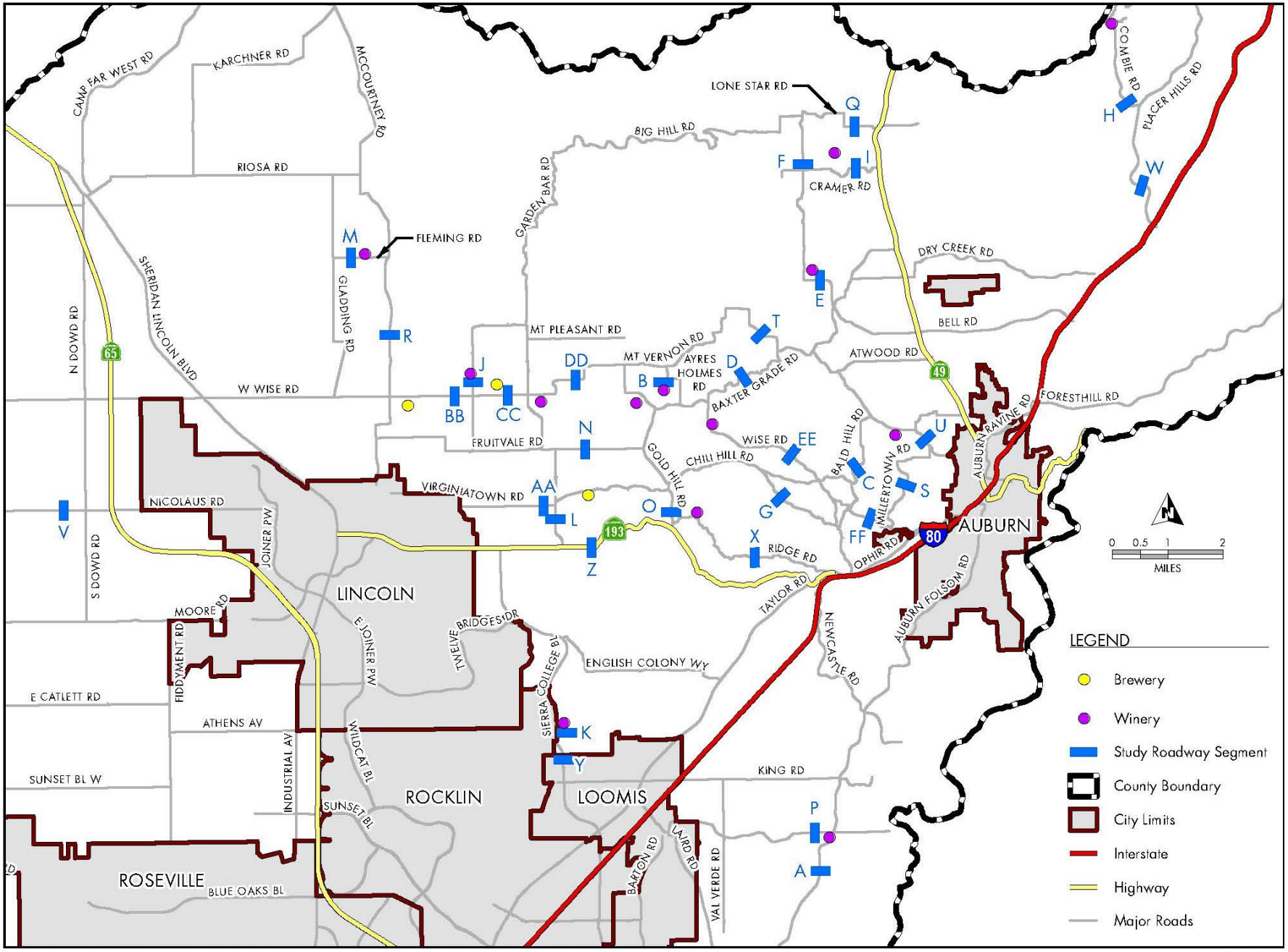
Daily Traffic Volumes. 24-hr traffic volume counts were collected on study area roadways from new counts, from data available from Placer County or from Caltrans annual traffic volume report. Figure 3 notes the locations of these traffic counts. Data was collected on Saturday June 10, 2017 and Saturday June 24, 2017. Weekday data was collected on October 12, 2017. The results of these counts form the basis for Table 3, Existing Roadway Segment Level of Service.

Peak Hour Intersection Traffic Counts. Weekday intersection turning movement counts were collected at study locations on Thursday October 5, 2017 and Saturday October 7, 2017. Intersection count data was collected during the typical weekday p.m. peak hour and during the highest volume hour for activity at rural wineries (i.e., noon to 2:00 p.m.) on Saturdays. The locations of study intersections are shown in Figure 4, and the results of these counts are noted in Figure 5. Traffic count worksheets are included in the appendix to this report.

Levels of Service. Levels of Service were determined using methodologies accepted by Placer County.

Roadway Segment Levels of Service. Table 3 identifies the current Level of Service on study area roads based on daily traffic volume. As indicated, all roadways carry traffic volumes that result in Level of Service that satisfy Placer County's minimums standards for rural areas (i.e., LOS C or LOS D based on proximity to a state highway).

Intersection Levels of Service. Table 4 identifies current peak hour Levels of Service at study area intersections. As shown, all but one study area intersection operates with Level of Service that satisfy Placer County's overall minimum LOS C standard for locations more than ½ mile from a state highway. Motorists turning at the **Sierra College Blvd / Delmar Avenue intersection** experience delays that are indicative of LOS E in the weekday p.m. peak hour.



STUDY AREA ROADWAY SEGMENTS

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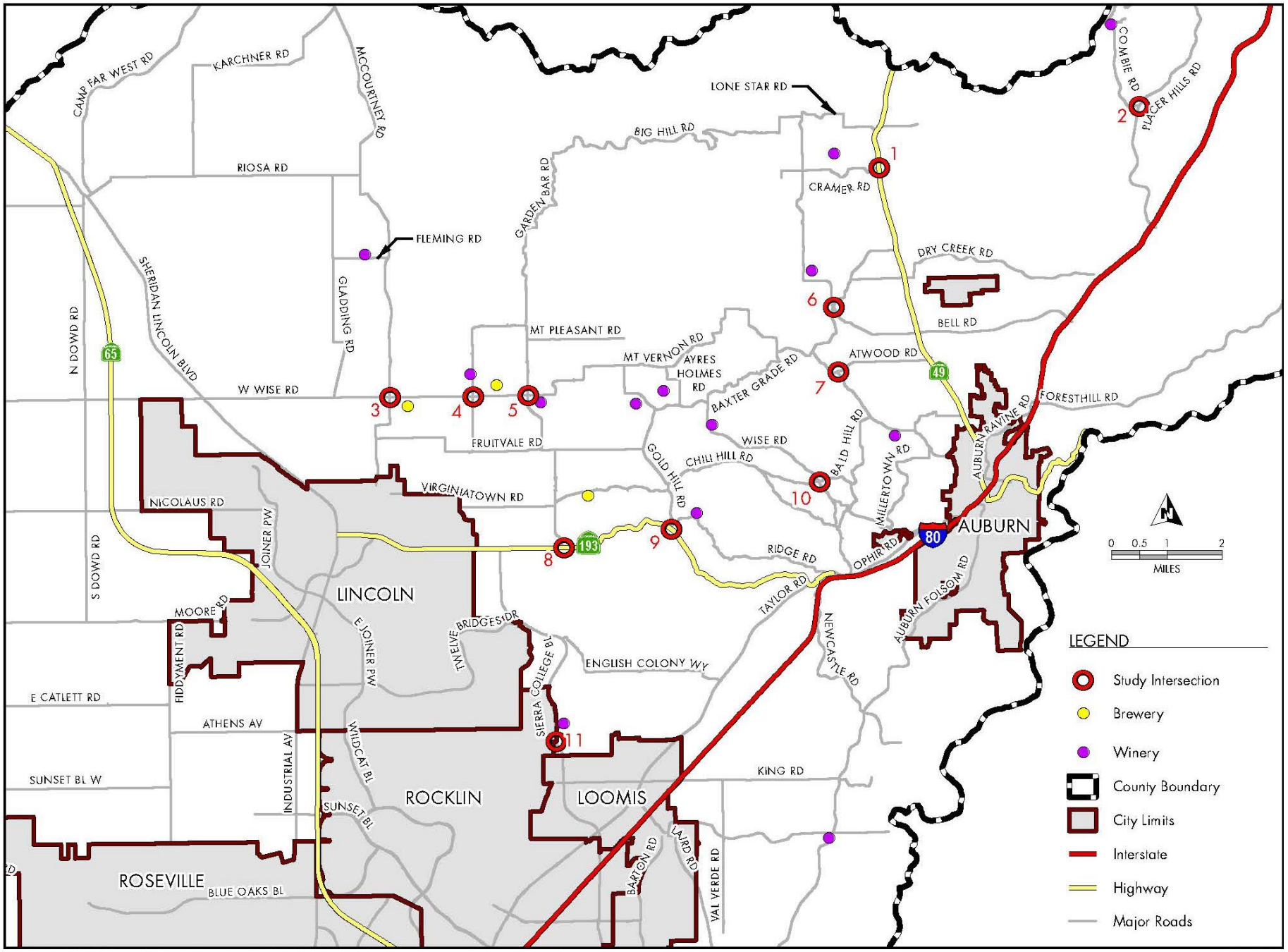
figure 3



STUDY AREA INTERSECTIONS

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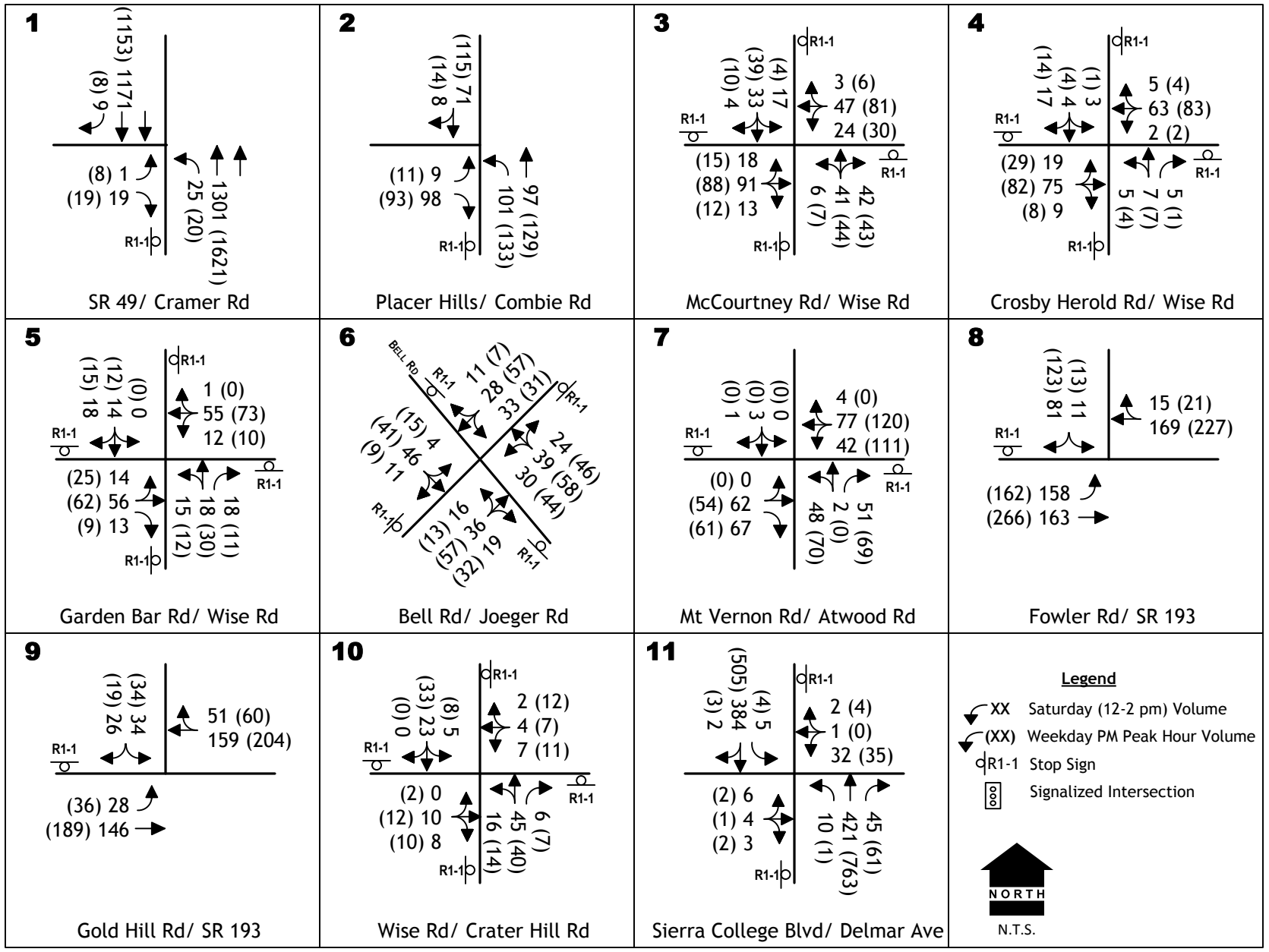
figure 4



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EXISTING TRAFFIC VOLUMES AND LANE CONFIGURATIONS

figure 5

TABLE 3 CURRENT ROADWAY SEGMENT TRAFFIC VOLUMES AND LEVEL OF SERVICE							
#	Road	Location	Classification (Terrain or Access)	Roadway Segment Level of Service			
				Weekday		Saturday	
				Daily Volume	LOS	Daily Volume	LOS
A	Auburn – Folsom Rd	South of King Rd	Rural Arterial (H)	8,573	A	8,355	A
B	Ayers Holmes Rd	Mt Vernon Rd to Wise Rd	Local Road (R)	412	A	485	A
C	Bald Hill Rd	Wise Rd to Mt. Vernon Rd	Rural Collector (R)	1,309	A	1,038	A
D	Baxter Grade Rd	Wise Rd to Mt. Vernon Rd	Rural Collector (R)	971	A	634	A
E	Bell Rd	Lone Star Rd to Cramer Rd	Rural Collector (R)	614	A	543	A
F	Bell Rd	Joeger Rd to Cramer Rd	Rural Collector (R)	1,400	A	1,329	A
G	Chili Hill Rd	Lozanos Rd to Gold Hill Rd	Rural Collector (R)	355	A	262	A
H	Combie Rd	Placer Hills Rd to end	Rural Collector (R)	2,688	B	2,477	B
I	Cramer Rd	Bell Rd to SR 49	Local Road (R)	558	A	549	A
J	Crosby Herold Rd	Wise Rd to Meadow Creek Rd	Local Road (R)	525	A	582	A
K	Delmar Ave	Sierra College Blvd to Citrus Colony Rd	Rural Collector (L)	1,126	A	1,171	A
L	Fowler Rd	SR 193 to Virginiatown Rd	Rural Collector (L)	3,412	B	3,440	B
M	Fleming Rd	Gladding Rd to McCourtney Rd	Local Road (L)	43	A	92	A
N	Fruitvale Rd	Fowler Rd to Gold Hill Rd	Rural Collector (R)	1,486	A	1,186	A
O	Gold Hill Rd	SR 193 to Virginiatown Rd	Rural Collector (R)	1,542	A	1,857	B
P	Horseshoe Bar Rd	Val Verde Rd to Auburn– Folsom Rd	Rural Collector (R)	3,545	B	2,485	B
Q	Lone Star Rd	Bell Rd to SR 49	Local Road (R)	1,328	A	1,223	A
R	McCourtney Rd	Wise Rd to Big Bend Rd	Rural Arterial (M)	1,192	A	1,207	A
S	Millertown Rd	Wise Rd to Mt. Vernon Rd	Rural Collector (R)	150	A	135	A
T	Mt. Vernon Rd	Wise Rd to Meyers Ln	Rural Collector (R)	2,021	B	2,679	B
U	Mt Vernon Rd	Vineyard Dr to Millertown Rd	Rural Collector (R)	2,995	B	2,676	B
V	Nicolaus Rd	West of Dowd Rd	Rural Arterial (M)	3,064	A	2,374	A
W	Placer Hills Rd	I-80 to Combie Rd	Rural Arterial (M)	9,470	A	7,407	A
X	Ridge Rd	Gold Hill Rd to SR 193	Rural Collector (R)	789	A	640	A
Y	Sierra College Blvd	South of King Rd	Rural Arterial (H)	12,762	B	10,642	A
Z	SR 193	Sierra College Blvd to Fowler Rd	State Highway (M)	6,700	A	6,700	A
AA	Virginiatown Rd	Lincoln limits to Fowler Rd	Rural Collector (L)	773	A	994	A
BB	Wise Rd	McCourtney Rd to Crosby Herold Rd	Rural Arterial (M)	2,575	A	2,714	A
CC	Wise Rd	Crosby Herold Rd to Garden Bar Rd	Rural Arterial (M)	1,857	A	1,978	A
DD	Wise Rd	Garden Bar Rd to Mt. Vernon Rd	Rural Arterial (M)	1,394	A	1,304	A
EE	Wise Rd	Baxter Grade Rd to Crater Hill Rd	Rural Collector (R)	1,168	A	931	A
FF	Wise Rd	Bald Hill Rd to Ophir Rd	Rural Collector (R)	1,000	A	915	A
(L) is level terrain, and (R) is rolling terrain. (H) is high arterial access control, and (M) is moderate arterial access control							

TABLE 4 EXISTING INTERSECTION LEVELS OF SERVICE						
#	Location	Control	Weekday PM Peak Hour		Saturday Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	SR 49 / Cramer Rd (overall) Eastbound Approach	EB Stop	(14.4) 18.5	(C) C	(12.9) 14.5	(B) B
2	Placer Hills Rd / Combie Rd (overall) Southbound Approach	SB Stop	(8.9) 10.2	(A) B	(8.6) 9.5	(A) A
3	Wise Rd / McCourtney Rd	AWS	8.2	A	8.2	A
4	Wise Rd / Crosby Herold Rd	AWS	7.7	A	7.5	A
5	Wise Rd / Garden Bar Rd	AWS	7.8	A	7.6	A
6	Bell Rd / Joeger Rd	AWS	8.3	A	7.8	A
7	Mt. Vernon Rd / Atwood Rd (overall) Northbound Approach	NB Stop	(8.6) 9.4	(A) A	(7.8) 7.8	(A) A
8	SR 193 / Fowler Rd (overall) Southbound Approach	SB Stop	(9.9) 11.9	(A) B	(9.0) 10.6	(A) B
9	SR 193 / Gold Hill Rd (overall) Southbound Approach	SB Stop	(10.4) 12.1	(B) B	(9.8) 10.8	(A) B
10	Wise Rd / Crater Hill Rd	AWS	7.6	A	7.6	A
11	Sierra College Blvd / Delmar Ave (overall) Westbound Approach	WB Stop	**(38.7)** **44.3**	**(E)** **E**	(16.9) 20.6	(C) C
(XX) is overall weighted average delay and LOS for movements yielding right of way **BOLD** values exceed minimum LOS standard						

Traffic Signal Warrants

The extent to which existing traffic volumes reach the level that satisfy peak hour traffic signal warrants has been evaluated. Peak hour warrants differentiate between *urban* and *rural* conditions based on the prevailing travel speed. Rural warrants are applied for speeds of 40 mph or greater, while urban criteria are employed at lower speeds. For this investigation rural warrant thresholds have been employed in all cases.

Current traffic volumes at all study intersections fall below the level that would satisfy peak hour warrant requirements.

Winery / Farm Brewery Traffic Count Data. The volume of traffic entering and exiting selected existing rural wineries and farm breweries was determined through video traffic counts conducted at winery and brewery entrances over a Friday, Saturday and Sunday. To avoid intruding onto private property the counts were conducted at public road access points using video cameras. These counts were used to identify the highest traffic volume hours of winery operation and were intended to reflect both regular operation of wineries and breweries as well as traffic volumes associated with publicized events. To capture events at as many facilities as possible driveway counts were conducted on June 9, 2017 through June 11, 2017, June 16, 2017 through June 18, 20017, and on September 30, 2017. The results of this data collection are presented in Table 5.

As indicated specific events were publicized and are noted, however, no exact information is available regarding the number of persons in attendance at any event. Information gathered from social media is presented when available. The volume of traffic observed at some locations would suggest that an event was held even though details were not known.

Average Traffic Volumes at Wineries. The average daily traffic volume occurring at wineries when no events were occurring was determined for the three winery parcel size classifications. These calculations exclude farm breweries. As noted, the Friday averages for wineries ranged from 24 ADT for small wineries to 41 ADT for large wineries, and the p.m. peak hour averages ranged from 7 to 10 peak hour trips. The totals were slightly higher on Saturdays with 38 to 41 ADT occurring when no events occurred.

The volume of traffic occurring on an hourly basis when events of all types occurred was also identified. This information is discussed in the Trip Generation analysis.

TABLE 5
TRAFFIC VOLUME COUNTS AT EXISTING PLACER COUNTY WINERIES AND FARM BREWERIES

Name	Location	Size	Date	Traffic volume					
				Friday		Saturday		Sunday	
				Daily (vpd)	Peak Hour (vph)	Daily (vpd)	Peak Hour (vph)	Daily (vpd)	Peak Hour (vph)
Dono dal Cielo Vineyard and Winery	6100 / 5960 Wise Road	large	6/16/2017	14	5	204[1]	37	46	17
Mt. Vernon Winery	10850 Mt. Vernon Road	large	6/9/2017	67	15	250[2]	45	92	19
Lone Buffalo Vineyards	7505 Wise Road	medium	6/16/2017	22	6	38	13	41[3]	13
Rock Hill Winery	2958 Delmar Avenue	medium	6/9/2017	13	5	171[4]	46	81	28
			9/30/2017	-	-	229[5]	53	-	-
Vina Castellano Winery	4590 Bell Road	medium	6/9/2017	76	11	156[5]	25	105	22
Fawnridge Winery	5560 Fawnridge Road	small	6/9/2017	8	2	13	1	41	13
Pescatore Vineyard & Winery	7055 Ridge Road	small	6/9/2017	-	-	82[6]	19	-	-
			6/16/2017	40	10	34	7	10	3
Ciotti Cellars	3285 Crosby Herold Road	small	6/9/2017	31	10	113[7]	39	-	-
			6/16/2017	17	6	34	12	12	3
Goat House Brewing Company	600 Wise Lane	-	6/16/2017	70	17	142[8]	46	217[9]	51
Average for Wineries Without Event[10]		small		24	7	41	10	21	7
		medium		37	8	38	13		
		large		41	10	n.a.	n.a.	69	18

[1] Live Music by Quarter horse (1 to 4pm)Vino Banditos concert and Doggiestyle Hotdog Vendor (6:30 to 8:30 pm)
[2] Wine release party (12-5pm) and Wine Cave Dinner (7pm)
[3] Dads taste Free (12 pm to 5 pm)
[4.] Concert
[5] Probable event details unknown
[6] Benefit Dinner for SARAS 6 pm, limited to 45 people
[7] Yin Yoga, 9:30 to 11am, limited to 40 spots, concert JP & Nowhere man (2 to 5pm)
[8.] Pizza
[9.] Father's Day on the Farm (beer and hotdogs 58 guests)
[10] average excludes farm breweries

Alternative Transportation Modes

The status of existing facilities for pedestrians, bicycle and transit users have been evaluated based on identification of existing facilities and review of planned programs and improvements.

Transit Services. ***Placer County Transit (PCT)*** provides bus service to most of the urbanized south Placer County area, but services are limited in the rural study area addressed by this analysis. The Auburn Station on Nevada Street in the City of Auburn is the hub for service in Western Placer County. PCT's *Taylor Road Shuttle* travels between Auburn and Sierra College in Rocklin, and this route follows Ophir Road between Auburn and the Ophir Park-&-Ride lot on I-80. This route provides service Mondays through Saturdays from 6:40 a.m. to 8:20 p.m. However, stops on Ophir Road are by reservation only. The SR 49 route follows the state highway north from the Auburn Transit Center to Dewitt Center on Bell Road and Chana High School on Richard Drive south of Dry Creek Road. This service runs Monday through Saturday from 4:35 a.m. to 7:30 p.m. None of these routes are near Placer County's existing wineries or farm breweries.

Bicycle Facilities

The 2018 Update to the Placer County Regional Bikeway Plan (Bikeway Plan) provides the most current information regarding the status of existing bicycle facilities in the study area and plans for future improvements.
http://pctpa.net/library/BikewayPlanning/PlacerCounty_RegionalBikewayPlan_FINAL_20180629.pdf .

The Bikeway Plan notes that there are four types of bikeways defined by Chapter 1000 of the Caltrans Highway Design Manual (2017).

- **Class I Bikeway (Bike Path).** Bike paths or share-use paths provide a completely separated facility designed for the exclusive use of cycles and pedestrians with minimal vehicle crossflows. Motorized vehicles are not allowed on Class I Bike Paths.

- **Class II Bikeway (Bike Lane).** Bike lanes are on-street bikeways that provide a designated right of way for the exclusive or semi-exclusive use of bicycles. Through travel by motor vehicles or pedestrians prohibited, but vehicle parking and crossflows by pedestrians and motorists are permitted.

- **Class III Bikeway (Bike Route). Bike routes** provide a right-of-way designated by signs or permanent markings and shared with pedestrians and motorists. Roadways designated as Class III Bike Routes should have sufficient width to accommodate motorists, bicyclists, and pedestrians. Shared-lane markings ("sharrows") can be used on roadways with a posted speed limit of 35 mph or less to provide an additional alert to drivers of the shared roadway environment with bicyclists.

- **Class IV Bikeway (Separated Bikeway).** Separated bikeways provide a physical separation from vehicular traffic. This separation may include grade separation, flexible posts, planters, or other inflexible physical barriers, or on-street parking. This class of bikeway has not yet been implemented in Placer County.

Existing Facilities. The Bikeway Plan noted the presence of existing bicycle facilities in its figures 10 (western Placer County) and 11 (Central Placer County), and this information has been described for the study area in Table 6 below. As indicated, dedicated bicycle facilities are rare in the study area.

TABLE 6
EXISTING STUDY AREA BICYCLE FACILITIES

Road	Location	Facility Designation
SR 193	Oak Tree Lane to Lincoln City limit	Class II
Ophir Road	Newcastle to I-80	Class II
English Colony Road	Penryn Elementary School to UPRR	Class III
Auburn Folsom Road	Auburn to Douglas Blvd	Class III
Bell Road	SR 49 to I-80	Class II
Lozanos Road	Adjoining Ophir Elementary School	Class III
Meadow Vista Road	Placer Hills Road to Pine Cone Lane	Class III
Placer Hills Road	Winchester Club Drive to Combie Road	Class III
Richardson Drive	Joeger Road to Dry Creek Road	Class III

The Bikeway Plan notes the presence of recreational cyclist on many rural roads and identifies High-Use Recreational Routes in its figure 19. Nearly all study area roads fall under this classification.

Planned Improvements. The Bikeway Plan notes facilities that may be developed in the future, and study area facilities are noted in its figures 23, 28, 29 and 30. These facilities are noted in Table 7. The Bikeway Plan also noted "priority", with those facilities that would be expected to be constructed first having higher scores.

TABLE 7 FUTURE STUDY AREA BICYCLE FACILITIES			
		Facility	
Road	**Location**	**Designation**	**Priority**
SR 193	Lincoln to Newcastle	Class II	4
Ophir Road	Newcastle to I-80	Class II	existing
Atwood Road	Mt. Vernon Road to SR 49	Class II	4
Auburn Folsom Road	Auburn to Douglas Blvd	Class IV	7
Bell Road	Lone Star Road to Joeger Road	Class III	2
Bell Road	Joeger Road to I-80	Class II	8
Combie Road	Placer Hills Rd to Lakeview Hills Rd	Class III	2
Cramer Road	Bell Road to SR 49	Class III	0
Crother Road	Placer Hills Drive to I-80	Class II	4
Dry Creek Road	Joeger Road to SR 49	Class II	6
English Colony Way	Sierra College Blvd to school	Class III	3
English Colony Way	School to Taylor Road	Class II	4
Fowler Road	SR 193 to Virginiatown Road	Class III	2
Garden Bar Road	Wise Road to Mt Pleasant Road	Class II	1
Garden Bar Road	Mt Vernon Rd to Hidden Falls Park	Class III	1
Gold Hill Road	SR 193 to Virginiatown Road	Class III	4
Horseshoe Bar Road	Loomis to Auburn Folsom Road	Class II	5
Indian Hill Road	Newcastle Road to Auburn	Class III with climbing lane	4
Joeger Road	Mt Vernon Road to Bell Road	Class III	2
Joeger Road	Bell Road to Dry Creek Road	Class II	3
Joeger Road	Dry Creek Road to SR 49	Class III	3
King Road	Loomis to Auburn Folsom Road	Class IV	2
Lone Star Road	Bell Road to SR 49	Class III	0
Lozanos Road	By Ophir Elementary School	Class III	existing
McCourtney Road	Lincoln to Wise Road	Class II	2
McCourtney Road	Wise Road to Camp Far West	Class III	2
Meadow Vista Road	Placer Hills Road to Pine Cone Lane	Class III	3
Mears Drive	Hidden Falls Park to Mt Vernon Road	Class III	-
Mt. Vernon Road	Wise Road to Mears Drive	Class III	-
Mt. Vernon Road	Mears Drive to Merry Knoll Road	Class II	3
Newcastle Road	I-80 to Auburn Folsom Road	Class III	3
Park Drive	Richardson Drive to Quartz Drive	Class II	7
Placer Hills Road	Lake Arthur Road to Crother Road	Class II	7
Placer Hills Road	Crother Road to Wiemar Cross Road	Class III	6
Richardson Drive	Joeger Road to Dry Creek Road	Class III	Existing
Richardson Drive	Dry Creek Road to Park Drive	Class II	7

TABLE 7 (continued) FUTURE STUDY AREA BICYCLE FACILITIES			
		Facility	
Road	**Location**	**Designation**	**Priority**
Ridge Road	Gold Hill Road to Ophir Road	Class III	4
Rock Springs Road	Auburn Folsom Road to Taylor Road	Class III	1
Sierra College Blvd	SR 193 to Delmar Avenue	Class IV	3
Taylor Road	Rippy Road to Ophir	Class IV	6
Virginiatown Road	Lincoln to Gold Hill Road	Class III	2/4
Wise Road	McCourtney Rd to Garden Bar Road	Class II	1
Wise Road	Garden Bar Road to Ophir Road	Class III	3

Collision History

Placer County has a robust Traffic Accident Analysis System (TAAS) in which traffic collision data is collected and reviewed on an annual basis. It is recognized that many roadways throughout the County do not conform to current design standards and guidelines; however, the fact that a roadway does not meet current design standards does not necessarily make safety improvements essential. Traffic and roadway engineering design standards and guidelines have evolved over many years; therefore, many roadways that do not display any safety deficiencies no longer meet the current standards simply due to the passage of time since their construction. Conversely, some roadways that meet current standards may display safety deficiencies. The TAAS recognizes that reconstructing all roadways that do not meet current design standards would be financially infeasible, and doing so would expend funds to upgrade many roadways that operate safely. Through the TAAS program, locations for detailed engineering investigations are identified and improvements to facilitate safe travel for all modes, if necessary, are implemented on a regular basis.

Consistent with the TAAS guidelines, three-years of collision history (January 1, 2014 – December 31, 2016) was obtained for study area roadways. This information was reviewed, and roadway collision rates were calculated based on the number of collisions per Million Vehicle Miles (MVM) of travel. This method permits comparison of roadways carrying different traffic volumes. In addition, reference to average collision rates for various types of facilities is a helpful way to determine if a location is experiencing a higher than expected rate of collisions. Comparative collision rates are published by Caltrans based on statewide data, based on the formulas noted in Table 8.

TABLE 8 2010 STATEWIDE AVERAGE COLLISION RATES		
Rural		
2-lane Flat - Rural ≤55	0.82	+0.35/ADT
2-lane Rolling - Rural ≤55	1.14	+0.35/ADT
Suburban (outside City limits, but classified as urban by FHWA)		
2-lane Suburban < 45 MPH	2.39	
2-lane Suburban 45 - 55 MPH	1.32	

As noted in Table 9, the study area roadways are generally experiencing collision rates at, or below, the comparative statewide average for their facility types.

The Bikeway Plan also presents information regarding bicycle related collisions that have occurred countywide from 2012 to 2016 (refer to Table 5 in the Bikeway Plan). A total of 74 collisions were identified, and the Bikeway Plan's Figure 20 illustrates the location of collisions. Review of that figure indicates that excluding incidents occurring on SR 49 in North Auburn, eight bicycle related collisions occurred in the study area.

Within the study area specific locations have been a concern to the community, and intersections on the State Route 49 corridor are of particular concern. Caltrans and Placer County have discussed measures to improve safety by slowing the speed of traffic on SR 49 and controlling opportunities to access the state highway. The solution most recently raised would involve installation of modern roundabouts at two or three intersections in the area between Auburn and the Bear River in lieu of traffic signals. Roundabouts would slow traffic and provide a safe location for accessing the state highway. Motorists accessing the highway at locations between the roundabouts would be able to turn right and use the next roundabout to make a u-turn, rather than making left turns across high speed traffic. While this plan may have merit, funding for the project has not yet been identified.

TABLE 9 COLLISION ANALYSIS (1/1/2014 - 12/31/2016)							
Road Name	**From**	**To**	**Length (miles)**	**Segment Related Collisions (3-year)**	**ADT**	**Collision Rate**	**Statewide Average**
Ayers Holmes Road	Mt Vernon Road	Wise Road	0.9	0	412	0.00	1.99
Bald Hill Road	Wise Road	Mt Vernon Road	2.1	2	1309	0.66	1.32
Baxter Grade Road	Wise Road	Mt Vernon Road	2.1	3	971	1.34	1.50
Bell Road	Lone Star Road	Richardson Drive	5.2	9	1400	1.13	1.39
Chili Hill Road	Lozanos Road	Gold Hill Road	3.7	1	355	0.70	2.13
Combie Road	Placer Hills Road	end	1.7	3	2688	0.60	2.39
Cramer Road	Bell Road	SR 49	1.6	3	558	3.07	1.77
Crosby Herold Road	Fruitvale Road	Mt Pleasant Road	2.3	1	525	0.76	1.81
Delmar Avenue	Sierra College Blvd	English Colony Way	1.9	0	1126	0.00	1.13
Fowler Road	SR 193	Virginiatown Road	0.9	3	3412	0.89	0.92
Fleming Road	Gladding Road	McCourtney Road	1	0	43	0.00	8.96
Fruitvale Road	McCourtney Road	Gold Hill Road	5.1	2	1486	0.24	1.38
Gold Hill Road	SR 193	Wise Road	2.4	2	1542	0.49	1.37
Horseshoe Bar Road	Val Verde Road	Auburn Folsom Road	2.1	5	3545	0.61	2.39
Lone Star Road	Bell Road	SR 49	1.8	1	1328	0.38	1.40
McCourtney Road	Wise Road	Big Ben Road	1.8	1	1192	0.43	1.11
Millertown Road	Wise Road	Mt Vernon Road	2.3	0	150	0.00	2.39
Mt Vernon Road	Wise Road	Joeger Road	4.8	13	2021	1.22	1.31
Mt Vernon Road	Joeger Road	City of Auburn	3.4	16	2995	1.43	2.39
Nicolaus Road	Sutter County Line	SR 65	5	5	2064	0.44	0.99
Placer Hills Road	I-80	Combie Road	2.6	9	9470	0.33	1.18
Ridge Road	Gold Hill Road	SR 193	3.5	5	789	1.65	1.58
Viginiatown Road	City of Lincoln	Gold Hill Road	5.4	6	773	1.31	1.27
Wise Road	McCourtney Road	Garden Bar Road	2.5	5	2575	0.71	0.96
Wise Road	Garden Bar Road	Ophir Road	9.7	14	1394	0.95	1.39

PROJECT CHARACTERISTICS

Assumptions

Increase in Agricultural Promotional Event Activity. This analysis quantifies the impacts associated with the ability of wineries and farm breweries to conduct Agricultural Promotional Events, which are not limited in number by the proposed Zoning Text Amendment. While, not limited in number, it is unrealistic to assume that wineries and farm breweries will host back-to-back events all day, every day. There are several factors that limit a particular facility's ability to host events, including number of staff, budget, parking capacity, overlap with regular tasting room hours, etc. Another factor to be considered is that most agricultural promotional events are currently scheduled outside of normal tasting room hours, and this trend is expected to continue. Promotional events are generally scheduled outside of normal tasting room hours because most facilities lack sufficient parking to support normal patronage of the tasting room, in addition to the attendees of a promotional event. This is supported by the fact that temporary overflow parking cannot be used for agricultural promotional events.

Based on these factors, the impact analysis conservatively assumes that each facility would host up to two additional agricultural promotional events per day as a result of the proposed Zoning Text Amendment. Of the two events, on may be a "Special" event or what has been terms a "Rolling" agricultural promotional event. Event characteristics are further discussed in the section titled "Project Characteristics" and which follows.

Future Winery and Farm Brewery Growth Projections. All future winery/farm brewery applications would be subject to the proposed Winery and Farm Brewery Zoning Text Amendment. Under the proposed project, future facilities on medium- and large-sized parcels would now be afforded the ability to host an unlimited number of Agricultural Promotional Events, and large wineries/breweries, both existing and future, would be afforded the ability to host 12 Special Events each year (an increase of six per year). The Zoning Text Amendment would not directly induce the development of additional medium or large wineries/farm breweries, as they are already permitted by-right in certain zones.

Placer County research of historic winery/farm brewery growth within its own jurisdictional boundaries and in the comparable, foothill counties of El Dorado and Amador counties yielded the following results:

- The historic annual growth rates for wineries in Placer, El Dorado, and Amador counties are very similar, ranging from 1.2 to 1.4 new facilities per year. The County has elected to use an annual average growth rate of 1.5 new facilities per year, be they wineries or farm breweries. While this growth rate accounts for both wineries and farm breweries, the rate is conservative given that this EIR is only analyzing wineries and farm breweries on medium and large parcel sizes as facilities on small parcels require an MUP.

- The estimated growth rate in Placer County over the period evaluated, 2003-2017, would be much less for wineries and farm breweries located only on medium or large sized parcels. The estimated average annual growth rate would be 0.6 new facilities per year, for a total of 12 new facilities over 20 years.

- Consistent with industry standard practice, the cumulative study period for this analysis is 20 years. Assuming 1.5 new facilities per year, the total growth evaluated in this EIR equates to **30 new facilities.**

Locations of Future Wineries / Farm Breweries. In order to assign trips associated with future wineries and farm breweries to study area roads it is necessary to understand the general location of these wineries. While it is not practical to identify specific parcels that might be developed as wineries or farm breweries in the future, it was possible for Placer County staff to make reasonable assumptions regarding the likely locations based on the availability of parcels greater than 10 acres that meet zoning requirements and the precedent established by the presence of existing wineries. The resulting distribution of future wineries and farm breweries was characterized in term of community area boundary sub-regions, as noted in Figure 6, and summarized in Table 10.

TABLE 10
FUTURE WINERY / FARM BREWERY LOCATION ASSUMPTIONS

Winery Sub Region	Current Medium / Large Wineries / Breweries	Share of Existing Wineries / Breweries	Number of Future Wineries / Breweries
West Lincoln	0	0%	0
North Wise Road	2	20%	6
South Wise Road	4	40%	12
Newcastle / Ophir	1	10%	3
North Auburn	0	0%	0
Northwest Auburn	2	20%	6
Horseshoe Bar / Penryn	1	10%	3
Granite Bay CP	0	0%	0
Dry Creek CP	0	0%	0
Meadows Vista	0	0%	0
Weimar / Applegate / Colfax	0	0%	0
Foresthill	0	0%	0
Total	***10***	***100%***	***30***

FIGURE 6 FUTURE WNERY SUBREGIONS MAP (BY Placer county)

Project Characteristics

Observed Trip Generation Characteristics. The amount of new vehicle traffic associated with new events permitted under the ordinance has been estimated based on attendance, automobile occupancy and assumptions for the time of day when new events may occur. As a comparison the amount of vehicle traffic associated with the events observed at existing wineries and farm breweries was isolated from the total daily volume at each venue based on hourly traffic counts at entrances to existing wineries and farm breweries, and this information is noted in Table 11. As shown, the overall time period when event travel may have occurred was identified along with the highest volume hour within that travel period. As indicated, some information regarding these events was available from social media, and in some cases review of the traffic volume counts suggested locations where it was reasonable to conclude that an event was held based on the high traffic volume, even though an event was not publicized.

These events generated wide ranges of in the number of total trips for the event and for the events peak hour volumes. The total number of trips generated during the time periods when persons would have been traveling for an event ranged from a low of 34 (Dad's Taste Free at Lone Buffalo) to a high of 212 (Wine Release Party at Mt. Vernon Winery). The range of highest hourly volumes associated with events ranged from 13 (Lone Buffalo) to 53 (Rock Hill).

Specific information regarding the characteristics of and attendance at these events is not available. Clearly, some events attracted guests in numbers that likely exceeded the 50 persons that are permitted for new agricultural promotional events under the amended ordinance. The events that most closely match the ordinance agricultural promotion event attendance was a benefit dinner held at Pescatore Vineyard (45 people), which generated 43 daily trips and 19 trips in its highest volume hour. The other larger events could fall into the "special events" category for new events allowed under the amended ordinance at large wineries.

Event Trip Generation Rates. For this analysis trip generation for new agricultural promotion events was estimated based on the number of persons in attendance, the number of times attendance at an event would turnover, and typical automobile occupancy. As noted in Table 12, each 50-person agricultural promotion event was assumed to require 20 vehicles (i.e., 2.5 persons per vehicle) to transport guests. Thus, one 50-person event where guests only turnover once would generate 20 inbound and 20 outbound trips over the course of a day, or a total of 40 daily trips.

The characteristics of "special" events would be similar. Under these assumptions a 100-person special event where guests turnover once would generate 40 inbound and 40 outbound trips, or 80 daily trips. Similarly, at these occupancy rates a 200-person special event where guests only turnover once would generate 80 inbound and 80 outbound trips, or 160 daily trips.

Attendees at some events come and go over the course of the event. These have been termed "rolling" events. For this analysis the 50-person occupancy has been assumed to turn over three (3) times at a rolling event. Thus a rolling 50-person event could generate 60 inbound and 60 outbound trips over the course of the event, or 120 daily trips.

TABLE 11 OBSERVED EVENT TRIP GENERATION					
Winery / Farm Brewery	**Type of Event**	**Event Travel Period**	**Description**	**Traffic Volume (vph)**	
				Total Trips during event travel period	**Highest Volume Hour during travel period**
Dono dal Cielo	Concert	12 pm – 5 pm	Live Music (1 pm to 4 pm)	90	34
	Food	6 pm – 9 pm	Doggiestyle Hotdogs (6:30 to 8 pm)	44	24
Mt. Vernon	Party	11 am – 6 pm	Wine Release Party (12 to 5 pm)	212	45
	Dinner	6 pm – 10 pm	Wine Cave Dinner (7:00 pm)	21	10
Lone Buffalo	Event	11 am – 6 pm	Dads Taste Free (12 to 5 pm)	34	13
Rock Hill	Concert	4 pm – 11 pm	Concert, details unknown	144	46
	Event	unknown	Details unknown	182	53
Vina Castellano	Event	11 am – 6 pm	Detail unknown	106	25
Pescatore	Dinner	5 pm – 10 pm	Benefit Dinner limited to 45 people (6 pm)	43	19
Ciotti Cellars	Event	9 am – 12 pm	Yin Yoda limited to 40 spots (9:30 to 11 am)	25	16
	Concert	1 pm – 6 pm	Live Music JP & Nowhere Man (2 pm to 5 pm)	77	39
Goat House	Food	11 am – 6 pm	Pizza, time unknown	157	42
	Event		Father's Day at the Farm (58 guests)	194	51

TABLE 12
WINERY / FARM BREWERY EVENTS TRIP GENERATION RATES

Description	Quantity (Attendance)	Trips per Total Allowed Events							
		Weekday				Saturday			
		Daily	PM Peak Hour			Daily	Afternoon Peak Hour		
			In	Out	Total		In	Out	Total
Regular Ag Promo Event	50 persons	40[A]	5[B]	5	10	40	10[C]	0	10
Rolling Ag Promo Event	50 persons	120[D]	20[E]	20	40	120	20[F]	20	40
Special Event	100 persons	80[G]	20[H]	20	40	80	40[I]	0	40
Special Event	200 persons	160[J]	40[K]	40	80	160	80[L]	0	80

(A) 50 persons per event / 2.5 persons per vehicle x 2 directions = 40 daily trips

(B) 50 persons per event / 2.5 persons per vehicle is 20 peak hour trips per event. The above stated PM peak hour trip generation is derived from the following methodology: on average when there are two events on a weekday half of the Ag Promo events would occur during the PM peak hour (4-6PM) and the other half of the Ag Promo events would occur outside of the PM peak hour (after 6pm). The later event would not be part of PM Peak hour trip generation estimate. For the Ag Promo Event during the PM peak hour, out of the total number of facilities, it is assumed that ½ of the Ag Promo Events end during the PM peak hour (4-6PM), whereas the remaining ½ of the events will have their Ag Promo Event beginning in the PM peak hour. Therefore, of the total hourly trips ¼ of the peak hour trips generated by a typical Ag Promo event will be inbound in the peak hour, ¼ of the of trips would be outbound in the peak hour and ½ would fall outside the PM peak hour altogether. Taken as an average across all facilities, this results in 5 inbound and 5 outbound trips for each 50 person Ag Promo event.

(C) One of the two daily events have travel in the Saturday peak hour (noon- 2:00 pm), and the second event would occur outside of the peak hour It is assumed that the Saturday peak hour Ag Promo Event would begin during the Saturday afternoon peak hour. Taken on average across all facilities, this equates to 10 inbound trips per event.

(D) 50 person event with the permitted capacity turning over three times (20 trips per 50 persons x 2 directions x three capacity turnovers = 120 daily trips).

(E) Assume a Rolling Ag Promo event occurs before an evening (after 6:00) regular Ag Promo event and that one rolling "turnover" will occur during the PM peak hour. 50 persons enter in the peak hour and 50 persons leave. At 2.5 persons per vehicle = 20 inbound and 20 outbound trips.

(F) Assume a Rolling Ag Promo event starts before and ends after the Saturday peak hour, and that one "turnover" occurs during the peak hour. 50 persons enter and 50 persons leave at 2.5 persons per vehicle = 20 inbound and 20 outbound trips.

(G) 100 persons per event / 2.5 persons per event x 2 directions is 80 daily trips.

(H) 100 persons per event / 2.5 persons per vehicle is 40 peak hour trips entering and 40 trips leaving per event. The above stated PM peak hour trip generation for an event is derived from the following methodology: Each special event would occur during the PM peak hour (4-6PM) and the facility's other Ag Promo Event would take place outside of the PM peak hour (after 6pm). For the Special Event during the PM peak hour, ½ of the facilities would have their Special Event ending during the PM peak hour (4-6PM), whereas the remaining ½ of the facilities will have their Special Event beginning in the PM peak hour. Therefore, ½ of the total number of trips generated by the Special events will be inbound and ½ the number of trips would be outbound. Taken as an average across all facilities, This results in an average of 20 inbound and 20 outbound trips for an event.

(I) The Special Event has travel in the peak hour. It is assumed that the Special Event would begin during the Saturday afternoon peak hour, which equates to 40 inbound trips per facility. The Ag Promo Event would occur outside (after) the afternoon peak hour.

(J) 200 persons per event / 2.5 persons per vehicle x 2 directions is 160 trips.

(K) 200 persons per event / 2.5 persons per vehicle is 80 peak hour trips per event. The above stated PM peak hour trip generation for a single large facility is derived from the following methodology: Each large facility would have its Special Event during the PM peak hour (4-6PM) and the Ag Promo Event outside of the PM peak hour (after 6pm). For the Special Event during the PM peak hour, out of the total number of large facilities, it is assumed that ½ of the facilities will have their Special Event ending during the PM peak hour (4-6PM), whereas the remaining ½ of the facilities will have their Special Event beginning in the PM peak hour. Therefore, ½ of the total number of trips generated by the Special events will be inbound and ½ the number of trips would be outbound. Taken as an average across all facilities, this results in 40 inbound and 40 outbound trips for each large facility.

(L) The Special Event has travel in the peak hour. It is assumed that the Special Event at all large facilities would begin during the Saturday afternoon peak hour, which equates to 80 inbound trips per facility. The Ag Promo Event would occur outside (after) the afternoon peak hour.

Assumptions have also been made relative to peak hour travel on weekday evenings and Saturdays. Because multiple events are assumed, one of the events has been assumed to require travel in the two-hour window period of the peak hour, while the second event is assumed to occur during periods outside of the peak hour. Assumptions have been made as to the direction of travel (i.e., inbound versus outbound trips) which differentiate between weekday p.m. peak hour as Saturday peak hour.

Trip Generation Rates "Per Facility". The total trip generation "per winery or farm brewery" has been estimated in a manner that accounts for the relative frequency of special and rolling agricultural promotions events. As indicated in the project description, each medium winery or farm brewery will be permitted to host up to 8 rolling ag promo events and 6 special events attended by up to 100 persons. The frequency of these events can be suggested in relation to the overall number of total event days that are available to each facility. For this analysis it was assumed that each facility will be open three days per week (i.e., Friday, Saturday and Sunday) and that events could occur over the 35 week period that generally encompasses spring, summer and fall. Thus, over the year there are 105 "event days", with a special event or rolling ag promo event occurring on 14 of those days, or roughly 13% of the time. Similarly, large wineries will be permitted to host 12 special events and 8 rolling ag promo events, and these 20 events would occur on 19% of the event days.

Because the nature of events at any individual winery will vary from day to say, it was necessary to estimate an overall weighted trip generation rate per facility that accounted for event frequency. This was accomplished in Tables 13 and 14 for medium wineries and farm breweries, and for large wineries, respectively. As shown for the event that will be the weighted average event at a medium winery or farm brewery the estimate was the sum of trips associated with regular event occurring 86.7% of the time, a rolling ag promo event that occurred 7.6% of the time and a special event that occurred 5.7% of the time. The total trip generation at the facility would be the sum of the weighted average event plus the trips associated with the 2nd regular ag promo event. As noted, each medium winery or farm brewery with two events would generate 88 daily trips with 24 trips in the peak hour.

As noted in Table 14, a similar approach was taken for large wineries. Because the size of a special event at a large winery is greater (i.e., 200 persons versus 100 persons) and special events are permitted more frequently at large wineries (i.e., 12 annually) the overall weighted average trip generation rates are somewhat greater for large wineries than for medium wineries and farm breweries.

TABLE 13
WEIGHTED AVERAGE MEDIUM WINERY / FARM BREWERY TRIP GENERATION RATES

Facility Size	Description	Quantity (persons)	Number of Annual Events (35 weeks)	Event Frequency		Trips per Total Allowed Events							
						Weekday				Saturday			
						Daily	PM Peak Hour			Daily	Afternoon Peak Hour		
							In	Out	Total		In	Out	Total
Medium Facility	Regular Ag Promo Event	50	91	91/105	Average Rate	40	5	5	10	40	10	0	10
				86.7%	*Weighted*	***34.7***	***4.3***	***4.3***	***8.7***	***34.7***	***8.7***	***0.0***	***8.7***
	Rolling Ag Promo Event	50	8	8/105	Average Rate	120	20	20	40	120	20	20	40
				7.6%	*Weighted*	***9.1***	***1.5***	***1.5***	***3.0***	***9.1***	***1.5***	***1.5***	***3.0***
	Special Event	100	6	6/105	Average Rate	80	20	20	40	80	40	0	40
				5.7%		***4.6***	***1.1***	***1.1***	***2.3***	***4.6***	***2.3***	***0***	***2.3***
	Sum of Weighted Average of special, rolling and regular Ag Promo events		105	100%		***48.4***	***6.9***	***6.9***	***13.8***	***48.4***	***12.5***	***1.5***	***14.0***
	2nd Regular Ag Promo Event	50	105	100%	Average Rate	40	5	5	10	40	10	0	10
	Overall Trip Generation Rates for a Medium Winery / Brewery (Sum of Weighted event and 2nd Ag Promo event)					**88**	**12**	**12**	**24**	**88**	**22**	**2**	**24**

TABLE 14
WEIGHTED AVERAGE LARGE WINERY TRIP GENERATION RATES

Facility Size	Description	Quantity (persons)	Number of Annual Events	Frequency		Trips per Total Allowed Events							
						Weekday				Saturday			
						Daily	PM Peak Hour			Daily	Afternoon Peak Hour		
							In	Out	Total		In	Out	Total
Large Facility	Regular Ag Promo Event	50	85	85/105	Average Rate	40	5	5	10	40	10	0	10
				81.0%	Weighted	32.4	4.1	4.1	16.2	32.4	8.1	0	8.1
	Rolling Ag Promo Event	50	8	8/105	Average Rate	120	20	20	40	120	20	20	40
				7.6%	Weighted	9.1	1.5	1.5	3.0	9.1	1.5	1.5	3.0
	Special Event	200	12	12/105	Average Rate	160	40	40	80	160	80	0	80
				11.4%	Weighted	18.2	4.6	4.6	9.2	18.2	9.1	0	9.1
	Weighted Average Per Primary event		105	100%		59.7	10.2	10.2	20.4	59.7	18.7	1.5	20.2
	Regular Ag Promo Event	50	105	100%	Average Rate	40	5	5	10	40	10	0	10
	Overall Trip Generation Rates for Large Winery (weighted event and 2nd Ag Promo Event)					**100**	**15**	**15**	**30**	**100**	**28**	**2**	**30**

Trip Generation Forecasts. The overall average weighted trip generation rates caused by the increase in events was applied to the existing medium wineries and farm breweries / large wineries to identify the immediate impact of implementing the Winery and Farm Brewery ordinance changes in terms of vehicle trip generation. As noted in Table 15, the additional events at existing wineries and rural breweries could generate 904 daily trips on a weekday or Saturday under the assumptions made here in. Of that total, 252 trips could occur in the weekday p.m. peak hour, and 320 trips could occur in the Saturday peak hour.

These estimates are conservative in that each existing facility would already be generating traffic that is included in current baseline traffic counts. It is likely that guests attending new events would displace some other persons who might have been at the facility as part of regular winery or farm brewery activity. Because no attempt was made to discount the trip generation forecasts for this "double counting" of trips, the overall estimate is conservative.

TABLE 15
WINERY AND FARM BREWERY EVENTS TRIP GENERATION FORECASTS FOR PROJECT SPECIFIC IMPACTS

Description	Quantity	Weekday				Saturday			
		Daily	PM Peak Hour			Daily	Afternoon Peak Hour		
			In	Out	Total		In	Out	Total
Existing Medium Winery	6[1]	528	72	72	144	528	132	12	144
Existing Large Winery	2[2]	200	30	30	60	200	56	4	60
Breweries (medium)	2[3]	176	24	24	48	176	44	4	48
Subtotal	***10***	***904***	***126***	***126***	***252***	***904***	***232***	***20***	***252***

(1) Lone Buffalo, Ciotti Cellars, Vina Castellano, Wise Villa, Rancho Roble, Casque at Flower Farm

(2) Dono dal Cielo and Mt Vernon

(3) Goathouse, Hillenbrand

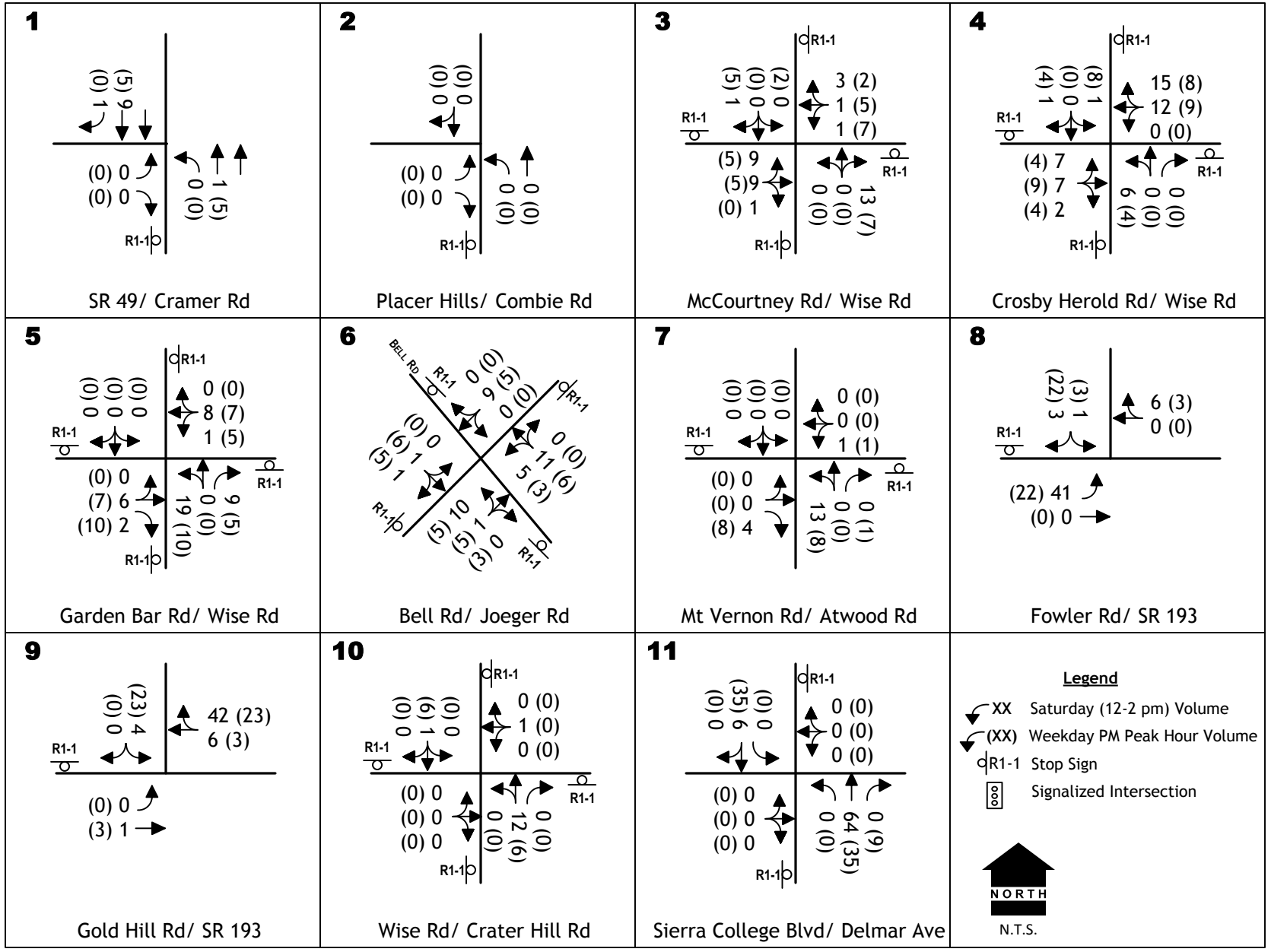
A similar estimate has been made for the trips generated by events in the future when more facilities will exist. This forecast is contained in Table 16. Under the long term cumulative conditions trips associated with events at the pending and new wineries and farm breweries anticipated over the 20 year horizon would further increase the traffic associated with implementing the ordinance revisions. As noted in Table 16, a total of 3,728 new daily trips could occur on a weekday and Saturday. The number of trips generated during the weekday p.m. peak hour would reach 1,044, and a similar number of trips would be generated in the Saturday peak hour.

TABLE 16 WINERY AND FARM BREWERY EVENTS TRIP GENERATION FORECASTS FOR CUMULATIVE IMPACTS									
Description	**Quantity**	**Weekday**				**Saturday**			
		Daily	**PM Peak Hour**			**Daily**	**Afternoon Peak Hour**		
			In	**Out**	**Total**		**In**	**Out**	**Total**
Existing Wineries and Farm Breweries									
Subtotal	***10***	***904***	***126***	***126***	***252***	***904***	***232***	***20***	***252***
Pending Wineries and Farm Breweries									
Breweries (medium)	1[1]	88	12	12	24	88	22	2	24
Subtotal	***1***	***88***	***12***	***12***	***24***	***88***	***22***	***2***	***24***
(1) Dueling Dogs									
Future Wineries and Farm Breweries									
Future medium Winery or Farm Brewery	22	1,936	264	264	528	1,936	484	44	528
Future large Winery or Farm Brewery	8	800	120	120	240	800	224	16	240
Subtotal New Facilities	***30***	***2,736***	***384***	***384***	***768***	***2,736***	***708***	***60***	***768***
TOTAL NEW, PENDING AND FUTURE WINERIES / FARM BREWERIES	***41***	***3,728***	***522***	***522***	***1,044***	***3,728***	***962***	***82***	***1,044***

Trip Distribution. Having determined the number of trips that are expected to be generated by the project, it is necessary to identify the directional distribution of project-generated traffic. For rural wineries and farm breweries the distribution generally reflects the population distribution with trade area for wineries. As noted in Table 17, the majority of winery and farm brewery visitors originate in the Sacramento / Roseville / SF Bay areas, which are much larger than the local Auburn area, with lesser shares traveling from areas to the north and east.

TABLE 17 PROJECT TRIP DISTRIBUTION ASSUMPTIONS		
Direction	**Route**	**Percent of Total**
North	SR 49 north of Lone Star Road	5%
	SR 65 north of Wise Road	5%
East	Auburn	15%
	Interstate 80 east of study area	10%
West-South	Sacramento / SF Bay Area	65%
Total		100%

Project Trip Assignment. The assignment of project traffic to the local area street system will reflect the alternative routes available between various existing and future winery and farm brewery locations and ultimate destinations. The choice of access route was determined based on the relative difference in travel time along each route. Using the regional trip distribution assumptions noted previously, project trips were assigned to the local street system based on the least time path to each destination. Figure 7 presents resulting "project only" traffic for trips generated by existing wineries, while Figure 8 presents the trips associated with events at both existing / pending and future wineries and farm breweries.



PROJECT ONLY - EXISTING WINERIES AND FARM BREWERIES
TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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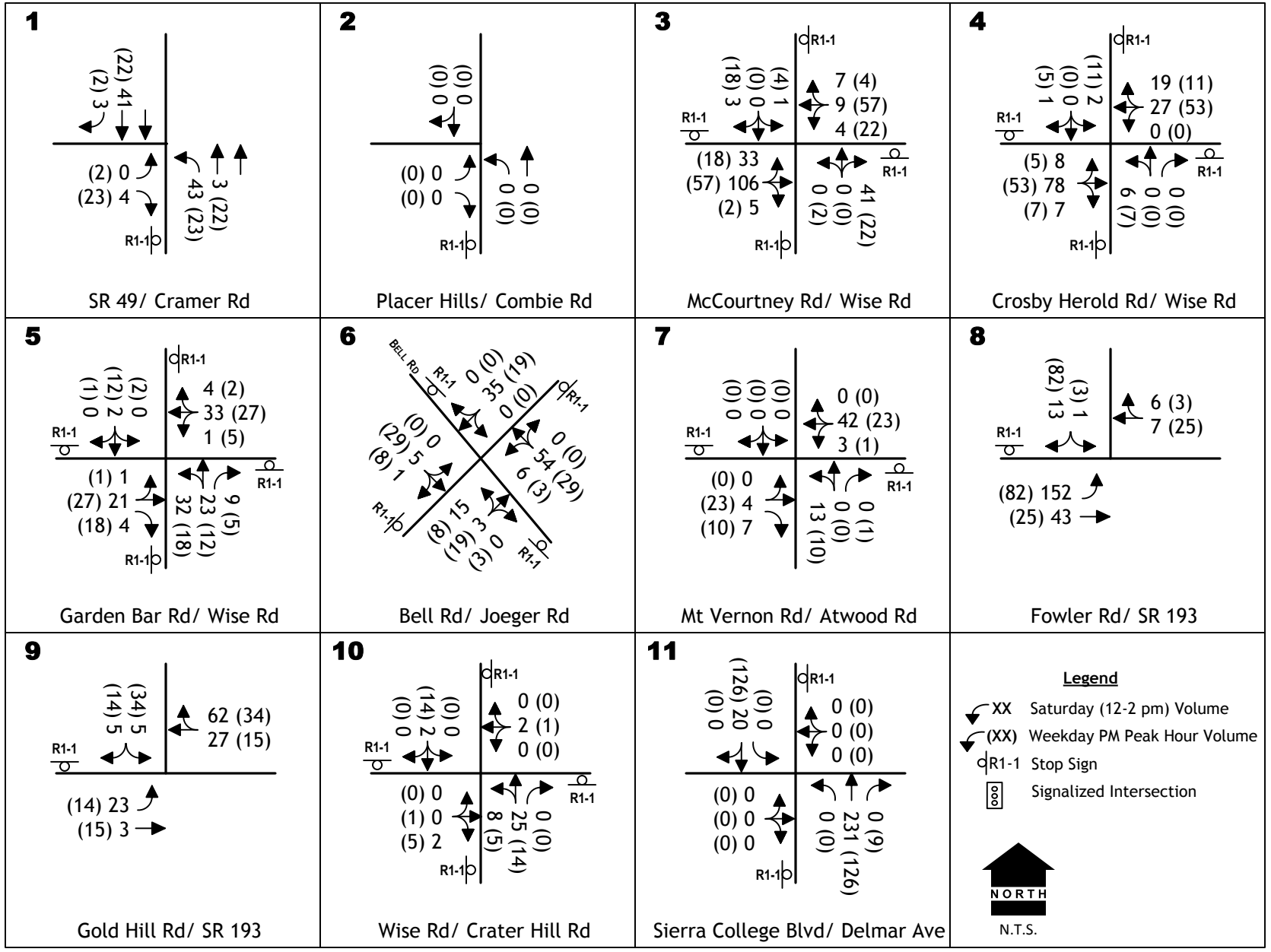
0040-01 RA 9/7/2018

figure 7



PROJECT ONLY – EXISTING, PENDING, AND FUTURE WINERIES
AND FARM BREWERIES TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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0040-01 RA 9/7/2018

figure 8

Existing Plus Project Traffic Conditions and Levels of Service

Roadway Segment Level of Service. Table 18 identifies the amount of traffic added to study area roads by the project on a daily basis and compares Existing and Existing Plus Project volumes. As indicated, the addition of project traffic does not result in any roadway segment operating with a Level of Service that exceeds the minimum LOS C/D standard.

Intersection Level of Service. Figure 9 superimposes trips caused by implementing the ordinance revision at existing wineries and farm breweries. Table 19 compares the existing and "Plus Project" Levels of Service at study intersections. As indicated the addition of project trips does not result in any additional intersection operating with a Level of Service that exceeds the adopted minimum standard.

The Sierra College Blvd / Delmar Avenue intersection will continue to operate with an overall Level of Service that exceeds the LOS C minimum. Because conditions exceed the LOS standard with and without the project the significance of the impact is determined based on change in overall average delay and satisfaction of peak hour traffic signal warrants. In this case, while the incremental change in delay caused by the project is 7.2 seconds, which exceeds the 2.5 seconds allowed under Placer County criteria, but traffic signal warrants are not satisfied. Because both criteria must be met under County guidelines, the impact is not significant.

Traffic Signal Warrants. Existing Plus Project traffic volumes were compared to peak hour warrant requirements to determine whether the addition of project trips results in the need for signalization. One un-signalized intersection will carry volumes that reach a level that satisfy warrants:

- SR 193 / Fowler Road (PM Only)

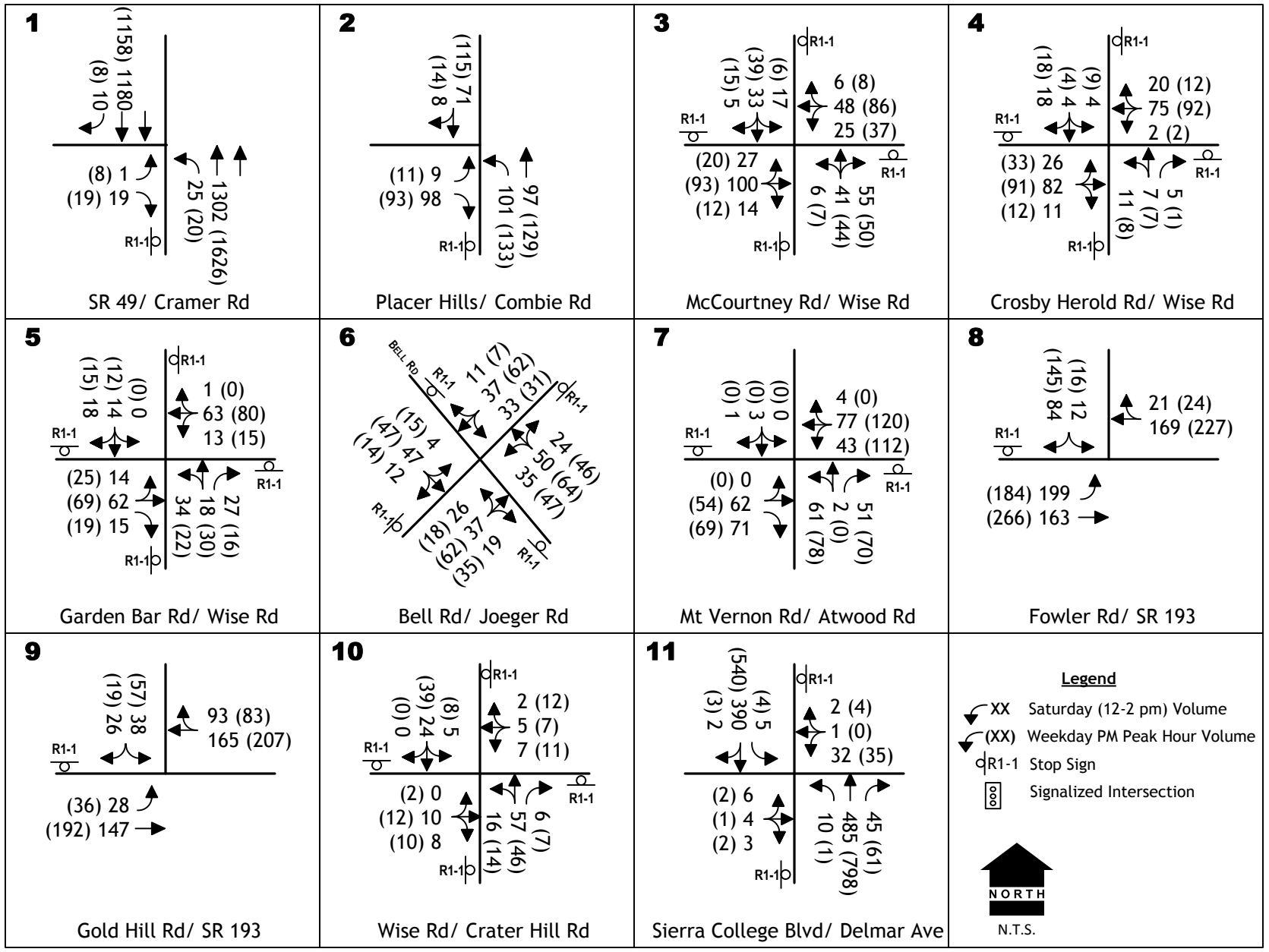
.

Because intersection Level of Service is within minimum standards, a significant impact does not occur at this location.

TABLE 18
EXISTING PLUS PROJECT ROADWAY SEGMENT TRAFFIC VOLUMES AND LEVEL OF SERVICE

#	Road	Location	Class	Roadway Volume and Segment Level of Service									
				Weekday					Saturday				
				Existing		Existing Plus Project			Existing		Existing Plus Project		
				Daily Volume	LOS	Daily Volume		LOS	Daily Volume	LOS	Daily Volume		LOS
						Project	Total				Project	Total	
A	Auburn – Folsom Rd	South of King Rd	RA	8,573	A	44	8,617	A	8,355	A	44	8,399	A
B	Ayers Holmes Rd	Mt Vernon Rd to Wise Rd	Local	412	A	0	412	A	485	A	0	485	A
C	Bald Hill Rd	Wise Rd to Mt. Vernon Rd	RC	1,309	A	78	1,387	A	1,038	A	78	1,116	A
D	Baxter Grade Rd	Wise Rd to Mt. Vernon Rd	RC	971	A	26	997	A	634	A	26	660	A
E	Bell Rd	Lone Star Rd to Cramer Rd	RC	614	A	0	614	A	543	A	0	543	A
F	Bell Rd	Joeger Rd to Cramer Rd	RC	1,400	A	4	1,404	A	1,329	A	4	1,333	A
G	Chili Hill Rd	Lozanos Rd to Gold Hill Rd	RC	355	A	76	431	A	262	A	76	338	A
H	Combie Rd	Placer Hills Rd to end	RC	2,688	B	0	2,688	B	2,477	B	0	2,477	B
I	Cramer Rd	Bell Rd to SR 49	Local	558	A	2	560	A	549	A	2	551	A
J	Crosby Herold Rd	Wise Rd to Meadow Creek Rd	Local	525	A	88	613	A	582	A	88	670	A
K	Delmar Ave	Sierra College Blvd to Citrus Colony Rd	RC	1,126	A	0	1,126	A	1,171	A	0	1,171	A
L	Fowler Rd	SR 193 to Virginiatown Rd	RC	3,412	B	180	3,592	B	3,440	B	180	3,620	B
M	Fleming Rd	Gladding Rd to McCourtney Rd	Local	43	A	0	43	A	92	A	0	92	A
N	Fruitvale Rd	Fowler Rd to Gold Hill Rd	RC	1,486	A	70	1,556	A	1,186	A	70	1,256	A
O	Gold Hill Rd	SR 193 to Virginiatown Rd	RC	1,542	A	162	1,704	B	1,857	B	162	2,019	B
P	Horseshoe Bar Rd	Val Verde Rd to Auburn – Folsom Rd	RC	3,545	B	44	3,589	B	2,485	B	44	2,529	B
Q	Lone Star Rd	Bell Rd to SR 49	Local	1,328	A	2	1,330	A	1,223	A	2	1,225	A
R	McCourtney Rd	Wise Rd to Big Bend Rd	RA	1,192	A	48	1,240	A	1,207	A	48	1,255	A
S	Millertown Rd	Wise Rd to Mt. Vernon Rd	RC	150	A	0	150	A	135	A	0	135	A
T	Mt. Vernon Rd	Wise Rd to Meyers Ln	RC	2,021	B	48	2,069	B	2,679	B	48	2,727	B
U	Mt. Vernon Rd	Vineyard Dr to Millertown Rd	RC	2,995	B	62	3,057	B	2,676	B	62	2,738	B
V	Nicolaus Rd	West of Dowd Rd	RA	3,064	A	0	3,064	A	2,374	A	0	2,374	A
W	Placer Hills Rd	I-80 to Combie Rd	RA	9,470	A	0	9,470	A	7,407	A	0	7,407	A
X	Ridge Rd	Gold Hill Rd to SR 193	RC	789	A	0	789	A	640	A	0	640	A
Y	Sierra College Blvd	South of King Rd	RA	12,762	B	252	13,014	B	10,642	A	252	10,894	A
Z	SR 193	Sierra College Blvd to Fowler Rd	State	6,700	A	158	6,858	A	6,700	A	158	6,858	A
AA	Virginiatown Rd	Lincoln limits to Fowler Rd	RC	773	A	22	795	A	994	A	22	1,016	A
BB	Wise Rd	McCourtney Rd to Crosby Herold Rd	RA	2,575	A	122	2,697	A	2,714	A	124	2,838	A
CC	Wise Rd	Crosby Herold Rd to Garden Bar Rd	RA	1,857	A	128	1,985	A	1,978	A	128	2,106	A
DD	Wise Rd	Garden Bar Rd to Mt. Vernon Rd	RA	1,394	A	96	1,490	A	1,304	A	96	1,400	A
EE	Wise Rd	Baxter Grade Rd to Crater Hill Rd	RC	1,168	A	46	1,214	A	931	A	46	977	A
FF	Wise Rd	Bald Hill Rd to Ophir Rd	RC	1,000	A	16	1,016	A	915	A	16	931	A

BOLD values exceed LOS C. **HIGHLIGHTED** values are a significant impact



EXISTING PLUS EXISTING WINERIES AND FARM BREWERIES
TRAFFIC VOLUMES AND LANE CONFIGURATIONS

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0040-01 RA 9/7/2018

figure 9

TABLE 19
EXISTING PLUS PROJECT INTERSECTION LVELS OF SERVICE

#	Location	Control	Weekday PM Peak Hour				Saturday Peak Hour			
			Existing		Existing Plus Project		Existing		Existing Plus Project	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	SR 49 / Cramer Road (overall) Eastbound approach	EB Stop	(14.4) 18.5	(C) C	(15.6) 18.8	(C) C	(12.9) 14.5	(B) B	(13.1) 14.7	(B) B
2	Placer Hills Rd / Combie Road (overall) Southbound approach	SB Stop	(8.9) 10.2	(A) B	(8.9) 10.2	A B	(8.6) 9.5	(A) A	(8.6) 9.5	(A) A
3	Wise Road / McCourtney Road	AWS	8.2	A	8.4	A	8.2	A	8.4	A
4	Wise Rd / Crosby Herold Road	AWS	7.7	A	7.8	A	7.5	A	7.7	A
5	Wise Road / Garden Bar Road	AWS	7.8	A	8.0	A	7.6	A	7.7	A
6	Bell Road / Joeger Road	AWS	8.3	A	8.5	A	7.8	A	8.0	A
7	Mt. Vernon Rd / Atwood Road (overall) Northbound approach	NB Stop	(8.6) 9.4	(A) A	(9.0) 10.1	(A) B	(7.8) 7.8	(A) A	(8.2) 10.2	(A) B
8	SR 193 / Fowler Road (overall) Southbound approach	SB Stop	(9.9) 11.9	(A) B	(10.3) 12.5	(B) B	(9.0) 10.6	(A) B	(9.0) 11.0	(A) B
9	SR 193 / Gold Hill Road (overall) Southbound approach	SB Stop	(10.4) 12.1	(B) B	(11.5) 13.1	(B) B	(9.8) 10.8	(A) B	(10.1) 11.0	(B) B
10	Wise Road / Crater Hill Road	AWS	7.6	A	7.6	A	7.6	A	7.6	A
11	Sierra College Blvd / Delmar Ave (overall) Westbound approach	WB Stop	**(38.7)** **44.3**	**(E)** **E**	**(45.1)** **51.8**	**(E)** **F**	(16.9) 20.6	(C) C	(18.6) 22.8	(C) C

(XX) is overall weighted average delay and LOS for movements yielding right of way
BOLD value exceed the minimum LOS C or D Standard. **HIGHLIGHTED** values are a significant impact

Impacts to Alternative Transportation Modes

The extent to which the proposed project may impact pedestrian and bicycle circulation has been considered from the standpoint of the additional use of existing facilities by persons attending events and the incremental increase in conflicts with automobiles created by project trips.

Given the rural location of existing and pending wineries and farm breweries, the project would be unlikely to generate appreciable pedestrian activity. To the extent that event participants might elect to ride to existing sites, the project could generate additional bicycle traffic on study area roads. As noted in the existing setting, study area roads are used frequently be recreational bicyclists who share the roads which lack bicycle lanes or wide paved shoulders. While the amount of regular bicycle activity that might be generated by new events may be relatively slight, the project will incrementally contribute to the use of study area roads for this purpose.

Alternatively the project will add automobile traffic to rural roads that are already used by alternative transportation modes. As noted in Table 18, implementing the ordinance changes at existing wineries could increase the traffic volume on rural collector roads by up to 208 vehicles per day. However, the amount of traffic added to these roads does not result in a capacity deficiency as measured in terms of roadway segment Level of Service, and the traffic increase would not appreciably worsen the existing situation for bicyclists.

The existing Benefit Districts that encompass the areas of Placer County's wineries and farm breweries include costs for improvements to many rural arterial and collector roads. As noted later in this report in Table 20 Placer County CIP Benefit District Projects, these improvements range from shoulder widening to road realignment. Roads that are affected include:

- Mt. Vernon Road
- Bald Hill Road
- Crater Hill Road
- Chili Hill Road
- Lozanos Road
- Wise Road

These improvements could also improve bicycle safety in this area.

Summary of Existing Plus Project Impacts / Mitigations

The project itself does not result in significant traffic impacts based on the standards of significance adopted by Placer County. No mitigation is required for Level of Service impacts. The project will add traffic to rural roads that serve existing wineries, however the amount of traffic added is not large enough to appreciably increase conflicts between bicycles and automobiles, and the project's impact to bicycles and other transportation modes is not significant.

CUMULATIVE TRAFFIC IMPACTS

Background

The cumulative impact analysis considers the relative impact of the proposed project within the context of long term traffic conditions in the study area. In addition to the proposed project, the analysis of long term cumulative impacts considers the combined effect of regional traffic growth on study area roads, trips associated with other reasonably foreseeable development proposals.

Background Traffic Volume Growth. Local agencies have various resources available for estimating background growth regional transportation facilities. In the case of this study area, the area is generally addressed by the original Placer County regional travel demand forecasting model, as well as subsequent models derived from the Placer County model and created for the North Auburn area, for the city of Lincoln and for the Town of Loomis. These models account for the regional effects of development throughout the SACOG multi-county region. Each model includes known development projects in the County such as Bickford Ranch and reflects development that is consistent with adopted General Plans. For example the model maintained by the City of Lincoln reflects development of that community's new Villages, while the Loomis model reflects development on the Village at Loomis site.

Because the winery area is rural with relatively limited development prospects, Placer County staff reviewed model results and the configuration of each model with regards to the level of detail provided and the reliability of forecasts to determine the best approach for this analysis. Placer County staff also reviewed available traffic studies and Caltrans planning documents and compared traffic model results to historic traffic volume counts on study area roads. Based on this comprehensive review, Placer County staff determined that the best approach yielding conservative results while incorporating the effects of growth in all jurisdictions would assume a uniform annual growth rate of 2.0% on each roadway segment. The resulting 20-year growth factor (i.e., 1.49) has been applied to the traffic volume on each roadway and at study intersections.

Reasonably Foreseeable Projects. Placer County Planning staff considered the extent of other development projects that might add traffic to the study area that would not reasonably be addressed by a background growth rate. For this analysis it was assumed that projects within the immediate study area could be considered but projects located at more distant locations would be assumed to be part of the background growth rate. Two projects were identified.

Hidden Falls Regional Park Expansion. Placer County is currently preparing an Environmental Impact Report evaluating the impacts of expanding Hidden Falls Regional Park. The parks current facilities lie north of Mt. Vernon Road and take access from that road via Mears Lane. The park generates traffic at various times throughout the year and the existing parks traffic is captured in the existing setting of this report. The proposed expansion would add land to the north with expanded pedestrian and equestrian trails, and new access to these areas would be created. While the exact location of new access and new parking facilities is being

determined and evaluated in the EIR, for this cumulative analysis it has been assumed that up to 441 additional parking spaces could be created with that expansion including spaces that are already approved but not constructed. The number of additional trips associated with the expansion has been estimate assuming continuing implementation of the peak period reservation system recently enacted at the existing park.

Sierra College Blvd / SR 193 Retail Center. Placer County has been in pre-development discussions regarding a possible retail center to be constructed at the intersection of Sierra College Blvd and SR 193. This 10 acre development would require a GPA/rezone and would be subject to an EIR before consideration by the Placer County Planning Commission and Board of Supervisors. However, for this analysis this project has been assumed to be completed to provide a very conservative assessment of cumulative impacts.

For this analysis, traffic associated with development in the City of Lincoln, projects south of SR 193, such as Bickford Ranch, the Village at Loomis, Loomis Costco, and Rocklin development is reflected in the background growth rate.

Roadway Improvements. The nature of improvements to study area roads and intersections that is reasonably certain has been determined based on consideration of projects included in adopted funding mechanisms. Placer County administers the Countywide Traffic Mitigation Fee Program which requires new development to contribute to the cost of circulation system improvements of county wide benefit. Individual benefit districts have been established. Table 20 notes improvements that affect study area roads. These improvements are assumed to be in place under cumulative conditions.

TABLE 20 PLACER COUNTY CIP BENEFIT DISTRICT PROJECTS		
Street / Intersection	**Segment**	**Description of Improvements**
Auburn Bowman Benefit District		
Mt Vernon Road	City of Auburn to Joeger Road	Improve Existing 2-lanes
Ophir Road	At Wise Road	Reconstruct pavement
SR 49	Dry Creek Road to Bell Road	Widen to 6-lanes
Meadow Vista Benefit District		
Placer Hills Road	I-80 to north of Combie Road	Widen to 3-lanes
Newcastle / Horseshoe Bar / Penryn Benefit District		
Bald Hill Road	Mt. Vernon Rd to Lozanos Road	Widen / Reconstruct
Crater Hill Road	At Chili Hill Road	Realign intersection
Chili Hill Road	West of Lozanos Road	Realign Horizontal Curve
Lozanos Road	At Auburn Ravine	Replace Bridge
	Ophir Road to Wise Road	Shoulder widening
Sierra College Blvd	King Road to English Colony Way	Widen to 4-lanes
	At Delmar Avenue	Signalize
Wise Road	Ophir Road to Crater Hill Road	Shoulder widening
SR 193	Taylor Road to Gold Hill Road	Shoulder widening
Placer Central Benefit District		
Mount Vernon Road	At Ayers Holmes Road	Improve sight distance
	At Mount Pleasant Road	Reconstruct intersection
Sierra College Blvd	English Colony Way to SR 193	Widen to 4-lanes
SR 193	Gold Hill Road to Sierra College Blvd	Shoulder widening
	Sierra College Blvd to City of Lincoln	Widen to 4-lanes

Traffic Volume Forecasts

Cumulative traffic volumes have been created by applying the uniform annual traffic growth rate of 2% for 20 years (i.e., overall factor of 1.49) and by superimposing the trips associated with reasonably foreseeable projects (i.e., Cumulative No Project conditions) as well as the proposed project (i.e., trips associated with existing, pending and 30 new future wineries and farm breweries).

Cumulative Traffic Conditions – No Project

Daily Traffic Volume Forecasts and Levels of Service. Table 21 presents daily traffic volume forecasts that compare conditions with and without the Winery and Farm Brewery Ordinance Amendment. As indicated, if the Winery and Farm Brewery ordinance amendment does not occur, all study area roadways will carry traffic volumes that result in Levels of Service that remain within of Placer County's minimum LOS C or LOS D (i.e., ½ mile of state highway) standard.

Peak Hour Traffic Volume Forecasts. Figure 10 presents cumulative peak hour traffic volumes without the trips associated with implementing the Placer County Winery and Farm Brewery Ordinance Amendment. These forecasts reflect the identified background growth rate as well as trips from reasonably foreseeable projects.

Cumulative No Project Intersection Level of Service. Table 22 identified the long-term cumulative Level of Service projected at study intersections under the No Project condition. While most locations will satisfy the adopted minimum LOS standard, one intersection will operate with conditions that exceed the minimum LOS standard based on overall LOS.

The **SR 49 / Cramer Road intersection** will operate at LOS E in the weekday p.m. peak hour. While conditions exceed LOS D with the project, the intersection does not carry volumes that satisfy peak hour traffic signal warrants at that time.

Cumulative No Project Traffic Signal Warrants. The volume of traffic occurring without the ordinance implementation would satisfy peak hour traffic signal warrants at one location during periods that have acceptable Level of Service:

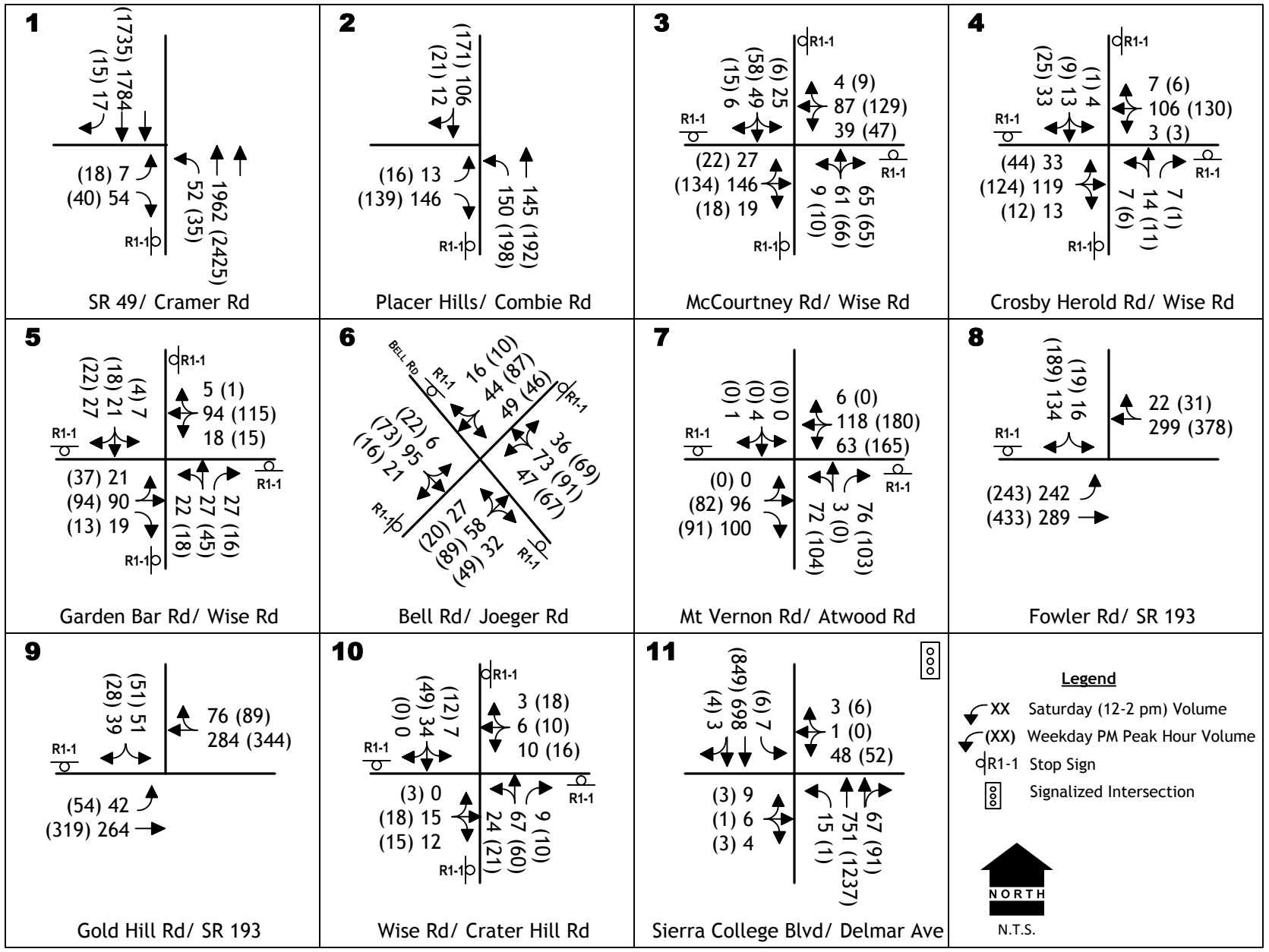
- SR 193 / Fowler Road

TABLE 21
CUMULATIVE PLUS PROJECT ROADWAY SEGMENT TRAFFIC VOLUMES AND LEVEL OF SERVICE

#	Road	Location	Class	Roadway Daily Volume and Segment Level of Service									
				Weekday					Saturday				
				No Project		Plus Project			No Project		Plus Project		
				Daily Volume	LOS	Daily Volume		LOS	Daily Volume	LOS	Daily Volume		LOS
						Project	Total				Project	Total	
A	Auburn – Folsom Rd	South of King Rd	RA	12,740	B	44	12,784	B	12,250	B	44	12,294	B
B	Ayers Holmes Rd	Mt Vernon Rd to Wise Rd	Local	630	A	108	738	A	760	A	108	868	A
C	Bald Hill Rd	Wise Rd to Mt. Vernon Rd	RC	1,945	B	86	2,031	B	1,525	A	86	1,611	B
D	Baxter Grade Rd	Wise Rd to Mt. Vernon Rd	RC	1,520	A	229	1,749	B	1,115	A	229	1,344	A
E	Bell Rd	Lone Star Rd to Cramer Rd	RC	867	A	238	1,105	A	782	A	238	1,020	A
F	Bell Rd	Joeger Rd to Cramer Rd	RC	2,230	B	242	2,472	B	2,480	B	242	2,722	B
G	Chili Hill Rd	Lozanos Rd to Gold Hill Rd	RC	530	A	116	646	A	385	A	116	501	A
H	Combie Rd	Placer Hills Rd to end	RC	3,995	B	0	3,995	B	3,630	B	0	3,630	B
I	Cramer Rd	Bell Rd to SR 49	Local	1,080	A	228	1,308	A	1,410	A	228	1,638	B
J	Crosby Herold Rd	Wise Rd to Meadow Creek Rd	Local	880	A	108	988	A	1,150	A	108	1,258	A
K	Delmar Ave	Sierra College Blvd to Citrus Colony Rd	RC	1,675	A	0	1,675	A	1,720	A	0	1,720	A
L	Fowler Rd	SR 193 to Virginiatown Rd	RC	5,155	B	738	5,893	B	5,290	B	738	6,028	C
M	Fleming Rd	Gladding Rd to McCourtney Rd	Local	65	A	44	109	A	135	A	44	179	A
N	Fruitvale Rd	Fowler Rd to Gold Hill Rd	RC	2,210	B	222	2,432	B	1,740	B	222	1,962	B
O	Gold Hill Rd	SR 193 to Virginiatown Rd	RC	2,290	B	392	2,682	B	2,725	B	392	3,117	B
P	Horseshoe Bar Rd	Val Verde Rd to Auburn – Folsom Rd	RC	5,270	C	40	5,310	C	3,645	B	40	3,685	B
Q	Lone Star Rd	Bell Rd to SR 49	Local	2,255	B	14	2,369	B	2,560	B	14	2,574	B
R	McCourtney Rd	Wise Rd to Big Bend Rd	RA	1,770	A	188	1,958	A	1,770	A	188	1,958	A
S	Millertown Rd	Wise Rd to Mt. Vernon Rd	RC	225	A	0	225	A	200	A	0	200	A
T	Mt. Vernon Rd	Wise Rd to Meyers Ln	RC	3,085	B	218	3,303	B	4,140	B	218	4,358	C
U	Mt Vernon Rd	Vineyard Dr to Millertown Rd	RC	4,450	C	302	4,752	C	3,925	B	302	4,227	C
V	Nicolaus Rd	West of Dowd Rd	RA	4,555	A	0	4,555	A	3,480	A	0	3,480	A
W	Placer Hills Rd	I-80 to Combie Rd	RA	14,075	C	0	14,075	C	10,860	B	0	10,860	B
X	Ridge Rd	Gold Hill Rd to SR 193	RC	1,175	A	0	1,175	A	940	A	0	940	A
Y	Sierra College Blvd	South of King Rd – 4 lanes	RA	21,370	A	1,038	22,408	A	19,180	A	1,038	20,218	A
Z	SR 193	Sierra College Blvd to Fowler Rd	State	10,980	B	876	11,856	B	11,420	B	876	12,296	B
AA	Virginiatown Rd	Lincoln limits to Fowler Rd	RC	1,150	A	298	1,448	A	1,460	A	298	1,758	A
BB	Wise Rd	McCourtney Rd to Crosby Herold Rd	RA	3,840	A	760	4,600	A	4,360	A	760	5,120	A
CC	Wise Rd	Crosby Herold Rd to Garden Bar Rd	RA	2,840	A	364	3,204	A	3,125	A	364	3,489	A
DD	Wise Rd	Garden Bar Rd to Mt. Vernon Rd	RA	2,205	A	298	2,503	A	2,260	A	298	2,558	A
EE	Wise Rd	Baxter Grade Rd to Crater Hill Rd	RC	1,735	B	96	1,831	B	1,365	A	96	1,461	A
FF	Wise Rd	Bald Hill Rd to Ophir Rd	RC	1,485	A	48	1,533	A	1,340	A	48	1,388	A

BOLD values exceed LOS C or D Standard. **HIGHLIGHTED** values are a significant impact

KDA



CUMULATIVE 20 YEAR BACKGROUND TRAFFIC
TRAFFIC VOLUMES AND LANE CONFIGURATIONS

KD Anderson & Associates, Inc.
Transportation Engineers

0040-01 RA 9/7/2018

figure 10

TABLE 22
CUMULATIVE PLUS PROJECT INTERSECTION LEVELS OF SERVICE

#	Location	Control	Weekday PM Peak Hour				Saturday Peak Hour			
			No Project		Plus Project		No Project		Plus Project	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	SR 49 / Cramer Rd	EB Stop								
	(overall)		**(35.0)**	**(E)**	**(41.8)**	**(E)**	(26.8)	(D)	(30.3)	(D)
	Eastbound approach		**46.2**	**E**	**58.6**	**F**	33.5	D	**40.8**	**E**
2	Placer Hills Rd / Combie Rd	SB Stop								
	(overall)		(9.9)	(A)	(9.9)	A	(9.2)	(A)	(9.2)	(A)
	Southbound approach		12.1	B	12.1	B	10.5	B	10.5	B
3	Wise Rd / McCourtney Rd	AWS	9.4	A	11.4	B	9.5	A	12.8	B
4	Wise Rd / Crosby Herold Rd	AWS	8.2	A	9.0	A	8.0	A	8.9	A
5	Wise Rd / Garden Bar Rd	AWS	8.5	A	9.3	A	8.2	A	8.9	A
6	Bell Rd / Joeger Rd	AWS	9.8	A	11.0	B	8.7	A	9.5	A
7	Mt. Vernon Rd / Atwood Rd	NB Stop								
	(overall)		(11.4)	(B)	(13.0)	(B)	(8.8)	(A)	(9.5)	(A)
	Northbound approach		14.4	B	17.3	C	11.3	B	11.8	B
8	SR 193 / Fowler Rd	SB Stop								
	(overall)		(14.3)	(B)	(23.8)	(C)	(10.9)	(B)	(12.7)	(B)
	Southbound approach		20.2	C	**39.3**	**E**	14.4	B	20.4	C
9	SR 193 / Gold Hill Rd	SB Stop								
	(overall)		(14.3)	(B)	(19.4)	(C)	(12.4)	(B)	(13.1)	(B)
	Southbound approach		18.2	C	25.0	D	14.3	B	16.1	C
10	Wise Rd / Crater Hill Rd	AWS	7.9	A	8.1	A	7.9	A	8.2	A
11	Sierra College Blvd / Delmar Ave	Signal	**6.5**	A	**6.4**	**A**	**7.2**	**A**	**6.9**	**A**

(XX) is overall weighted average delay and LOS for movements yielding right of way
BOLD value exceeds the minimum LOS C or D Standard. **HIGHLIGHTED** values are a significant impact

Cumulative Traffic Conditions – Plus Project

Cumulative Plus Project Roadway Segment Level of Service. Table 21 also presents the daily traffic volumes anticipated on study area roads in the future if the Winery and Farm Brewery Ordinance is implemented and other growth also occurs. As indicated all roadways will carry traffic volumes that are indicative of Levels of Service that remain within Placer County's minimum LOS C/D standard. Thus, the impacts of implementing the ordinance are not significant in these areas.

Cumulative Plus Project Intersection Traffic Volumes. Figure 11 presents the Weekday and Saturday peak hour traffic volumes occurring with implementation of the ordinance and other growth.

Cumulative Plus Project Intersection Level of Service. Table 22 compares the long-term cumulative Level of Service projected at study intersections under the No Project and Plus Project conditions. While many locations will continue to satisfy the adopted minimum LOS standard, one intersection will operate with conditions that exceed minimum standard for overall LOS if the ordinance is implemented.

The **SR 49 / Cramer Road intersection** will operate at LOS E in the weekday peak hour. Because conditions exceed LOS D with and without the project, the significance of the project's impact at intersections controlled by side street stop signs is based on the incremental change in delay and is also predicated on satisfaction of peak hour traffic signal warrants. In this case, because the incremental change in overall delay (6.8 seconds) exceeds the incremental allowed under Placer County methodology (i.e., 2.5 seconds) and projected traffic volumes do satisfy peak hour warrants at this time, the project's impact is ***significant*** at this intersection.

Measures to reduce this impact to a less than significant level are subject to Caltrans approval on this state highway, and as noted earlier a regional approach incorporating roundabouts at selected intersection may be pursued by Caltrans and the County. However, it may be that the SR 49 / Cramer Road intersection might better be limited to right-turns-only in concert with u-turn opportunities available at other nearby roundabouts. Alternatively, a traffic signal at this location would result in LOS D conditions, which would satisfy Placer County's minimum LOS standards.

Any measure that involves stopping traffic on mainline state highways is subject to an additional level of analysis before a decision can be made as to the applicable choice of traffic control. Current Caltrans policy requires than an ***Intersection Control Evaluation (ICE)*** report be prepared to evaluate the best choice among all-way stop, traffic signal, or roundabout.

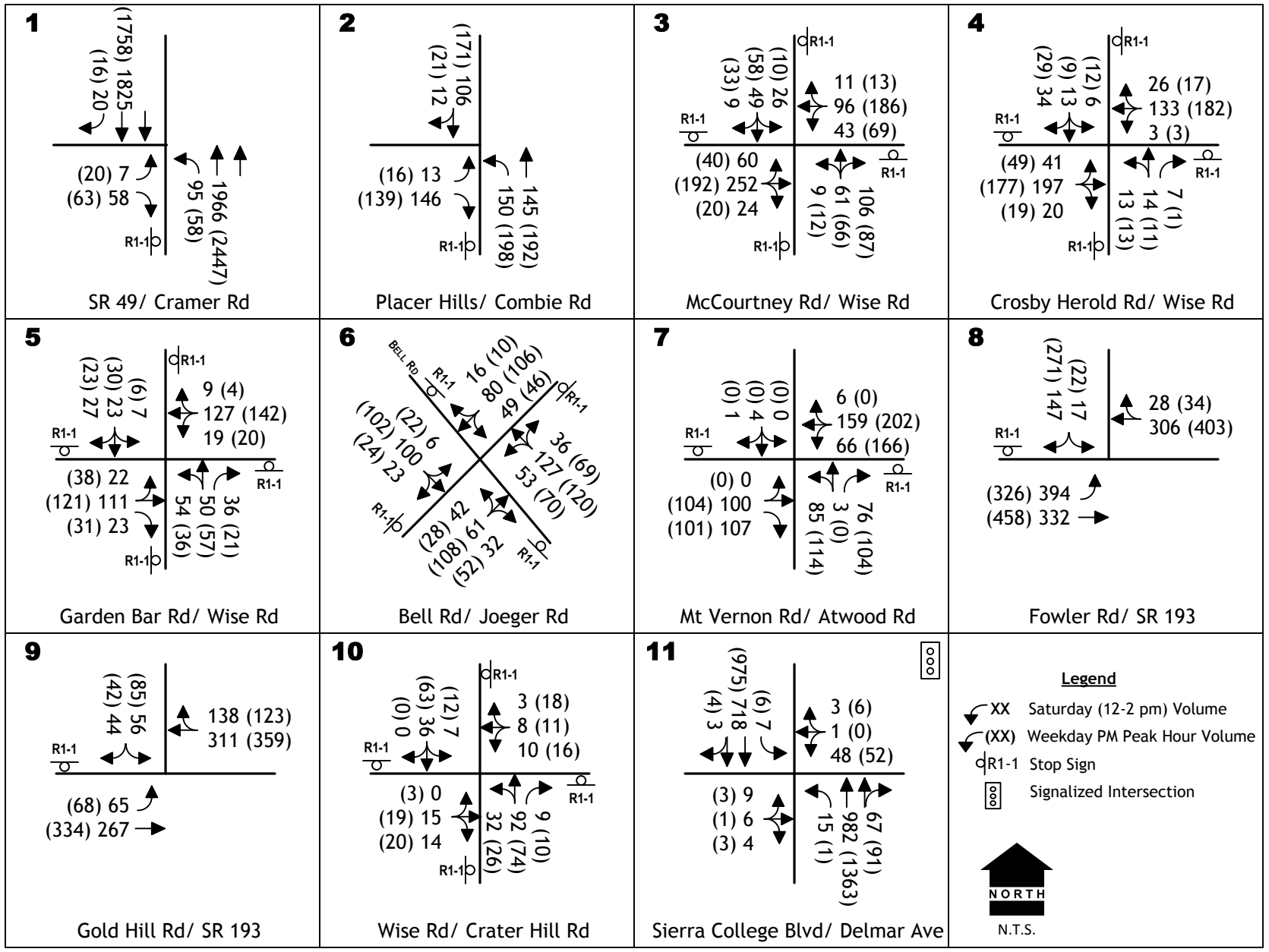
As noted earlier no funding source has been identified for improvements to the SR 49 corridor north of Dry Creek Road. Placer County could elect to identify a strategy for the overall traffic controls in the area and update its fee program to address the local share of these costs. However, while future wineries and farm breweries would contribute their fair share to the cost

of SR 49 corridor improvements by paying adopted fees, Placer County cannot guarantee that funding will be available. As a result, this impact is ***significant and unavoidable.***

Cumulative Plus Project Traffic Signal Warrants. The status of peak hour traffic signal warrants with implementation of the ordinance was determined. These intersections carry volumes that satisfy rural traffic signal warrants:

- SR 49 / Cramer Road (PM only)
- Mt. Vernon Road / Atwood Road (PM only)
- SR 193 / Fowler Road
- SR 193 / Gold Hill Road (PM only)

Because the overall Level of Service at the Mt Vernon Road / Atwood Road, SR 193 / Fowler Road and SR 193 / Gold Hill Road intersections remains LOS D or better with the project, this impact is not significant under Placer County guidelines, and no mitigation is required.



KD Anderson & Associates, Inc.
Transportation Engineers
0040-01 RA 9/7/2018

CUMULATIVE PLUS PROJECT
TRAFFIC VOLUMES AND LANE CONFIGURATIONS

figure 11

Summary of Cumulative Plus Project Impacts / Mitigations

The Placer County Winery and Farm Brewery Ordinance project contributes to significant cumulative off-site traffic impacts at one location:

1. Under cumulative conditions the **SR 49 / Cramer Road intersection** will operate at LOS E in the weekday p.m. peak hour. The project's impact is ***significant*** at this intersection.

Measures to reduce this impact to a less than significant level are subject to Caltrans approval on this state highway, and a regional approach incorporating roundabouts at selected intersection has been discussed by Caltrans and Placer County and may be pursued. A two-lane roundabout would yield LOS meeting the minimum standards. However, it may be that the SR 49 / Cramer Road intersection might better be limited to right-turns-only in concept with u-turn opportunities available at other nearby roundabouts. Alternatively, a traffic signal at this location would result in LOS D conditions, which satisfy Placer County's minimum LOS standards.

Any measure that involved stopping traffic on mainline state highways is subject to an additional level of analysis before a decision can be made as to the applicable choice of traffic control. Current Caltrans policy requires than an ***Intersection Control Evaluation (ICE)*** report be prepared to evaluate the best choice among all-way stop, traffic signal, roundabout.

No funding source has been identified for improvements to the SR 49 corridor north of Dry Creek Road. Placer County could elect to identify a strategy for the overall traffic controls in the area and update its fee program to address the local share of these costs. However, while future wineries would contribute their fair share to the cost of SR 49 corridor improvements by paying adopted fees, Placer County cannot guarantee that funding will be available. As a result, this impact is ***significant and unavoidable.***

APPENDIX
(under separate cover)

Traffic Counts

Level of Service Calculation Worksheets

TECHNICAL APPENDIX 1 OF 4

FOR

PLACER COUNTY WINERY AND FARM BREWERY ORDINANCE TRAFFIC IMPACT ANALYSIS

Placer County, California

Prepared For:

RANEY PLANNING & MANAGEMENT
1501 Sports Drive
Sacramento, CA 95834

Prepared By:

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Loomis, CA 95650
(916) 660-1555

April 10, 2019

Job No. 5765-19

INTERSECTION TURNING MOVEMENT COUNTS
SATURDAY

KDA

Prepared by National Data & Surveying Services

Bell Rd & Joeger Rd

Peak Hour Turning Movement Count

ID: 17-07774-001
City: Auburn

Day: Saturday
Date: 10/07/2017

PEAK HOURS

AM	NONE
NOON	12:45 PM - 01:45 PM
PM	NONE

COUNT PERIODS

AM	NONE
NOON	12:00 PM - 02:00 PM
PM	NONE

Bell Rd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	11	46	4	0	66	NOON
PM	0	0	0	0	0	PM

Joeger Rd — EASTBOUND

AM	NOON	PM
0	69	0
0	0	0
0	16	0
0	36	0
0	19	0
AM	NOON	PM

WESTBOUND — Joeger Rd

PM	NOON	AM
0	11	0
0	28	0
0	33	0
0	0	0
0	64	0
PM	NOON	AM

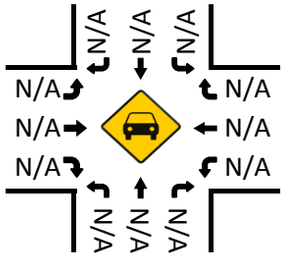
Bell Rd — NORTHBOUND

PM	0	0	0	0	0	PM
NOON	98	0	30	39	24	NOON
AM	0	0	0	0	0	AM

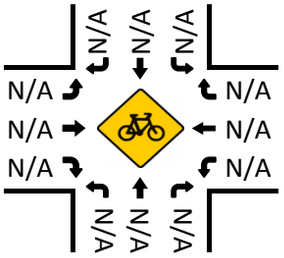
CONTROL: 0

	AM	NOON	PM
TEV	0	297	0
PHF		0.94	

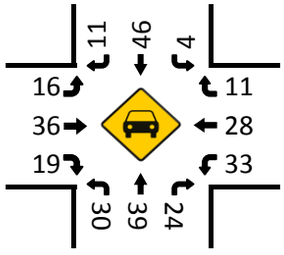
Total Vehicles (AM)



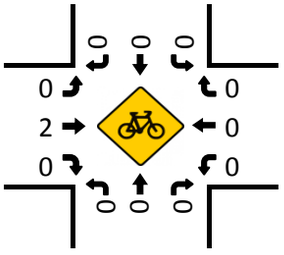
Bikes (AM)



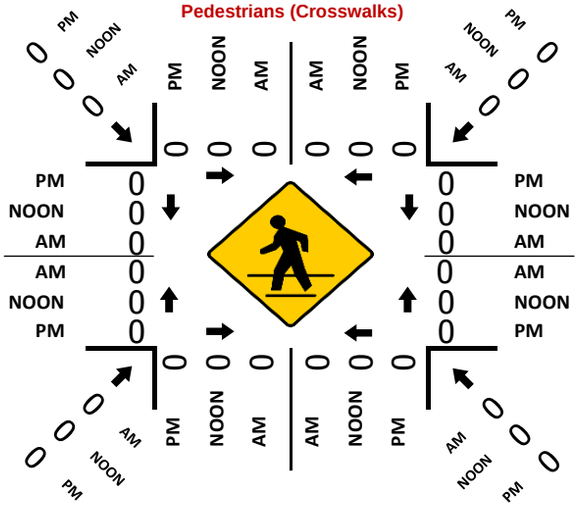
Total Vehicles (Noon)



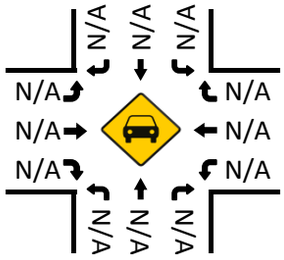
Bikes (NOON)



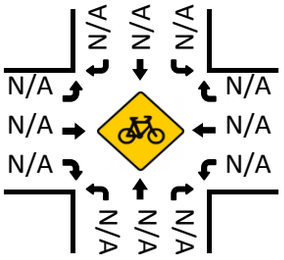
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Bell Rd & Joeger Rd
City: Auburn
Control:

Project ID: 17-07774-001
Date: 2017-10-07

Total

NS/EW Streets:	Bell Rd				Bell Rd				Joeger Rd				Joeger Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	5	10	5	0	3	12	1	0	6	8	7	0	7	7	2	0	73
12:15 PM	10	12	4	0	1	7	1	1	5	8	9	0	9	6	3	0	76
12:30 PM	7	5	9	0	0	9	0	0	4	4	7	0	2	9	4	0	60
12:45 PM	8	10	4	0	2	13	2	0	4	7	4	0	7	9	3	0	73
1:00 PM	10	9	5	0	2	8	4	0	3	7	3	0	10	8	4	0	73
1:15 PM	5	11	4	0	0	11	2	0	2	13	10	0	8	3	3	0	72
1:30 PM	7	9	11	0	0	14	3	0	7	9	2	0	8	8	1	0	79
1:45 PM	3	5	4	0	1	7	2	0	5	5	11	0	6	7	4	0	60
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	55	71	46	0	9	81	15	1	36	61	53	0	57	57	24	0	566
APPROACH %'s :	31.98%	41.28%	26.74%	0.00%	8.49%	76.42%	14.15%	0.94%	24.00%	40.67%	35.33%	0.00%	41.30%	41.30%	17.39%	0.00%	
PEAK HR :	**12:45 PM - 01:45 PM**																TOTAL
PEAK HR VOL :	30	39	24	0	4	46	11	0	16	36	19	0	33	28	11	0	297
PEAK HR FACTOR :	0.750	0.886	0.545	0.000	0.500	0.821	0.688	0.000	0.571	0.692	0.475	0.000	0.825	0.778	0.688	0.000	0.940
	0.861				0.897				0.710				0.818				

Prepared by National Data & Surveying Services

SR 49 & Cramer Rd

Peak Hour Turning Movement Count

ID: 17-07774-002
City: Auburn

Day: Saturday
Date: 10/07/2017

PEAK HOURS

AM	NONE
NOON	12:45 PM - 01:45 PM
PM	NONE

COUNT PERIODS

AM	NONE
NOON	12:00 PM - 02:00 PM
PM	NONE

SR 49 — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	9	1171	0	0	1302	NOON
PM	0	0	0	0	0	PM

Cramer Rd — EASTBOUND

AM	NOON	PM
0	33	0
0	0	0
0	1	0
0	0	0
0	19	0

Cramer Rd — WESTBOUND

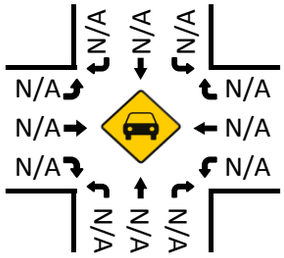
PM	NOON	AM
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

SR 49 — NORTHBOUND

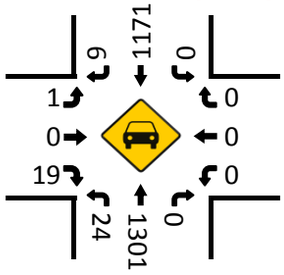
PM	0	0	0	0	0	PM
NOON	1191	1	24	1301	0	NOON
AM	0	0	0	0	0	AM

CONTROL			
	0		
TEV	0 AM	2526 NOON	0 PM
PHF		0.95	

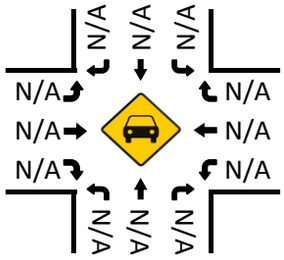
Total Vehicles (AM)



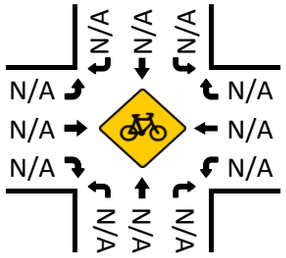
Total Vehicles (Noon)



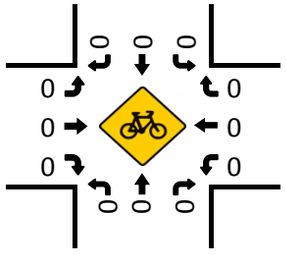
Total Vehicles (PM)



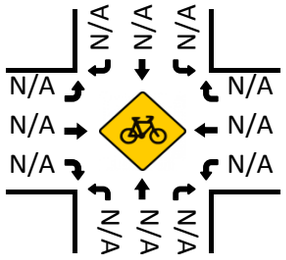
Bikes (AM)



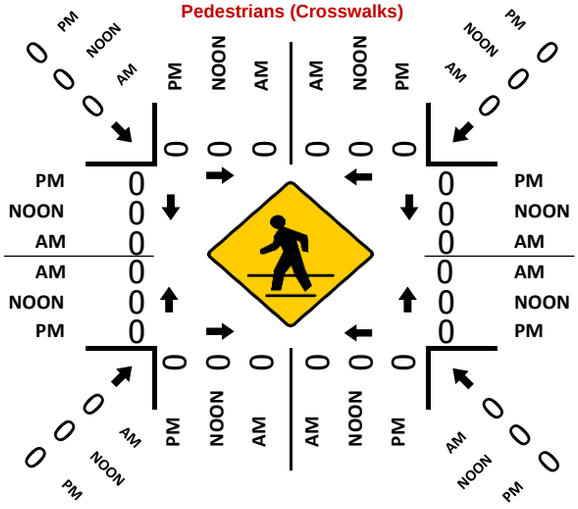
Bikes (NOON)



Bikes (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 49 & Cramer Rd
City: Auburn
Control:

Project ID: 17-07774-002
Date: 2017-10-07

Total

NS/EW Streets:	SR 49				SR 49				Cramer Rd				Cramer Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	1	258	0	0	0	303	0	0	1	0	5	0	0	0	0	0	568
12:15 PM	3	298	0	0	0	308	1	0	1	0	2	0	0	0	0	0	613
12:30 PM	2	289	0	0	0	314	0	0	0	0	6	0	0	0	0	0	611
12:45 PM	9	327	0	0	0	292	2	0	0	0	1	0	0	0	0	0	631
1:00 PM	2	347	0	0	0	302	2	0	0	0	10	0	0	0	0	0	663
1:15 PM	6	303	0	1	0	303	3	0	1	0	3	0	0	0	0	0	620
1:30 PM	7	324	0	0	0	274	2	0	0	0	5	0	0	0	0	0	612
1:45 PM	2	291	0	0	0	295	1	0	1	0	5	0	0	0	0	0	595
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	32	2437	0	1	0	2391	11	0	4	0	37	0	0	0	0	0	4913
APPROACH %'s :	1.30%	98.66%	0.00%	0.04%	0.00%	99.54%	0.46%	0.00%	9.76%	0.00%	90.24%	0.00%					
PEAK HR :	**12:45 PM - 01:45 PM**																TOTAL
PEAK HR VOL :	24	1301	0	1	0	1171	9	0	1	0	19	0	0	0	0	0	2526
PEAK HR FACTOR :	0.667	0.937	0.000	0.250	0.000	0.966	0.750	0.000	0.250	0.000	0.475	0.000	0.000	0.000	0.000	0.000	0.952
		0.950				0.964				0.500							

Prepared by National Data & Surveying Services

Placer Hills Rd & Combie Rd

Peak Hour Turning Movement Count

ID: 17-07774-003
City: Meadow Vista

Day: Saturday
Date: 10/07/2017

PEAK HOURS	COUNT PERIODS
NONE	NONE
12:45 PM - 01:45 PM	12:00 PM - 02:00 PM
NONE	NONE

SOUTHBOUND (Placer Hills Rd)

AM	0	0	0	0	0	AM
NOON	8	71	0	0	106	NOON
PM	0	0	0	0	0	PM

EASTBOUND (Combie Rd)

AM	NOON	PM
0	109	0
0	0	0
0	9	0
0	0	0
0	98	0
AM	NOON	PM

WESTBOUND (Combie Rd)

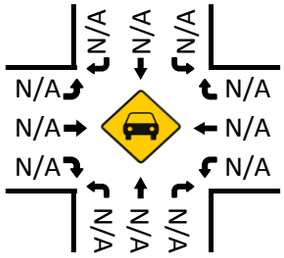
PM	NOON	AM
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
PM	NOON	AM

NORTHBOUND (Placer Hills Rd)

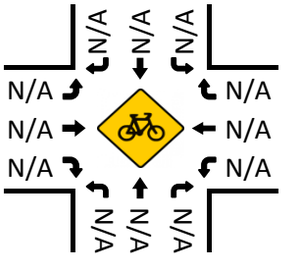
PM	0	0	0	0	0	PM
NOON	170	1	101	97	0	NOON
AM	0	0	0	0	0	AM

CONTROL			
	0		
TEV	0 AM	385 NOON	0 PM
PHF		0.88	

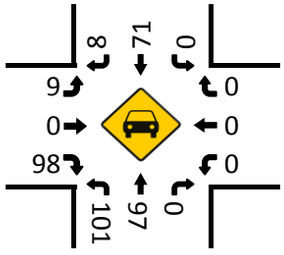
Total Vehicles (AM)



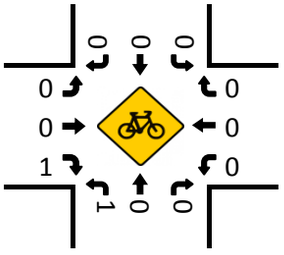
Bikes (AM)



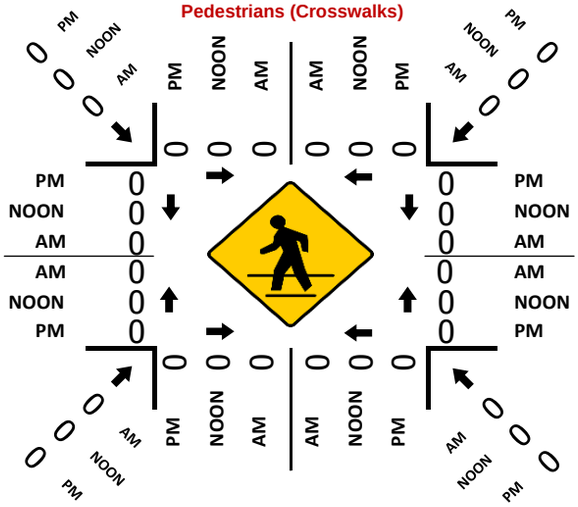
Total Vehicles (Noon)



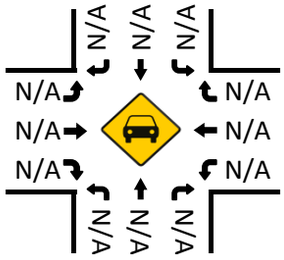
Bikes (NOON)



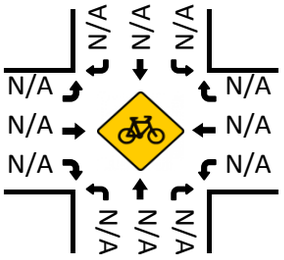
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Placer Hills Rd & Combie Rd
City: Meadow Vista
Control:

Project ID: 17-07774-003
Date: 2017-10-07

Total

NS/EW Streets:	Placer Hills Rd				Placer Hills Rd				Combie Rd				Combie Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	14	15	0	0	0	29	4	0	1	0	24	0	0	0	0	0	87
12:15 PM	20	24	0	0	0	16	2	0	2	0	26	0	0	0	0	0	90
12:30 PM	19	20	0	0	0	28	3	0	1	0	16	0	0	0	0	0	87
12:45 PM	30	24	0	0	0	13	2	0	3	0	23	0	0	0	0	0	95
1:00 PM	16	27	0	1	0	22	2	0	3	0	18	0	0	0	0	0	89
1:15 PM	23	20	0	0	0	19	0	0	1	0	29	0	0	0	0	0	92
1:30 PM	32	26	0	0	0	17	4	0	2	0	28	0	0	0	0	0	109
1:45 PM	16	29	0	0	0	20	4	0	3	0	23	0	0	0	0	0	95
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	170	185	0	1	0	164	21	0	16	0	187	0	0	0	0	0	744
APPROACH %'s :	47.75%	51.97%	0.00%	0.28%	0.00%	88.65%	11.35%	0.00%	7.88%	0.00%	92.12%	0.00%					
PEAK HR :	**12:45 PM - 01:45 PM**																TOTAL
PEAK HR VOL :	101	97	0	1	0	71	8	0	9	0	98	0	0	0	0	0	385
PEAK HR FACTOR :	0.789	0.898	0.000	0.250	0.000	0.807	0.500	0.000	0.750	0.000	0.845	0.000	0.000	0.000	0.000	0.000	0.883
		0.858				0.823				0.892							

Prepared by National Data & Surveying Services

Sierra College Blvd & Delmar Ave

Peak Hour Turning Movement Count

ID: 17-07774-004
City: Loomis

Day: Saturday
Date: 10/07/2017

PEAK HOURS	COUNT PERIODS
NONE	NONE
12:30 PM - 01:30 PM	12:00 PM - 02:00 PM
NONE	NONE

SOUTHBOUND — Sierra College Blvd

AM	0	0	0	0	0	AM
NOON	2	384	5	0	429	NOON
PM	0	0	0	0	0	PM

EASTBOUND — Delmar Ave

AM	NOON	PM
0	11	0
0	0	0
0	6	0
0	4	0
0	3	0
AM	NOON	PM

WESTBOUND — Delmar Ave

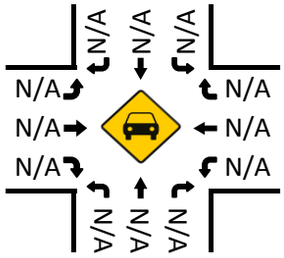
PM	NOON	AM
0	2	0
0	1	0
0	32	0
0	0	0
0	54	0
PM	NOON	AM

NORTHBOUND — Sierra College Blvd

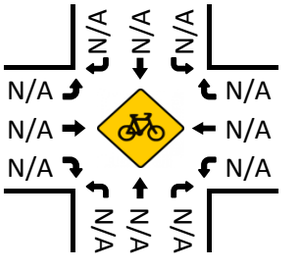
PM	0	0	0	0	0	PM
NOON	421	2	8	421	45	NOON
AM	0	0	0	0	0	AM

CONTROL			
	0		
TEV	0 AM	915 NOON	0 PM
PHF		0.95	

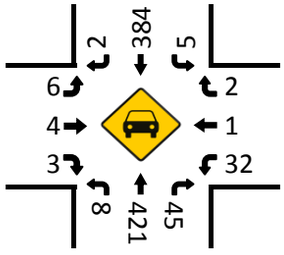
Total Vehicles (AM)



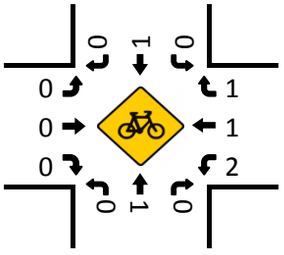
Bikes (AM)



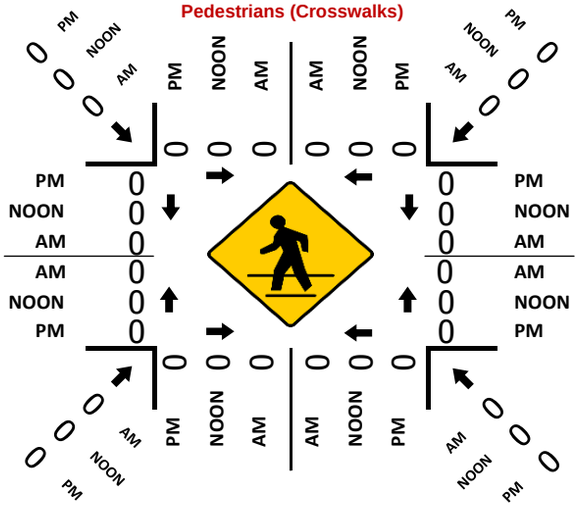
Total Vehicles (Noon)



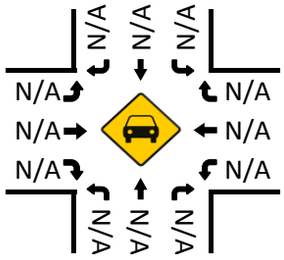
Bikes (NOON)



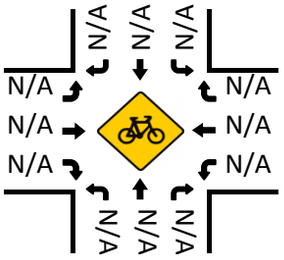
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Sierra College Blvd & Delmar Ave
City: Loomis
Control:

Project ID: 17-07774-004
Date: 2017-10-07

Total

NS/EW Streets:	Sierra College Blvd				Sierra College Blvd				Delmar Ave				Delmar Ave				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	1	97	5	0	1	103	1	0	0	0	0	0	14	0	0	0	222
12:15 PM	1	107	6	0	0	83	1	1	0	0	0	0	9	0	1	0	209
12:30 PM	2	113	14	0	1	98	0	0	2	0	0	0	10	0	1	0	241
12:45 PM	1	89	11	1	1	96	0	0	1	2	0	0	8	0	1	0	211
1:00 PM	2	116	9	1	2	88	0	0	1	1	3	0	8	1	0	0	232
1:15 PM	3	103	11	0	1	102	2	0	2	1	0	0	6	0	0	0	231
1:30 PM	1	95	10	0	1	79	0	0	1	0	1	0	13	0	2	0	203
1:45 PM	1	115	10	0	0	93	2	0	0	0	1	0	8	0	3	0	233
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	12	835	76	2	7	742	6	1	7	4	5	0	76	1	8	0	1782
APPROACH %'s :	1.30%	90.27%	8.22%	0.22%	0.93%	98.15%	0.79%	0.13%	43.75%	25.00%	31.25%	0.00%	89.41%	1.18%	9.41%	0.00%	
PEAK HR :	**12:30 PM - 01:30 PM**																TOTAL
PEAK HR VOL :	8	421	45	2	5	384	2	0	6	4	3	0	32	1	2	0	915
PEAK HR FACTOR :	0.667	0.907	0.804	0.500	0.625	0.941	0.250	0.000	0.750	0.500	0.250	0.000	0.800	0.250	0.500	0.000	0.949
	0.922				0.931				0.650				0.795				

Prepared by National Data & Surveying Services

Crosby Herold Rd & Wise Rd

Peak Hour Turning Movement Count

ID: 17-07774-005
City: Lincoln

Day: Saturday
Date: 10/07/2017

PEAK HOURS		COUNT PERIODS
NONE	AM	NONE
12:00 PM - 01:00 PM	NOON	12:00 PM - 02:00 PM
NONE	PM	NONE

Crosby Herold Rd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	17	4	3	0	31	NOON
PM	0	0	0	0	0	PM

0 0 0 0

Wise Rd — EASTBOUND

AM	NOON	PM	
0	85	0	
0	0	0	0
0	19	0	0
0	75	0	0
0	9	0	0
AM	NOON	PM	

Wise Rd — WESTBOUND

PM	NOON	AM	
0	5	0	0
0	63	0	0
0	2	0	0
0	0	0	0
0	83	0	
PM	NOON	AM	

CONTROL

0

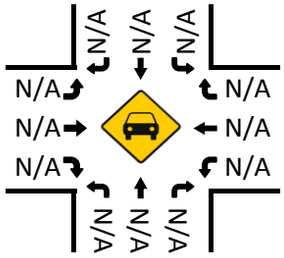
TEV	0 AM	214 NOON	0 PM
PHF		0.94	

0 0 0 0

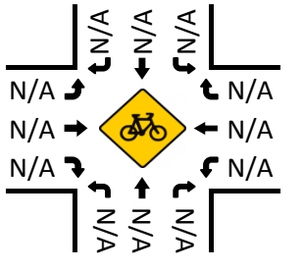
Crosby Herold Rd — NORTHBOUND

PM	0	0	0	0	0	PM
NOON	15	0	5	7	5	NOON
AM	0	0	0	0	0	AM

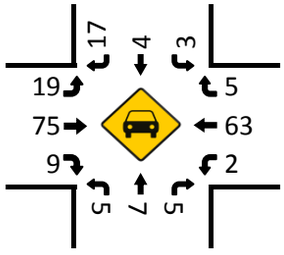
Total Vehicles (AM)



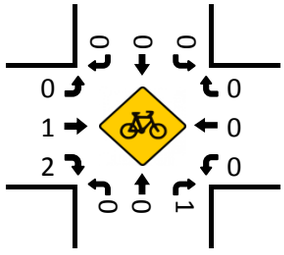
Bikes (AM)



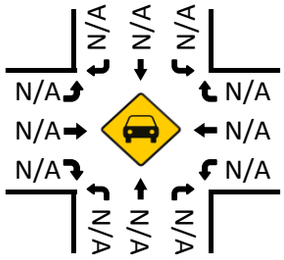
Total Vehicles (Noon)



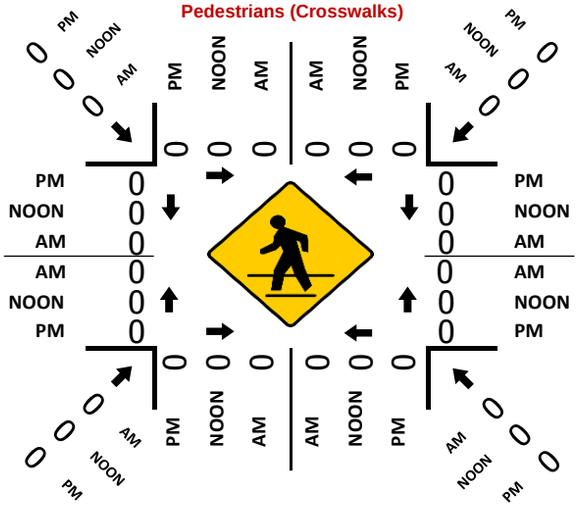
Bikes (NOON)



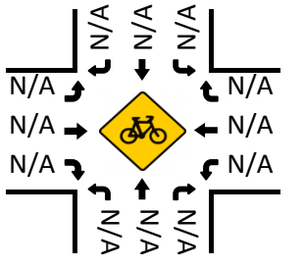
Total Vehicles (PM)



Pedestrians (Crosswalks)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Crosby Herold Rd & Wise Rd
City: Lincoln
Control:

Project ID: 17-07774-005
Date: 2017-10-07

Total

NS/EW Streets:	Crosby Herold Rd				Crosby Herold Rd				Wise Rd				Wise Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	0	3	1	0	0	1	4	0	7	16	4	0	1	15	4	0	56
12:15 PM	3	1	2	0	2	1	8	0	3	16	1	0	1	18	1	0	57
12:30 PM	1	2	2	0	1	1	1	0	5	20	3	0	0	19	0	0	55
12:45 PM	1	1	0	0	0	1	4	0	4	23	1	0	0	11	0	0	46
1:00 PM	0	1	0	0	0	1	2	0	5	17	3	0	1	8	1	0	39
1:15 PM	0	2	1	0	2	1	4	0	8	19	0	0	1	16	3	0	57
1:30 PM	1	1	0	0	1	1	11	0	6	20	1	0	0	5	1	0	48
1:45 PM	0	0	0	0	1	0	3	0	1	21	1	0	0	23	2	0	52
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	6	11	6	0	7	7	37	0	39	152	14	0	4	115	12	0	410
APPROACH %'s :	26.09%	47.83%	26.09%	0.00%	13.73%	13.73%	72.55%	0.00%	19.02%	74.15%	6.83%	0.00%	3.05%	87.79%	9.16%	0.00%	
PEAK HR :	**12:00 PM - 01:00 PM**																TOTAL
PEAK HR VOL :	5	7	5	0	3	4	17	0	19	75	9	0	2	63	5	0	214
PEAK HR FACTOR :	0.417	0.583	0.625	0.000	0.375	1.000	0.531	0.000	0.679	0.815	0.563	0.000	0.500	0.829	0.313	0.000	0.939
	0.708				0.545				0.920				0.875				

Prepared by National Data & Surveying Services

Mt Vernon Rd & Atwood Rd

Peak Hour Turning Movement Count

ID: 17-07774-006
City: Auburn

Day: Saturday
Date: 10/07/2017

PEAK HOURS

AM	NONE
NOON	01:00 PM - 02:00 PM
PM	NONE

COUNT PERIODS

AM	NONE
NOON	12:00 PM - 02:00 PM
PM	NONE

Mt Vernon Rd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	1	3	0	6	NOON
PM	0	0	0	0	0	PM

Atwood Rd — EASTBOUND

AM	NOON	PM
0	125	0
0	0	0
0	0	0
0	62	0
0	67	0
AM	NOON	PM

Atwood Rd — WESTBOUND

PM	NOON	AM
0	4	0
0	77	0
0	42	0
0	0	0
0	116	0
PM	NOON	AM

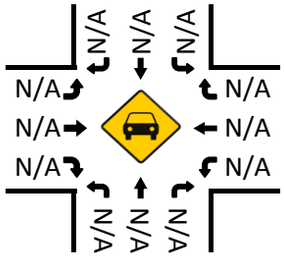
Mt Vernon Rd — NORTHBOUND

PM	0	0	0	0	0	PM
NOON	110	0	48	2	51	NOON
AM	0	0	0	0	0	AM

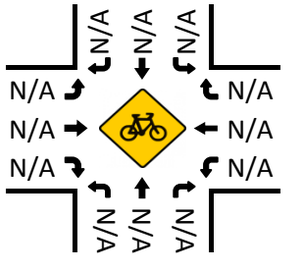
CONTROL: 0

	AM	NOON	PM
TEV	0	357	0
PHF		0.92	

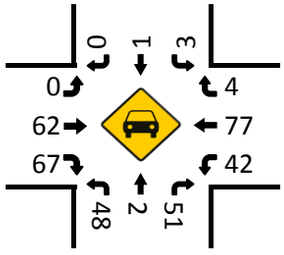
Total Vehicles (AM)



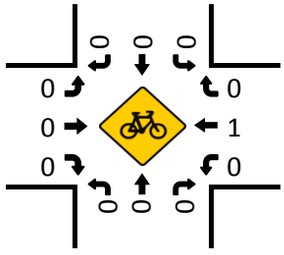
Bikes (AM)



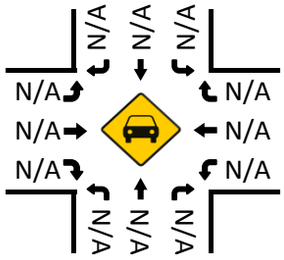
Total Vehicles (Noon)



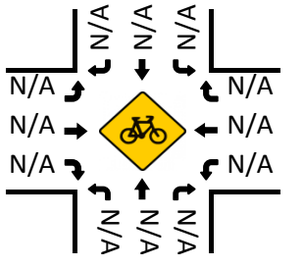
Bikes (NOON)



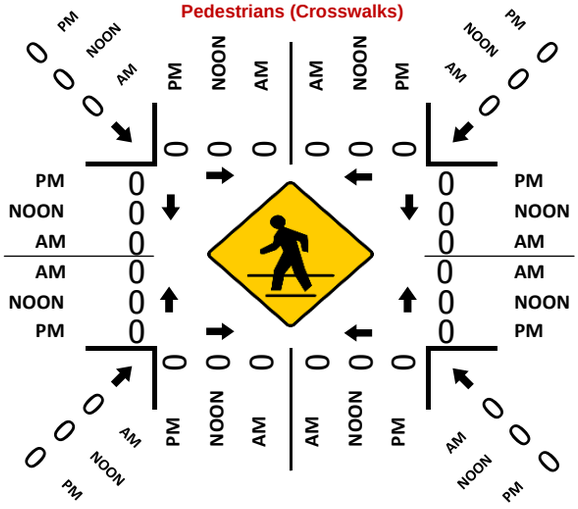
Total Vehicles (PM)



Bikes (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Mt Vernon Rd & Atwood Rd
City: Auburn
Control:

Project ID: 17-07774-006
Date: 2017-10-07

Total

NS/EW Streets:	Mt Vernon Rd				Mt Vernon Rd				Atwood Rd				Atwood Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	10	0	16	0	0	1	0	0	0	17	18	0	13	13	2	0	90
12:15 PM	11	0	6	0	0	0	0	0	0	19	13	0	15	16	0	0	80
12:30 PM	9	0	8	0	0	0	0	0	0	16	16	0	10	13	0	0	72
12:45 PM	10	0	17	0	0	0	0	0	0	10	14	0	4	18	1	0	74
1:00 PM	12	1	13	0	0	1	0	0	0	15	15	0	11	20	1	0	89
1:15 PM	13	0	11	0	0	0	0	0	0	17	23	0	7	17	0	0	88
1:30 PM	12	0	8	0	2	0	0	0	0	12	16	0	12	19	2	0	83
1:45 PM	11	1	19	0	1	0	0	0	0	18	13	0	12	21	1	0	97
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	88	2	98	0	3	2	0	0	0	124	128	0	84	137	7	0	673
APPROACH %'s :	46.81%	1.06%	52.13%	0.00%	60.00%	40.00%	0.00%	0.00%	0.00%	49.21%	50.79%	0.00%	36.84%	60.09%	3.07%	0.00%	
PEAK HR :	**01:00 PM - 02:00 PM**																TOTAL
PEAK HR VOL :	48	2	51	0	3	1	0	0	0	62	67	0	42	77	4	0	357
PEAK HR FACTOR :	0.923	0.500	0.671	0.000	0.375	0.250	0.000	0.000	0.000	0.861	0.728	0.000	0.875	0.917	0.500	0.000	0.920
	0.815				0.500				0.806				0.904				

Prepared by National Data & Surveying Services

McCourtney Rd & Wise Rd

Peak Hour Turning Movement Count

ID: 17-07774-007
City: Lincoln

Day: Saturday
Date: 10/07/2017

PEAK HOURS

AM	NONE
NOON	12:30 PM - 01:30 PM
PM	NONE

COUNT PERIODS

AM	NONE
NOON	12:00 PM - 02:00 PM
PM	NONE

McCourtney Rd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	4	33	17	0	62	NOON
PM	0	0	0	0	0	PM

Wise Rd — EASTBOUND

AM	NOON	PM
0	56	0
0	0	0
0	18	0
0	91	0
0	13	0
AM	NOON	PM

Wise Rd — WESTBOUND

PM	NOON	AM
0	3	0
0	47	0
0	24	0
0	0	0
0	150	0
PM	NOON	AM

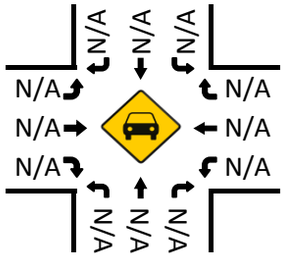
CONTROL

	0		
TEV	0	339	0
	AM	NOON	PM
PHF		0.81	

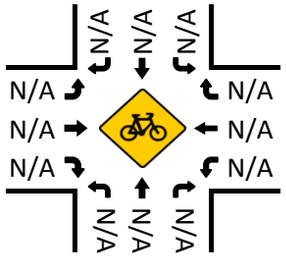
McCourtney Rd — NORTHBOUND

PM	0	0	0	0	0	PM
NOON	71	1	5	41	42	NOON
AM	0	0	0	0	0	AM

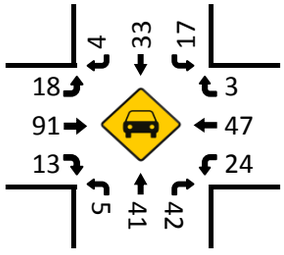
Total Vehicles (AM)



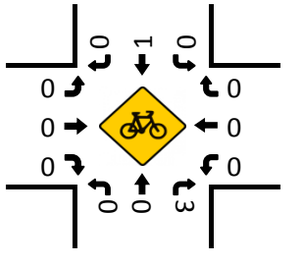
Bikes (AM)



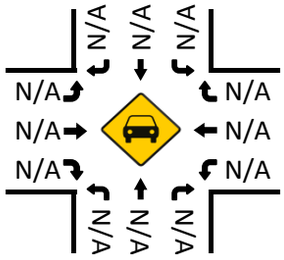
Total Vehicles (Noon)



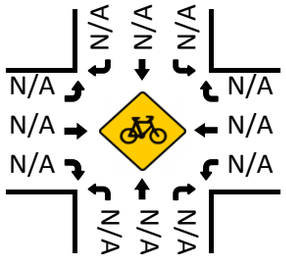
Bikes (NOON)



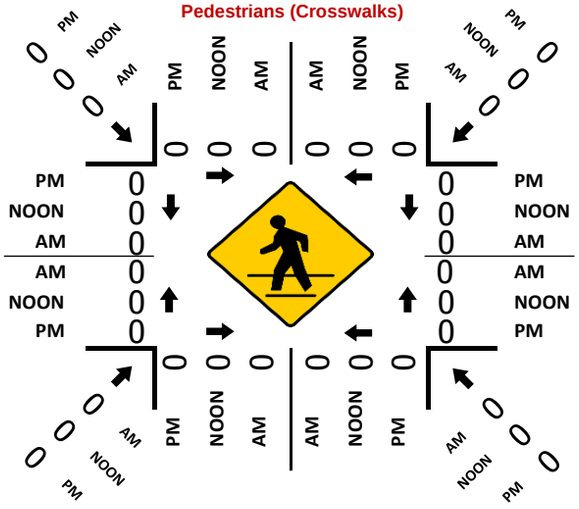
Total Vehicles (PM)



Bikes (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: McCourtney Rd & Wise Rd
City: Lincoln
Control:

Project ID: 17-07774-007
Date: 2017-10-07

Total

NS/EW Streets:	McCourtney Rd				McCourtney Rd				Wise Rd				Wise Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	2	9	6	0	1	7	0	0	3	15	4	0	6	20	2	0	75
12:15 PM	1	6	13	0	3	11	3	0	4	22	1	0	9	12	3	0	88
12:30 PM	2	10	12	0	2	8	1	0	4	22	0	0	7	10	2	0	80
12:45 PM	1	8	9	0	7	4	0	0	5	21	5	0	7	7	0	0	74
1:00 PM	0	14	5	0	5	9	1	0	5	22	2	0	3	14	1	0	81
1:15 PM	2	9	16	1	3	12	2	0	4	26	6	0	7	16	0	0	104
1:30 PM	3	6	6	0	5	9	2	0	1	20	0	0	6	13	5	0	76
1:45 PM	0	7	10	0	1	8	1	0	3	23	0	0	8	14	0	0	75
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	11	69	77	1	27	68	10	0	29	171	18	0	53	106	13	0	653
APPROACH %'s :	6.96%	43.67%	48.73%	0.63%	25.71%	64.76%	9.52%	0.00%	13.30%	78.44%	8.26%	0.00%	30.81%	61.63%	7.56%	0.00%	
PEAK HR :	**12:30 PM - 01:30 PM**																TOTAL
PEAK HR VOL :	5	41	42	1	17	33	4	0	18	91	13	0	24	47	3	0	339
PEAK HR FACTOR :	0.625	0.732	0.656	0.250	0.607	0.688	0.500	0.000	0.900	0.875	0.542	0.000	0.857	0.734	0.375	0.000	0.815
	0.795				0.794				0.847				0.804				

Prepared by National Data & Surveying Services

Garden Bar Rd & Wise Rd

Peak Hour Turning Movement Count

ID: 18-07016-002
City: Lincoln

Day: Saturday
Date: 01/20/2018

PEAK HOURS	COUNT PERIODS
NONE	NONE
01:00 PM - 02:00 PM	12:00 PM - 02:00 PM
NONE	NONE

SOUTHBOUND (Garden Bar Rd)

AM	0	0	0	0	0	AM
NOON	18	14	0	0	33	NOON
PM	0	0	0	0	0	PM

EASTBOUND (Wise Rd)

AM	NOON	PM
0	90	0
0	2	0
0	14	0
0	56	0
0	13	0
AM	NOON	PM

WESTBOUND (Wise Rd)

PM	NOON	AM
0	1	0
0	55	0
0	12	0
0	0	0
0	74	0
PM	NOON	AM

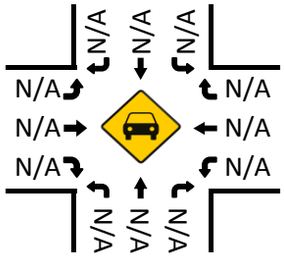
NORTHBOUND (Garden Bar Rd)

PM	0	0	0	0	0	PM
NOON	39	0	15	18	18	NOON
AM	0	0	0	0	0	AM

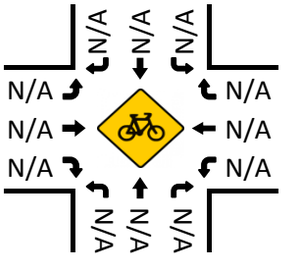
CONTROL

	0		
TEV	0	236	0
	AM	NOON	PM
PHF		0.89	

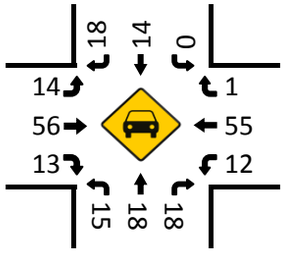
Total Vehicles (AM)



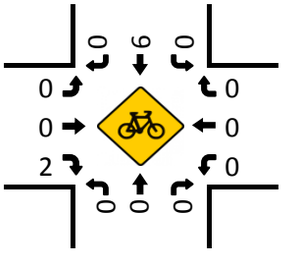
Bikes (AM)



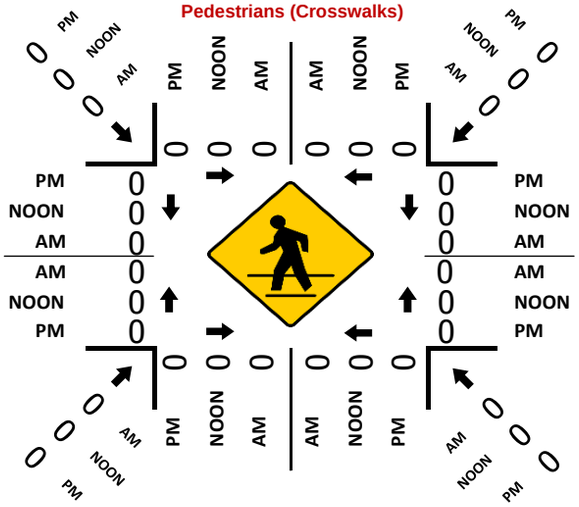
Total Vehicles (Noon)



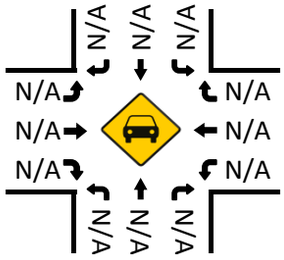
Bikes (NOON)



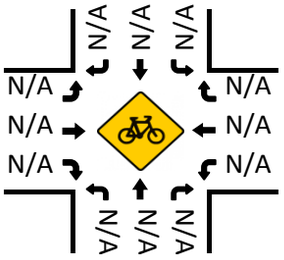
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

5765-19

File Name : 18-07016-002
Date : 01/20/2018

Unshifted Count = All Vehicles & Uturns

	Garden Bar Rd Southbound					Wise Rd Westbound					Garden Bar Rd Northbound					Wise Rd Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
12:00	0	5	1	0	6	2	9	0	0	11	2	2	1	0	5	7	13	0	1	21	43	1
12:15	0	6	3	0	9	2	6	0	0	8	2	5	2	0	9	6	4	3	0	13	39	0
12:30	2	3	6	0	11	2	6	0	0	8	4	5	3	0	12	4	13	4	0	21	52	0
12:45	0	2	3	0	5	4	11	1	0	16	4	1	3	0	8	2	11	7	0	20	49	0
Total	2	16	13	0	31	10	32	1	0	43	12	13	9	0	34	19	41	14	1	75	183	1
13:00	0	7	5	0	12	2	10	0	0	12	5	6	10	0	21	3	14	4	0	21	66	0
13:15	0	2	5	0	7	2	16	0	0	18	2	5	3	0	10	5	13	0	0	18	53	0
13:30	0	3	4	0	7	5	9	1	0	15	4	4	3	0	11	3	17	4	0	24	57	0
13:45	0	2	4	0	6	3	20	0	0	23	4	3	2	0	9	3	12	5	2	22	60	2
Total	0	14	18	0	32	12	55	1	0	68	15	18	18	0	51	14	56	13	2	85	236	2
Grand Total	2	30	31	0	63	22	87	2	0	111	27	31	27	0	85	33	97	27	3	160	419	3
Apprch %	3.2%	47.6%	49.2%	0.0%		19.8%	78.4%	1.8%	0.0%		31.8%	36.5%	31.8%	0.0%		20.6%	60.6%	16.9%	1.9%			
Total %	0.5%	7.2%	7.4%	0.0%	15.0%	5.3%	20.8%	0.5%	0.0%	26.5%	6.4%	7.4%	6.4%	0.0%	20.3%	7.9%	23.2%	6.4%	0.7%	38.2%	100.0%	

NOON PEAK	Garden Bar Rd Southbound					Wise Rd Westbound					Garden Bar Rd Northbound					Wise Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 13:00 to 14:00																					
Peak Hour For Entire Intersection Begins at 13:00																					
13:00	0	7	5	0	12	2	10	0	0	12	5	6	10	0	21	3	14	4	0	21	66
13:15	0	2	5	0	7	2	16	0	0	18	2	5	3	0	10	5	13	0	0	18	53
13:30	0	3	4	0	7	5	9	1	0	15	4	4	3	0	11	3	17	4	0	24	57
13:45	0	2	4	0	6	3	20	0	0	23	4	3	2	0	9	3	12	5	2	22	60
Total Volume	0	14	18	0	32	12	55	1	0	68	15	18	18	0	51	14	56	13	2	85	236
% App Total	0.0%	43.8%	56.3%	0.0%		17.6%	80.9%	1.5%	0.0%		29.4%	35.3%	35.3%	0.0%		16.5%	65.9%	15.3%	2.4%		
PHF	.000	.500	.900	.000	.667	.600	.688	.250	.000	.739	.750	.750	.450	.000	.607	.700	.824	.650	.250	.885	.894

Prepared by National Data & Surveying Services

Fowler Rd & SR 193

Peak Hour Turning Movement Count

ID: 17-07774-009
City: Newcastle

Day: Saturday
Date: 10/07/2017

PEAK HOURS		COUNT PERIODS
NONE		NONE
12:30 PM - 01:30 PM		12:00 PM - 02:00 PM
NONE		NONE

Fowler Rd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	81	0	11	0	173	NOON
PM	0	0	0	0	0	PM

SR 193 — EASTBOUND

AM	NOON	PM	
0	250	0	
0	0	0	0
0	158	0	0
0	163	0	0
0	0	0	0
AM	NOON	PM	

CONTROL

0

TEV	0 AM	597 NOON	0 PM
PHF		0.95	

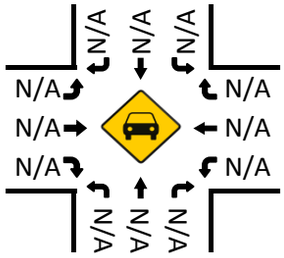
WESTBOUND — SR 193

PM	NOON	AM	
0	15	0	0
0	169	0	0
0	0	0	0
0	0	0	0
0	174	0	
PM	NOON	AM	

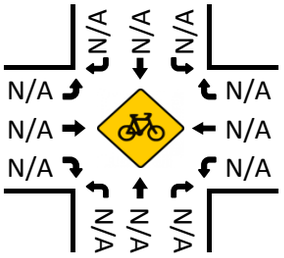
PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

NORTHBOUND — Fowler Rd

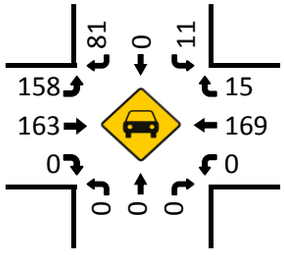
Total Vehicles (AM)



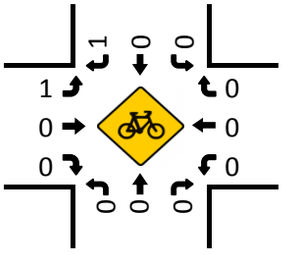
Bikes (AM)



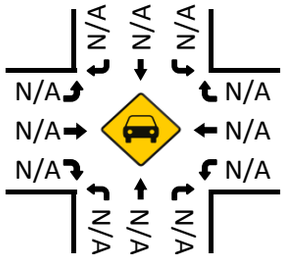
Total Vehicles (Noon)



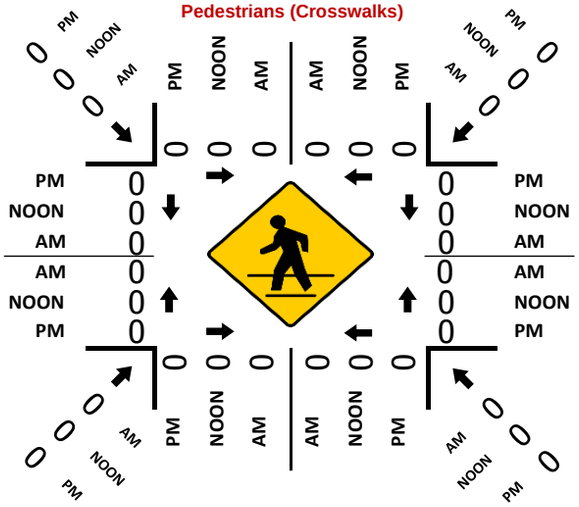
Bikes (NOON)



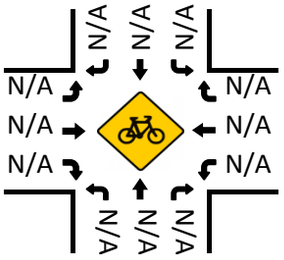
Total Vehicles (PM)



Pedestrians (Crosswalks)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Fowler Rd & SR 193
City: Newcastle
Control:

Project ID: 17-07774-009
Date: 2017-10-07

Total

NS/EW Streets:	Fowler Rd				Fowler Rd				SR 193				SR 193				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	0	0	0	0	3	0	27	0	28	44	0	0	0	34	1	0	137
12:15 PM	0	0	0	0	4	0	28	0	26	41	0	0	0	39	6	0	144
12:30 PM	0	0	0	0	5	0	19	0	38	41	0	0	0	35	2	0	140
12:45 PM	0	0	0	0	2	0	19	0	36	34	0	0	0	51	2	0	144
1:00 PM	0	0	0	0	1	0	18	0	45	41	0	0	0	49	3	0	157
1:15 PM	0	0	0	0	3	0	25	0	39	47	0	0	0	34	8	0	156
1:30 PM	0	0	0	0	0	0	22	0	24	48	0	0	0	40	4	0	138
1:45 PM	0	0	0	0	1	0	23	0	38	42	0	0	0	37	3	0	144
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	19	0	181	0	274	338	0	0	0	319	29	0	1160
APPROACH %'s :					9.50%	0.00%	90.50%	0.00%	44.77%	55.23%	0.00%	0.00%	0.00%	91.67%	8.33%	0.00%	
PEAK HR :	**12:30 PM - 01:30 PM**																TOTAL
PEAK HR VOL :	0	0	0	0	11	0	81	0	158	163	0	0	0	169	15	0	597
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.550	0.000	0.810	0.000	0.878	0.867	0.000	0.000	0.000	0.828	0.469	0.000	0.951
						0.821				0.933				0.868			

Prepared by National Data & Surveying Services

Gold Hill Rd & SR 193

Peak Hour Turning Movement Count

ID: 17-07774-010
City: Newcastle

Day: Saturday
Date: 10/07/2017

PEAK HOURS	COUNT PERIODS
NONE	NONE
12:45 PM - 01:45 PM	12:00 PM - 02:00 PM
NONE	NONE

Gold Hill Rd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	26	0	34	0	79	NOON
PM	0	0	0	0	0	PM

SR 193 — EASTBOUND

AM	NOON	PM	
0	185	0	⇦
0	0	0	↶ 0
0	28	0	↱ 0
0	146	0	→ 0
0	0	0	↴ 0
AM	NOON	PM	

SR 193 — WESTBOUND

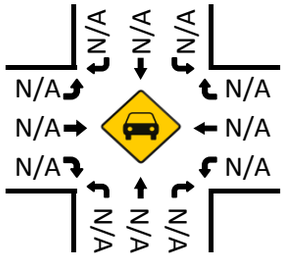
PM	NOON	AM	
0	51	0	0 ↰
0	159	0	0 ←
0	0	0	0 ↶
0	0	0	0 ↱
0	180	0	⇨
PM	NOON	AM	

Gold Hill Rd — NORTHBOUND

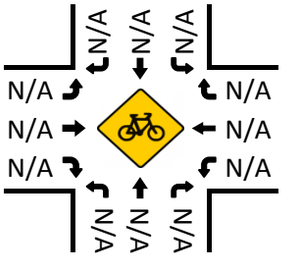
PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

CONTROL			
	0		
TEV	0 AM	444 NOON	0 PM
PHF		0.90	

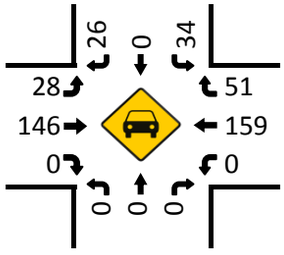
Total Vehicles (AM)



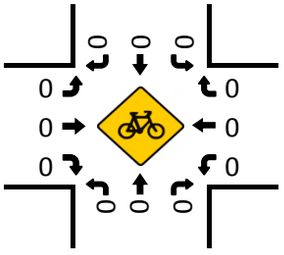
Bikes (AM)



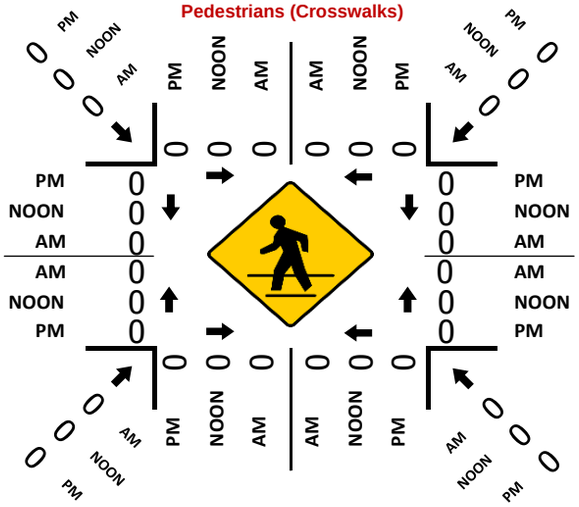
Total Vehicles (Noon)



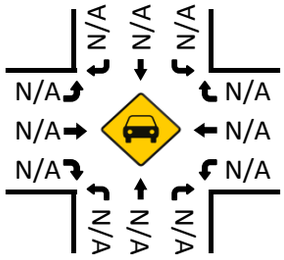
Bikes (NOON)



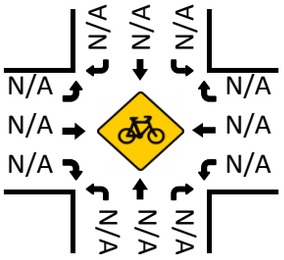
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Gold Hill Rd & SR 193
City: Newcastle
Control:

Project ID: 17-07774-010
Date: 2017-10-07

Total

NS/EW Streets:	Gold Hill Rd				Gold Hill Rd				SR 193				SR 193				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	0	0	0	0	6	0	7	0	8	39	0	0	0	29	9	0	98
12:15 PM	0	0	0	0	7	0	6	0	7	40	0	0	0	31	8	0	99
12:30 PM	0	0	0	0	11	0	2	0	10	37	0	0	0	36	14	0	110
12:45 PM	0	0	0	0	11	0	9	0	3	27	0	0	0	40	11	0	101
1:00 PM	0	0	0	0	6	0	6	0	10	28	0	0	0	46	15	0	111
1:15 PM	0	0	0	0	5	0	5	0	8	46	0	0	0	34	11	0	109
1:30 PM	0	0	0	0	12	0	6	0	7	45	0	0	0	39	14	0	123
1:45 PM	0	0	0	0	3	0	6	0	10	27	0	0	0	33	20	0	99
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	61	0	47	0	63	289	0	0	0	288	102	0	850
APPROACH %'s :					56.48%	0.00%	43.52%	0.00%	17.90%	82.10%	0.00%	0.00%	0.00%	73.85%	26.15%	0.00%	
PEAK HR :	**12:45 PM - 01:45 PM**																TOTAL
PEAK HR VOL :	0	0	0	0	34	0	26	0	28	146	0	0	0	159	51	0	444
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.708	0.000	0.722	0.000	0.700	0.793	0.000	0.000	0.000	0.864	0.850	0.000	0.902
						0.750				0.806				0.861			

Prepared by National Data & Surveying Services

Lozanos Rd & Wise Rd

Peak Hour Turning Movement Count

ID: 17-07774-012
City: Newcastle

Day: Saturday
Date: 10/07/2017

PEAK HOURS		COUNT PERIODS
AM	NONE	NONE
NOON	12:00 PM - 01:00 PM	12:00 PM - 02:00 PM
PM	NONE	NONE

Lozanos Rd – SOUTHBOUND

	Movement 1	Movement 2	Movement 3	U-turn	Approach
AM	0	0	0	0	0
NOON	0	0	0	0	0
PM	0	0	0	0	0
Bikes	0	0	0	0	

Wise Rd – EASTBOUND

Movement	AM	NOON	PM	Bikes
Departing	0	44	0	
U-turn	0	0	0	0
Left	0	0	0	0
Through	0	14	0	0
Right	0	27	0	0

Wise Rd – WESTBOUND

Movement	PM	NOON	AM	Bikes
U-turn	0	0	0	0
Through	0	19	0	0
Left	0	3	0	0
Right	0	0	0	0
Departing	0	18	0	

Lozanos Rd – NORTHBOUND

	Approach	U-turn	Left	Through	Right
PM	0	0	0	0	0
NOON	30	0	25	0	4
AM	0	0	0	0	0
Bikes		0	0	0	0

CONTROL

0

	AM	NOON	PM
TEV	0	92	0
PHF		0.85	

Total Vehicles (AM)

All movements: N/A

Total Vehicles (Noon)

Southbound: 0, 0, 0
Eastbound: 0 (U-turn), 14 (through), 27 (right)
Westbound: 0 (U-turn), 19 (through), 3 (left)
Northbound: 25, 0, 4

Total Vehicles (PM)

All movements: N/A

Bikes (AM)

All movements: N/A

Bikes (NOON)

All movements: 0

Bikes (PM)

All movements: N/A

Pedestrians (Crosswalks)

Crosswalk	AM	NOON	PM
North	0	0	0
South	0	0	0
East	0	0	0
West	0	0	0
Diagonals	0	0	0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lozanos Rd & Wise Rd
City: Newcastle
Control:

Project ID: 17-07774-012
Date: 2017-10-07

Total

NS/EW Streets:	Lozanos Rd				Lozanos Rd				Wise Rd				Wise Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	8	0	1	0	0	0	0	0	0	4	8	0	0	6	0	0	27
12:15 PM	6	0	1	0	0	0	0	0	0	3	9	0	1	6	0	0	26
12:30 PM	8	0	1	0	0	0	0	0	0	2	4	0	2	4	0	0	21
12:45 PM	3	0	1	0	0	0	0	0	0	5	6	0	0	3	0	0	18
1:00 PM	5	0	0	0	0	0	0	0	0	4	6	0	0	4	0	0	19
1:15 PM	7	0	0	0	0	0	0	0	0	3	9	0	0	4	0	0	23
1:30 PM	8	0	1	0	0	0	0	0	0	3	8	0	1	5	0	0	26
1:45 PM	5	0	0	0	0	0	0	0	0	6	5	0	2	5	0	0	23
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	50	0	5	0	0	0	0	0	0	30	55	0	6	37	0	0	183
APPROACH %'s :	90.91%	0.00%	9.09%	0.00%					0.00%	35.29%	64.71%	0.00%	13.95%	86.05%	0.00%	0.00%	
PEAK HR :	**12:00 PM - 01:00 PM**																TOTAL
PEAK HR VOL :	25	0	4	0	0	0	0	0	0	14	27	0	3	19	0	0	92
PEAK HR FACTOR :	0.781	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.700	0.750	0.000	0.375	0.792	0.000	0.000	0.852
		0.806								0.854				0.786			

Prepared by National Data & Surveying Services

Wise Rd & Crater Hill Rd

Peak Hour Turning Movement Count

ID: 18-07016-001
City: Auburn

Day: Saturday
Date: 01/20/2018

PEAK HOURS	COUNT PERIODS
NONE	NONE
12:15 PM - 01:15 PM	12:00 PM - 02:00 PM
NONE	NONE

Wise Rd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	23	5	0	47	NOON
PM	0	0	0	0	0	PM

Crater Hill Rd — EASTBOUND

AM	NOON	PM
0	20	0
0	0	0
0	0	0
0	10	0
0	8	0
AM	NOON	PM

Crater Hill Rd — WESTBOUND

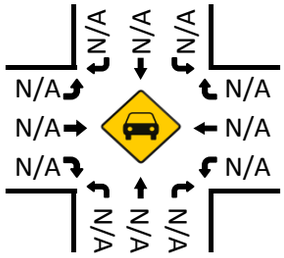
PM	NOON	AM
0	2	0
0	4	0
0	7	0
0	1	0
0	22	0
PM	NOON	AM

Wise Rd — NORTHBOUND

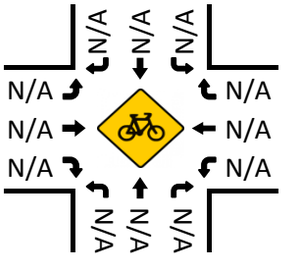
PM	0	0	0	0	0	PM
NOON	38	0	16	45	6	NOON
AM	0	0	0	0	0	AM

CONTROL			
	0		
TEV	0 AM	127 NOON	0 PM
PHF		0.86	

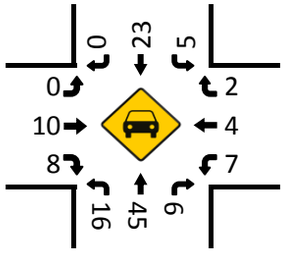
Total Vehicles (AM)



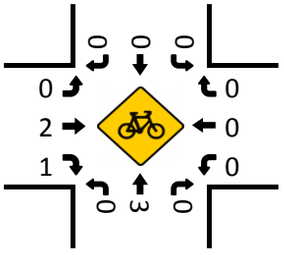
Bikes (AM)



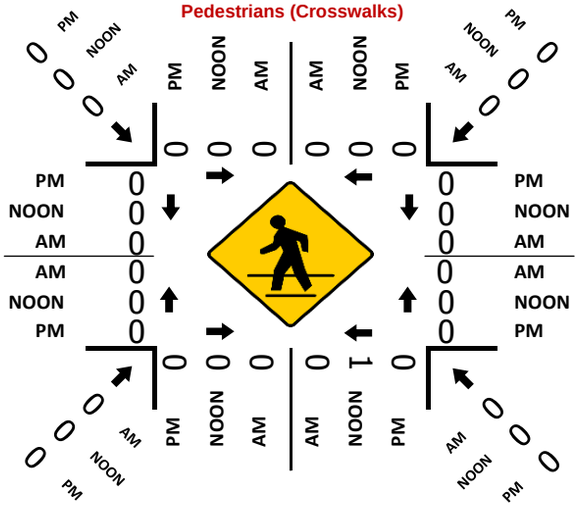
Total Vehicles (Noon)



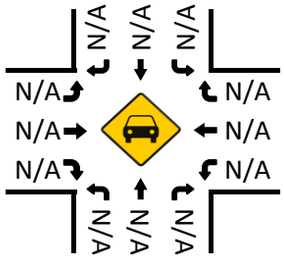
Bikes (NOON)



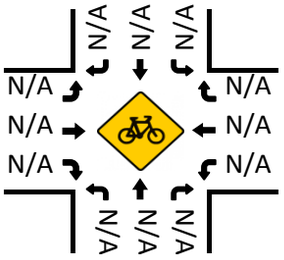
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

5765-19

File Name : 18-07016-001
Date : 01/20/2018

Unshifted Count = All Vehicles & Uturns

	Wise Rd Southbound					Crater Hill Rd Westbound					Wise Rd Northbound					Crater Hill Rd Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
12:00	1	6	0	0	7	0	0	2	0	2	2	9	1	0	12	0	0	4	0	4	25	0
12:15	1	6	0	0	7	3	1	0	0	4	7	11	1	0	19	0	4	1	0	5	35	0
12:30	1	10	0	0	11	1	1	0	1	3	3	11	1	0	15	0	4	4	0	8	37	1
12:45	0	3	0	0	3	1	2	1	0	4	5	11	2	0	18	0	0	0	0	0	25	0
Total	3	25	0	0	28	5	4	3	1	13	17	42	5	0	64	0	8	9	0	17	122	1
13:00	3	4	0	0	7	2	0	1	0	3	1	12	2	0	15	0	2	3	0	5	30	0
13:15	1	8	0	0	9	2	1	2	0	5	3	16	0	0	19	1	0	2	0	3	36	0
13:30	3	10	0	0	13	1	0	0	0	1	2	8	2	0	12	1	3	3	0	7	33	0
13:45	2	10	0	0	12	0	2	0	0	2	1	11	0	0	12	0	1	3	0	4	30	0
Total	9	32	0	0	41	5	3	3	0	11	7	47	4	0	58	2	6	11	0	19	129	0
Grand Total	12	57	0	0	69	10	7	6	1	24	24	89	9	0	122	2	14	20	0	36	251	1
Apprch %	17.4%	82.6%	0.0%	0.0%		41.7%	29.2%	25.0%	4.2%		19.7%	73.0%	7.4%	0.0%		5.6%	38.9%	55.6%	0.0%			
Total %	4.8%	22.7%	0.0%	0.0%	27.5%	4.0%	2.8%	2.4%	0.4%	9.6%	9.6%	35.5%	3.6%	0.0%	48.6%	0.8%	5.6%	8.0%	0.0%	14.3%	100.0%	

NOON PEAK	Wise Rd Southbound					Crater Hill Rd Westbound					Wise Rd Northbound					Crater Hill Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 12:15 to 13:15																					
Peak Hour For Entire Intersection Begins at 12:15																					
12:15	1	6	0	0	7	3	1	0	0	4	7	11	1	0	19	0	4	1	0	5	35
12:30	1	10	0	0	11	1	1	0	1	3	3	11	1	0	15	0	4	4	0	8	37
12:45	0	3	0	0	3	1	2	1	0	4	5	11	2	0	18	0	0	0	0	0	25
13:00	3	4	0	0	7	2	0	1	0	3	1	12	2	0	15	0	2	3	0	5	30
Total Volume	5	23	0	0	28	7	4	2	1	14	16	45	6	0	67	0	10	8	0	18	127
% App Total	17.9%	82.1%	0.0%	0.0%		50.0%	28.6%	14.3%	7.1%		23.9%	67.2%	9.0%	0.0%		0.0%	55.6%	44.4%	0.0%		
PHF	.417	.575	.000	.000	.636	.583	.500	.500	.250	.875	.571	.938	.750	.000	.882	.000	.625	.500	.000	.563	.858

Prepared by National Data & Surveying Services

Bell Rd & Joeger Rd

Peak Hour Turning Movement Count

ID: 17-07774-001
City: Auburn

Day: Thursday
Date: 10/05/2017

PEAK HOURS		COUNT PERIODS
NONE		NONE
NONE		NONE
04:00 PM - 05:00 PM		04:00 PM - 06:00 PM

Bell Rd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	9	41	15	0	78	PM

Joeger Rd — EASTBOUND

AM	NOON	PM	
0	0	110	⇦
0	0	0	↩ 0
0	0	13	↱ 0
0	0	57	→ 0
0	0	32	↳ 0
AM	NOON	PM	

Joeger Rd — WESTBOUND

PM	NOON	AM	
7	0	0	↰ 0
57	0	0	← 0
31	0	0	↲ 0
0	0	0	↶ 0
118	0	0	⇨
PM	NOON	AM	

CONTROL

0

TEV	0 AM	0 NOON	410 PM
PHF			0.90

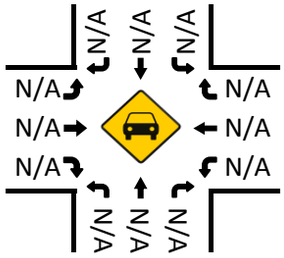
Bell Rd — NORTHBOUND

PM	104	0	44	58	46	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

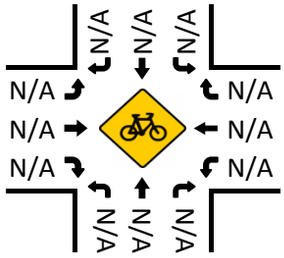
0 0 0 0

0 0 0 0

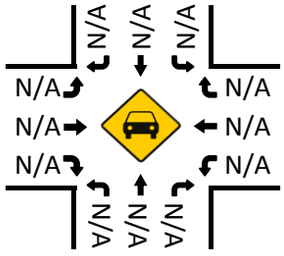
Total Vehicles (AM)



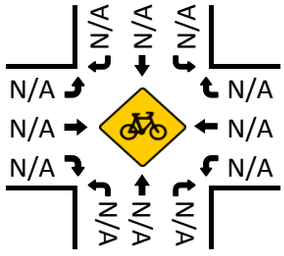
Bikes (AM)



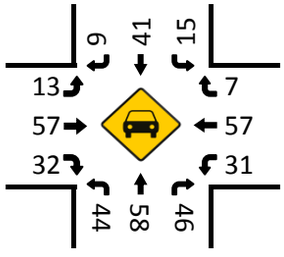
Total Vehicles (Noon)



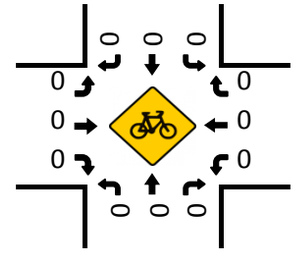
Bikes (NOON)



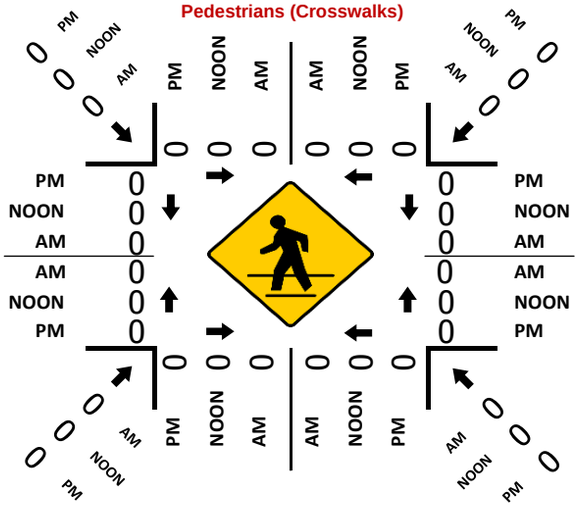
Total Vehicles (PM)



Bikes (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Bell Rd & Joeger Rd
City: Auburn
Control:

Project ID: 17-07774-001
Date: 2017-10-05

Total

NS/EW Streets:	Bell Rd				Bell Rd				Joeger Rd				Joeger Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	10	16	12	0	4	12	2	0	3	15	10	0	10	19	1	0	114
4:15 PM	14	19	9	0	4	9	4	0	4	15	6	0	9	13	2	0	108
4:30 PM	16	11	14	0	3	8	0	0	3	15	8	0	5	16	0	0	99
4:45 PM	4	12	11	0	4	12	3	0	3	12	8	0	7	9	4	0	89
5:00 PM	10	9	17	0	1	8	7	0	1	18	10	0	2	21	1	0	105
5:15 PM	15	7	7	0	0	7	2	0	2	13	10	0	6	13	1	0	83
5:30 PM	17	13	14	0	1	4	2	0	1	22	9	0	6	8	4	0	101
5:45 PM	11	12	12	0	1	12	0	0	1	7	7	0	3	9	2	0	77
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	97	99	96	0	18	72	20	0	18	117	68	0	48	108	15	0	776
APPROACH %'s :	33.22%	33.90%	32.88%	0.00%	16.36%	65.45%	18.18%	0.00%	8.87%	57.64%	33.50%	0.00%	28.07%	63.16%	8.77%	0.00%	
PEAK HR :	**04:00 PM - 05:00 PM**																TOTAL
PEAK HR VOL :	44	58	46	0	15	41	9	0	13	57	32	0	31	57	7	0	410
PEAK HR FACTOR :	0.688	0.763	0.821	0.000	0.938	0.854	0.563	0.000	0.813	0.950	0.800	0.000	0.775	0.750	0.438	0.000	0.899
	0.881				0.855				0.911				0.792				

INTERSECTION TURNING MOVEMENT COUNTS
WEEKDAY

KDA

Prepared by National Data & Surveying Services

SR 49 & Cramer Rd

Peak Hour Turning Movement Count

ID: 17-07774-002
City: Auburn

Day: Thursday
Date: 10/05/2017

PEAK HOURS

AM	NONE
NOON	NONE
PM	04:00 PM - 05:00 PM

COUNT PERIODS

AM	NONE
NOON	NONE
PM	04:00 PM - 06:00 PM

SR 49 — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	8	1153	0	0	1629	PM

Cramer Rd — EASTBOUND

AM	NOON	PM
0	0	28
0	0	0
0	0	8
0	0	0
0	0	19

Cramer Rd — WESTBOUND

PM	NOON	AM
0	0	0
0	0	0
1	0	0
0	0	0
0	0	0

SR 49 — NORTHBOUND

PM	1173	0	20	1621	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

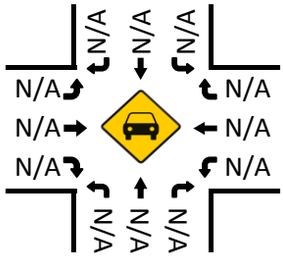
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0

CONTROL

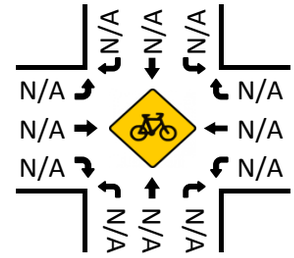
0

	AM	NOON	PM
TEV	0	0	2830
PHF			0.99

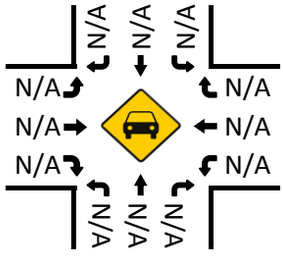
Total Vehicles (AM)



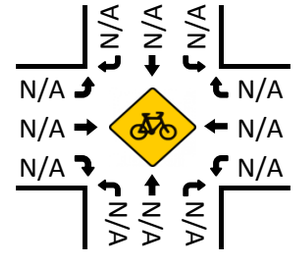
Bikes (AM)



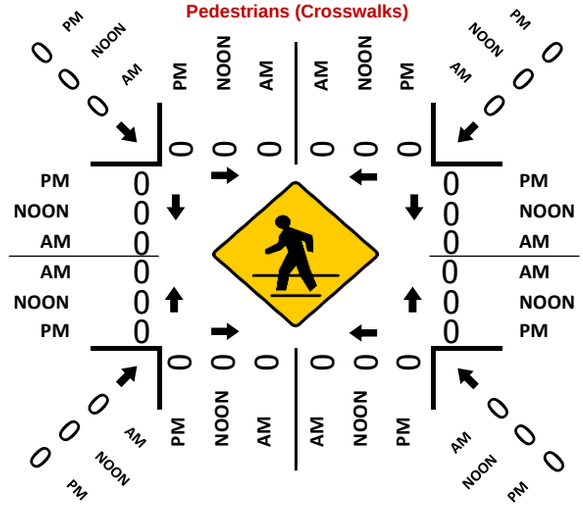
Total Vehicles (Noon)



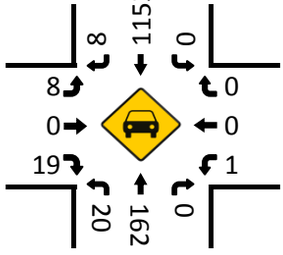
Bikes (NOON)



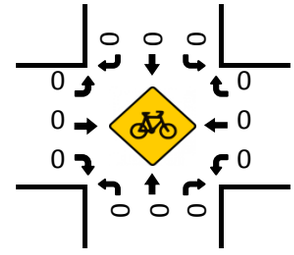
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 49 & Cramer Rd
City: Auburn
Control:

Project ID: 17-07774-002
Date: 2017-10-05

Total

NS/EW Streets:	SR 49				SR 49				Cramer Rd				Cramer Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	3	398	0	0	0	304	1	0	2	0	4	0	0	0	0	0	712
4:15 PM	7	392	0	0	0	292	3	0	1	0	7	0	0	0	0	0	702
4:30 PM	5	413	0	0	0	271	2	0	2	0	5	0	1	0	0	0	699
4:45 PM	5	418	0	0	0	286	2	0	3	0	3	0	0	0	0	0	717
5:00 PM	10	386	0	0	1	267	3	0	0	0	2	0	0	0	0	0	669
5:15 PM	7	418	0	0	0	274	1	0	0	0	7	0	0	0	0	0	707
5:30 PM	6	358	0	0	0	273	2	0	1	0	5	0	0	0	0	0	645
5:45 PM	8	340	0	0	0	241	0	0	0	0	1	0	0	0	0	0	590
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	51	3123	0	0	1	2208	14	0	9	0	34	0	1	0	0	0	5441
APPROACH %'s :	1.61%	98.39%	0.00%	0.00%	0.04%	99.33%	0.63%	0.00%	20.93%	0.00%	79.07%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	**04:00 PM - 05:00 PM**																TOTAL
PEAK HR VOL :	20	1621	0	0	0	1153	8	0	8	0	19	0	1	0	0	0	2830
PEAK HR FACTOR :	0.714	0.969	0.000	0.000	0.000	0.948	0.667	0.000	0.667	0.000	0.679	0.000	0.250	0.000	0.000	0.000	0.987
		0.970				0.952				0.844				0.250			

Prepared by National Data & Surveying Services

Placer Hills Rd & Combie Rd

Peak Hour Turning Movement Count

ID: 17-07774-003
City: Meadow Vista

Day: Thursday
Date: 10/05/2017

PEAK HOURS

NONE
NONE
04:00 PM - 05:00 PM

COUNT PERIODS

NONE
NONE
04:00 PM - 06:00 PM

Placer Hills Rd — SOUTHBOUND

AM	0	0	0	0	0
NOON	0	0	0	0	0
PM	14	115	0	0	140

Combie Rd — EASTBOUND

AM	NOON	PM
0	0	147
0	0	0
0	0	11
0	0	0
0	0	93

Combie Rd — WESTBOUND

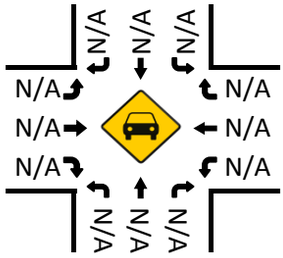
PM	NOON	AM
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

Placer Hills Rd — NORTHBOUND

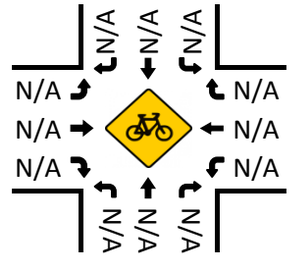
PM	208	0	133	129	0
NOON	0	0	0	0	0
AM	0	0	0	0	0

CONTROL			
	0		
TEV	0 AM	0 NOON	495 PM
PHF			0.88

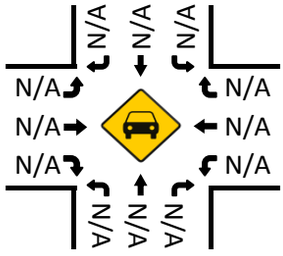
Total Vehicles (AM)



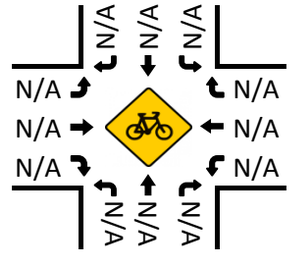
Bikes (AM)



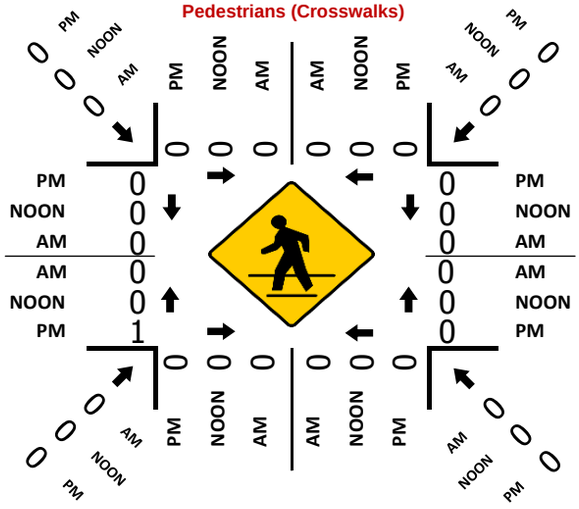
Total Vehicles (Noon)



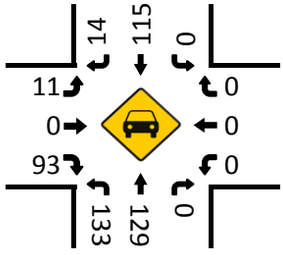
Bikes (NOON)



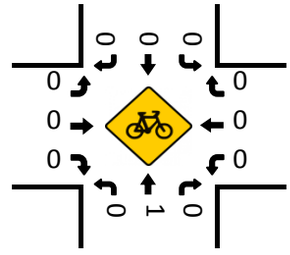
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Placer Hills Rd & Combie Rd
City: Meadow Vista
Control:

Project ID: 17-07774-003
Date: 2017-10-05

Total

NS/EW Streets:	Placer Hills Rd				Placer Hills Rd				Combie Rd				Combie Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	42	29	0	0	0	24	2	0	1	0	25	0	0	0	0	0	123
4:15 PM	32	42	0	0	0	40	4	0	3	0	20	0	0	0	0	0	141
4:30 PM	28	29	0	0	0	26	0	0	3	0	19	0	0	0	0	0	105
4:45 PM	31	29	0	0	0	25	8	0	4	0	29	0	0	0	0	0	126
5:00 PM	28	34	0	0	0	17	7	0	3	0	24	0	0	0	0	0	113
5:15 PM	46	29	0	0	0	19	3	0	9	0	16	0	0	0	0	0	122
5:30 PM	31	22	0	0	0	23	0	0	3	0	17	0	0	0	0	0	96
5:45 PM	31	40	0	0	0	18	5	0	1	0	14	0	0	0	0	0	109
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	269	254	0	0	0	192	29	0	27	0	164	0	0	0	0	0	935
APPROACH %'s :	51.43%	48.57%	0.00%	0.00%	0.00%	86.88%	13.12%	0.00%	14.14%	0.00%	85.86%	0.00%					
PEAK HR :	**04:00 PM - 05:00 PM**																TOTAL
PEAK HR VOL :	133	129	0	0	0	115	14	0	11	0	93	0	0	0	0	0	495
PEAK HR FACTOR :	0.792	0.768	0.000	0.000	0.000	0.719	0.438	0.000	0.688	0.000	0.802	0.000	0.000	0.000	0.000	0.000	0.878
		0.885				0.733				0.788							

Prepared by National Data & Surveying Services

Sierra College Blvd & Delmar Ave

Peak Hour Turning Movement Count

ID: 17-07774-004
City: Loomis

Day: Thursday
Date: 10/05/2017

PEAK HOURS	COUNT PERIODS
NONE	NONE
NONE	NONE
04:30 PM - 05:30 PM	04:00 PM - 06:00 PM

Sierra College Blvd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	3	505	4	0	769	PM

Delmar Ave — EASTBOUND

AM	NOON	PM	
0	0	4	
0	0	0	0
0	0	2	0
0	0	1	0
0	0	2	0
AM	NOON	PM	

Delmar Ave — WESTBOUND

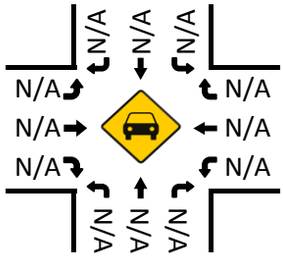
PM	NOON	AM	
4	0	0	0
0	0	0	0
35	0	0	0
0	0	0	0
66	0	0	
PM	NOON	AM	

Sierra College Blvd — NORTHBOUND

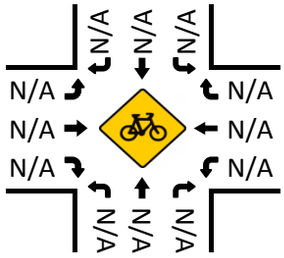
PM	542	0	1	763	61	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

CONTROL			
	0		
TEV	0 AM	0 NOON	1381 PM
PHF			0.94

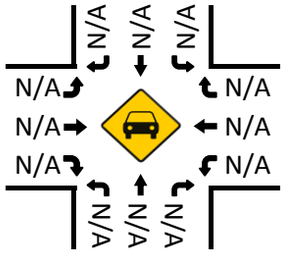
Total Vehicles (AM)



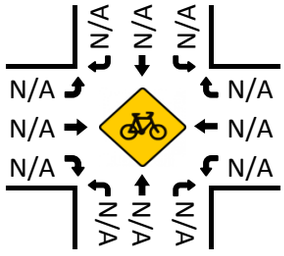
Bikes (AM)



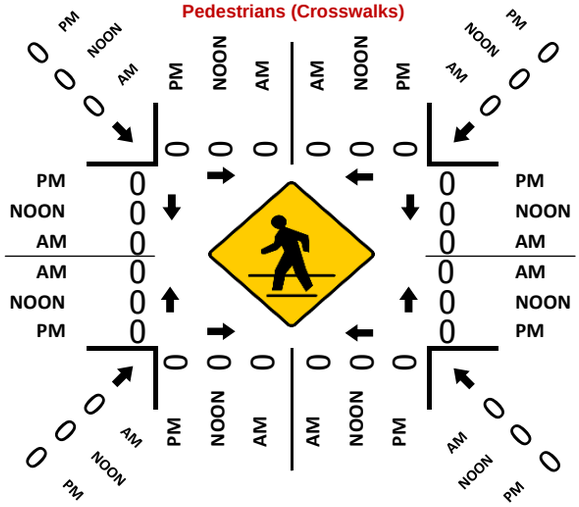
Total Vehicles (Noon)



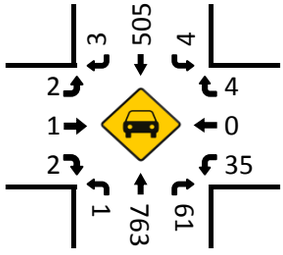
Bikes (NOON)



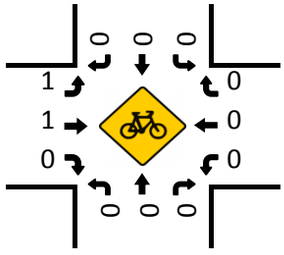
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Sierra College Blvd & Delmar Ave
City: Loomis
Control:

Project ID: 17-07774-004
Date: 2017-10-05

Total

NS/EW Streets:	Sierra College Blvd				Sierra College Blvd				Delmar Ave				Delmar Ave				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	180	6	0	0	104	1	0	3	1	0	0	4	0	1	0	300
4:15 PM	0	179	17	0	2	116	1	0	5	0	1	0	6	0	0	0	327
4:30 PM	0	195	19	0	0	111	0	0	1	0	0	0	8	0	0	0	334
4:45 PM	0	164	11	0	1	146	1	0	0	0	1	0	9	0	2	0	335
5:00 PM	0	212	19	0	2	119	0	0	1	0	1	0	12	0	1	0	367
5:15 PM	1	192	12	0	1	129	2	0	0	1	0	0	6	0	1	0	345
5:30 PM	0	194	16	0	1	107	0	0	0	0	1	0	7	0	2	0	328
5:45 PM	2	132	14	0	1	136	0	0	0	0	0	0	4	1	1	0	291
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	1448	114	0	8	968	5	0	10	2	4	0	56	1	8	0	2627
APPROACH %'s :	0.19%	92.52%	7.28%	0.00%	0.82%	98.67%	0.51%	0.00%	62.50%	12.50%	25.00%	0.00%	86.15%	1.54%	12.31%	0.00%	
PEAK HR :	**04:30 PM - 05:30 PM**																TOTAL
PEAK HR VOL :	1	763	61	0	4	505	3	0	2	1	2	0	35	0	4	0	1381
PEAK HR FACTOR :	0.250	0.900	0.803	0.000	0.500	0.865	0.375	0.000	0.500	0.250	0.500	0.000	0.729	0.000	0.500	0.000	0.941
		0.893				0.865				0.625				0.750			

Prepared by National Data & Surveying Services

Crosby Herold Rd & Wise Rd

Peak Hour Turning Movement Count

ID: 17-07774-005
City: Lincoln

Day: Thursday
Date: 10/05/2017

Crosby Herold Rd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	14	4	1	0	40	PM

0	0	0	0	

Wise Rd — EASTBOUND

AM	NOON	PM	
0	0	101	
0	0	0	0
0	0	29	0
0	0	82	0
0	0	8	0
AM	NOON	PM	

Wise Rd — WESTBOUND

	PM	NOON	AM
0	4	0	0
0	83	0	0
0	2	0	0
0	0	0	0
	84	0	0
	PM	NOON	AM

		0	0	0	0	
PM	14	0	4	7	1	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

Crosby Herold Rd — NORTHBOUND

CONTROL			
0			
TEV	0 AM	0 NOON	239 PM
PHF			0.93

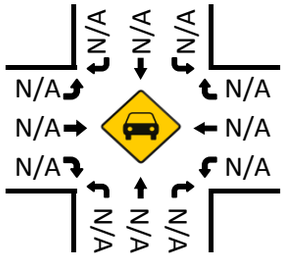
PEAK HOURS

NONE	
NONE	
04:30 PM - 05:30 PM	

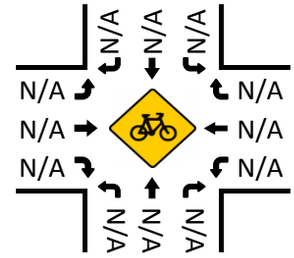
COUNT PERIODS

NONE	
NONE	
04:00 PM - 06:00 PM	

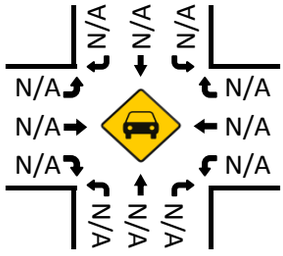
Total Vehicles (AM)



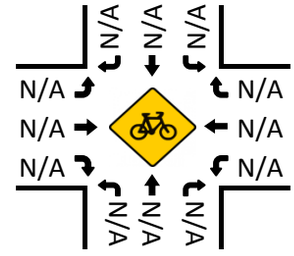
Bikes (AM)



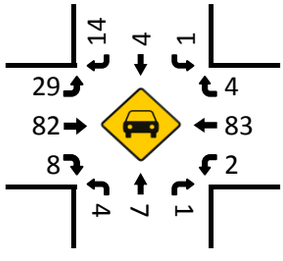
Total Vehicles (Noon)



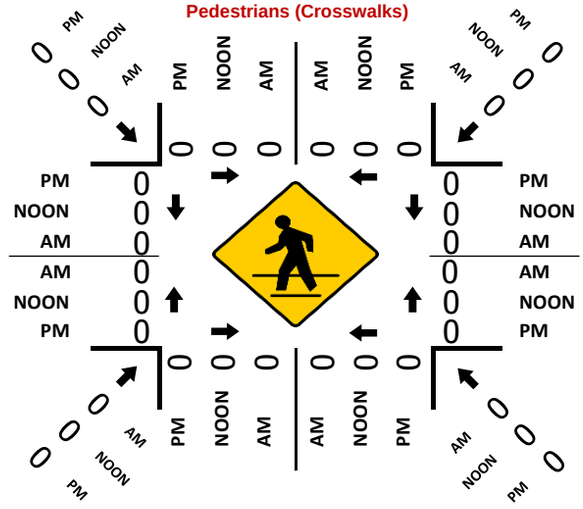
Bikes (NOON)



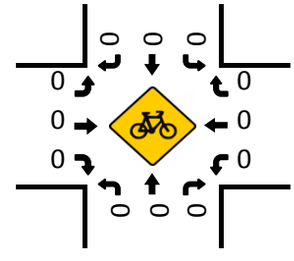
Total Vehicles (PM)



Pedestrians (Crosswalks)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Crosby Herold Rd & Wise Rd
City: Lincoln
Control:

Project ID: 17-07774-005
Date: 2017-10-05

Total

NS/EW Streets:	Crosby Herold Rd				Crosby Herold Rd				Wise Rd				Wise Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	2	1	0	0	0	0	6	0	4	18	0	0	2	14	2	0	49
4:15 PM	1	2	1	0	0	0	1	0	0	17	3	0	0	23	0	0	48
4:30 PM	0	4	0	0	0	0	3	0	10	18	3	0	1	22	3	0	64
4:45 PM	2	0	1	0	1	2	5	0	8	17	2	0	0	23	1	0	62
5:00 PM	2	1	0	0	0	1	2	0	5	26	2	0	1	15	0	0	55
5:15 PM	0	2	0	0	0	1	4	0	6	21	1	0	0	23	0	0	58
5:30 PM	2	1	1	0	1	1	4	0	5	11	1	0	0	18	0	0	45
5:45 PM	2	1	0	0	0	1	5	0	2	15	4	0	0	28	2	0	60
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	11	12	3	0	2	6	30	0	40	143	16	0	4	166	8	0	441
APPROACH %'s :	42.31%	46.15%	11.54%	0.00%	5.26%	15.79%	78.95%	0.00%	20.10%	71.86%	8.04%	0.00%	2.25%	93.26%	4.49%	0.00%	
PEAK HR :	**04:30 PM - 05:30 PM**																TOTAL
PEAK HR VOL :	4	7	1	0	1	4	14	0	29	82	8	0	2	83	4	0	239
PEAK HR FACTOR :	0.500	0.438	0.250	0.000	0.250	0.500	0.700	0.000	0.725	0.788	0.667	0.000	0.500	0.902	0.333	0.000	0.934
	0.750				0.594				0.902				0.856				

Prepared by National Data & Surveying Services

Mt Vernon Rd & Atwood Rd

Peak Hour Turning Movement Count

ID: 17-07774-006
City: Auburn

Day: Thursday
Date: 10/05/2017

PEAK HOURS	NONE										NONE	COUNT PERIODS
	NONE										NONE	
	04:15 PM - 05:15 PM										04:00 PM - 06:00 PM	

Mt Vernon Rd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

Atwood Rd — EASTBOUND

AM	NOON	PM	
0	0	190	⇦
0	0	0	↩ 0
0	0	0	↱ 0
0	0	54	→ 0
0	0	61	↴ 0
AM	NOON	PM	

CONTROL

	0		
TEV	0 AM	0 NOON	485 PM
PHF			0.89

Atwood Rd — WESTBOUND

PM	NOON	AM	
0	0	0	↰ 0
0	120	0	← 0
0	111	0	↶ 0
0	0	0	↷ 0
	123	0	0
PM	NOON	AM	

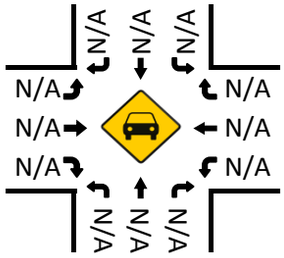
Mt Vernon Rd — NORTHBOUND

PM	172	0	70	0	69	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

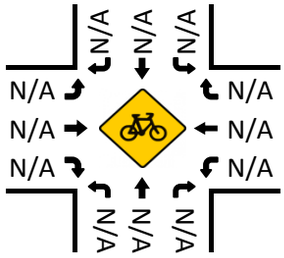
0 0 0 0

0 0 0 0

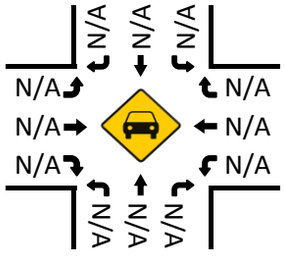
Total Vehicles (AM)



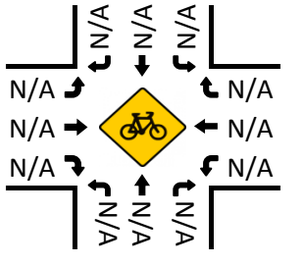
Bikes (AM)



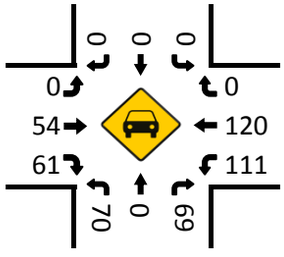
Total Vehicles (Noon)



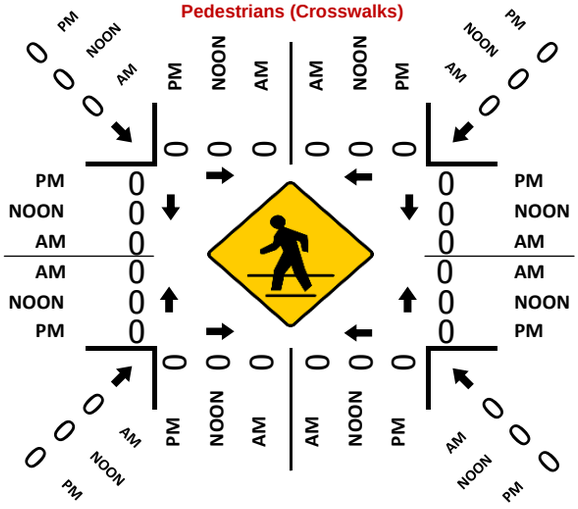
Bikes (NOON)



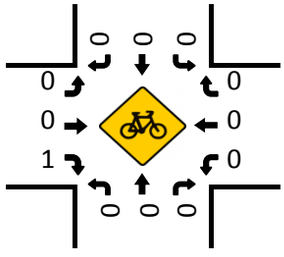
Total Vehicles (PM)



Pedestrians (Crosswalks)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Mt Vernon Rd & Atwood Rd
City: Auburn
Control:

Project ID: 17-07774-006
Date: 2017-10-05

Total

NS/EW Streets:	Mt Vernon Rd				Mt Vernon Rd				Atwood Rd				Atwood Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	23	1	13	0	0	1	0	0	0	15	17	0	28	26	0	0	124
4:15 PM	19	0	19	0	0	0	0	0	0	9	18	0	17	30	0	0	112
4:30 PM	17	0	12	0	0	0	0	0	0	18	15	0	30	31	0	0	123
4:45 PM	18	0	21	0	0	0	0	0	0	15	13	0	22	24	0	0	113
5:00 PM	16	0	17	0	0	0	0	0	0	12	15	0	42	35	0	0	137
5:15 PM	16	0	15	0	1	0	0	0	1	18	9	0	19	21	0	0	100
5:30 PM	11	1	10	0	0	0	0	0	0	6	10	0	16	34	0	0	88
5:45 PM	14	0	13	1	0	0	1	0	0	10	12	0	14	5	0	0	70
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	134	2	120	1	1	1	1	0	1	103	109	0	188	206	0	0	867
APPROACH %'s :	52.14%	0.78%	46.69%	0.39%	33.33%	33.33%	33.33%	0.00%	0.47%	48.36%	51.17%	0.00%	47.72%	52.28%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	70	0	69	0	0	0	0	0	0	54	61	0	111	120	0	0	485
PEAK HR FACTOR :	0.921	0.000	0.821	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.847	0.000	0.661	0.857	0.000	0.000	0.885
		0.891								0.871				0.750			

Prepared by National Data & Surveying Services

McCourtney Rd & Wise Rd

Peak Hour Turning Movement Count

ID: 17-07774-007
City: Lincoln

Day: Thursday
Date: 10/05/2017

PEAK HOURS		COUNT PERIODS
NONE	AM	NONE
NONE	NOON	NONE
04:15 PM - 05:15 PM	PM	04:00 PM - 06:00 PM

McCourtney Rd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	10	39	4	0	65	PM

0 0 0 0

Wise Rd — EASTBOUND

AM	NOON	PM	
0	0	98	
0	0	0	0
0	0	15	0
0	0	88	0
0	0	12	0
AM	NOON	PM	

Wise Rd — WESTBOUND

	PM	NOON	AM
0	6	0	0
0	81	0	0
0	30	0	0
0	0	0	0
	135	0	0
	PM	NOON	AM

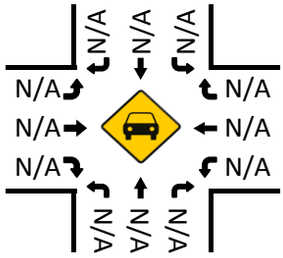
CONTROL			
0			
TEV	0 AM	0 NOON	379 PM
PHF			0.89

0 0 0 0

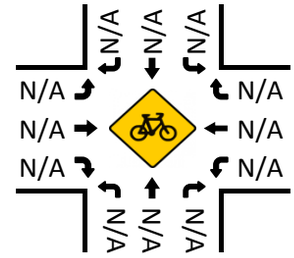
McCourtney Rd — NORTHBOUND

PM	81	0	7	44	43	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

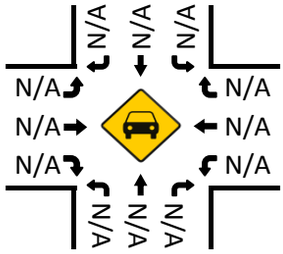
Total Vehicles (AM)



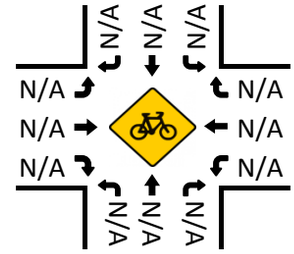
Bikes (AM)



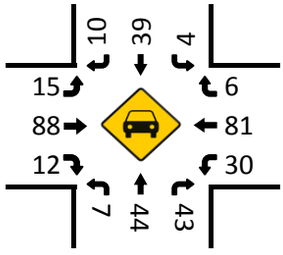
Total Vehicles (Noon)



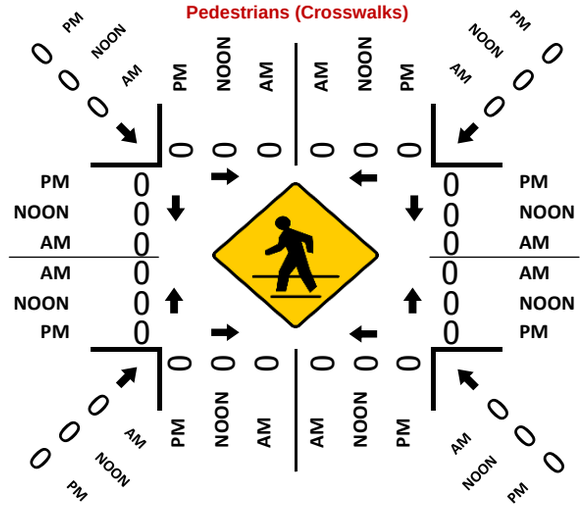
Bikes (NOON)



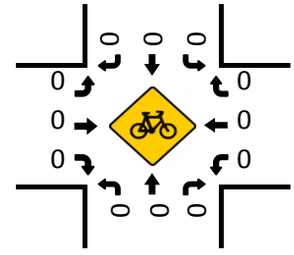
Total Vehicles (PM)



Pedestrians (Crosswalks)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: McCourtney Rd & Wise Rd
City: Lincoln
Control:

Project ID: 17-07774-007
Date: 2017-10-05

Total

NS/EW Streets:	McCourtney Rd				McCourtney Rd				Wise Rd				Wise Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	4	12	12	0	0	9	3	0	3	15	3	0	6	15	3	0	85
4:15 PM	2	7	10	0	1	9	5	0	1	23	0	0	9	18	1	0	86
4:30 PM	1	12	5	0	0	8	2	0	6	27	1	0	3	26	2	0	93
4:45 PM	3	11	13	0	3	8	0	0	5	21	4	0	9	15	2	0	94
5:00 PM	1	14	15	0	0	14	3	0	3	17	7	0	9	22	1	0	106
5:15 PM	1	11	6	0	2	4	2	0	7	20	3	0	3	20	4	0	83
5:30 PM	0	4	8	0	1	7	4	0	6	19	1	0	14	25	1	0	90
5:45 PM	3	9	10	0	0	6	1	0	4	17	0	0	4	16	1	0	71
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	15	80	79	0	7	65	20	0	35	159	19	0	57	157	15	0	708
APPROACH %'s :	8.62%	45.98%	45.40%	0.00%	7.61%	70.65%	21.74%	0.00%	16.43%	74.65%	8.92%	0.00%	24.89%	68.56%	6.55%	0.00%	
PEAK HR :	**04:15 PM - 05:15 PM**																TOTAL
PEAK HR VOL :	7	44	43	0	4	39	10	0	15	88	12	0	30	81	6	0	379
PEAK HR FACTOR :	0.583	0.786	0.717	0.000	0.333	0.696	0.500	0.000	0.625	0.815	0.429	0.000	0.833	0.779	0.750	0.000	0.894
		0.783				0.779				0.846				0.914			

Prepared by National Data & Surveying Services

Garden Bar Rd & Wise Rd

Peak Hour Turning Movement Count

ID: 18-07016-002
City: Lincoln

Day: Wednesday
Date: 01/17/2018

PEAK HOURS		COUNT PERIODS
NONE		NONE
NONE		NONE
04:45 PM - 05:45 PM		04:00 PM - 06:00 PM

Garden Bar Rd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	15	12	0	0	55	PM
	0	0	0	0		

Wise Rd — EASTBOUND

AM	NOON	PM	
0	0	100	
0	0	0	0
0	0	25	0
0	0	62	0
0	0	9	0
AM	NOON	PM	

Wise Rd — WESTBOUND

PM	NOON	AM	
0	0	0	0
73	0	0	0
10	0	0	0
0	0	0	0
73	0	0	
PM	NOON	AM	

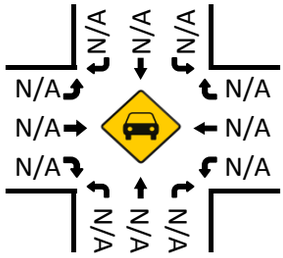
CONTROL

	0		
TEV	0 AM	0 NOON	259 PM
PHF			0.85

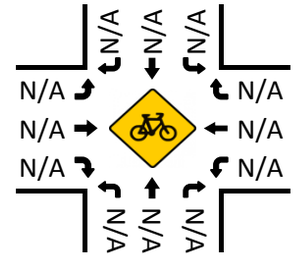
Garden Bar Rd — NORTHBOUND

PM	31	0	12	30	11	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM
		0	0	0	0	

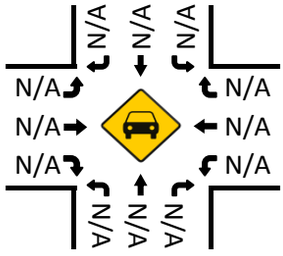
Total Vehicles (AM)



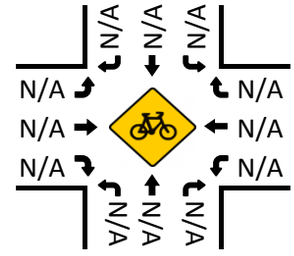
Bikes (AM)



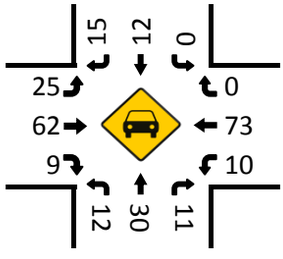
Total Vehicles (Noon)



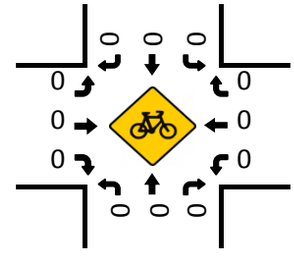
Bikes (NOON)



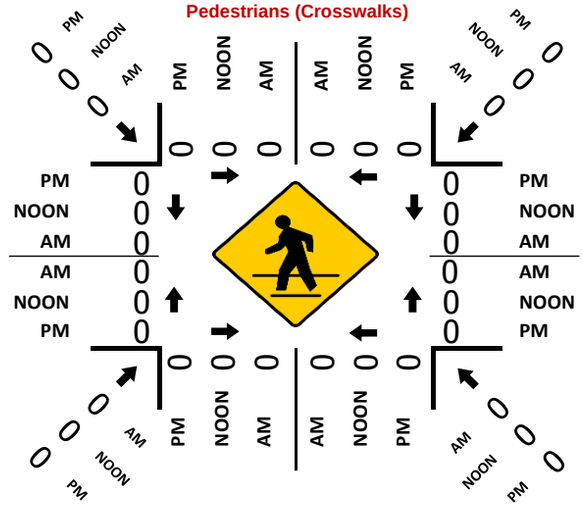
Total Vehicles (PM)



Bikes (PM)



Pedestrians (Crosswalks)



ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

5765-19

File Name : 18-07016-002
Date : 01/17/2018

Unshifted Count = All Vehicles & Uturns

	Garden Bar Rd Southbound					Wise Rd Westbound					Garden Bar Rd Northbound					Wise Rd Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
16:00	0	1	4	0	5	5	13	0	0	18	2	14	7	0	23	10	9	0	0	19	65	0
16:15	0	2	3	0	5	1	13	0	0	14	0	8	4	0	12	6	18	7	0	31	62	0
16:30	0	2	5	0	7	1	13	1	0	15	2	4	5	0	11	6	8	1	0	15	48	0
16:45	0	4	5	0	9	3	18	0	0	21	4	5	2	0	11	9	16	2	0	27	68	0
Total	0	9	17	0	26	10	57	1	0	68	8	31	18	0	57	31	51	10	0	92	243	0
17:00	0	4	3	0	7	1	12	0	0	13	3	11	4	0	18	6	16	2	0	24	62	0
17:15	0	2	3	0	5	4	29	0	0	33	2	6	3	0	11	5	19	3	0	27	76	0
17:30	0	2	4	0	6	2	14	0	0	16	3	8	2	0	13	5	11	2	0	18	53	0
17:45	0	3	5	0	8	1	16	1	0	18	2	7	6	0	15	1	11	2	0	14	55	0
Total	0	11	15	0	26	8	71	1	0	80	10	32	15	0	57	17	57	9	0	83	246	0
Grand Total	0	20	32	0	52	18	128	2	0	148	18	63	33	0	114	48	108	19	0	175	489	0
Apprch %	0.0%	38.5%	61.5%	0.0%		12.2%	86.5%	1.4%	0.0%		15.8%	55.3%	28.9%	0.0%		27.4%	61.7%	10.9%	0.0%			
Total %	0.0%	4.1%	6.5%	0.0%	10.6%	3.7%	26.2%	0.4%	0.0%	30.3%	3.7%	12.9%	6.7%	0.0%	23.3%	9.8%	22.1%	3.9%	0.0%	35.8%	100.0%	

PM PEAK HOUR	Garden Bar Rd Southbound					Wise Rd Westbound					Garden Bar Rd Northbound					Wise Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	0	4	5	0	9	3	18	0	0	21	4	5	2	0	11	9	16	2	0	27	68
17:00	0	4	3	0	7	1	12	0	0	13	3	11	4	0	18	6	16	2	0	24	62
17:15	0	2	3	0	5	4	29	0	0	33	2	6	3	0	11	5	19	3	0	27	76
17:30	0	2	4	0	6	2	14	0	0	16	3	8	2	0	13	5	11	2	0	18	53
Total Volume	0	12	15	0	27	10	73	0	0	83	12	30	11	0	53	25	62	9	0	96	259
% App Total	0.0%	44.4%	55.6%	0.0%		12.0%	88.0%	0.0%	0.0%		22.6%	56.6%	20.8%	0.0%		26.0%	64.6%	9.4%	0.0%		
PHF	.000	.750	.750	.000	.750	.625	.629	.000	.000	.629	.750	.682	.688	.000	.736	.694	.816	.750	.000	.889	.852

Prepared by National Data & Surveying Services

Fowler Rd & SR 193

Peak Hour Turning Movement Count

ID: 17-07774-009
City: Newcastle

Day: Thursday
Date: 10/05/2017

	PEAK HOURS	COUNT PERIODS
AM	NONE	NONE
NOON	NONE	NONE
PM	04:00 PM - 05:00 PM	04:00 PM - 06:00 PM

Fowler Rd — SOUTHBOUND

	Right	Thru	Left	U-Turn	Out
AM	0	0	0	0	0
NOON	0	0	0	0	0
PM	123	0	13	0	183
	0	0	0	0	

SR 193 — EASTBOUND

	AM	NOON	PM	
Out	0	0	350	
U-Turn	0	0	0	0
Left	0	0	162	0
Thru	0	0	266	0
Right	0	0	0	0

SR 193 — WESTBOUND

		PM	NOON	AM
Right	0	21	0	0
Thru	0	227	0	0
Left	0	0	0	0
U-Turn	0	0	0	0
Out		279	0	0

Fowler Rd — NORTHBOUND

	Out	U-Turn	Left	Thru	Right
		0	0	0	0
PM	0	0	0	0	0
NOON	0	0	0	0	0
AM	0	0	0	0	0

CONTROL

0

	AM	NOON	PM
TEV	0	0	812
PHF			0.94

Total Vehicles (AM)

				Southbound			Westbound			Northbound		
Eastbound	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Total Vehicles (Noon)

All movements: N/A

Total Vehicles (PM)

	Left	Thru	Right
Southbound	13	0	123
Eastbound	162	266	0
Westbound	0	227	21
Northbound	0	0	0

Bikes (AM)

All movements: N/A

Bikes (NOON)

All movements: N/A

Bikes (PM)

	Left	Thru	Right
Southbound	0	0	0
Eastbound	2	0	0
Westbound	0	0	0
Northbound	0	0	0

Pedestrians (Crosswalks)

	AM	NOON	PM
North crosswalk (westbound)	0	0	0
North crosswalk (eastbound)	0	0	0
West crosswalk (southbound)	0	0	0
West crosswalk (northbound)	0	0	0
East crosswalk (southbound)	0	0	0
East crosswalk (northbound)	0	0	0
South crosswalk (eastbound)	0	0	0
South crosswalk (westbound)	0	0	0
Diagonal NW	0	0	0
Diagonal NE	0	0	0
Diagonal SW	0	0	0
Diagonal SE	0	0	0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Fowler Rd & SR 193
City: Newcastle
Control:

Project ID: 17-07774-009
Date: 2017-10-05

Total

NS/EW Streets:	Fowler Rd				Fowler Rd				SR 193				SR 193				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	1	0	43	0	45	60	0	0	0	57	10	0	216
4:15 PM	0	0	0	0	2	0	25	0	34	68	0	0	0	56	4	0	189
4:30 PM	0	0	0	0	2	0	26	0	46	63	0	0	0	50	4	0	191
4:45 PM	0	0	0	0	8	0	29	0	37	75	0	0	0	64	3	0	216
5:00 PM	0	0	0	0	3	0	25	0	34	62	0	0	0	60	5	0	189
5:15 PM	0	0	0	0	0	0	37	0	46	64	0	1	0	58	5	0	211
5:30 PM	0	0	0	0	2	0	18	0	45	55	0	0	0	56	4	0	180
5:45 PM	0	0	0	0	0	0	25	0	30	39	0	0	0	46	5	0	145
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	18	0	228	0	317	486	0	1	0	447	40	0	1537
APPROACH %'s :					7.32%	0.00%	92.68%	0.00%	39.43%	60.45%	0.00%	0.12%	0.00%	91.79%	8.21%	0.00%	
PEAK HR :	**04:00 PM - 05:00 PM**																TOTAL
PEAK HR VOL :	0	0	0	0	13	0	123	0	162	266	0	0	0	227	21	0	812
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.406	0.000	0.715	0.000	0.880	0.887	0.000	0.000	0.000	0.887	0.525	0.000	0.940
						0.773				0.955				0.925			

Prepared by National Data & Surveying Services

Gold Hill Rd & SR 193

Peak Hour Turning Movement Count

ID: 17-07774-010
City: Newcastle

Day: Thursday
Date: 10/05/2017

	PEAK HOURS	COUNT PERIODS
AM	NONE	NONE
NOON	NONE	NONE
PM	05:00 PM - 06:00 PM	04:00 PM - 06:00 PM

Gold Hill Rd — SOUTHBOUND

	Right	Thru	Left	U-Turn	Exit
AM	0	0	0	0	0
NOON	0	0	0	0	0
PM	19	0	34	0	96
	0	0	0	0	

SR 193 — WESTBOUND

	PM	NOON	AM
0 Right	60	0	0
0 Thru	204	0	0
0 Left	0	0	0
0 U-Turn	0	0	0
Exit	223	0	0

SR 193 — EASTBOUND

	AM	NOON	PM
Exit	0	0	223
U-Turn 0	0	0	0
Left 0	0	0	36
Thru 0	0	0	189
Right 0	0	0	0

Gold Hill Rd — NORTHBOUND

	Exit	U-Turn	Left	Thru	Right
		0	0	0	0
PM	0	0	0	0	0
NOON	0	0	0	0	0
AM	0	0	0	0	0

CONTROL

0

	AM	NOON	PM
TEV	0	0	542
PHF			0.86

Total Vehicles (AM)

Southbound: N/A N/A N/A; Eastbound: N/A N/A N/A; Westbound: N/A N/A N/A; Northbound: N/A N/A N/A

Total Vehicles (Noon)

Southbound: N/A N/A N/A; Eastbound: N/A N/A N/A; Westbound: N/A N/A N/A; Northbound: N/A N/A N/A

Total Vehicles (PM)

Southbound: 19 (right), 0 (thru), 34 (left)
Eastbound: 36 (left), 189 (thru), 0 (right)
Westbound: 60 (right), 204 (thru), 0 (left)
Northbound: 0 0 0

Bikes (AM)

Southbound: N/A N/A N/A; Eastbound: N/A N/A N/A; Westbound: N/A N/A N/A; Northbound: N/A N/A N/A

Bikes (NOON)

Southbound: N/A N/A N/A; Eastbound: N/A N/A N/A; Westbound: N/A N/A N/A; Northbound: N/A N/A N/A

Bikes (PM)

Southbound: 0 0 0; Eastbound: 0 0 0; Westbound: 0 0 0; Northbound: 0 0 0

Pedestrians (Crosswalks)

Crosswalk	AM	NOON	PM
North (westward)	0	0	0
North (eastward)	0	0	0
West (southward)	0	0	0
West (northward)	0	0	0
East (southward)	0	0	0
East (northward)	0	0	0
South (eastward)	0	0	0
South (westward)	0	0	0
NW corner (diagonal)	0	0	0
NE corner (diagonal)	0	0	0
SW corner (diagonal)	0	0	0
SE corner (diagonal)	0	0	0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Gold Hill Rd & SR 193
City: Newcastle
Control:

Project ID: 17-07774-010
Date: 2017-10-05

Total

NS/EW Streets:	Gold Hill Rd				Gold Hill Rd				SR 193				SR 193				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	4	0	7	0	10	38	0	0	0	49	21	0	129
4:15 PM	0	0	0	0	9	0	7	0	12	50	0	0	0	44	15	0	137
4:30 PM	0	0	0	0	12	0	4	0	10	39	0	0	0	39	13	0	117
4:45 PM	0	0	0	0	8	0	6	0	5	52	0	0	0	44	9	0	124
5:00 PM	0	0	0	0	14	0	3	0	11	54	0	0	0	63	12	0	157
5:15 PM	0	0	0	0	5	0	6	0	9	46	0	0	0	57	16	0	139
5:30 PM	0	0	0	0	9	0	7	0	9	37	0	0	0	42	17	0	121
5:45 PM	0	0	0	0	6	0	3	0	7	52	0	0	0	42	15	0	125
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	67	0	43	0	73	368	0	0	0	380	118	0	1049
APPROACH %'s :					60.91%	0.00%	39.09%	0.00%	16.55%	83.45%	0.00%	0.00%	0.00%	76.31%	23.69%	0.00%	
PEAK HR :	**05:00 PM - 06:00 PM**																TOTAL
PEAK HR VOL :	0	0	0	0	34	0	19	0	36	189	0	0	0	204	60	0	542
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.607	0.000	0.679	0.000	0.818	0.875	0.000	0.000	0.000	0.810	0.882	0.000	0.863
						0.779				0.865				0.880			

Prepared by National Data & Surveying Services

Lozanos Rd & Wise Rd

Peak Hour Turning Movement Count

ID: 17-07774-012
City: Newcastle

Day: Thursday
Date: 10/05/2017

PEAK HOURS		COUNT PERIODS
NONE		NONE
NONE		NONE
04:00 PM - 05:00 PM		04:00 PM - 06:00 PM

Lozanos Rd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	1	PM

0 0 0 0

Wise Rd — EASTBOUND

AM	NOON	PM	
0	0	79	
0	0	0	0
0	0	1	0
0	0	18	0
0	0	42	0
AM	NOON	PM	

Wise Rd — WESTBOUND

	PM	NOON	AM
0	0	0	0
0	34	0	0
0	5	0	0
0	0	0	0
	30	0	0
	PM	NOON	AM

CONTROL

0

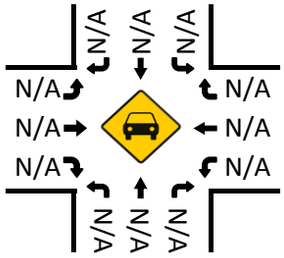
	AM	NOON	PM
TEV	0	0	157
PHF			0.84

0 0 0 0

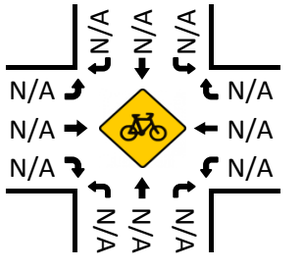
Lozanos Rd — NORTHBOUND

PM	47	0	45	0	12	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

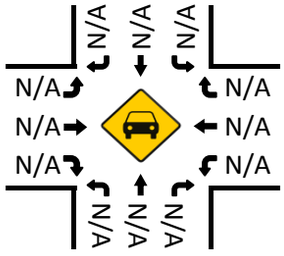
Total Vehicles (AM)



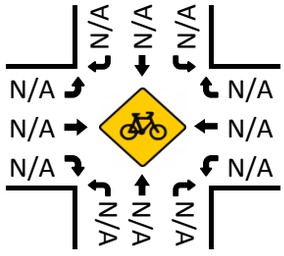
Bikes (AM)



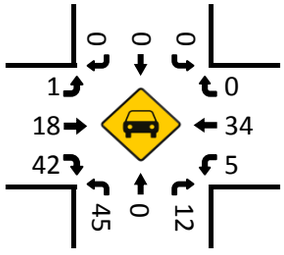
Total Vehicles (Noon)



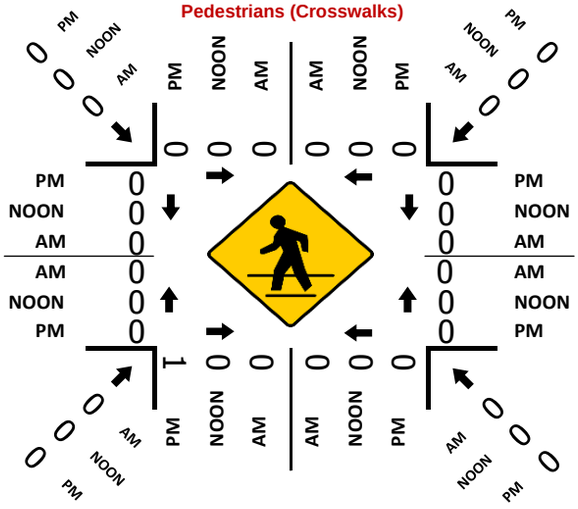
Bikes (NOON)



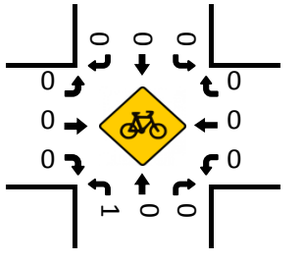
Total Vehicles (PM)



Pedestrians (Crosswalks)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Lozanos Rd & Wise Rd
City: Newcastle
Control:

Project ID: 17-07774-012
Date: 2017-10-05

Total

NS/EW Streets:	Lozanos Rd				Lozanos Rd				Wise Rd				Wise Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	11	0	3	0	0	0	0	0	1	3	8	0	1	7	0	0	34
4:15 PM	12	0	3	0	0	0	0	0	0	5	12	0	1	14	0	0	47
4:30 PM	15	0	3	0	0	0	0	0	0	5	12	0	1	5	0	0	41
4:45 PM	7	0	3	0	0	0	0	0	0	5	10	0	2	8	0	0	35
5:00 PM	12	0	2	0	0	0	0	0	0	5	8	0	0	6	0	0	33
5:15 PM	15	0	0	0	0	0	0	0	0	7	8	0	1	6	0	0	37
5:30 PM	14	0	0	0	0	0	0	0	0	4	4	0	2	5	0	0	29
5:45 PM	14	0	2	0	0	0	0	0	0	7	5	1	1	3	0	0	33
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	100	0	16	0	0	0	0	0	1	41	67	1	9	54	0	0	289
APPROACH %'s :	86.21%	0.00%	13.79%	0.00%					0.91%	37.27%	60.91%	0.91%	14.29%	85.71%	0.00%	0.00%	
PEAK HR :	**04:00 PM - 05:00 PM**																TOTAL
PEAK HR VOL :	45	0	12	0	0	0	0	0	1	18	42	0	5	34	0	0	157
PEAK HR FACTOR :	0.750	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.250	0.900	0.875	0.000	0.625	0.607	0.000	0.000	0.835
		0.792								0.897				0.650			

Prepared by National Data & Surveying Services

Wise Rd & Crater Hill Rd

Peak Hour Turning Movement Count

ID: 18-07016-001
City: Auburn

Day: Wednesday
Date: 01/17/2018

PEAK HOURS

NONE
NONE
04:00 PM - 05:00 PM

COUNT PERIODS

NONE
NONE
04:00 PM - 06:00 PM

Wise Rd — SOUTHBOUND

AM	0	0	0	0	0
NOON	0	0	0	0	0
PM	0	33	8	0	54

Crater Hill Rd — EASTBOUND

AM	NOON	PM
0	0	21
0	0	0
0	0	2
0	0	12
0	0	10

Crater Hill Rd — WESTBOUND

PM	NOON	AM
12	0	0
7	0	0
11	0	0
0	0	0
27	0	0

CONTROL

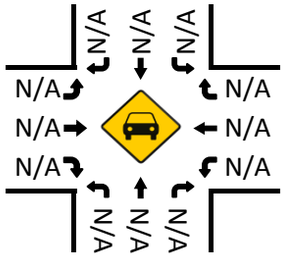
0

	AM	NOON	PM
TEV	0	0	156
PHF			0.79

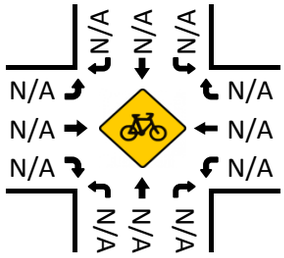
Wise Rd — NORTHBOUND

PM	54	0	14	40	7
NOON	0	0	0	0	0
AM	0	0	0	0	0

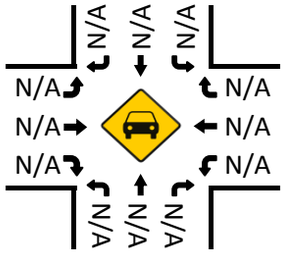
Total Vehicles (AM)



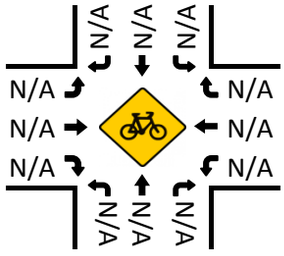
Bikes (AM)



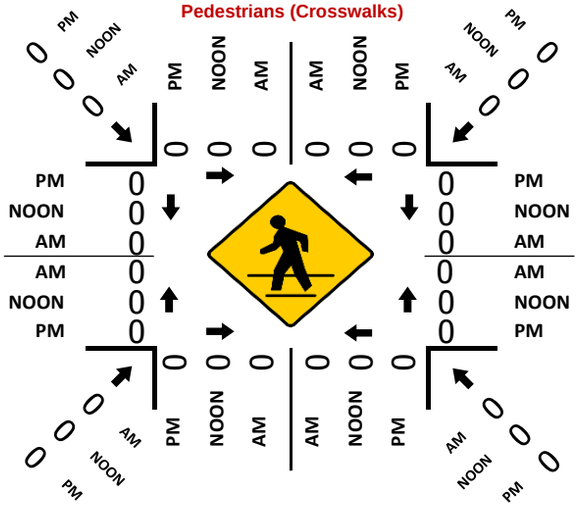
Total Vehicles (Noon)



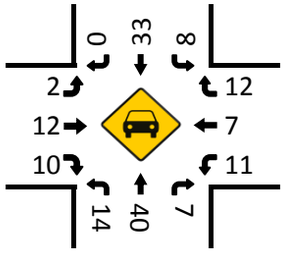
Bikes (NOON)



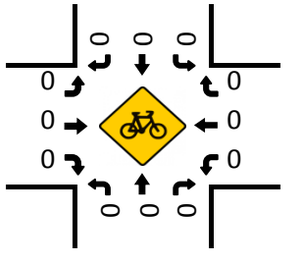
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



ALL TRAFFIC DATA

(916) 771-8700
orders@atdtraffic.com

5765-19

File Name : 18-07016-001
Date : 01/17/2018

Unshifted Count = All Vehicles & Uturns

	Wise Rd Southbound					Crater Hill Rd Westbound					Wise Rd Northbound					Crater Hill Rd Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
16:00	0	4	0	0	4	3	2	4	0	9	5	11	0	0	16	1	3	2	0	6	35	0
16:15	3	6	0	0	9	1	1	1	0	3	2	8	6	0	16	0	3	5	0	8	36	0
16:30	1	11	0	0	12	5	3	3	0	11	7	13	0	0	20	1	3	2	0	6	49	0
16:45	4	12	0	0	16	2	1	4	0	7	0	8	1	0	9	0	3	1	0	4	36	0
Total	8	33	0	0	41	11	7	12	0	30	14	40	7	0	61	2	12	10	0	24	156	0
17:00	1	4	1	0	6	2	0	2	0	4	2	12	1	0	15	0	1	3	0	4	29	0
17:15	0	10	0	0	10	1	4	1	0	6	5	9	3	0	17	0	2	2	0	4	37	0
17:30	1	9	0	0	10	0	1	3	0	4	1	8	1	0	10	0	3	4	0	7	31	0
17:45	0	10	0	0	10	1	3	3	0	7	4	8	0	0	12	0	0	2	0	2	31	0
Total	2	33	1	0	36	4	8	9	0	21	12	37	5	0	54	0	6	11	0	17	128	0
Grand Total	10	66	1	0	77	15	15	21	0	51	26	77	12	0	115	2	18	21	0	41	284	0
Apprch %	13.0%	85.7%	1.3%	0.0%		29.4%	29.4%	41.2%	0.0%		22.6%	67.0%	10.4%	0.0%		4.9%	43.9%	51.2%	0.0%			
Total %	3.5%	23.2%	0.4%	0.0%	27.1%	5.3%	5.3%	7.4%	0.0%	18.0%	9.2%	27.1%	4.2%	0.0%	40.5%	0.7%	6.3%	7.4%	0.0%	14.4%	100.0%	

PM PEAK HOUR	Wise Rd Southbound					Crater Hill Rd Westbound					Wise Rd Northbound					Crater Hill Rd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:00 to 17:00																					
Peak Hour For Entire Intersection Begins at 16:00																					
16:00	0	4	0	0	4	3	2	4	0	9	5	11	0	0	16	1	3	2	0	6	35
16:15	3	6	0	0	9	1	1	1	0	3	2	8	6	0	16	0	3	5	0	8	36
16:30	1	11	0	0	12	5	3	3	0	11	7	13	0	0	20	1	3	2	0	6	49
16:45	4	12	0	0	16	2	1	4	0	7	0	8	1	0	9	0	3	1	0	4	36
Total Volume	8	33	0	0	41	11	7	12	0	30	14	40	7	0	61	2	12	10	0	24	156
% App Total	19.5%	80.5%	0.0%	0.0%		36.7%	23.3%	40.0%	0.0%		23.0%	65.6%	11.5%	0.0%		8.3%	50.0%	41.7%	0.0%		
PHF	.500	.688	.000	.000	.641	.550	.583	.750	.000	.682	.500	.769	.292	.000	.763	.500	1.000	.500	.000	.750	.796

Prepared by National Data & Surveying Services

Garden Bar Rd & Wise Rd

Peak Hour Turning Movement Count

ID: 18-07016-002
City: Lincoln

Day: Wednesday
Date: 01/17/2018

PEAK HOURS		COUNT PERIODS
NONE		NONE
NONE		NONE
04:45 PM - 05:45 PM		04:00 PM - 06:00 PM

Garden Bar Rd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	15	12	0	0	55	PM

0 0 0 0

Wise Rd — EASTBOUND

AM	NOON	PM	
0	0	100	
0	0	0	0
0	0	25	0
0	0	62	0
0	0	9	0
AM	NOON	PM	

Wise Rd — WESTBOUND

PM	NOON	AM	
0	0	0	0
0	73	0	0
0	10	0	0
0	0	0	0
	73	0	0
PM	NOON	AM	

CONTROL

0

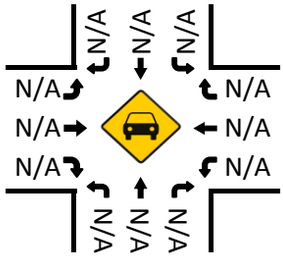
	AM	NOON	PM
TEV	0	0	259
PHF			0.85

0 0 0 0

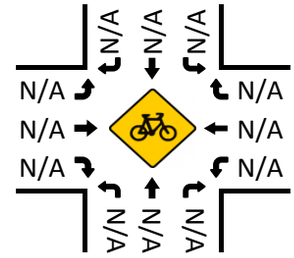
Garden Bar Rd — NORTHBOUND

PM	31	0	12	30	11	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

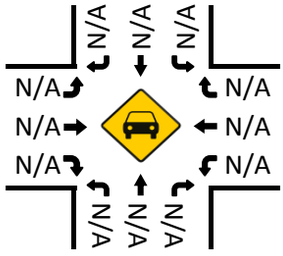
Total Vehicles (AM)



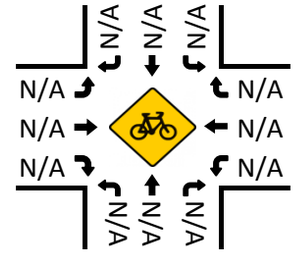
Bikes (AM)



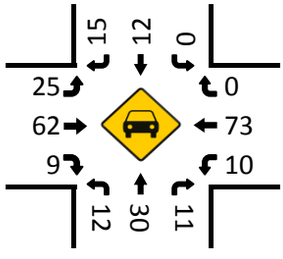
Total Vehicles (Noon)



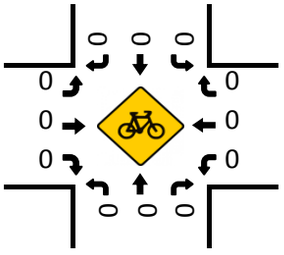
Bikes (NOON)



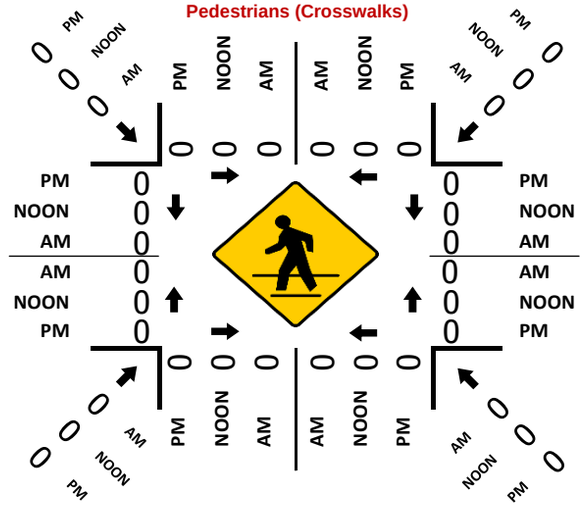
Total Vehicles (PM)



Bikes (PM)



Pedestrians (Crosswalks)



TECHNICAL APPENDIX 2 OF 4

FOR

PLACER COUNTY WINERY AND FARM BREWERY ORDINANCE TRAFFIC IMPACT ANALYSIS

Placer County, California

Prepared For:

RANEY PLANNING & MANAGEMENT
1501 Sports Drive
Sacramento, CA 95834

Prepared By:

KD Anderson & Associates, Inc.
3853 Taylor Road, Suite G
Loomis, CA 95650
(916) 660-1555

April 10, 2019

Job No. 5765-19

DAILY COUNTS
SATURDAY

KDA

Prepared by NDS/ATD

VOLUME

Wise Rd Bet. McCourtney Rd & Crosby Herold Rd

Day: Saturday
Date: 6/10/2017

City: Lincoln
Project #: CA17_7498_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,367	1,347	2,714

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			2		1		3		12:00			28		22		50	
00:15			2		2		4		12:15			21		26		47	
00:30			3		1		4		12:30			23		18		41	
00:45			2	9	3	7	5	16	12:45			29	101	24	90	53	191
01:00			1		1		2		13:00			26		15		41	
01:15			2		1		3		13:15			31		22		53	
01:30			1		3		4		13:30			23		16		39	
01:45			2	6	2	7	4	13	13:45			21	101	14	67	35	168
02:00			1		1		2		14:00			25		34		59	
02:15			1		3		4		14:15			24		22		46	
02:30			1		0		1		14:30			26		27		53	
02:45			1	4	1	5	2	9	14:45			22	97	32	115	54	212
03:00			0		0		0		15:00			30		22		52	
03:15			1		1		2		15:15			28		25		53	
03:30			0		0		0		15:30			25		26		51	
03:45			0	1	1	2	1	3	15:45			23	106	24	97	47	203
04:00			2		0		2		16:00			34		30		64	
04:15			4		1		5		16:15			27		24		51	
04:30			3		1		4		16:30			25		35		60	
04:45			2	11	1	3	3	14	16:45			20	106	32	121	52	227
05:00			3		6		9		17:00			32		28		60	
05:15			5		7		12		17:15			16		34		50	
05:30			6		6		12		17:30			19		16		35	
05:45			5	19	5	24	10	43	17:45			22	89	20	98	42	187
06:00			5		7		12		18:00			21		24		45	
06:15			7		8		15		18:15			29		21		50	
06:30			13		11		24		18:30			21		18		39	
06:45			15	40	12	38	27	78	18:45			15	86	19	82	34	168
07:00			10		11		21		19:00			11		12		23	
07:15			11		12		23		19:15			13		17		30	
07:30			13		10		23		19:30			12		14		26	
07:45			16	50	18	51	34	101	19:45			14	50	16	59	30	109
08:00			15		20		35		20:00			11		15		26	
08:15			14		13		27		20:15			10		13		23	
08:30			23		16		39		20:30			13		12		25	
08:45			17	69	16	65	33	134	20:45			15	49	11	51	26	100
09:00			19		27		46		21:00			14		17		31	
09:15			23		19		42		21:15			12		11		23	
09:30			15		11		26		21:30			10		8		18	
09:45			17	74	21	78	38	152	21:45			8	44	4	40	12	84
10:00			18		24		42		22:00			9		8		17	
10:15			19		36		55		22:15			11		7		18	
10:30			15		21		36		22:30			11		9		20	
10:45			24	76	31	112	55	188	22:45			10	41	4	28	14	69
11:00			22		29		51		23:00			15		5		20	
11:15			22		21		43		23:15			10		4		14	
11:30			35		22		57		23:30			8		4		12	
11:45			19	98	19	91	38	189	23:45			7	40	3	16	10	56
TOTALS				457		483		940	TOTALS				910		864		1774
SPLIT %				48.6%		51.4%		34.6%	SPLIT %				51.3%		48.7%		65.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,367	1,347	2,714

AM Peak Hour			11:15	10:15	10:45	PM Peak Hour			15:15	16:30	16:00
AM Pk Volume			104	117	206	PM Pk Volume			110	129	227
Pk Hr Factor			0.743	0.813	0.904	Pk Hr Factor			0.809	0.921	0.887
7 - 9 Volume	0	0	119	116	235	4 - 6 Volume	0	0	195	219	414
7 - 9 Peak Hour			08:00	07:45	07:45	4 - 6 Peak Hour			16:00	16:30	16:00
7 - 9 Pk Volume	0	0	69	67	135	4 - 6 Pk Volume	0	0	106	129	227
Pk Hr Factor	0.000	0.000	0.750	0.838	0.865	Pk Hr Factor	0.000	0.000	0.779	0.921	0.887

Prepared by NDS/ATD

VOLUME

Wise Rd Bet. Garden Bar Rd & Wally Allan Rd

Day: Saturday
Date: 6/10/2017

City: Lincoln
Project #: CA17_7498_002

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	637	667	1,304

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			1		1		2		12:00			11		10		21	
00:15			1		5		6		12:15			10		14		24	
00:30			2		2		4		12:30			15		14		29	
00:45			1	5	2	10	3	15	12:45			10	46	13	51	23	97
01:00			1		1		2		13:00			9		8		17	
01:15			0		1		1		13:15			9		12		21	
01:30			1		1		2		13:30			13		10		23	
01:45			1	3	1	4	2	7	13:45			11	42	15	45	26	87
02:00			1		1		2		14:00			16		12		28	
02:15			1		1		2		14:15			14		10		24	
02:30			1		0		1		14:30			13		9		22	
02:45			1	4	1	3	2	7	14:45			18	61	10	41	28	102
03:00			0		0		0		15:00			19		12		31	
03:15			1		1		2		15:15			19		13		32	
03:30			0		0		0		15:30			15		10		25	
03:45			1	2	1	2	2	4	15:45			13	66	11	46	24	112
04:00			1		0		1		16:00			12		12		24	
04:15			0		1		1		16:15			18		11		29	
04:30			1		4		5		16:30			15		16		31	
04:45			1	3	1	6	2	9	16:45			12	57	13	52	25	109
05:00			1		3		4		17:00			11		15		26	
05:15			3		5		8		17:15			15		13		28	
05:30			2		5		7		17:30			11		10		21	
05:45			1	7	3	16	4	23	17:45			14	51	7	45	21	96
06:00			1		4		5		18:00			10		6		16	
06:15			2		4		6		18:15			10		11		21	
06:30			5		12		17		18:30			9		8		17	
06:45			6	14	3	23	9	37	18:45			7	36	5	30	12	66
07:00			6		8		14		19:00			4		4		8	
07:15			6		6		12		19:15			7		6		13	
07:30			2		8		10		19:30			5		3		8	
07:45			4	18	4	26	8	44	19:45			3	19	7	20	10	39
08:00			6		12		18		20:00			2		5		7	
08:15			7		9		16		20:15			4		4		8	
08:30			4		11		15		20:30			2		10		12	
08:45			11	28	8	40	19	68	20:45			7	15	8	27	15	42
09:00			12		9		21		21:00			3		11		14	
09:15			9		8		17		21:15			6		7		13	
09:30			8		6		14		21:30			2		4		6	
09:45			11	40	7	30	18	70	21:45			4	15	5	27	9	42
10:00			11		11		22		22:00			4		2		6	
10:15			8		9		17		22:15			6		4		10	
10:30			6		6		12		22:30			4		11		15	
10:45			9	34	13	39	22	73	22:45			2	16	8	25	10	41
11:00			15		12		27		23:00			2		7		9	
11:15			13		11		24		23:15			2		4		6	
11:30			10		9		19		23:30			3		4		7	
11:45			8	46	7	39	15	85	23:45			2	9	5	20	7	29
TOTALS				204		238		442	TOTALS				433		429		862
SPLIT %				46.2%		53.8%		33.9%	SPLIT %				50.2%		49.8%		66.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	637	667	1,304

AM Peak Hour			10:45	10:45	10:45	PM Peak Hour			14:45	16:30	14:45
AM Pk Volume			47	45	92	PM Pk Volume			71	57	116
Pk Hr Factor			0.783	0.865	0.852	Pk Hr Factor			0.934	0.891	0.906
7 - 9 Volume	0	0	46	66	112	4 - 6 Volume	0	0	108	97	205
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:00	16:30	16:15
7 - 9 Pk Volume	0	0	28	40	68	4 - 6 Pk Volume	0	0	57	57	111
Pk Hr Factor	0.000	0.000	0.636	0.833	0.895	Pk Hr Factor	0.000	0.000	0.792	0.891	0.895

Prepared by NDS/ATD

VOLUME

Nicolaus Rd Bet. Canal Rd & Maverick Ln

Day: Saturday
Date: 6/10/2017

City: Lincoln
Project #: CA17_7498_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,251	1,123	2,374

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			25		4		29		12:00			25		21		46	
00:15			16		5		21		12:15			26		17		43	
00:30			10		2		12		12:30			19		14		33	
00:45			7	58	3	14	10	72	12:45			23	93	15	67	38	160
01:00			5		1		6		13:00			21		19		40	
01:15			2		1		3		13:15			18		24		42	
01:30			2		2		4		13:30			20		19		39	
01:45			1	10	1	5	2	15	13:45			21	80	19	81	40	161
02:00			0		4		4		14:00			13		13		26	
02:15			1		1		2		14:15			23		25		48	
02:30			2		3		5		14:30			22		16		38	
02:45			1	4	2	10	3	14	14:45			19	77	18	72	37	149
03:00			1		1		2		15:00			20		23		43	
03:15			2		1		3		15:15			17		24		41	
03:30			1		3		4		15:30			18		30		48	
03:45			1	5	0	5	1	10	15:45			21	76	30	107	51	183
04:00			1		6		7		16:00			19		19		38	
04:15			1		4		5		16:15			25		16		41	
04:30			3		6		9		16:30			19		23		42	
04:45			2	7	3	19	5	26	16:45			16	79	28	86	44	165
05:00			6		4		10		17:00			18		11		29	
05:15			3		2		5		17:15			19		28		47	
05:30			4		5		9		17:30			12		15		27	
05:45			4	17	3	14	7	31	17:45			29	78	20	74	49	152
06:00			3		2		5		18:00			24		16		40	
06:15			5		5		10		18:15			17		26		43	
06:30			18		9		27		18:30			11		20		31	
06:45			12	38	5	21	17	59	18:45			19	71	18	80	37	151
07:00			17		8		25		19:00			15		11		26	
07:15			11		9		20		19:15			14		12		26	
07:30			9		4		13		19:30			16		13		29	
07:45			18	55	8	29	26	84	19:45			10	55	15	51	25	106
08:00			9		8		17		20:00			17		12		29	
08:15			16		17		33		20:15			11		12		23	
08:30			20		11		31		20:30			12		14		26	
08:45			20	65	11	47	31	112	20:45			10	50	12	50	22	100
09:00			15		11		26		21:00			8		13		21	
09:15			14		13		27		21:15			12		13		25	
09:30			17		16		33		21:30			10		10		20	
09:45			29	75	17	57	46	132	21:45			13	43	13	49	26	92
10:00			21		12		33		22:00			10		10		20	
10:15			28		15		43		22:15			9		8		17	
10:30			24		12		36		22:30			5		10		15	
10:45			20	93	14	53	34	146	22:45			9	33	8	36	17	69
11:00			8		17		25		23:00			7		9		16	
11:15			19		15		34		23:15			3		7		10	
11:30			22		16		38		23:30			4		3		7	
11:45			24	73	23	71	47	144	23:45			2	16	6	25	8	41
TOTALS				500		345		**845**	TOTALS				751		778		**1529**
SPLIT %				59.2%		40.8%		**35.6%**	SPLIT %				49.1%		50.9%		**64.4%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,251	1,123	2,374

AM Peak Hour			09:45	11:30	**11:30**	**PM Peak Hour**			12:00	15:00	**15:00**
AM Pk Volume			102	77	**174**	**PM Pk Volume**			93	107	**183**
Pk Hr Factor			0.879	0.837	**0.926**	**Pk Hr Factor**			0.894	0.892	**0.897**
7 - 9 Volume	0	0	120	76	**196**	**4 - 6 Volume**	0	0	157	160	**317**
7 - 9 Peak Hour			08:00	08:00	**08:00**	**4 - 6 Peak Hour**			16:00	16:30	**16:00**
7 - 9 Pk Volume	0	0	65	47	**112**	**4 - 6 Pk Volume**	0	0	79	90	**165**
Pk Hr Factor	0.000	0.000	0.813	0.691	**0.848**	**Pk Hr Factor**	0.000	0.000	0.790	0.804	**0.938**

Prepared by NDS/ATD

VOLUME

McCourtney Rd Bet. Wise Rd & Big Ben Rd

Day: Saturday
Date: 6/10/2017

City: Lincoln
Project #: CA17_7498_004

DAILY TOTALS	NB	SB	EB	WB	Total
	604	603	0	0	1,207

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	8		11						19	
00:15	0		0						0		12:15	12		15						27	
00:30	2		0						2		12:30	9		18						27	
00:45	0	2	2	2					2	4	12:45	9	38	7	51					16	89
01:00	1		0						1		13:00	4		8						12	
01:15	0		1						1		13:15	17		9						26	
01:30	0		1						1		13:30	14		12						26	
01:45	0	1	0	2					0	3	13:45	11	46	9	38					20	84
02:00	1		2						3		14:00	16		17						33	
02:15	0		0						0		14:15	8		12						20	
02:30	1		0						1		14:30	9		6						15	
02:45	1	3	0	2					1	5	14:45	15	48	9	44					24	92
03:00	0		0						0		15:00	15		12						27	
03:15	1		0						1		15:15	14		7						21	
03:30	0		0						0		15:30	9		10						19	
03:45	0	1	0						0	1	15:45	9	47	14	43					23	90
04:00	0		0						0		16:00	15		19						34	
04:15	0		3						3		16:15	14		11						25	
04:30	1		1						2		16:30	10		10						20	
04:45	0	1	1	5					1	6	16:45	9	48	16	56					25	104
05:00	2		1						3		17:00	16		11						27	
05:15	2		3						5		17:15	8		9						17	
05:30	0		2						2		17:30	8		11						19	
05:45	1	5	6	12					7	17	17:45	13	45	7	38					20	83
06:00	3		3						6		18:00	16		5						21	
06:15	5		4						9		18:15	17		9						26	
06:30	1		6						7		18:30	11		4						15	
06:45	4	13	5	18					9	31	18:45	11	55	5	23					16	78
07:00	3		10						13		19:00	12		6						18	
07:15	3		9						12		19:15	7		8						15	
07:30	1		7						8		19:30	7		4						11	
07:45	5	12	4	30					9	42	19:45	7	33	8	26					15	59
08:00	2		3						5		20:00	4		5						9	
08:15	4		5						9		20:15	10		4						14	
08:30	12		16						28		20:30	4		7						11	
08:45	7	25	15	39					22	64	20:45	5	23	2	18					7	41
09:00	6		6						12		21:00	6		1						7	
09:15	11		10						21		21:15	7		4						11	
09:30	5		13						18		21:30	2		4						6	
09:45	13	35	7	36					20	71	21:45	8	23	1	10					9	33
10:00	8		14						22		22:00	5		1						6	
10:15	5		10						15		22:15	2		2						4	
10:30	8		13						21		22:30	1		2						3	
10:45	4	25	6	43					10	68	22:45	4	12	0	5					4	17
11:00	7		9						16		23:00	6		0						6	
11:15	12		16						28		23:15	3		4						7	
11:30	16		15						31		23:30	2		1						3	
11:45	12	47	16	56					28	103	23:45	5	16	1	6					6	22
TOTALS		170		245						415	TOTALS		434		358						792
SPLIT %		41.0%		59.0%						34.4%	SPLIT %		54.8%		45.2%						65.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	604	603	0	0	1,207

AM Peak Hour	11:15	11:45			11:15	PM Peak Hour	13:15	16:00			13:15
AM Pk Volume	48	60			106	PM Pk Volume	58	56			105
Pk Hr Factor	0.750	0.833			0.855	Pk Hr Factor	0.853	0.737			0.795
7 - 9 Volume	37	69	0	0	106	4 - 6 Volume	93	94	0	0	187
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:15	16:00			16:00
7 - 9 Pk Volume	25	39	0	0	64	4 - 6 Pk Volume	49	56	0	0	104
Pk Hr Factor	0.521	0.609	0.000	0.000	0.571	Pk Hr Factor	0.766	0.737	0.000	0.000	0.765

Prepared by NDS/ATD

VOLUME

Sierra College Blvd Bet. Delmar Ave & King Rd

Day: Saturday
Date: 6/10/2017

City: Loomis
Project #: CA17_7498_005

DAILY TOTALS	NB	SB	EB	WB	Total
	5,480	5,162	0	0	10,642

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	15		8						23		**12:00**	106		103						209	
00:15	16		7						23		**12:15**	109		100						209	
00:30	7		7						14		**12:30**	104		106						210	
00:45	20	58	4	26					24	84	**12:45**	140	459	108	417					248	876
01:00	4		2						6		**13:00**	115		98						213	
01:15	12		3						15		**13:15**	108		89						197	
01:30	3		2						5		**13:30**	116		95						211	
01:45	3	22	4	11					7	33	**13:45**	124	463	89	371					213	834
02:00	5		2						7		**14:00**	109		89						198	
02:15	7		6						13		**14:15**	97		87						184	
02:30	3		1						4		**14:30**	99		83						182	
02:45	2	17	3	12					5	29	**14:45**	111	416	100	359					211	775
03:00	3		3						6		**15:00**	108		103						211	
03:15	2		3						5		**15:15**	106		97						203	
03:30	4		10						14		**15:30**	135		85						220	
03:45	0	9	7	23					7	32	**15:45**	123	472	105	390					228	862
04:00	3		4						7		**16:00**	128		101						229	
04:15	2		5						7		**16:15**	131		95						226	
04:30	7		8						15		**16:30**	143		102						245	
04:45	1	13	10	27					11	40	**16:45**	102	504	89	387					191	891
05:00	7		16						23		**17:00**	124		76						200	
05:15	6		19						25		**17:15**	120		70						190	
05:30	10		14						24		**17:30**	31		28						59	
05:45	9	32	27	76					36	108	**17:45**	125	400	75	249					200	649
06:00	8		22						30		**18:00**	99		56						155	
06:15	13		33						46		**18:15**	101		50						151	
06:30	14		31						45		**18:30**	104		55						159	
06:45	28	63	39	125					67	188	**18:45**	82	386	45	206					127	592
07:00	27		54						81		**19:00**	53		53						106	
07:15	27		38						65		**19:15**	61		54						115	
07:30	35		58						93		**19:30**	69		42						111	
07:45	25	114	74	224					99	338	**19:45**	43	226	60	209					103	435
08:00	37		44						81		**20:00**	72		51						123	
08:15	37		73						110		**20:15**	52		42						94	
08:30	54		78						132		**20:30**	52		52						104	
08:45	60	188	87	282					147	470	**20:45**	62	238	37	182					99	420
09:00	81		85						166		**21:00**	45		54						99	
09:15	63		91						154		**21:15**	55		66						121	
09:30	72		87						159		**21:30**	63		46						109	
09:45	56	272	109	372					165	644	**21:45**	55	218	40	206					95	424
10:00	67		76						143		**22:00**	51		41						92	
10:15	92		93						185		**22:15**	41		54						95	
10:30	85		84						169		**22:30**	30		49						79	
10:45	93	337	98	351					191	688	**22:45**	25	147	25	169					50	316
11:00	77		83						160		**23:00**	30		18						48	
11:15	102		106						208		**23:15**	11		29						40	
11:30	84		96						180		**23:30**	15		31						46	
11:45	92	355	104	389					196	744	**23:45**	15	71	21	99					36	170
TOTALS		1480		1918						**3398**	**TOTALS**		4000		3244						**7244**
SPLIT %		43.6%		56.4%						**31.9%**	**SPLIT %**		55.2%		44.8%						**68.1%**

DAILY TOTALS	NB	SB	EB	WB	Total
	5,480	5,162	0	0	10,642

AM Peak Hour	11:45	11:45			**11:45**	**PM Peak Hour**	15:45	12:00			**15:45**
AM Pk Volume	411	413			**824**	**PM Pk Volume**	525	417			**928**
Pk Hr Factor	0.943	0.974			**0.981**	**Pk Hr Factor**	0.918	0.965			**0.947**
7 - 9 Volume	302	506	0	0	**808**	**4 - 6 Volume**	904	636	0	0	**1540**
7 - 9 Peak Hour	08:00	08:00			**08:00**	**4 - 6 Peak Hour**	16:00	16:00			**16:00**
7 - 9 Pk Volume	188	282	0	0	**470**	**4 - 6 Pk Volume**	504	387	0	0	**891**
Pk Hr Factor	0.783	0.810	0.000	0.000	**0.799**	**Pk Hr Factor**	0.881	0.949	0.000	0.000	**0.909**

Prepared by NDS/ATD

VOLUME

Placer Hills Rd Bet. Pinewood Way & Winchester Club Dr

Day: Saturday
Date: 6/10/2017

City: Meadow Vista
Project #: CA17_7498_006

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	3,672	3,735	7,407

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			7		12		19		12:00			69		61		130	
00:15			2		8		10		12:15			74		66		140	
00:30			6		6		12		12:30			71		77		148	
00:45			0	15	5	31	5	46	12:45			69	283	72	276	141	559
01:00			1		4		5		13:00			88		86		174	
01:15			1		2		3		13:15			84		71		155	
01:30			0		3		3		13:30			56		82		138	
01:45			2	4	6	15	8	19	13:45			65	293	69	308	134	601
02:00			1		6		7		14:00			80		75		155	
02:15			1		1		2		14:15			52		64		116	
02:30			1		2		3		14:30			50		79		129	
02:45			2	5	1	10	3	15	14:45			69	251	83	301	152	552
03:00			1		1		2		15:00			61		85		146	
03:15			2		1		3		15:15			75		99		174	
03:30			1		2		3		15:30			64		74		138	
03:45			2	6	1	5	3	11	15:45			63	263	65	323	128	586
04:00			1		3		4		16:00			85		71		156	
04:15			1		1		2		16:15			60		74		134	
04:30			2		1		3		16:30			59		56		115	
04:45			1	5	2	7	3	12	16:45			82	286	82	283	164	569
05:00			4		2		6		17:00			61		78		139	
05:15			10		6		16		17:15			55		75		130	
05:30			14		3		17		17:30			46		65		111	
05:45			16	44	7	18	23	62	17:45			53	215	82	300	135	515
06:00			18		3		21		18:00			67		68		135	
06:15			19		8		27		18:15			47		57		104	
06:30			20		5		25		18:30			43		47		90	
06:45			32	89	17	33	49	122	18:45			47	204	61	233	108	437
07:00			29		14		43		19:00			47		43		90	
07:15			39		18		57		19:15			23		41		64	
07:30			40		17		57		19:30			36		43		79	
07:45			45	153	32	81	77	234	19:45			50	156	35	162	85	318
08:00			53		15		68		20:00			33		54		87	
08:15			45		24		69		20:15			41		41		82	
08:30			78		35		113		20:30			30		41		71	
08:45			82	258	33	107	115	365	20:45			31	135	31	167	62	302
09:00			68		41		109		21:00			25		47		72	
09:15			57		42		99		21:15			14		44		58	
09:30			79		41		120		21:30			14		33		47	
09:45			67	271	60	184	127	455	21:45			14	67	26	150	40	217
10:00			59		56		115		22:00			12		26		38	
10:15			78		60		138		22:15			11		31		42	
10:30			67		59		126		22:30			7		24		31	
10:45			83	287	77	252	160	539	22:45			10	40	20	101	30	141
11:00			85		79		164		23:00			5		24		29	
11:15			84		91		175		23:15			6		12		18	
11:30			72		79		151		23:30			7		13		20	
11:45			79	320	76	325	155	645	23:45			4	22	14	63	18	85
TOTALS				1457		1068		2525	TOTALS				2215		2667		4882
SPLIT %				57.7%		42.3%		34.1%	SPLIT %				45.4%		54.6%		65.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	3,672	3,735	7,407

AM Peak Hour			10:45	10:45	10:45	PM Peak Hour			12:30	14:30	12:30
AM Pk Volume			324	326	650	PM Pk Volume			312	346	618
Pk Hr Factor			0.953	0.896	0.929	Pk Hr Factor			0.886	0.874	0.888
7 - 9 Volume	0	0	411	188	599	4 - 6 Volume	0	0	501	583	1084
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:00	16:45	16:00
7 - 9 Pk Volume	0	0	258	107	365	4 - 6 Pk Volume	0	0	286	300	569
Pk Hr Factor	0.000	0.000	0.787	0.764	0.793	Pk Hr Factor	0.000	0.000	0.841	0.915	0.867

Prepared by NDS/ATD

VOLUME

Auburn Folsom Rd Bet. Dick Cook Rd & Horseshoe Bar Rd

Day: Saturday
Date: 6/10/2017

City: Loomis
Project #: CA17_7498_007

DAILY TOTALS	NB	SB	EB	WB	Total
	4,187	4,168	0	0	8,355

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	8		8						16		12:00	73		98						171	
00:15	8		11						19		12:15	60		93						153	
00:30	4		7						11		12:30	64		88						152	
00:45	5	25	8	34					13	59	12:45	81	278	93	372					174	650
01:00	4		5						9		13:00	63		73						136	
01:15	3		6						9		13:15	69		81						150	
01:30	6		1						7		13:30	73		84						157	
01:45	3	16	3	15					6	31	13:45	77	282	82	320					159	602
02:00	2		2						4		14:00	80		105						185	
02:15	2		2						4		14:15	87		72						159	
02:30	4		2						6		14:30	70		77						147	
02:45	2	10	1	7					3	17	14:45	75	312	69	323					144	635
03:00	3		1						4		15:00	76		76						152	
03:15	2		1						3		15:15	110		79						189	
03:30	3		2						5		15:30	90		72						162	
03:45	2	10	4	8					6	18	15:45	100	376	75	302					175	678
04:00	1		4						5		16:00	96		85						181	
04:15	1		3						4		16:15	92		82						174	
04:30	4		1						5		16:30	85		74						159	
04:45	4	10	3	11					7	21	16:45	75	348	63	304					138	652
05:00	4		3						7		17:00	61		80						141	
05:15	6		11						17		17:15	77		77						154	
05:30	10		8						18		17:30	69		59						128	
05:45	13	33	10	32					23	65	17:45	55	262	45	261					100	523
06:00	14		12						26		18:00	79		54						133	
06:15	19		15						34		18:15	55		50						105	
06:30	37		23						60		18:30	58		47						105	
06:45	24	94	18	68					42	162	18:45	53	245	43	194					96	439
07:00	40		38						78		19:00	48		50						98	
07:15	33		34						67		19:15	42		37						79	
07:30	39		44						83		19:30	40		45						85	
07:45	53	165	26	142					79	307	19:45	53	183	38	170					91	353
08:00	56		40						96		20:00	43		34						77	
08:15	35		39						74		20:15	49		37						86	
08:30	45		58						103		20:30	40		31						71	
08:45	59	195	47	184					106	379	20:45	37	169	43	145					80	314
09:00	51		69						120		21:00	42		35						77	
09:15	73		65						138		21:15	32		36						68	
09:30	72		59						131		21:30	37		34						71	
09:45	74	270	69	262					143	532	21:45	46	157	28	133					74	290
10:00	86		73						159		22:00	22		24						46	
10:15	82		68						150		22:15	35		24						59	
10:30	61		104						165		22:30	18		19						37	
10:45	82	311	104	349					186	660	22:45	19	94	20	87					39	181
11:00	66		93						159		23:00	20		15						35	
11:15	60		104						164		23:15	22		11						33	
11:30	85		111						196		23:30	14		9						23	
11:45	63	274	95	403					158	677	23:45	12	68	7	42					19	110
TOTALS		1413		1515						2928	TOTALS		2774		2653						5427
SPLIT %		48.3%		51.7%						35.0%	SPLIT %		51.1%		48.9%						65.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	4,187	4,168	0	0	8,355

AM Peak Hour	09:30	10:45			10:45	PM Peak Hour	15:15	12:00			15:15
AM Pk Volume	314	412			705	PM Pk Volume	396	372			707
Pk Hr Factor	0.913	0.928			0.899	Pk Hr Factor	0.900	0.949			0.935
7 - 9 Volume	360	326	0	0	686	4 - 6 Volume	610	565	0	0	1175
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	195	184	0	0	379	4 - 6 Pk Volume	348	304	0	0	652
Pk Hr Factor	0.826	0.793	0.000	0.000	0.894	Pk Hr Factor	0.906	0.894	0.000	0.000	0.901

Prepared by NDS/ATD

VOLUME

Horseshoe Bar Rd Bet. Val Verde Rd & Auburn Folsom Rd

Day: Saturday
Date: 6/10/2017

City: Loomis
Project #: CA17_7498_008

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,214	1,271	2,485

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			3		7		10		12:00			36		34		70	
00:15			4		2		6		12:15			33		31		64	
00:30			2		3		5		12:30			19		30		49	
00:45			0	9	1	13	1	22	12:45			33	121	20	115	53	236
01:00			1		1		2		13:00			29		31		60	
01:15			1		0		1		13:15			30		21		51	
01:30			0		1		1		13:30			23		13		36	
01:45			1	3	2	4	3	7	13:45			32	114	15	80	47	194
02:00			0		1		1		14:00			31		22		53	
02:15			1		0		1		14:15			29		31		60	
02:30			0		1		1		14:30			17		33		50	
02:45			0	1	0	2	0	3	14:45			26	103	19	105	45	208
03:00			1		1		2		15:00			18		37		55	
03:15			0		0		0		15:15			20		26		46	
03:30			1		1		2		15:30			16		24		40	
03:45			0	2	1	3	1	5	15:45			25	79	18	105	43	184
04:00			1		1		2		16:00			27		17		44	
04:15			1		2		3		16:15			30		21		51	
04:30			1		2		3		16:30			23		17		40	
04:45			0	3	2	7	2	10	16:45			14	94	28	83	42	177
05:00			1		0		1		17:00			10		18		28	
05:15			0		3		3		17:15			20		24		44	
05:30			1		3		4		17:30			17		18		35	
05:45			1	3	1	7	2	10	17:45			21	68	18	78	39	146
06:00			2		4		6		18:00			23		21		44	
06:15			2		3		5		18:15			16		16		32	
06:30			3		9		12		18:30			13		15		28	
06:45			2	9	2	18	4	27	18:45			17	69	15	67	32	136
07:00			5		3		8		19:00			10		13		23	
07:15			8		12		20		19:15			9		10		19	
07:30			5		8		13		19:30			10		16		26	
07:45			10	28	10	33	20	61	19:45			12	41	17	56	29	97
08:00			14		21		35		20:00			15		19		34	
08:15			10		17		27		20:15			12		14		26	
08:30			17		12		29		20:30			10		13		23	
08:45			15	56	16	66	31	122	20:45			12	49	12	58	24	107
09:00			13		18		31		21:00			11		10		21	
09:15			16		17		33		21:15			9		9		18	
09:30			18		20		38		21:30			10		8		18	
09:45			20	67	25	80	45	147	21:45			10	40	9	36	19	76
10:00			24		24		48		22:00			12		8		20	
10:15			23		29		52		22:15			8		6		14	
10:30			19		29		48		22:30			10		3		13	
10:45			20	86	34	116	54	202	22:45			14	44	4	21	18	65
11:00			18		29		47		23:00			8		3		11	
11:15			27		33		60		23:15			6		3		9	
11:30			26		24		50		23:30			5		5		10	
11:45			31	102	20	106	51	208	23:45			4	23	1	12	5	35
TOTALS				369		455		**824**	TOTALS				845		816		**1661**
SPLIT %				44.8%		55.2%		**33.2%**	SPLIT %				50.9%		49.1%		**66.8%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,214	1,271	2,485

AM Peak Hour			11:30	10:30	**11:30**	**PM Peak Hour**			12:00	14:15	**12:00**
AM Pk Volume			126	125	**235**	**PM Pk Volume**			121	120	**236**
Pk Hr Factor			0.875	0.919	**0.839**	**Pk Hr Factor**			0.840	0.811	**0.843**
7 - 9 Volume	0	0	84	99	**183**	**4 - 6 Volume**	0	0	162	161	**323**
7 - 9 Peak Hour			08:00	08:00	**08:00**	**4 - 6 Peak Hour**			16:00	16:45	**16:00**
7 - 9 Pk Volume	0	0	56	66	**122**	**4 - 6 Pk Volume**	0	0	94	88	**177**
Pk Hr Factor	0.000	0.000	0.824	0.786	**0.871**	**Pk Hr Factor**	0.000	0.000	0.783	0.786	**0.868**

Prepared by NDS/ATD

VOLUME

Wise Rd Bet. Country Ln & Crater Hill Rd

Day: Saturday
Date: 6/10/2017

City: Newcastle
Project #: CA17_7498_009

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	459	472	931

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		1		1		12:00			10		5		15	
00:15			0		2		2		12:15			13		6		19	
00:30			0		0		0		12:30			9		13		22	
00:45			1	1	1	4	2	5	12:45			4	36	19	43	23	79
01:00			0		0		0		13:00			7		6		13	
01:15			0		1		1		13:15			5		13		18	
01:30			1		1		2		13:30			9		13		22	
01:45			0	1	0	2	0	3	13:45			7	28	14	46	21	74
02:00			0		0		0		14:00			13		10		23	
02:15			1		1		2		14:15			14		6		20	
02:30			0		0		0		14:30			10		2		12	
02:45			1	2	1	2	2	4	14:45			6	43	16	34	22	77
03:00			0		0		0		15:00			9		5		14	
03:15			1		1		2		15:15			10		6		16	
03:30			1		0		1		15:30			5		12		17	
03:45			0	2	1	2	1	4	15:45			15	39	11	34	26	73
04:00			0		0		0		16:00			12		14		26	
04:15			1		0		1		16:15			10		13		23	
04:30			0		1		1		16:30			10		14		24	
04:45			1	2	0	1	1	3	16:45			6	38	15	56	21	94
05:00			1		1		2		17:00			9		12		21	
05:15			1		0		1		17:15			7		11		18	
05:30			1		1		2		17:30			6		6		12	
05:45			3	6	0	2	3	8	17:45			6	28	9	38	15	66
06:00			1		1		2		18:00			6		9		15	
06:15			2		0		2		18:15			4		11		15	
06:30			6		1		7		18:30			8		7		15	
06:45			2	11	2	4	4	15	18:45			7	25	7	34	14	59
07:00			2		5		7		19:00			5		3		8	
07:15			3		1		4		19:15			7		1		8	
07:30			5		1		6		19:30			5		3		8	
07:45			2	12	4	11	6	23	19:45			4	21	10	17	14	38
08:00			4		3		7		20:00			6		11		17	
08:15			8		5		13		20:15			7		6		13	
08:30			2		10		12		20:30			4		4		8	
08:45			10	24	9	27	19	51	20:45			5	22	5	26	10	48
09:00			6		4		10		21:00			7		3		10	
09:15			5		5		10		21:15			8		7		15	
09:30			7		6		13		21:30			3		1		4	
09:45			13	31	5	20	18	51	21:45			3	21	4	15	7	36
10:00			10		3		13		22:00			1		1		2	
10:15			9		3		12		22:15			2		2		4	
10:30			5		5		10		22:30			0		3		3	
10:45			8	32	3	14	11	46	22:45			2	5	0	6	2	11
11:00			8		11		19		23:00			0		2		2	
11:15			7		7		14		23:15			1		3		4	
11:30			7		4		11		23:30			0		1		1	
11:45			5	27	4	26	9	53	23:45			1	2	2	8	3	10
TOTALS				151		115		266	TOTALS				308		357		665
SPLIT %				56.8%		43.2%		28.6%	SPLIT %				46.3%		53.7%		71.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	459	472	931

AM Peak Hour			09:30	08:15	11:45	PM Peak Hour			15:45	16:00	15:45
AM Pk Volume			39	28	65	PM Pk Volume			47	56	99
Pk Hr Factor			0.750	0.700	0.739	Pk Hr Factor			0.783	0.933	0.952
7 - 9 Volume	0	0	36	38	74	4 - 6 Volume	0	0	66	94	160
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:00	16:00	16:00
7 - 9 Pk Volume	0	0	24	27	51	4 - 6 Pk Volume	0	0	38	56	94
Pk Hr Factor	0.000	0.000	0.600	0.675	0.671	Pk Hr Factor	0.000	0.000	0.792	0.933	0.904

Prepared by NDS/ATD

VOLUME

Wise Rd Bet. Bald Hill Rd & Ophir Rd

Day: Saturday
Date: 6/10/2017

City: Auburn
Project #: CA17_7498_010

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	455	460	915

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			12		7		19	
00:15			0		1		1		12:15			7		13		20	
00:30			1		3		4		12:30			8		8		16	
00:45			2	3	1	5	3	8	12:45			7	34	19	47	26	81
01:00			0		1		1		13:00			7		10		17	
01:15			0		2		2		13:15			6		10		16	
01:30			1		0		1		13:30			8		10		18	
01:45			0	1	0	3	0	4	13:45			10	31	10	40	20	71
02:00			0		0		0		14:00			9		11		20	
02:15			1		0		1		14:15			10		4		14	
02:30			0		1		1		14:30			10		12		22	
02:45			1	2	1	2	2	4	14:45			7	36	12	39	19	75
03:00			0		1		1		15:00			7		7		14	
03:15			0		1		1		15:15			8		5		13	
03:30			1		0		1		15:30			6		11		17	
03:45			1	2	0	2	1	4	15:45			9	30	11	34	20	64
04:00			0		0		0		16:00			9		12		21	
04:15			0		1		1		16:15			5		8		13	
04:30			0		1		1		16:30			12		6		18	
04:45			1	1	0	2	1	3	16:45			9	35	8	34	17	69
05:00			1		0		1		17:00			6		6		12	
05:15			1		0		1		17:15			9		16		25	
05:30			3		0		3		17:30			10		6		16	
05:45			1	6	0		1	6	17:45			18	43	4	32	22	75
06:00			4		0		4		18:00			13		9		22	
06:15			1		0		1		18:15			4		5		9	
06:30			4		1		5		18:30			10		13		23	
06:45			4	13	2	3	6	16	18:45			6	33	5	32	11	65
07:00			3		3		6		19:00			8		12		20	
07:15			1		2		3		19:15			9		6		15	
07:30			4		1		5		19:30			3		5		8	
07:45			4	12	1	7	5	19	19:45			4	24	7	30	11	54
08:00			6		1		7		20:00			1		2		3	
08:15			3		6		9		20:15			7		5		12	
08:30			4		5		9		20:30			1		5		6	
08:45			11	24	5	17	16	41	20:45			1	10	7	19	8	29
09:00			2		3		5		21:00			2		3		5	
09:15			10		2		12		21:15			2		6		8	
09:30			8		8		16		21:30			1		4		5	
09:45			11	31	12	25	23	56	21:45			5	10	2	15	7	25
10:00			8		2		10		22:00			3		2		5	
10:15			11		8		19		22:15			1		6		7	
10:30			9		8		17		22:30			1		3		4	
10:45			12	40	6	24	18	64	22:45			1	6	2	13	3	19
11:00			9		4		13		23:00			0		1		1	
11:15			11		12		23		23:15			0		2		2	
11:30			4		7		11		23:30			0		2		2	
11:45			3	27	6	29	9	56	23:45			1	1	1	6	2	7
TOTALS				162		119		281	TOTALS				293		341		634
SPLIT %				57.7%		42.3%		30.7%	SPLIT %				46.2%		53.8%		69.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	455	460	915

AM Peak Hour			10:15	11:45	10:30	PM Peak Hour			17:15	12:15	17:15
AM Pk Volume			41	34	71	PM Pk Volume			50	50	85
Pk Hr Factor			0.854	0.654	0.772	Pk Hr Factor			0.694	0.658	0.850
7 - 9 Volume	0	0	36	24	60	4 - 6 Volume	0	0	78	66	144
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			17:00	16:30	17:00
7 - 9 Pk Volume	0	0	24	17	41	4 - 6 Pk Volume	0	0	43	36	75
Pk Hr Factor	0.000	0.000	0.545	0.708	0.641	Pk Hr Factor	0.000	0.000	0.597	0.563	0.750

Prepared by NDS/ATD

VOLUME

Bell Rd Bet. Coyote Ridge Ct & Miracle Dr

Day: Saturday
Date: 6/10/2017

City: Auburn
Project #: CA17_7498_011

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	682	647	1,329

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			1		2		3		12:00			11		11		22	
00:15			0		2		2		12:15			10		8		18	
00:30			2		2		4		12:30			15		13		28	
00:45			0	3	3	9	3	12	12:45			11	47	14	46	25	93
01:00			1		2		3		13:00			12		17		29	
01:15			0		1		1		13:15			10		17		27	
01:30			1		0		1		13:30			13		17		30	
01:45			0	2	2	5	2	7	13:45			14	49	15	66	29	115
02:00			0		0		0		14:00			11		13		24	
02:15			1		0		1		14:15			12		9		21	
02:30			0		1		1		14:30			12		10		22	
02:45			1	2	0	1	1	3	14:45			19	54	7	39	26	93
03:00			0		1		1		15:00			11		15		26	
03:15			1		0		1		15:15			8		17		25	
03:30			0		1		1		15:30			16		13		29	
03:45			1	2	1	3	2	5	15:45			12	47	11	56	23	103
04:00			0		0		0		16:00			10		10		20	
04:15			1		1		2		16:15			9		12		21	
04:30			1		0		1		16:30			13		18		31	
04:45			0	2	1	2	1	4	16:45			10	42	9	49	19	91
05:00			2		3		5		17:00			14		17		31	
05:15			1		2		3		17:15			14		12		26	
05:30			1		2		3		17:30			6		9		15	
05:45			1	5	2	9	3	14	17:45			14	48	16	54	30	102
06:00			2		2		4		18:00			10		10		20	
06:15			5		2		7		18:15			3		15		18	
06:30			5		2		7		18:30			3		10		13	
06:45			4	16	1	7	5	23	18:45			11	27	12	47	23	74
07:00			3		4		7		19:00			15		10		25	
07:15			6		4		10		19:15			5		12		17	
07:30			11		3		14		19:30			11		15		26	
07:45			10	30	7	18	17	48	19:45			8	39	8	45	16	84
08:00			12		2		14		20:00			7		4		11	
08:15			5		2		7		20:15			8		8		16	
08:30			8		5		13		20:30			6		4		10	
08:45			20	45	5	14	25	59	20:45			2	23	7	23	9	46
09:00			15		14		29		21:00			9		1		10	
09:15			9		6		15		21:15			4		4		8	
09:30			9		9		18		21:30			5		4		9	
09:45			12	45	6	35	18	80	21:45			12	30	5	14	17	44
10:00			16		6		22		22:00			4		5		9	
10:15			14		7		21		22:15			8		5		13	
10:30			11		11		22		22:30			3		5		8	
10:45			11	52	8	32	19	84	22:45			3	18	3	18	6	36
11:00			11		15		26		23:00			1		4		5	
11:15			11		6		17		23:15			1		4		5	
11:30			16		11		27		23:30			4		2		6	
11:45			9	47	10	42	19	89	23:45			1	7	3	13	4	20
TOTALS				251		177		428	TOTALS				431		470		901
SPLIT %				58.6%		41.4%		32.2%	SPLIT %				47.8%		52.2%		67.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	682	647	1,329

AM Peak Hour			08:45	11:00	10:45	PM Peak Hour			14:00	13:00	13:00
AM Pk Volume			53	42	89	PM Pk Volume			54	66	115
Pk Hr Factor			0.663	0.700	0.824	Pk Hr Factor			0.711	0.971	0.958
7 - 9 Volume	0	0	75	32	107	4 - 6 Volume	0	0	90	103	193
7 - 9 Peak Hour			08:00	07:00	08:00	4 - 6 Peak Hour			16:30	16:15	16:30
7 - 9 Pk Volume	0	0	45	18	59	4 - 6 Pk Volume	0	0	51	56	107
Pk Hr Factor	0.000	0.000	0.563	0.643	0.590	Pk Hr Factor	0.000	0.000	0.911	0.778	0.863

Prepared by NDS/ATD

VOLUME

Bell Rd Bet. Mallard Way & Cramer Rd

Day: Saturday
Date: 6/10/2017

City: Auburn
Project #: CA17_7498_012

DAILY TOTALS	NB	SB	EB	WB	Total
	248	295	0	0	543

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	2		4						6	
00:15	1		0						1		12:15	2		2						4	
00:30	0		0						0		12:30	6		7						13	
00:45	1	2	1	1					2	3	12:45	1	11	4	17					5	28
01:00	1		0						1		13:00	5		3						8	
01:15	1		2						3		13:15	6		2						8	
01:30	0		0						0		13:30	9		5						14	
01:45	0	2	0	2					0	4	13:45	6	26	5	15					11	41
02:00	1		0						1		14:00	4		5						9	
02:15	0		0						0		14:15	3		9						12	
02:30	2		0						2		14:30	5		6						11	
02:45	0	3	1	1					1	4	14:45	4	16	10	30					14	46
03:00	0		0						0		15:00	7		10						17	
03:15	1		0						1		15:15	6		8						14	
03:30	0		1						1		15:30	8		7						15	
03:45	2	3	0	1					2	4	15:45	7	28	5	30					12	58
04:00	0		2						2		16:00	5		2						7	
04:15	1		0						1		16:15	3		3						6	
04:30	0		1						1		16:30	6		4						10	
04:45	0	1	0	3					0	4	16:45	3	17	5	14					8	31
05:00	2		1						3		17:00	5		3						8	
05:15	1		1						2		17:15	5		7						12	
05:30	1		2						3		17:30	2		4						6	
05:45	3	7	1	5					4	12	17:45	1	13	2	16					3	29
06:00	1		2						3		18:00	4		6						10	
06:15	1		2						3		18:15	2		4						6	
06:30	1		2						3		18:30	6		3						9	
06:45	1	4	2	8					3	12	18:45	3	15	4	17					7	32
07:00	0		5						5		19:00	2		3						5	
07:15	1		2						3		19:15	3		4						7	
07:30	1		3						4		19:30	3		1						4	
07:45	3	5	4	14					7	19	19:45	1	9	2	10					3	19
08:00	3		9						12		20:00	2		3						5	
08:15	2		4						6		20:15	2		3						5	
08:30	4		6						10		20:30	4		0						4	
08:45	1	10	8	27					9	37	20:45	2	10	5	11					7	21
09:00	5		7						12		21:00	1		1						2	
09:15	5		2						7		21:15	2		1						3	
09:30	4		4						8		21:30	5		0						5	
09:45	4	18	3	16					7	34	21:45	2	10	2	4					4	14
10:00	2		4						6		22:00	4		0						4	
10:15	1		3						4		22:15	2		2						4	
10:30	6		4						10		22:30	1		4						5	
10:45	4	13	2	13					6	26	22:45	0	7	1	7					1	14
11:00	4		9						13		23:00	2		0						2	
11:15	3		8						11		23:15	1		2						3	
11:30	4		8						12		23:30	1		0						1	
11:45	3	14	5	30					8	44	23:45	0	4	1	3					1	7
TOTALS		82		121						203	TOTALS		166		174						340
SPLIT %		40.4%		59.6%						37.4%	SPLIT %		48.8%		51.2%						62.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	248	295	0	0	543

AM Peak Hour	09:00	11:00			11:00	PM Peak Hour	15:00	14:15			14:45
AM Pk Volume	18	30			44	PM Pk Volume	28	35			60
Pk Hr Factor	0.900	0.833			0.846	Pk Hr Factor	0.875	0.875			0.882
7 - 9 Volume	15	41	0	0	56	4 - 6 Volume	30	30	0	0	60
7 - 9 Peak Hour	07:45	08:00			08:00	4 - 6 Peak Hour	16:30	16:30			16:30
7 - 9 Pk Volume	12	27	0	0	37	4 - 6 Pk Volume	19	19	0	0	38
Pk Hr Factor	0.750	0.750	0.000	0.000	0.771	Pk Hr Factor	0.792	0.679	0.000	0.000	0.792

Prepared by NDS/ATD

VOLUME

Lone Star Rd W/O SR 49

Day: Saturday
Date: 6/10/2017

City: Auburn
Project #: CA17_7498_013

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,223	0	1,223

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			3		0		3		12:00			13		0		13	
00:15			2		0		2		12:15			11		0		11	
00:30			1		0		1		12:30			17		0		17	
00:45			3	9	0		3	9	12:45			19	60	0		19	60
01:00			0		0		0		13:00			20		0		20	
01:15			4		0		4		13:15			18		0		18	
01:30			0		0		0		13:30			19		0		19	
01:45			0	4	0		0	4	13:45			22	79	0		22	79
02:00			1		0		1		14:00			16		0		16	
02:15			0		0		0		14:15			21		0		21	
02:30			0		0		0		14:30			21		0		21	
02:45			3	4	0		3	4	14:45			19	77	0		19	77
03:00			0		0		0		15:00			17		0		17	
03:15			0		0		0		15:15			19		0		19	
03:30			1		0		1		15:30			28		0		28	
03:45			1	2	0		1	2	15:45			29	93	0		29	93
04:00			1		0		1		16:00			24		0		24	
04:15			0		0		0		16:15			38		0		38	
04:30			1		0		1		16:30			33		0		33	
04:45			1	3	0		1	3	16:45			32	127	0		32	127
05:00			1		0		1		17:00			24		0		24	
05:15			2		0		2		17:15			19		0		19	
05:30			2		0		2		17:30			21		0		21	
05:45			7	12	0		7	12	17:45			25	89	0		25	89
06:00			7		0		7		18:00			14		0		14	
06:15			4		0		4		18:15			16		0		16	
06:30			3		0		3		18:30			13		0		13	
06:45			19	33	0		19	33	18:45			10	53	0		10	53
07:00			13		0		13		19:00			11		0		11	
07:15			18		0		18		19:15			22		0		22	
07:30			19		0		19		19:30			14		0		14	
07:45			14	64	0		14	64	19:45			11	58	0		11	58
08:00			17		0		17		20:00			17		0		17	
08:15			25		0		25		20:15			8		0		8	
08:30			20		0		20		20:30			14		0		14	
08:45			10	72	0		10	72	20:45			13	52	0		13	52
09:00			24		0		24		21:00			2		0		2	
09:15			11		0		11		21:15			11		0		11	
09:30			20		0		20		21:30			7		0		7	
09:45			15	70	0		15	70	21:45			11	31	0		11	31
10:00			24		0		24		22:00			12		0		12	
10:15			12		0		12		22:15			19		0		19	
10:30			21		0		21		22:30			9		0		9	
10:45			21	78	0		21	78	22:45			13	53	0		13	53
11:00			18		0		18		23:00			10		0		10	
11:15			21		0		21		23:15			5		0		5	
11:30			21		0		21		23:30			4		0		4	
11:45			17	77	0		17	77	23:45			4	23	0		4	23
TOTALS			428					428	TOTALS			795					795
SPLIT %			100.0%					35.0%	SPLIT %			100.0%					65.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,223	0	1,223

AM Peak Hour			10:30		10:30	PM Peak Hour			16:00		16:00
AM Pk Volume			81		81	PM Pk Volume			127		127
Pk Hr Factor			0.964		0.964	Pk Hr Factor			0.836		0.836
7 - 9 Volume	0	0	136	0	136	4 - 6 Volume	0	0	216	0	216
7 - 9 Peak Hour			07:45		07:45	4 - 6 Peak Hour			16:00		16:00
7 - 9 Pk Volume	0	0	76	0	76	4 - 6 Pk Volume	0	0	127	0	127
Pk Hr Factor	0.000	0.000	0.760	0.000	0.760	Pk Hr Factor	0.000	0.000	0.836	0.000	0.836

Prepared by NDS/ATD

VOLUME

Bald Hill Rd Bet. Crater Hill Rd & Valle Vista Ct

Day: Saturday
Date: 6/10/2017

City: Auburn
Project #: CA17_7498_014

DAILY TOTALS	NB	SB	EB	WB	Total
	562	476	0	0	1,038

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	10		11						21	
00:15	1		0						1		12:15	17		7						24	
00:30	1		1						2		12:30	11		14						25	
00:45	1	3	0	1					1	4	12:45	8	46	10	42					18	88
01:00	0		2						2		13:00	11		13						24	
01:15	1		1						2		13:15	10		8						18	
01:30	0		0						0		13:30	13		13						26	
01:45	1	2	0	3					1	5	13:45	10	44	8	42					18	86
02:00	0		1						1		14:00	12		10						22	
02:15	0		0						0		14:15	16		9						25	
02:30	2		1						3		14:30	18		12						30	
02:45	1	3	0	2					1	5	14:45	11	57	4	35					15	92
03:00	2		1						3		15:00	13		12						25	
03:15	0		1						1		15:15	6		7						13	
03:30	1		1						2		15:30	10		10						20	
03:45	0	3	0	3					0	6	15:45	14	43	8	37					22	80
04:00	1		0						1		16:00	6		14						20	
04:15	0		1						1		16:15	5		3						8	
04:30	0		0						0		16:30	11		9						20	
04:45	1	2	0	1					1	3	16:45	8	30	8	34					16	64
05:00	0		1						1		17:00	8		7						15	
05:15	1		1						2		17:15	6		9						15	
05:30	0		1						1		17:30	11		8						19	
05:45	1	2	1	4					2	6	17:45	5	30	8	32					13	62
06:00	1		1						2		18:00	7		6						13	
06:15	2		2						4		18:15	10		10						20	
06:30	1		1						2		18:30	8		9						17	
06:45	4	8	1	5					5	13	18:45	5	30	7	32					12	62
07:00	5		3						8		19:00	6		7						13	
07:15	4		2						6		19:15	10		4						14	
07:30	11		7						18		19:30	8		6						14	
07:45	5	25	6	18					11	43	19:45	5	29	5	22					10	51
08:00	6		6						12		20:00	5		4						9	
08:15	8		5						13		20:15	3		7						10	
08:30	6		2						8		20:30	3		6						9	
08:45	8	28	8	21					16	49	20:45	3	14	4	21					7	35
09:00	8		4						12		21:00	4		2						6	
09:15	12		7						19		21:15	4		6						10	
09:30	8		10						18		21:30	5		4						9	
09:45	6	34	7	28					13	62	21:45	3	16	1	13					4	29
10:00	7		7						14		22:00	3		1						4	
10:15	11		5						16		22:15	6		0						6	
10:30	7		8						15		22:30	5		1						6	
10:45	11	36	7	27					18	63	22:45	3	17	2	4					5	21
11:00	19		12						31		23:00	1		2						3	
11:15	11		12						23		23:15	1		3						4	
11:30	8		10						18		23:30	1		1						2	
11:45	18	56	8	42					26	98	23:45	1	4	1	7					2	11
TOTALS		202		155						357	TOTALS		360		321						681
SPLIT %		56.6%		43.4%						34.4%	SPLIT %		52.9%		47.1%						65.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	562	476	0	0	1,038

AM Peak Hour	11:00	11:00			11:00	PM Peak Hour	14:15	12:30			13:45
AM Pk Volume	56	42			98	PM Pk Volume	58	45			95
Pk Hr Factor	0.737	0.875			0.790	Pk Hr Factor	0.806	0.804			0.792
7 - 9 Volume	53	39	0	0	92	4 - 6 Volume	60	66	0	0	126
7 - 9 Peak Hour	07:30	07:30			07:30	4 - 6 Peak Hour	16:30	16:00			16:30
7 - 9 Pk Volume	30	24	0	0	54	4 - 6 Pk Volume	33	34	0	0	66
Pk Hr Factor	0.682	0.857	0.000	0.000	0.750	Pk Hr Factor	0.750	0.607	0.000	0.000	0.825

Prepared by NDS/ATD

VOLUME

Baxter Grade Rd Bet. Wise Rd & Mt. Vernon Rd

Day: Saturday
Date: 6/10/2017

City: Auburn
Project #: CA17_7498_015

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	315	319	634

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			2		2		4	
00:15			1		0		1		12:15			5		10		15	
00:30			0		0		0		12:30			6		4		10	
00:45			0	1	1	1	1	2	12:45			5	18	5	21	10	39
01:00			1		0		1		13:00			5		9		14	
01:15			0		0		0		13:15			5		6		11	
01:30			0		0		0		13:30			5		9		14	
01:45			1	2	1	1	2	3	13:45			5	20	10	34	15	54
02:00			0		0		0		14:00			4		11		15	
02:15			0		0		0		14:15			9		6		15	
02:30			0		0		0		14:30			9		9		18	
02:45			0		0		0		14:45			9	31	10	36	19	67
03:00			0		0		0		15:00			4		5		9	
03:15			0		0		0		15:15			2		5		7	
03:30			1		2		3		15:30			7		7		14	
03:45			0	1	0	2	0	3	15:45			10	23	4	21	14	44
04:00			2		0		2		16:00			5		2		7	
04:15			0		1		1		16:15			3		8		11	
04:30			0		0		0		16:30			5		9		14	
04:45			1	3	0	1	1	4	16:45			8	21	4	23	12	44
05:00			0		1		1		17:00			9		11		20	
05:15			0		1		1		17:15			8		7		15	
05:30			2		0		2		17:30			6		6		12	
05:45			4	6	1	3	5	9	17:45			3	26	9	33	12	59
06:00			2		0		2		18:00			4		4		8	
06:15			3		3		6		18:15			3		5		8	
06:30			1		1		2		18:30			4		8		12	
06:45			4	10	1	5	5	15	18:45			2	13	3	20	5	33
07:00			6		1		7		19:00			8		2		10	
07:15			5		2		7		19:15			5		5		10	
07:30			1		1		2		19:30			4		3		7	
07:45			3	15	1	5	4	20	19:45			4	21	4	14	8	35
08:00			3		2		5		20:00			4		6		10	
08:15			3		2		5		20:15			4		1		5	
08:30			2		1		3		20:30			2		4		6	
08:45			4	12	3	8	7	20	20:45			5	15	8	19	13	34
09:00			7		7		14		21:00			2		3		5	
09:15			10		2		12		21:15			3		2		5	
09:30			3		3		6		21:30			3		1		4	
09:45			4	24	2	14	6	38	21:45			2	10	1	7	3	17
10:00			4		5		9		22:00			4		1		5	
10:15			2		1		3		22:15			1		1		2	
10:30			3		4		7		22:30			2		2		4	
10:45			2	11	6	16	8	27	22:45			1	8	2	6	3	14
11:00			7		7		14		23:00			3		1		4	
11:15			5		8		13		23:15			2		3		5	
11:30			3		4		7		23:30			1		2		3	
11:45			3	18	3	22	6	40	23:45			0	6	1	7	1	13
TOTALS				103		78		181	TOTALS				212		241		453
SPLIT %				56.9%		43.1%		28.5%	SPLIT %				46.8%		53.2%		71.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	315	319	634

AM Peak Hour			08:45	10:30	10:30	PM Peak Hour			14:00	13:15	14:00
AM Pk Volume			24	25	42	PM Pk Volume			31	36	67
Pk Hr Factor			0.600	0.781	0.750	Pk Hr Factor			0.861	0.818	0.882
7 - 9 Volume	0	0	27	13	40	4 - 6 Volume	0	0	47	56	103
7 - 9 Peak Hour			07:00	08:00	07:00	4 - 6 Peak Hour			16:45	17:00	16:30
7 - 9 Pk Volume	0	0	15	8	20	4 - 6 Pk Volume	0	0	31	33	61
Pk Hr Factor	0.000	0.000	0.625	0.667	0.714	Pk Hr Factor	0.000	0.000	0.861	0.750	0.763

Prepared by NDS/ATD

VOLUME

Combie Rd Bet. Placer Hills Rd & Wooley Creek Ln

Day: Saturday
Date: 6/10/2017

City: Meadow Vista
Project #: CA17_7498_016

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,236	1,241	2,477

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			1		1		2		12:00			22		24		46	
00:15			2		4		6		12:15			30		22		52	
00:30			1		3		4		12:30			30		32		62	
00:45			1	5	1	9	2	14	12:45			30	112	21	99	51	211
01:00			1		1		2		13:00			27		30		57	
01:15			2		0		2		13:15			26		33		59	
01:30			0		1		1		13:30			19		25		44	
01:45			1	4	1	3	2	7	13:45			22	94	27	115	49	209
02:00			0		0		0		14:00			25		20		45	
02:15			1		1		2		14:15			22		18		40	
02:30			2		1		3		14:30			19		25		44	
02:45			0	3	1	3	1	6	14:45			26	92	27	90	53	182
03:00			1		0		1		15:00			18		25		43	
03:15			1		2		3		15:15			23		25		48	
03:30			0		2		2		15:30			21		41		62	
03:45			1	3	1	5	2	8	15:45			20	82	26	117	46	199
04:00			0		0		0		16:00			19		29		48	
04:15			1		0		1		16:15			20		37		57	
04:30			1		0		1		16:30			19		22		41	
04:45			1	3	1	1	2	4	16:45			26	84	29	117	55	201
05:00			0		1		1		17:00			28		24		52	
05:15			1		1		2		17:15			17		18		35	
05:30			4		0		4		17:30			20		17		37	
05:45			3	8	1	3	4	11	17:45			16	81	27	86	43	167
06:00			9		1		10		18:00			23		23		46	
06:15			6		1		7		18:15			15		16		31	
06:30			9		2		11		18:30			17		10		27	
06:45			10	34	5	9	15	43	18:45			16	71	22	71	38	142
07:00			6		1		7		19:00			14		19		33	
07:15			14		3		17		19:15			11		13		24	
07:30			5		4		9		19:30			11		18		29	
07:45			18	43	11	19	29	62	19:45			7	43	12	62	19	105
08:00			22		8		30		20:00			11		13		24	
08:15			18		12		30		20:15			8		14		22	
08:30			29		17		46		20:30			4		9		13	
08:45			28	97	14	51	42	148	20:45			9	32	10	46	19	78
09:00			16		17		33		21:00			5		12		17	
09:15			31		17		48		21:15			6		15		21	
09:30			19		14		33		21:30			6		12		18	
09:45			24	90	19	67	43	157	21:45			6	23	12	51	18	74
10:00			34		12		46		22:00			2		4		6	
10:15			27		28		55		22:15			2		6		8	
10:30			16		17		33		22:30			4		9		13	
10:45			23	100	27	84	50	184	22:45			1	9	11	30	12	39
11:00			28		22		50		23:00			4		3		7	
11:15			30		25		55		23:15			2		6		8	
11:30			34		22		56		23:30			1		3		4	
11:45			22	114	18	87	40	201	23:45			2	9	4	16	6	25
TOTALS				504		341		845	TOTALS				732		900		1632
SPLIT %				59.6%		40.4%		34.1%	SPLIT %				44.9%		55.1%		65.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,236	1,241	2,477

AM Peak Hour			10:45	10:45	10:45	PM Peak Hour			12:15	15:30	12:30
AM Pk Volume			115	96	211	PM Pk Volume			117	133	229
Pk Hr Factor			0.846	0.889	0.942	Pk Hr Factor			0.975	0.811	0.923
7 - 9 Volume	0	0	140	70	210	4 - 6 Volume	0	0	165	203	368
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:15	16:00	16:15
7 - 9 Pk Volume	0	0	97	51	148	4 - 6 Pk Volume	0	0	93	117	205
Pk Hr Factor	0.000	0.000	0.836	0.750	0.804	Pk Hr Factor	0.000	0.000	0.830	0.791	0.899

Prepared by NDS/ATD

VOLUME

Chili Hill Rd Bet. Lozanos Rd & Gold Hill Rd

Day: Saturday
Date: 6/24/2017

City: Newcastle
Project #: CA17_7498_017

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	123	139	262

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			8		9		17	
00:15			0		0		0		12:15			4		3		7	
00:30			0		0		0		12:30			4		1		5	
00:45			0		0		0		12:45			3	19	1	14	4	33
01:00			0		1		1		13:00			6		3		9	
01:15			0		0		0		13:15			3		4		7	
01:30			0		0		0		13:30			1		1		2	
01:45			0		0	1	0	1	13:45			2	12	1	9	3	21
02:00			1		0		1		14:00			0		2		2	
02:15			0		0		0		14:15			0		0		0	
02:30			0		0		0		14:30			0		3		3	
02:45			0	1	0		0	1	14:45			1	1	2	7	3	8
03:00			0		0		0		15:00			1		5		6	
03:15			0		0		0		15:15			0		1		1	
03:30			0		0		0		15:30			0		1		1	
03:45			0		0		0		15:45			0	1	4	11	4	12
04:00			0		0		0		16:00			1		2		3	
04:15			0		0		0		16:15			1		3		4	
04:30			0		0		0		16:30			0		3		3	
04:45			0		0		0		16:45			0	2	3	11	3	13
05:00			1		1		2		17:00			2		2		4	
05:15			5		0		5		17:15			0		2		2	
05:30			0		0		0		17:30			0		0		0	
05:45			0	6	0	1	0	7	17:45			0	2	1	5	1	7
06:00			0		0		0		18:00			0		5		5	
06:15			1		1		2		18:15			1		0		1	
06:30			2		1		3		18:30			0		4		4	
06:45			3	6	0	2	3	8	18:45			0	1	2	11	2	12
07:00			2		2		4		19:00			1		0		1	
07:15			1		3		4		19:15			0		0		0	
07:30			5		1		6		19:30			0		3		3	
07:45			5	13	0	6	5	19	19:45			0	1	3	6	3	7
08:00			1		3		4		20:00			0		2		2	
08:15			3		0		3		20:15			0		0		0	
08:30			3		0		3		20:30			2		1		3	
08:45			3	10	3	6	6	16	20:45			0	2	2	5	2	7
09:00			4		2		6		21:00			0		0		0	
09:15			4		3		7		21:15			0		0		0	
09:30			5		2		7		21:30			0		0		0	
09:45			5	18	4	11	9	29	21:45			0		3	3	3	3
10:00			3		2		5		22:00			1		0		1	
10:15			2		1		3		22:15			0		2		2	
10:30			4		4		8		22:30			0		0		0	
10:45			1	10	4	11	5	21	22:45			0	1	1	3	1	4
11:00			5		2		7		23:00			0		1		1	
11:15			4		4		8		23:15			0		0		0	
11:30			4		5		9		23:30			0		0		0	
11:45			4	17	4	15	8	32	23:45			0		0	1	0	1
TOTALS				81		53		134	TOTALS				42		86		128
SPLIT %				60.4%		39.6%		51.1%	SPLIT %				32.8%		67.2%		48.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	123	139	262

AM Peak Hour			11:15	11:15	11:15	PM Peak Hour			12:00	12:00	12:00
AM Pk Volume			20	22	42	PM Pk Volume			19	14	33
Pk Hr Factor			0.625	0.611	0.618	Pk Hr Factor			0.594	0.389	0.485
7 - 9 Volume	0	0	23	12	35	4 - 6 Volume	0	0	4	16	20
7 - 9 Peak Hour			07:30	07:15	07:00	4 - 6 Peak Hour			16:15	16:00	16:15
7 - 9 Pk Volume	0	0	14	7	19	4 - 6 Pk Volume	0	0	3	11	14
Pk Hr Factor	0.000	0.000	0.700	0.583	0.792	Pk Hr Factor	0.000	0.000	0.375	0.917	0.875

Prepared by NDS/ATD

VOLUME

Delmar Ave Bet. Sierra College Blvd & Rock Hill Winery

Day: Saturday
Date: 6/10/2017

City: Loomis
Project #: CA17_7498_018

DAILY TOTALS	NB	SB	EB	WB	Total
	562	609	0	0	1,171

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	3		0						3		12:00	9		8						17	
00:15	2		2						4		12:15	8		5						13	
00:30	0		1						1		12:30	5		9						14	
00:45	2	7	1	4					3	11	12:45	21	43	6	28					27	71
01:00	0		2						2		13:00	11		14						25	
01:15	0		0						0		13:15	16		12						28	
01:30	1		0						1		13:30	13		10						23	
01:45	1	2	1	3					2	5	13:45	10	50	9	45					19	95
02:00	0		0						0		14:00	18		6						24	
02:15	0		1						1		14:15	15		8						23	
02:30	1		0						1		14:30	13		10						23	
02:45	0	1	1	2					1	3	14:45	10	56	11	35					21	91
03:00	0		0						0		15:00	9		12						21	
03:15	1		0						1		15:15	10		10						20	
03:30	0		1						1		15:30	13		13						26	
03:45	0	1	0	1					0	2	15:45	14	46	10	45					24	91
04:00	2		0						2		16:00	12		15						27	
04:15	0		1						1		16:15	14		12						26	
04:30	0		1						1		16:30	12		9						21	
04:45	1	3	1	3					2	6	16:45	13	51	10	46					23	97
05:00	0		1						1		17:00	6		6						12	
05:15	2		3						5		17:15	6		8						14	
05:30	2		1						3		17:30	9		8						17	
05:45	3	7	0	5					3	12	17:45	10	31	12	34					22	65
06:00	1		2						3		18:00	10		4						14	
06:15	1		5						6		18:15	19		6						25	
06:30	1		4						5		18:30	12		8						20	
06:45	2	5	3	14					5	19	18:45	10	51	10	28					20	79
07:00	4		2						6		19:00	8		12						20	
07:15	2		4						6		19:15	7		14						21	
07:30	2		4						6		19:30	5		12						17	
07:45	6	14	6	16					12	30	19:45	4	24	10	48					14	72
08:00	8		7						15		20:00	4		8						12	
08:15	4		9						13		20:15	9		10						19	
08:30	11		9						20		20:30	7		12						19	
08:45	6	29	4	29					10	58	20:45	4	24	10	40					14	64
09:00	8		10						18		21:00	2		8						10	
09:15	7		9						16		21:15	5		7						12	
09:30	4		8						12		21:30	2		10						12	
09:45	5	24	11	38					16	62	21:45	6	15	12	37					18	52
10:00	7		8						15		22:00	4		16						20	
10:15	7		7						14		22:15	5		11						16	
10:30	8		8						16		22:30	2		9						11	
10:45	10	32	5	28					15	60	22:45	2	13	4	40					6	53
11:00	6		8						14		23:00	3		2						5	
11:15	7		10						17		23:15	2		1						3	
11:30	6		9						15		23:30	2		0						2	
11:45	5	24	9	36					14	60	23:45	2	9	1	4					3	13
TOTALS		149		179						328	TOTALS		413		430						843
SPLIT %		45.4%		54.6%						28.0%	SPLIT %		49.0%		51.0%						72.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	562	609	0	0	1,171

AM Peak Hour	08:30	09:00			08:30	PM Peak Hour	12:45	15:30			12:45
AM Pk Volume	32	38			64	PM Pk Volume	61	50			103
Pk Hr Factor	0.727	0.864			0.800	Pk Hr Factor	0.726	0.833			0.920
7 - 9 Volume	43	45	0	0	88	4 - 6 Volume	82	80	0	0	162
7 - 9 Peak Hour	07:45	07:45			07:45	4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	29	31	0	0	60	4 - 6 Pk Volume	51	46	0	0	97
Pk Hr Factor	0.659	0.861	0.000	0.000	0.750	Pk Hr Factor	0.911	0.767	0.000	0.000	0.898

Prepared by NDS/ATD

VOLUME

Fowler Rd Bet. SR 193 & Virginiatown Rd

Day: Saturday
Date: 6/10/2017

City: Lincoln
Project #: CA17_7498_019

DAILY TOTALS	NB	SB	EB	WB	Total
	1,770	1,670	0	0	3,440

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	6		4						10		**12:00**	34		29						63	
00:15	6		5						11		**12:15**	29		28						57	
00:30	3		3						6		**12:30**	37		28						65	
00:45	3	18	1	13					4	31	**12:45**	43	143	17	102					60	245
01:00	4		0						4		**13:00**	42		20						62	
01:15	2		2						4		**13:15**	25		23						48	
01:30	1		0						1		**13:30**	32		27						59	
01:45	2	9	1	3					3	12	**13:45**	34	133	19	89					53	222
02:00	1		2						3		**14:00**	34		21						55	
02:15	1		1						2		**14:15**	41		30						71	
02:30	2		1						3		**14:30**	32		27						59	
02:45	1	5	0	4					1	9	**14:45**	38	145	25	103					63	248
03:00	1		0						1		**15:00**	27		22						49	
03:15	0		1						1		**15:15**	24		28						52	
03:30	2		2						4		**15:30**	46		24						70	
03:45	0	3	1	4					1	7	**15:45**	54	151	19	93					73	244
04:00	1		0						1		**16:00**	54		23						77	
04:15	1		3						4		**16:15**	50		22						72	
04:30	1		1						2		**16:30**	71		24						95	
04:45	0	3	0	4					0	7	**16:45**	56	231	29	98					85	329
05:00	1		3						4		**17:00**	55		26						81	
05:15	2		3						5		**17:15**	47		23						70	
05:30	1		5						6		**17:30**	33		29						62	
05:45	6	10	7	18					13	28	**17:45**	24	159	29	107					53	266
06:00	5		4						9		**18:00**	25		20						45	
06:15	8		6						14		**18:15**	28		22						50	
06:30	10		12						22		**18:30**	19		25						44	
06:45	12	35	17	39					29	74	**18:45**	24	96	22	89					46	185
07:00	10		20						30		**19:00**	23		18						41	
07:15	11		24						35		**19:15**	19		12						31	
07:30	13		12						25		**19:30**	15		20						35	
07:45	12	46	15	71					27	117	**19:45**	16	73	21	71					37	144
08:00	9		13						22		**20:00**	19		31						50	
08:15	7		19						26		**20:15**	20		28						48	
08:30	11		21						32		**20:30**	13		39						52	
08:45	19	46	27	80					46	126	**20:45**	14	66	32	130					46	196
09:00	20		24						44		**21:00**	16		32						48	
09:15	21		16						37		**21:15**	10		43						53	
09:30	22		15						37		**21:30**	17		24						41	
09:45	23	86	21	76					44	162	**21:45**	11	54	18	117					29	171
10:00	25		27						52		**22:00**	17		36						53	
10:15	14		16						30		**22:15**	14		39						53	
10:30	26		20						46		**22:30**	11		25						36	
10:45	25	90	17	80					42	170	**22:45**	8	50	21	121					29	171
11:00	19		20						39		**23:00**	6		16						22	
11:15	26		27						53		**23:15**	6		12						18	
11:30	26		32						58		**23:30**	7		17						24	
11:45	23	94	22	101					45	195	**23:45**	5	24	12	57					17	81
TOTALS		445		493						**938**	**TOTALS**		1325		1177						**2502**
SPLIT %		47.4%		52.6%						**27.3%**	**SPLIT %**		53.0%		47.0%						**72.7%**

DAILY TOTALS	NB	SB	EB	WB	Total
	1,770	1,670	0	0	3,440

AM Peak Hour	11:45	11:30			**11:45**	**PM Peak Hour**	16:15	20:30			**16:15**
AM Pk Volume	123	111			**230**	**PM Pk Volume**	232	146			**333**
Pk Hr Factor	0.831	0.867			**0.885**	**Pk Hr Factor**	0.817	0.849			**0.876**
7 - 9 Volume	92	151	0	0	**243**	**4 - 6 Volume**	390	205	0	0	**595**
7 - 9 Peak Hour	07:00	08:00			**08:00**	**4 - 6 Peak Hour**	16:15	16:45			**16:15**
7 - 9 Pk Volume	46	80	0	0	**126**	**4 - 6 Pk Volume**	232	107	0	0	**333**
Pk Hr Factor	0.885	0.741	0.000	0.000	**0.685**	**Pk Hr Factor**	0.817	0.922	0.000	0.000	**0.876**

Prepared by NDS/ATD

VOLUME

Fruitvale Rd Bet. Fowler Rd & Gold Hill Rd

Day: Saturday
Date: 6/24/2017

City: Newcastle
Project #: CA17_7498_020

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	635	551	1,186

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			1		0		1		12:00			20		10		30	
00:15			1		1		2		12:15			10		15		25	
00:30			0		1		1		12:30			9		12		21	
00:45			0	2	0	2	0	4	12:45			14	53	8	45	22	98
01:00			1		1		2		13:00			10		12		22	
01:15			1		1		2		13:15			12		5		17	
01:30			0		0		0		13:30			11		13		24	
01:45			0	2	0	2	0	4	13:45			18	51	9	39	27	90
02:00			0		1		1		14:00			14		6		20	
02:15			1		1		2		14:15			11		6		17	
02:30			1		0		1		14:30			15		7		22	
02:45			0	2	0	2	0	4	14:45			14	54	9	28	23	82
03:00			1		0		1		15:00			8		8		16	
03:15			2		0		2		15:15			12		10		22	
03:30			1		0		1		15:30			14		6		20	
03:45			0	4	1	1	1	5	15:45			18	52	8	32	26	84
04:00			1		1		2		16:00			9		9		18	
04:15			0		0		0		16:15			13		8		21	
04:30			1		0		1		16:30			14		14		28	
04:45			0	2	2	3	2	5	16:45			12	48	9	40	21	88
05:00			1		1		2		17:00			7		7		14	
05:15			1		0		1		17:15			13		8		21	
05:30			4		1		5		17:30			5		8		13	
05:45			3	9	3	5	6	14	17:45			13	38	8	31	21	69
06:00			9		3		12		18:00			9		10		19	
06:15			2		3		5		18:15			10		8		18	
06:30			5		4		9		18:30			10		11		21	
06:45			5	21	3	13	8	34	18:45			3	32	7	36	10	68
07:00			2		4		6		19:00			4		6		10	
07:15			8		10		18		19:15			8		5		13	
07:30			5		6		11		19:30			5		6		11	
07:45			8	23	3	23	11	46	19:45			4	21	3	20	7	41
08:00			8		7		15		20:00			9		5		14	
08:15			6		7		13		20:15			8		4		12	
08:30			9		9		18		20:30			7		9		16	
08:45			8	31	9	32	17	63	20:45			4	28	14	32	18	60
09:00			8		3		11		21:00			6		11		17	
09:15			9		8		17		21:15			6		5		11	
09:30			12		11		23		21:30			6		10		16	
09:45			7	36	9	31	16	67	21:45			3	21	4	30	7	51
10:00			6		10		16		22:00			8		4		12	
10:15			16		11		27		22:15			3		5		8	
10:30			7		2		9		22:30			7		4		11	
10:45			6	35	8	31	14	66	22:45			5	23	4	17	9	40
11:00			10		9		19		23:00			2		3		5	
11:15			6		18		24		23:15			8		0		8	
11:30			8		10		18		23:30			2		2		4	
11:45			9	33	12	49	21	82	23:45			2	14	2	7	4	21
TOTALS				200		194		394	TOTALS				435		357		792
SPLIT %				50.8%		49.2%		33.2%	SPLIT %				54.9%		45.1%		66.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	635	551	1,186

AM Peak Hour			11:45	11:15	11:45	PM Peak Hour			13:45	12:15	12:00
AM Pk Volume			48	50	97	PM Pk Volume			58	47	98
Pk Hr Factor			0.600	0.694	0.808	Pk Hr Factor			0.806	0.783	0.817
7 - 9 Volume	0	0	54	55	109	4 - 6 Volume	0	0	86	71	157
7 - 9 Peak Hour			07:45	08:00	08:00	4 - 6 Peak Hour			16:00	16:00	16:00
7 - 9 Pk Volume	0	0	31	32	63	4 - 6 Pk Volume	0	0	48	40	88
Pk Hr Factor	0.000	0.000	0.861	0.889	0.875	Pk Hr Factor	0.000	0.000	0.857	0.714	0.786

Prepared by NDS/ATD

VOLUME

Gold Hill Rd Bet. SR 193 & Virginiatown Rd

Day: Saturday
Date: 6/10/2017

City: Newcastle
Project #: CA17_7498_021

DAILY TOTALS	NB	SB	EB	WB	Total
	879	978	0	0	1,857

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	3		1						4		**12:00**	14		19						33	
00:15	2		2						4		**12:15**	25		17						42	
00:30	2		1						3		**12:30**	16		13						29	
00:45	2	9	1	5					3	14	**12:45**	11	66	18	67					29	133
01:00	1		1						2		**13:00**	23		19						42	
01:15	2		1						3		**13:15**	16		20						36	
01:30	1		1						2		**13:30**	13		17						30	
01:45	2	6	1	4					3	10	**13:45**	13	65	13	69					26	134
02:00	1		1						2		**14:00**	22		18						40	
02:15	1		1						2		**14:15**	12		15						27	
02:30	0		1						1		**14:30**	26		22						48	
02:45	1	3	1	4					2	7	**14:45**	24	84	28	83					52	167
03:00	1		0						1		**15:00**	11		14						25	
03:15	2		1						3		**15:15**	15		13						28	
03:30	1		0						1		**15:30**	19		23						42	
03:45	1	5	0	1					1	6	**15:45**	22	67	18	68					40	135
04:00	0		1						1		**16:00**	11		11						22	
04:15	1		0						1		**16:15**	21		25						46	
04:30	0		2						2		**16:30**	20		15						35	
04:45	1	2	2	5					3	7	**16:45**	14	66	25	76					39	142
05:00	0		3						3		**17:00**	13		12						25	
05:15	0		1						1		**17:15**	14		16						30	
05:30	1		1						2		**17:30**	12		18						30	
05:45	1	2	3	8					4	10	**17:45**	13	52	12	58					25	110
06:00	1		3						4		**18:00**	13		14						27	
06:15	3		6						9		**18:15**	10		10						20	
06:30	1		4						5		**18:30**	8		8						16	
06:45	3	8	9	22					12	30	**18:45**	10	41	10	42					20	83
07:00	1		2						3		**19:00**	9		7						16	
07:15	5		7						12		**19:15**	11		5						16	
07:30	8		11						19		**19:30**	9		8						17	
07:45	6	20	10	30					16	50	**19:45**	9	38	9	29					18	67
08:00	5		10						15		**20:00**	8		11						19	
08:15	8		12						20		**20:15**	7		8						15	
08:30	11		13						24		**20:30**	5		10						15	
08:45	10	34	15	50					25	84	**20:45**	10	30	12	41					22	71
09:00	9		17						26		**21:00**	7		10						17	
09:15	11		18						29		**21:15**	11		15						26	
09:30	15		15						30		**21:30**	8		18						26	
09:45	18	53	20	70					38	123	**21:45**	6	32	15	58					21	90
10:00	20		22						42		**22:00**	3		12						15	
10:15	17		18						35		**22:15**	8		10						18	
10:30	22		11						33		**22:30**	4		8						12	
10:45	22	81	22	73					44	154	**22:45**	6	21	6	36					12	57
11:00	17		18						35		**23:00**	3		2						5	
11:15	21		22						43		**23:15**	4		2						6	
11:30	22		17						39		**23:30**	2		2						4	
11:45	22	82	15	72					37	154	**23:45**	3	12	1	7					4	19
TOTALS		305		344						**649**	**TOTALS**		574		634						**1208**
SPLIT %		47.0%		53.0%						**34.9%**	**SPLIT %**		47.5%		52.5%						**65.1%**

DAILY TOTALS	NB	SB	EB	WB	Total
	879	978	0	0	1,857

AM Peak Hour	11:30	10:45			**10:45**	**PM Peak Hour**	14:00	14:00			**14:00**
AM Pk Volume	83	79			**161**	**PM Pk Volume**	84	83			**167**
Pk Hr Factor	0.830	0.898			**0.915**	**Pk Hr Factor**	0.808	0.741			**0.803**
7 - 9 Volume	54	80	0	0	**134**	**4 - 6 Volume**	118	134	0	0	**252**
7 - 9 Peak Hour	08:00	08:00			**08:00**	**4 - 6 Peak Hour**	16:15	16:15			**16:15**
7 - 9 Pk Volume	34	50	0	0	**84**	**4 - 6 Pk Volume**	68	77	0	0	**145**
Pk Hr Factor	0.773	0.833	0.000	0.000	**0.840**	**Pk Hr Factor**	0.810	0.770	0.000	0.000	**0.788**

Prepared by NDS/ATD

VOLUME

Millertown Rd Bet. Wise Rd & Vada Ranch Rd

Day: Saturday
Date: 6/10/2017

City: Auburn
Project #: CA17_7498_022

DAILY TOTALS	NB	SB	EB	WB	Total
	70	65	0	0	135

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	1		2						3	
00:15	0		0						0		12:15	0		4						4	
00:30	0		1						1		12:30	2		2						4	
00:45	1	1	0	1					1	2	12:45	0	3	2	10					2	13
01:00	0		0						0		13:00	1		3						4	
01:15	1		0						1		13:15	0		1						1	
01:30	0		1						1		13:30	1		0						1	
01:45	0	1	0	1					0	2	13:45	1	3	1	5					2	8
02:00	0		0						0		14:00	3		1						4	
02:15	1		0						1		14:15	1		0						1	
02:30	0		0						0		14:30	1		0						1	
02:45	0	1	0						0	1	14:45	4	9	3	4					7	13
03:00	0		1						1		15:00	1		1						2	
03:15	1		0						1		15:15	1		2						3	
03:30	0		0						0		15:30	3		0						3	
03:45	1	2	0	1					1	3	15:45	1	6	1	4					2	10
04:00	0		1						1		16:00	0		1						1	
04:15	0		0						0		16:15	2		1						3	
04:30	0		0						0		16:30	2		3						5	
04:45	1	1	0	1					1	2	16:45	0	4	1	6					1	10
05:00	0		0						0		17:00	2		0						2	
05:15	0		0						0		17:15	1		1						2	
05:30	1		1						2		17:30	0		0						0	
05:45	0	1	0	1					0	2	17:45	1	4	3	4					4	8
06:00	1		0						1		18:00	2		1						3	
06:15	1		1						2		18:15	0		1						1	
06:30	1		0						1		18:30	1		0						1	
06:45	0	3	0	1					0	4	18:45	1	4	1	3					2	7
07:00	0		1						1		19:00	1		0						1	
07:15	0		0						0		19:15	0		0						0	
07:30	1		0						1		19:30	1		1						2	
07:45	1	2	2	3					3	5	19:45	0	2	0	1					0	3
08:00	0		0						0		20:00	0		0						0	
08:15	0		0						0		20:15	1		1						2	
08:30	1		2						3		20:30	0		0						0	
08:45	2	3	0	2					2	5	20:45	0	1	0	1					0	2
09:00	3		1						4		21:00	1		0						1	
09:15	1		0						1		21:15	0		2						2	
09:30	1		1						2		21:30	1		0						1	
09:45	0	5	2	4					2	9	21:45	1	3	1	3					2	6
10:00	1		0						1		22:00	0		0						0	
10:15	1		1						2		22:15	0		0						0	
10:30	0		0						0		22:30	1		1						2	
10:45	2	4	2	3					4	7	22:45	0	1	1	2					1	3
11:00	0		0						0		23:00	0		0						0	
11:15	2		2						4		23:15	0		0						0	
11:30	1		0						1		23:30	0		1						1	
11:45	2	5	1	3					3	8	23:45	1	1	0	1					1	2
TOTALS		29		21						50	TOTALS		41		44						85
SPLIT %		58.0%		42.0%						37.0%	SPLIT %		48.2%		51.8%						63.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	70	65	0	0	135

AM Peak Hour	08:30	11:45			11:45	PM Peak Hour	14:00	12:15			14:45
AM Pk Volume	7	9			14	PM Pk Volume	9	11			15
Pk Hr Factor	0.583	0.563			0.875	Pk Hr Factor	0.563	0.688			0.536
7 - 9 Volume	5	5	0	0	10	4 - 6 Volume	8	10	0	0	18
7 - 9 Peak Hour	08:00	07:45			07:45	4 - 6 Peak Hour	16:15	16:00			16:15
7 - 9 Pk Volume	3	4	0	0	6	4 - 6 Pk Volume	6	6	0	0	11
Pk Hr Factor	0.375	0.500	0.000	0.000	0.500	Pk Hr Factor	0.750	0.500	0.000	0.000	0.550

Prepared by NDS/ATD

VOLUME

Ridge Rd Bet. Uncle Joe's Ln & Ralston Ln

Day: Saturday
Date: 6/24/2017

City: Newcastle
Project #: CA17_7498_023

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	326	314	640

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			5		5		10	
00:15			2		0		2		12:15			1		6		7	
00:30			0		0		0		12:30			5		8		13	
00:45			0	2	2	2	2	4	12:45			9	20	1	20	10	40
01:00			3		0		3		13:00			7		5		12	
01:15			0		0		0		13:15			6		9		15	
01:30			2		0		2		13:30			7		5		12	
01:45			0	5	1	1	1	6	13:45			6	26	9	28	15	54
02:00			0		0		0		14:00			4		6		10	
02:15			0		0		0		14:15			7		6		13	
02:30			0		1		1		14:30			4		5		9	
02:45			0		0	1	0	1	14:45			10	25	4	21	14	46
03:00			0		0		0		15:00			5		9		14	
03:15			0		0		0		15:15			10		2		12	
03:30			0		0		0		15:30			7		6		13	
03:45			0		0		0		15:45			3	25	8	25	11	50
04:00			0		0		0		16:00			5		4		9	
04:15			0		0		0		16:15			5		2		7	
04:30			1		1		2		16:30			6		4		10	
04:45			0	1	1	2	1	3	16:45			9	25	6	16	15	41
05:00			0		1		1		17:00			8		6		14	
05:15			0		0		0		17:15			5		5		10	
05:30			0		1		1		17:30			3		6		9	
05:45			0		1	3	1	3	17:45			8	24	3	20	11	44
06:00			0		2		2		18:00			11		5		16	
06:15			0		1		1		18:15			3		4		7	
06:30			1		3		4		18:30			6		3		9	
06:45			1	2	3	9	4	11	18:45			5	25	6	18	11	43
07:00			1		4		5		19:00			3		4		7	
07:15			0		2		2		19:15			3		2		5	
07:30			2		3		5		19:30			5		3		8	
07:45			2	5	6	15	8	20	19:45			5	16	6	15	11	31
08:00			3		2		5		20:00			5		3		8	
08:15			1		5		6		20:15			5		0		5	
08:30			9		4		13		20:30			5		3		8	
08:45			4	17	5	16	9	33	20:45			6	21	2	8	8	29
09:00			4		4		8		21:00			3		2		5	
09:15			7		5		12		21:15			3		4		7	
09:30			4		12		16		21:30			5		6		11	
09:45			2	17	8	29	10	46	21:45			5	16	1	13	6	29
10:00			6		3		9		22:00			2		4		6	
10:15			0		6		6		22:15			3		0		3	
10:30			3		4		7		22:30			1		2		3	
10:45			6	15	5	18	11	33	22:45			1	7	2	8	3	15
11:00			5		4		9		23:00			0		0		0	
11:15			12		10		22		23:15			1		0		1	
11:30			2		4		6		23:30			2		0		2	
11:45			8	27	7	25	15	52	23:45			2	5	1	1	3	6
TOTALS				91		121		212	TOTALS				235		193		428
SPLIT %				42.9%		57.1%		33.1%	SPLIT %				54.9%		45.1%		66.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	326	314	640

AM Peak Hour			11:00	09:00	11:15	PM Peak Hour			14:45	13:15	13:00
AM Pk Volume			27	29	53	PM Pk Volume			32	29	54
Pk Hr Factor			0.563	0.604	0.602	Pk Hr Factor			0.800	0.806	0.900
7 - 9 Volume	0	0	22	31	53	4 - 6 Volume	0	0	49	36	85
7 - 9 Peak Hour			08:00	07:45	08:00	4 - 6 Peak Hour			16:15	16:45	16:30
7 - 9 Pk Volume	0	0	17	17	33	4 - 6 Pk Volume	0	0	28	23	49
Pk Hr Factor	0.000	0.000	0.472	0.708	0.635	Pk Hr Factor	0.000	0.000	0.778	0.958	0.817

Prepared by NDS/ATD

VOLUME

Mt Vernon Rd Bet. Hastings Ln & Meyer Ln

Day: Saturday
Date: 6/10/2017

City: Auburn
Project #: CA17_7498_024

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,348	1,331	2,679

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			31		21		52	
00:15			0		0		0		12:15			21		20		41	
00:30			2		2		4		12:30			25		26		51	
00:45			1	3	1	3	2	6	12:45			22	99	26	93	48	192
01:00			2		1		3		13:00			30		21		51	
01:15			0		1		1		13:15			18		29		47	
01:30			1		1		2		13:30			25		26		51	
01:45			0	3	0	3	0	6	13:45			25	98	30	106	55	204
02:00			0		1		1		14:00			15		30		45	
02:15			1		0		1		14:15			30		34		64	
02:30			0		0		0		14:30			24		33		57	
02:45			0	1	1	2	1	3	14:45			24	93	20	117	44	210
03:00			1		0		1		15:00			19		27		46	
03:15			0		1		1		15:15			21		30		51	
03:30			0		0		0		15:30			29		17		46	
03:45			1	2	1	2	2	4	15:45			22	91	21	95	43	186
04:00			0		0		0		16:00			24		27		51	
04:15			0		1		1		16:15			35		24		59	
04:30			2		0		2		16:30			29		27		56	
04:45			4	6	1	2	5	8	16:45			30	118	18	96	48	214
05:00			1		2		3		17:00			33		22		55	
05:15			2		0		2		17:15			23		17		40	
05:30			3		1		4		17:30			20		22		42	
05:45			9	15	1	4	10	19	17:45			21	97	24	85	45	182
06:00			3		3		6		18:00			17		16		33	
06:15			4		5		9		18:15			19		12		31	
06:30			8		6		14		18:30			11		15		26	
06:45			12	27	6	20	18	47	18:45			10	57	14	57	24	114
07:00			10		12		22		19:00			11		10		21	
07:15			14		13		27		19:15			13		8		21	
07:30			12		16		28		19:30			10		14		24	
07:45			11	47	15	56	26	103	19:45			14	48	8	40	22	88
08:00			14		23		37		20:00			10		7		17	
08:15			18		19		37		20:15			8		4		12	
08:30			25		23		48		20:30			9		14		23	
08:45			22	79	24	89	46	168	20:45			12	39	10	35	22	74
09:00			23		16		39		21:00			11		10		21	
09:15			35		28		63		21:15			8		7		15	
09:30			29		25		54		21:30			5		9		14	
09:45			23	110	28	97	51	207	21:45			2	26	6	32	8	58
10:00			28		27		55		22:00			6		8		14	
10:15			39		22		61		22:15			3		6		9	
10:30			34		38		72		22:30			5		3		8	
10:45			35	136	24	111	59	247	22:45			6	20	3	20	9	40
11:00			27		28		55		23:00			2		6		8	
11:15			26		46		72		23:15			5		10		15	
11:30			41		29		70		23:30			4		14		18	
11:45			27	121	25	128	52	249	23:45			1	12	8	38	9	50
TOTALS				550		517		1067	TOTALS				798		814		1612
SPLIT %				51.5%		48.5%		39.8%	SPLIT %				49.5%		50.5%		60.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,348	1,331	2,679

AM Peak Hour			10:00	10:30	10:30	PM Peak Hour			16:15	13:45	13:45
AM Pk Volume			136	136	258	PM Pk Volume			127	127	221
Pk Hr Factor			0.872	0.739	0.896	Pk Hr Factor			0.907	0.934	0.863
7 - 9 Volume	0	0	126	145	271	4 - 6 Volume	0	0	215	181	396
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:15	16:00	16:15
7 - 9 Pk Volume	0	0	79	89	168	4 - 6 Pk Volume	0	0	127	96	218
Pk Hr Factor	0.000	0.000	0.790	0.927	0.875	Pk Hr Factor	0.000	0.000	0.907	0.889	0.924

Prepared by NDS/ATD

VOLUME

Mt Vernon Rd Bet. Vineyard Dr & Millertown Rd

Day: Saturday
Date: 6/10/2017

City: Auburn
Project #: CA17_7498_025

DAILY TOTALS	NB	SB	EB	WB	Total
	1,267	1,409	0	0	2,676

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	1		0						1		12:00	25		34						59	
00:15	4		2						6		12:15	30		21						51	
00:30	1		5						6		12:30	31		28						59	
00:45	2	8	2	9					4	17	12:45	18	104	31	114					49	218
01:00	3		1						4		13:00	35		27						62	
01:15	5		1						6		13:15	26		25						51	
01:30	2		0						2		13:30	29		30						59	
01:45	1	11	1	3					2	14	13:45	32	122	31	113					63	235
02:00	1		0						1		14:00	29		22						51	
02:15	1		0						1		14:15	27		26						53	
02:30	0		1						1		14:30	31		28						59	
02:45	1	3	0	1					1	4	14:45	27	114	29	105					56	219
03:00	2		2						4		15:00	24		26						50	
03:15	1		0						1		15:15	16		28						44	
03:30	1		0						1		15:30	33		19						52	
03:45	1	5	1	3					2	8	15:45	31	104	25	98					56	202
04:00	0		0						0		16:00	34		26						60	
04:15	0		2						2		16:15	26		29						55	
04:30	1		0						1		16:30	29		27						56	
04:45	1	2	2	4					3	6	16:45	21	110	34	116					55	226
05:00	0		1						1		17:00	24		25						49	
05:15	1		1						2		17:15	15		23						38	
05:30	1		2						3		17:30	17		21						38	
05:45	1	3	7	11					8	14	17:45	19	75	19	88					38	163
06:00	2		5						7		18:00	18		21						39	
06:15	5		5						10		18:15	16		20						36	
06:30	2		6						8		18:30	17		24						41	
06:45	5	14	9	25					14	39	18:45	20	71	17	82					37	153
07:00	8		13						21		19:00	17		19						36	
07:15	4		16						20		19:15	12		12						24	
07:30	3		19						22		19:30	10		6						16	
07:45	7	22	12	60					19	82	19:45	7	46	8	45					15	91
08:00	6		15						21		20:00	11		6						17	
08:15	10		20						30		20:15	13		9						22	
08:30	8		27						35		20:30	16		4						20	
08:45	9	33	34	96					43	129	20:45	15	55	14	33					29	88
09:00	8		19						27		21:00	10		8						18	
09:15	10		24						34		21:15	7		11						18	
09:30	14		35						49		21:30	8		5						13	
09:45	21	53	34	112					55	165	21:45	12	37	6	30					18	67
10:00	21		31						52		22:00	10		7						17	
10:15	24		26						50		22:15	10		2						12	
10:30	28		19						47		22:30	12		11						23	
10:45	21	94	29	105					50	199	22:45	8	40	8	28					16	68
11:00	24		19						43		23:00	7		2						9	
11:15	31		31						62		23:15	11		2						13	
11:30	25		35						60		23:30	8		3						11	
11:45	25	105	32	117					57	222	23:45	10	36	4	11					14	47
TOTALS		353		546						899	TOTALS		914		863						1777
SPLIT %		39.3%		60.7%						33.6%	SPLIT %		51.4%		48.6%						66.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	1,267	1,409	0	0	2,676

AM Peak Hour	11:45	11:15			11:15	PM Peak Hour	15:30	16:00			13:00
AM Pk Volume	111	132			238	PM Pk Volume	124	116			235
Pk Hr Factor	0.895	0.943			0.960	Pk Hr Factor	0.912	0.853			0.933
7 - 9 Volume	55	156	0	0	211	4 - 6 Volume	185	204	0	0	389
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	33	96	0	0	129	4 - 6 Pk Volume	110	116	0	0	226
Pk Hr Factor	0.825	0.706	0.000	0.000	0.750	Pk Hr Factor	0.809	0.853	0.000	0.000	0.942

Prepared by NDS/ATD

VOLUME

Virginiatown Rd Bet. Coyote Ln & Fowler Rd

Day: Saturday
Date: 6/10/2017

City: Lincoln
Project #: CA17_7498_026

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	516	478	994

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			1		0		1		12:00			4		6		10	
00:15			2		0		2		12:15			7		3		10	
00:30			0		0		0		12:30			6		9		15	
00:45			0	3	2	2	2	5	12:45			5	22	5	23	10	45
01:00			0		0		0		13:00			5		9		14	
01:15			2		0		2		13:15			10		8		18	
01:30			0		2		2		13:30			8		10		18	
01:45			2	4	1	3	3	7	13:45			8	31	9	36	17	67
02:00			2		0		2		14:00			7		13		20	
02:15			0		2		2		14:15			6		19		25	
02:30			1		1		2		14:30			6		15		21	
02:45			2	5	5	8	7	13	14:45			4	23	10	57	14	80
03:00			0		2		2		15:00			10		12		22	
03:15			1		1		2		15:15			8		14		22	
03:30			1		1		2		15:30			10		18		28	
03:45			1	3	1	5	2	8	15:45			8	36	30	74	38	110
04:00			2		2		4		16:00			5		24		29	
04:15			0		0		0		16:15			4		20		24	
04:30			1		2		3		16:30			5		20		25	
04:45			1	4	0	4	1	8	16:45			5	19	12	76	17	95
05:00			1		1		2		17:00			5		11		16	
05:15			2		1		3		17:15			5		9		14	
05:30			1		1		2		17:30			4		4		8	
05:45			2	6	2	5	4	11	17:45			8	22	4	28	12	50
06:00			1		2		3		18:00			10		2		12	
06:15			2		2		4		18:15			12		3		15	
06:30			3		1		4		18:30			14		3		17	
06:45			5	11	4	9	9	20	18:45			10	46	4	12	14	58
07:00			1		2		3		19:00			8		2		10	
07:15			10		0		10		19:15			11		5		16	
07:30			8		2		10		19:30			10		3		13	
07:45			5	24	3	7	8	31	19:45			12	41	7	17	19	58
08:00			4		3		7		20:00			15		5		20	
08:15			2		2		4		20:15			22		5		27	
08:30			6		2		8		20:30			29		2		31	
08:45			4	16	5	12	9	28	20:45			15	81	4	16	19	97
09:00			4		8		12		21:00			17		1		18	
09:15			5		6		11		21:15			10		2		12	
09:30			5		7		12		21:30			8		5		13	
09:45			7	21	3	24	10	45	21:45			7	42	2	10	9	52
10:00			5		4		9		22:00			4		3		7	
10:15			4		9		13		22:15			7		1		8	
10:30			3		2		5		22:30			5		2		7	
10:45			2	14	5	20	7	34	22:45			1	17	2	8	3	25
11:00			6		4		10		23:00			1		1		2	
11:15			5		4		9		23:15			2		0		2	
11:30			8		4		12		23:30			0		2		2	
11:45			3	22	5	17	8	39	23:45			0	3	2	5	2	8
TOTALS				133		116		**249**	TOTALS				383		362		**745**
SPLIT %				53.4%		46.6%		**25.1%**	SPLIT %				51.4%		48.6%		**74.9%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	516	478	994

AM Peak Hour			07:15	08:45	**09:00**	**PM Peak Hour**			20:15	15:45	**15:30**
AM Pk Volume			27	26	**45**	**PM Pk Volume**			83	94	**119**
Pk Hr Factor			0.675	0.813	**0.938**	**Pk Hr Factor**			0.716	0.783	**0.783**
7 - 9 Volume	0	0	40	19	**59**	**4 - 6 Volume**	0	0	41	104	**145**
7 - 9 Peak Hour			07:15	08:00	**07:15**	**4 - 6 Peak Hour**			17:00	16:00	**16:00**
7 - 9 Pk Volume	0	0	27	12	**35**	**4 - 6 Pk Volume**	0	0	22	76	**95**
Pk Hr Factor	0.000	0.000	0.675	0.600	**0.875**	**Pk Hr Factor**	0.000	0.000	0.688	0.792	**0.819**

Prepared by NDS/ATD

VOLUME

Fleming Rd Bet. Gladding Rd & McCourtney Rd

Day: Saturday
Date: 6/10/2017

City: Lincoln
Project #: CA17_7498_028

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	43	49	92

AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00			0	0	0		12:00			1	0	1	
00:15			0	0	0		12:15			0	0	0	
00:30			0	0	0		12:30			1	0	1	
00:45			0	0	0		12:45			0	2	1	1	1	3
01:00			0	0	0		13:00			0	1	1	
01:15			0	0	0		13:15			0	0	0	
01:30			0	0	0		13:30			1	1	2	
01:45			0	0	0		13:45			1	2	2	4	3	6
02:00			0	0	0		14:00			2	0	2	
02:15			0	0	0		14:15			0	0	0	
02:30			0	0	0		14:30			1	2	3	
02:45			0	0	0		14:45			2	5	0	2	2	7
03:00			0	0	0		15:00			1	3	4	
03:15			1	0	1		15:15			2	2	4	
03:30			0	0	0		15:30			0	1	1	
03:45			0	1	0	0	1	15:45			1	4	1	7	2	11
04:00			0	0	0		16:00			0	1	1	
04:15			0	0	0		16:15			1	1	2	
04:30			0	1	1		16:30			0	0	0	
04:45			0	0	1	0	1	16:45			0	1	1	3	1	4
05:00			1	0	1		17:00			1	1	2	
05:15			0	0	0		17:15			2	2	4	
05:30			1	0	1		17:30			0	1	1	
05:45			0	2	0	0	2	17:45			0	3	1	5	1	8
06:00			0	0	0		18:00			2	0	2	
06:15			0	1	1		18:15			0	1	1	
06:30			0	0	0		18:30			0	0	0	
06:45			0	0	1	0	1	18:45			0	2	1	2	1	4
07:00			1	0	1		19:00			1	0	1	
07:15			0	1	1		19:15			0	0	0	
07:30			1	0	1		19:30			0	0	0	
07:45			0	2	0	1	0	3	19:45			1	2	0	1	2
08:00			2	2	4		20:00			0	0	0	
08:15			0	0	0		20:15			0	1	1	
08:30			1	1	2		20:30			1	0	1	
08:45			0	3	1	4	1	7	20:45			0	1	0	1	0	2
09:00			0	0	0		21:00			1	0	1	
09:15			1	1	2		21:15			0	0	0	
09:30			0	2	2		21:30			0	2	2	
09:45			0	1	1	4	1	5	21:45			0	1	0	2	0	3
10:00			1	2	3		22:00			2	0	2	
10:15			1	0	1		22:15			0	1	1	
10:30			1	1	2		22:30			0	0	0	
10:45			0	3	2	5	2	8	22:45			0	2	0	1	0	3
11:00			1	1	2		23:00			1	1	2	
11:15			1	0	1		23:15			0	0	0	
11:30			0	2	2		23:30			1	0	1	
11:45			2	4	1	4	3	8	23:45			0	2	0	1	0	3
TOTALS				16	20	36	TOTALS				27	29	56
SPLIT %				44.4%	55.6%	39.1%	SPLIT %				48.2%	51.8%	60.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	43	49	92

AM Peak Hour			11:00	09:15	09:15	PM Peak Hour			14:30	14:30	14:30
AM Pk Volume			4	6	8	PM Pk Volume			6	7	13
Pk Hr Factor			0.500	0.750	0.667	Pk Hr Factor			0.750	0.583	0.813
7 - 9 Volume	0	0	5	5	10	4 - 6 Volume	0	0	4	8	12
7 - 9 Peak Hour			07:15	08:00	08:00	4 - 6 Peak Hour			16:30	16:45	16:45
7 - 9 Pk Volume	0	0	3	4	7	4 - 6 Pk Volume	0	0	3	5	8
Pk Hr Factor	0.000	0.000	0.375	0.500	0.438	Pk Hr Factor	0.000	0.000	0.375	0.625	0.500

Prepared by NDS/ATD

VOLUME

Ayers Holmes Rd Bet. Mt. Vernon Rd & Wise Rd

Day: Saturday
Date: 6/10/2017

City: Auburn
Project #: CA17_7498_029

DAILY TOTALS	NB	SB	EB	WB	Total
	245	240	0	0	485

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	7		2						9	
00:15	1		0						1		12:15	5		3						8	
00:30	0		0						0		12:30	10		2						12	
00:45	1	2	1	1					2	3	12:45	5	27	4	11					9	38
01:00	0		0						0		13:00	7		4						11	
01:15	0		0						0		13:15	4		7						11	
01:30	0		1						1		13:30	3		2						5	
01:45	1	1	0	1					1	2	13:45	3	17	8	21					11	38
02:00	0		0						0		14:00	6		10						16	
02:15	0		0						0		14:15	7		7						14	
02:30	0		1						1		14:30	7		4						11	
02:45	1	1	0	1					1	2	14:45	6	26	7	28					13	54
03:00	0		0						0		15:00	8		4						12	
03:15	0		1						1		15:15	7		6						13	
03:30	2		0						2		15:30	5		6						11	
03:45	0	2	0	1					0	3	15:45	8	28	9	25					17	53
04:00	1		0						1		16:00	3		3						6	
04:15	0		1						1		16:15	7		3						10	
04:30	1		2						3		16:30	3		1						4	
04:45	0	2	0	3					0	5	16:45	5	18	3	10					8	28
05:00	0		0						0		17:00	4		1						5	
05:15	0		0						0		17:15	4		8						12	
05:30	1		2						3		17:30	7		1						8	
05:45	0	1	2	4					2	5	17:45	4	19	2	12					6	31
06:00	0		0						0		18:00	7		3						10	
06:15	0		4						4		18:15	3		3						6	
06:30	2		2						4		18:30	4		4						8	
06:45	1	3	0	6					1	9	18:45	1	15	2	12					3	27
07:00	2		1						3		19:00	3		1						4	
07:15	1		2						3		19:15	1		2						3	
07:30	2		2						4		19:30	2		1						3	
07:45	1	6	3	8					4	14	19:45	1	7	2	6					3	13
08:00	1		2						3		20:00	4		1						5	
08:15	3		3						6		20:15	3		3						6	
08:30	2		4						6		20:30	3		2						5	
08:45	1	7	5	14					6	21	20:45	2	12	6	12					8	24
09:00	1		4						5		21:00	3		2						5	
09:15	5		3						8		21:15	4		3						7	
09:30	2		4						6		21:30	2		3						5	
09:45	1	9	1	12					2	21	21:45	1	10	4	12					5	22
10:00	3		7						10		22:00	1		1						2	
10:15	3		4						7		22:15	0		1						1	
10:30	4		6						10		22:30	2		1						3	
10:45	5	15	4	21					9	36	22:45	1	4	2	5					3	9
11:00	3		2						5		23:00	0		1						1	
11:15	1		1						2		23:15	1		0						1	
11:30	5		4						9		23:30	0		1						1	
11:45	2	11	3	10					5	21	23:45	1	2	2	4					3	6
TOTALS		60		82						142	TOTALS		185		158						343
SPLIT %		42.3%		57.7%						29.3%	SPLIT %		53.9%		46.1%						70.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	245	240	0	0	485

AM Peak Hour	11:45	10:00			10:00	PM Peak Hour	14:15	13:45			14:00
AM Pk Volume	24	21			36	PM Pk Volume	28	29			54
Pk Hr Factor	0.600	0.750			0.900	Pk Hr Factor	0.875	0.725			0.844
7 - 9 Volume	13	22	0	0	35	4 - 6 Volume	37	22	0	0	59
7 - 9 Peak Hour	07:30	08:00			08:00	4 - 6 Peak Hour	16:45	16:30			16:45
7 - 9 Pk Volume	7	14	0	0	21	4 - 6 Pk Volume	20	13	0	0	33
Pk Hr Factor	0.583	0.700	0.000	0.000	0.875	Pk Hr Factor	0.714	0.406	0.000	0.000	0.688

Prepared by NDS/ATD

VOLUME

Cramer Road Bet. Bell Rd & SR 49

Day: Saturday
Date: 6/10/2017

City: Auburn
Project #: CA17_7498_030

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	267	282	549

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			6		2		8	
00:15			1		3		4		12:15			3		6		9	
00:30			1		1		2		12:30			8		8		16	
00:45			0	2	0	4	0	6	12:45			2	19	7	23	9	42
01:00			0		0		0		13:00			4		6		10	
01:15			1		1		2		13:15			7		6		13	
01:30			0		0		0		13:30			2		6		8	
01:45			0	1	0	1	0	2	13:45			3	16	6	24	9	40
02:00			2		0		2		14:00			6		7		13	
02:15			0		1		1		14:15			7		7		14	
02:30			1		0		1		14:30			5		6		11	
02:45			0	3	0	1	0	4	14:45			6	24	7	27	13	51
03:00			0		2		2		15:00			12		6		18	
03:15			0		0		0		15:15			11		8		19	
03:30			0		1		1		15:30			5		11		16	
03:45			1	1	0	3	1	4	15:45			2	30	11	36	13	66
04:00			2		0		2		16:00			4		10		14	
04:15			0		1		1		16:15			4		6		10	
04:30			1		0		1		16:30			6		2		8	
04:45			0	3	0	1	0	4	16:45			6	20	7	25	13	45
05:00			1		0		1		17:00			2		5		7	
05:15			1		1		2		17:15			5		2		7	
05:30			2		1		3		17:30			3		3		6	
05:45			0	4	0	2	0	6	17:45			1	11	6	16	7	27
06:00			1		0		1		18:00			2		2		4	
06:15			3		1		4		18:15			1		2		3	
06:30			0		2		2		18:30			1		6		7	
06:45			2	6	0	3	2	9	18:45			1	5	1	11	2	16
07:00			5		1		6		19:00			3		1		4	
07:15			3		3		6		19:15			2		2		4	
07:30			2		3		5		19:30			1		1		2	
07:45			5	15	2	9	7	24	19:45			3	9	2	6	5	15
08:00			3		3		6		20:00			1		5		6	
08:15			3		2		5		20:15			2		1		3	
08:30			8		4		12		20:30			4		3		7	
08:45			1	15	4	13	5	28	20:45			5	12	1	10	6	22
09:00			6		2		8		21:00			3		2		5	
09:15			4		4		8		21:15			1		1		2	
09:30			5		5		10		21:30			2		3		5	
09:45			3	18	4	15	7	33	21:45			2	8	3	9	5	17
10:00			5		8		13		22:00			4		2		6	
10:15			2		2		4		22:15			2		2		4	
10:30			4		4		8		22:30			1		3		4	
10:45			4	15	4	18	8	33	22:45			2	9	1	8	3	17
11:00			2		2		4		23:00			2		1		3	
11:15			6		4		10		23:15			1		2		3	
11:30			4		2		6		23:30			1		1		2	
11:45			5	17	4	12	9	29	23:45			0	4	1	5	1	9
TOTALS				100		82		182	TOTALS				167		200		367
SPLIT %				54.9%		45.1%		33.2%	SPLIT %				45.5%		54.5%		66.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	267	282	549

AM Peak Hour			11:45	09:15	11:45	PM Peak Hour			14:30	15:15	14:45
AM Pk Volume			22	21	42	PM Pk Volume			34	40	66
Pk Hr Factor			0.688	0.656	0.656	Pk Hr Factor			0.708	0.909	0.868
7 - 9 Volume	0	0	30	22	52	4 - 6 Volume	0	0	31	41	72
7 - 9 Peak Hour			07:45	08:00	07:45	4 - 6 Peak Hour			16:00	16:00	16:00
7 - 9 Pk Volume	0	0	19	13	30	4 - 6 Pk Volume	0	0	20	25	45
Pk Hr Factor	0.000	0.000	0.594	0.813	0.625	Pk Hr Factor	0.000	0.000	0.833	0.625	0.804

Prepared by NDS/ATD

VOLUME

Crosby Herold Rd Bet. Wise Rd & Meadow Creek Rd

Day: Saturday
Date: 6/10/2017

City: Lincoln
Project #: CA17_7498_031

DAILY TOTALS	NB	SB	EB	WB	Total
	293	289	0	0	582

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	6		9						15	
00:15	0		0						0		12:15	3		4						7	
00:30	0		1						1		12:30	1		3						4	
00:45	0		0	1					0	1	12:45	6	16	8	24					14	40
01:00	1		0						1		13:00	4		5						9	
01:15	0		0						0		13:15	6		4						10	
01:30	0		2						2		13:30	3		2						5	
01:45	2	3	0	2					2	5	13:45	4	17	5	16					9	33
02:00	0		0						0		14:00	4		4						8	
02:15	0		1						1		14:15	8		3						11	
02:30	0		1						1		14:30	10		4						14	
02:45	0		0	2					0	2	14:45	14	36	4	15					18	51
03:00	1		0						1		15:00	12		2						14	
03:15	0		0						0		15:15	10		1						11	
03:30	0		2						2		15:30	8		4						12	
03:45	1	2	0	2					1	4	15:45	8	38	9	16					17	54
04:00	0		0						0		16:00	4		4						8	
04:15	0		0						0		16:15	5		6						11	
04:30	0		1						1		16:30	6		5						11	
04:45	2	2	0	1					2	3	16:45	5	20	8	23					13	43
05:00	0		2						2		17:00	5		10						15	
05:15	0		1						1		17:15	4		7						11	
05:30	0		1						1		17:30	6		3						9	
05:45	1	1	0	4					1	5	17:45	7	22	8	28					15	50
06:00	0		2						2		18:00	6		3						9	
06:15	0		2						2		18:15	6		6						12	
06:30	1		2						3		18:30	4		1						5	
06:45	1	2	4	10					5	12	18:45	2	18	4	14					6	32
07:00	3		1						4		19:00	1		2						3	
07:15	2		2						4		19:15	1		6						7	
07:30	6		5						11		19:30	3		2						5	
07:45	2	13	4	12					6	25	19:45	7	12	6	16					13	28
08:00	1		4						5		20:00	4		4						8	
08:15	2		2						4		20:15	3		6						9	
08:30	2		5						7		20:30	2		3						5	
08:45	5	10	4	15					9	25	20:45	2	11	3	16					5	27
09:00	5		7						12		21:00	3		6						9	
09:15	5		1						6		21:15	1		3						4	
09:30	2		1						3		21:30	3		1						4	
09:45	4	16	7	16					11	32	21:45	1	8	1	11					2	19
10:00	6		10						16		22:00	2		2						4	
10:15	2		10						12		22:15	3		1						4	
10:30	1		4						5		22:30	2		1						3	
10:45	2	11	5	29					7	40	22:45	1	8	2	6					3	14
11:00	4		2						6		23:00	1		0						1	
11:15	5		3						8		23:15	1		1						2	
11:30	5		2						7		23:30	1		0						1	
11:45	10	24	2	9					12	33	23:45	0	3	0	1					0	4
TOTALS		84		103						187	TOTALS		209		186						395
SPLIT %		44.9%		55.1%						32.1%	SPLIT %		52.9%		47.1%						67.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	293	289	0	0	582

AM Peak Hour	11:15	09:45			09:45	PM Peak Hour	14:30	16:30			14:15
AM Pk Volume	26	31			44	PM Pk Volume	46	30			57
Pk Hr Factor	0.650	0.775			0.688	Pk Hr Factor	0.821	0.750			0.792
7 - 9 Volume	23	27	0	0	50	4 - 6 Volume	42	51	0	0	93
7 - 9 Peak Hour	07:00	07:15			07:15	4 - 6 Peak Hour	17:00	16:30			16:15
7 - 9 Pk Volume	13	15	0	0	26	4 - 6 Pk Volume	22	30	0	0	50
Pk Hr Factor	0.542	0.750	0.000	0.000	0.591	Pk Hr Factor	0.786	0.750	0.000	0.000	0.833

Prepared by NDS/ATD

VOLUME

Wise Rd Bet. Crosby Herold Rd & Garden bar Rd

Day: Saturday
Date: 6/10/2017

City: Lincoln
Project #: CA17_7498_032

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,012	966	1,978

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			1		1		2		12:00			24		11		35	
00:15			0		1		1		12:15			21		18		39	
00:30			3		1		4		12:30			15		14		29	
00:45			2	6	2	5	4	11	12:45			19	79	14	57	33	136
01:00			1		1		2		13:00			26		14		40	
01:15			2		0		2		13:15			21		20		41	
01:30			0		3		3		13:30			19		13		32	
01:45			2	5	2	6	4	11	13:45			17	83	13	60	30	143
02:00			1		1		2		14:00			18		26		44	
02:15			1		3		4		14:15			12		21		33	
02:30			1		0		1		14:30			14		22		36	
02:45			1	4	1	5	2	9	14:45			10	54	21	90	31	144
03:00			0		0		0		15:00			16		19		35	
03:15			1		2		3		15:15			23		23		46	
03:30			0		1		1		15:30			15		22		37	
03:45			0	1	0	3	0	4	15:45			12	66	17	81	29	147
04:00			1		1		2		16:00			20		21		41	
04:15			3		0		3		16:15			25		23		48	
04:30			4		1		5		16:30			25		26		51	
04:45			1	9	1	3	2	12	16:45			12	82	15	85	27	167
05:00			3		2		5		17:00			22		18		40	
05:15			5		6		11		17:15			17		21		38	
05:30			5		3		8		17:30			10		14		24	
05:45			6	19	5	16	11	35	17:45			20	69	15	68	35	137
06:00			5		3		8		18:00			16		15		31	
06:15			7		4		11		18:15			20		14		34	
06:30			11		8		19		18:30			14		10		24	
06:45			4	27	7	22	11	49	18:45			11	61	13	52	24	113
07:00			6		9		15		19:00			7		11		18	
07:15			8		9		17		19:15			12		9		21	
07:30			12		6		18		19:30			8		10		18	
07:45			10	36	8	32	18	68	19:45			5	32	12	42	17	74
08:00			14		15		29		20:00			9		5		14	
08:15			13		12		25		20:15			5		9		14	
08:30			20		8		28		20:30			9		7		16	
08:45			16	63	16	51	32	114	20:45			15	38	9	30	24	68
09:00			13		18		31		21:00			11		11		22	
09:15			17		15		32		21:15			9		8		17	
09:30			15		8		23		21:30			7		4		11	
09:45			12	57	17	58	29	115	21:45			10	37	7	30	17	67
10:00			13		17		30		22:00			8		5		13	
10:15			12		11		23		22:15			7		7		14	
10:30			12		16		28		22:30			10		6		16	
10:45			19	56	20	64	39	120	22:45			8	33	3	21	11	54
11:00			11		17		28		23:00			9		3		12	
11:15			14		17		31		23:15			9		2		11	
11:30			25		17		42		23:30			5		3		8	
11:45			15	65	23	74	38	139	23:45			7	30	3	11	10	41
TOTALS				348		339		687	TOTALS				664		627		1291
SPLIT %				50.7%		49.3%		34.7%	SPLIT %				51.4%		48.6%		65.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,012	966	1,978

AM Peak Hour			11:30	11:00	11:30	PM Peak Hour			12:45	14:00	15:45
AM Pk Volume			85	74	154	PM Pk Volume			85	90	169
Pk Hr Factor			0.850	0.804	0.917	Pk Hr Factor			0.817	0.865	0.828
7 - 9 Volume	0	0	99	83	182	4 - 6 Volume	0	0	151	153	304
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:15	16:00	16:00
7 - 9 Pk Volume	0	0	63	51	114	4 - 6 Pk Volume	0	0	84	85	167
Pk Hr Factor	0.000	0.000	0.788	0.797	0.891	Pk Hr Factor	0.000	0.000	0.840	0.817	0.819

TECHNICAL APPENDIX 3 OF 4

FOR

PLACER COUNTY WINERY AND FARM BREWERY ORDINANCE TRAFFIC IMPACT ANALYSIS

Placer County, California

Prepared For:

RANEY PLANNING & MANAGEMENT
1501 Sports Drive
Sacramento, CA 95834

Prepared By:

KD Anderson & Associates, Inc.
3853 Taylor Road, Suite G
Loomis, CA 95650
(916) 660-1555

April 10, 2019

Job No. 5765-19

DAILY COUNTS
WEEKDAY

KDA

Prepared by NDS/ATD

VOLUME

Wise Rd Bet. McCourtney Rd & Crosby Herold Rd

Day: Thursday
Date: 10/12/2017

City: Lincoln
Project #: CA17_7775_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,304	1,271	2,575

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			1		1		2		12:00			17		15		32	
00:15			2		0		2		12:15			19		14		33	
00:30			3		0		3		12:30			22		22		44	
00:45			1	7	0	1	1	8	12:45			16	74	20	71	36	145
01:00			0		2		2		13:00			22		11		33	
01:15			1		1		2		13:15			10		15		25	
01:30			0		2		2		13:30			21		20		41	
01:45			1	2	1	6	2	8	13:45			22	75	18	64	40	139
02:00			1		0		1		14:00			20		16		36	
02:15			0		1		1		14:15			22		28		50	
02:30			0		0		0		14:30			19		22		41	
02:45			0	1	0	1	0	2	14:45			24	85	13	79	37	164
03:00			1		1		2		15:00			25		23		48	
03:15			1		0		1		15:15			31		24		55	
03:30			0		1		1		15:30			26		22		48	
03:45			1	3	0	2	1	5	15:45			17	99	16	85	33	184
04:00			1		1		2		16:00			47		23		70	
04:15			2		6		8		16:15			26		31		57	
04:30			3		4		7		16:30			32		31		63	
04:45			1	7	3	14	4	21	16:45			32	137	34	119	66	256
05:00			0		5		5		17:00			32		27		59	
05:15			7		8		15		17:15			39		30		69	
05:30			10		17		27		17:30			22		22		44	
05:45			10	27	8	38	18	65	17:45			22	115	19	98	41	213
06:00			12		17		29		18:00			31		26		57	
06:15			13		21		34		18:15			31		19		50	
06:30			32		15		47		18:30			29		21		50	
06:45			21	78	20	73	41	151	18:45			18	109	17	83	35	192
07:00			17		22		39		19:00			14		9		23	
07:15			14		28		42		19:15			14		19		33	
07:30			21		41		62		19:30			12		12		24	
07:45			25	77	26	117	51	194	19:45			13	53	5	45	18	98
08:00			27		14		41		20:00			9		5		14	
08:15			22		16		38		20:15			19		8		27	
08:30			20		18		38		20:30			9		5		14	
08:45			18	87	17	65	35	152	20:45			10	47	3	21	13	68
09:00			12		19		31		21:00			5		6		11	
09:15			18		23		41		21:15			11		5		16	
09:30			10		21		31		21:30			8		5		13	
09:45			7	47	26	89	33	136	21:45			5	29	5	21	10	50
10:00			15		26		41		22:00			3		5		8	
10:15			10		25		35		22:15			4		3		7	
10:30			17		16		33		22:30			5		1		6	
10:45			16	58	15	82	31	140	22:45			3	15	2	11	5	26
11:00			19		16		35		23:00			1		3		4	
11:15			12		14		26		23:15			0		0		0	
11:30			19		22		41		23:30			3		4		7	
11:45			16	66	23	75	39	141	23:45			2	6	4	11	6	17
TOTALS				460		563		1023	TOTALS				844		708		1552
SPLIT %				45.0%		55.0%		39.7%	SPLIT %				54.4%		45.6%		60.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,304	1,271	2,575

AM Peak Hour			07:30	07:00	07:15	PM Peak Hour			16:00	16:15	16:30
AM Pk Volume			95	117	196	PM Pk Volume			137	123	257
Pk Hr Factor			0.880	0.713	0.790	Pk Hr Factor			0.729	0.904	0.931
7 - 9 Volume	0	0	164	182	346	4 - 6 Volume	0	0	252	217	469
7 - 9 Peak Hour			07:30	07:00	07:15	4 - 6 Peak Hour			16:00	16:15	16:30
7 - 9 Pk Volume	0	0	95	117	196	4 - 6 Pk Volume	0	0	137	123	257
Pk Hr Factor	0.000	0.000	0.880	0.713	0.790	Pk Hr Factor	0.000	0.000	0.729	0.904	0.931

Prepared by NDS/ATD

VOLUME

Nicolaus Rd Bet. Canal Rd & Maverick Ln

Day: Thursday
Date: 10/12/2017

City: Lincoln
Project #: CA17_7775_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,543	1,521	3,064

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			2		3		5		12:00			14		18		32	
00:15			2		2		4		12:15			11		13		24	
00:30			2		2		4		12:30			14		15		29	
00:45			1	7	1	8	2	15	12:45			18	57	12	58	30	115
01:00			0		0		0		13:00			12		15		27	
01:15			0		1		1		13:15			14		12		26	
01:30			0		0		0		13:30			20		16		36	
01:45			1	1	1	2	2	3	13:45			11	57	13	56	24	113
02:00			1		0		1		14:00			15		23		38	
02:15			0		0		0		14:15			12		30		42	
02:30			2		2		4		14:30			17		18		35	
02:45			1	4	0	2	1	6	14:45			25	69	25	96	50	165
03:00			3		0		3		15:00			34		41		75	
03:15			1		1		2		15:15			24		36		60	
03:30			2		6		8		15:30			41		41		82	
03:45			0	6	1	8	1	14	15:45			31	130	38	156	69	286
04:00			3		3		6		16:00			28		33		61	
04:15			2		4		6		16:15			41		44		85	
04:30			6		3		9		16:30			53		56		109	
04:45			5	16	1	11	6	27	16:45			51	173	36	169	87	342
05:00			9		8		17		17:00			48		46		94	
05:15			11		5		16		17:15			60		42		102	
05:30			10		12		22		17:30			48		33		81	
05:45			15	45	9	34	24	79	17:45			31	187	26	147	57	334
06:00			17		15		32		18:00			42		32		74	
06:15			20		24		44		18:15			34		28		62	
06:30			15		32		47		18:30			32		21		53	
06:45			31	83	37	108	68	191	18:45			21	129	17	98	38	227
07:00			30		44		74		19:00			19		14		33	
07:15			37		37		74		19:15			20		18		38	
07:30			48		32		80		19:30			8		13		21	
07:45			26	141	34	147	60	288	19:45			7	54	17	62	24	116
08:00			31		26		57		20:00			13		18		31	
08:15			25		38		63		20:15			12		9		21	
08:30			34		16		50		20:30			6		4		10	
08:45			31	121	13	93	44	214	20:45			2	33	11	42	13	75
09:00			16		22		38		21:00			3		12		15	
09:15			13		12		25		21:15			3		9		12	
09:30			19		19		38		21:30			3		5		8	
09:45			18	66	6	59	24	125	21:45			6	15	8	34	14	49
10:00			20		3		23		22:00			0		2		2	
10:15			11		15		26		22:15			6		4		10	
10:30			15		16		31		22:30			2		6		8	
10:45			15	61	9	43	24	104	22:45			0	8	2	14	2	22
11:00			18		15		33		23:00			3		5		8	
11:15			22		17		39		23:15			3		4		7	
11:30			13		17		30		23:30			3		4		7	
11:45			16	69	10	59	26	128	23:45			2	11	2	15	4	26
TOTALS				620		574		1194	TOTALS				923		947		1870
SPLIT %				51.9%		48.1%		39.0%	SPLIT %				49.4%		50.6%		61.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,543	1,521	3,064

AM Peak Hour			06:45	06:30	06:45	PM Peak Hour			16:30	16:15	16:30
AM Pk Volume			146	150	296	PM Pk Volume			212	182	392
Pk Hr Factor			0.760	0.852	0.925	Pk Hr Factor			0.883	0.813	0.899
7 - 9 Volume	0	0	262	240	502	4 - 6 Volume	0	0	360	316	676
7 - 9 Peak Hour			07:15	07:00	07:00	4 - 6 Peak Hour			16:30	16:15	16:30
7 - 9 Pk Volume	0	0	142	147	288	4 - 6 Pk Volume	0	0	212	182	392
Pk Hr Factor	0.000	0.000	0.740	0.835	0.900	Pk Hr Factor	0.000	0.000	0.883	0.813	0.899

Prepared by NDS/ATD

VOLUME

McCourtney Rd Bet. Wise Rd & Big Ben Rd

Day: Thursday
Date: 10/12/2017

City: Lincoln
Project #: CA17_7775_004

DAILY TOTALS	NB	SB	EB	WB	Total
	612	580	0	0	1,192

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	10		13						23	
00:15	0		4						4		12:15	9		13						22	
00:30	2		3						5		12:30	7		6						13	
00:45	0	2	0	7					0	9	12:45	8	34	7	39					15	73
01:00	1		1						2		13:00	9		6						15	
01:15	1		1						2		13:15	17		8						25	
01:30	0		1						1		13:30	6		9						15	
01:45	0	2	0	3					0	5	13:45	8	40	6	29					14	69
02:00	0		0						0		14:00	15		12						27	
02:15	0		1						1		14:15	12		4						16	
02:30	0		0						0		14:30	9		6						15	
02:45	0		1	2					1	2	14:45	6	42	21	43					27	85
03:00	0		3						3		15:00	16		6						22	
03:15	0		1						1		15:15	12		7						19	
03:30	0		0						0		15:30	21		7						28	
03:45	0		1	5					1	5	15:45	13	62	10	30					23	92
04:00	0		1						1		16:00	15		6						21	
04:15	1		2						3		16:15	12		10						22	
04:30	1		2						3		16:30	13		15						28	
04:45	0	2	0	5					0	7	16:45	16	56	8	39					24	95
05:00	1		3						4		17:00	16		7						23	
05:15	0		9						9		17:15	19		11						30	
05:30	0		11						11		17:30	17		2						19	
05:45	2	3	5	28					7	31	17:45	13	65	14	34					27	99
06:00	9		4						13		18:00	13		11						24	
06:15	3		11						14		18:15	6		10						16	
06:30	4		13						17		18:30	7		9						16	
06:45	6	22	6	34					12	56	18:45	15	41	3	33					18	74
07:00	5		12						17		19:00	5		7						12	
07:15	6		15						21		19:15	27		0						27	
07:30	7		19						26		19:30	6		3						9	
07:45	3	21	18	64					21	85	19:45	7	45	6	16					13	61
08:00	17		8						25		20:00	7		4						11	
08:15	4		4						8		20:15	5		1						6	
08:30	8		12						20		20:30	5		2						7	
08:45	8	37	4	28					12	65	20:45	4	21	3	10					7	31
09:00	3		7						10		21:00	2		6						8	
09:15	0		20						20		21:15	2		4						6	
09:30	4		13						17		21:30	7		1						8	
09:45	9	16	6	46					15	62	21:45	3	14	0	11					3	25
10:00	7		8						15		22:00	4		1						5	
10:15	4		11						15		22:15	2		0						2	
10:30	11		10						21		22:30	0		0						0	
10:45	11	33	8	37					19	70	22:45	1	7	0	1					1	8
11:00	0		15						15		23:00	2		1						3	
11:15	17		2						19		23:15	2		0						2	
11:30	15		6						21		23:30	0		0						0	
11:45	10	42	11	34					21	76	23:45	1	5	1	2					2	7
TOTALS		180		293						473	TOTALS		432		287						719
SPLIT %		38.1%		61.9%						39.7%	SPLIT %		60.1%		39.9%						60.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	612	580	0	0	1,192

AM Peak Hour	11:15	07:00			07:15	PM Peak Hour	16:45	17:45			16:30
AM Pk Volume	52	64			93	PM Pk Volume	68	44			105
Pk Hr Factor	0.765	0.842			0.894	Pk Hr Factor	0.895	0.786			0.875
7 - 9 Volume	58	92	0	0	150	4 - 6 Volume	121	73	0	0	194
7 - 9 Peak Hour	08:00	07:00			07:15	4 - 6 Peak Hour	16:45	16:30			16:30
7 - 9 Pk Volume	37	64	0	0	93	4 - 6 Pk Volume	68	41	0	0	105
Pk Hr Factor	0.544	0.842	0.000	0.000	0.894	Pk Hr Factor	0.895	0.683	0.000	0.000	0.875

Prepared by NDS/ATD

VOLUME

Sierra College Blvd Bet. Delmar Ave & King Rd

Day: Tuesday
Date: 10/3/2017

City: Loomis
Project #: CA17_7775_005

DAILY TOTALS	NB	SB	EB	WB	Total
	6,353	6,409	0	0	12,762

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	4		2						6		12:00	88		82						170	
00:15	5		2						7		12:15	86		81						167	
00:30	6		4						10		12:30	107		91						198	
00:45	5	20	2	10					7	30	12:45	114	395	92	346					206	741
01:00	6		2						8		13:00	99		86						185	
01:15	4		3						7		13:15	88		75						163	
01:30	1		0						1		13:30	95		100						195	
01:45	3	14	1	6					4	20	13:45	99	381	83	344					182	725
02:00	3		2						5		14:00	121		79						200	
02:15	2		5						7		14:15	115		105						220	
02:30	1		1						2		14:30	121		101						222	
02:45	1	7	2	10					3	17	14:45	133	490	90	375					223	865
03:00	2		3						5		15:00	143		113						256	
03:15	5		5						10		15:15	140		119						259	
03:30	1		10						11		15:30	173		112						285	
03:45	2	10	10	28					12	38	15:45	164	620	105	449					269	1069
04:00	3		4						7		16:00	160		120						280	
04:15	2		11						13		16:15	195		106						301	
04:30	4		19						23		16:30	196		108						304	
04:45	7	16	14	48					21	64	16:45	153	704	124	458					277	1162
05:00	7		27						34		17:00	208		103						311	
05:15	9		41						50		17:15	230		107						337	
05:30	6		66						72		17:30	137		103						240	
05:45	16	38	78	212					94	250	17:45	204	779	89	402					293	1181
06:00	14		65						79		18:00	155		83						238	
06:15	32		114						146		18:15	135		69						204	
06:30	36		102						138		18:30	166		59						225	
06:45	60	142	157	438					217	580	18:45	108	564	62	273					170	837
07:00	50		124						174		19:00	81		49						130	
07:15	75		198						273		19:15	62		53						115	
07:30	51		212						263		19:30	72		49						121	
07:45	67	243	179	713					246	956	19:45	66	281	28	179					94	460
08:00	61		183						244		20:00	71		25						96	
08:15	82		166						248		20:15	47		27						74	
08:30	79		120						199		20:30	64		13						77	
08:45	75	297	168	637					243	934	20:45	43	225	22	87					65	312
09:00	56		143						199		21:00	44		22						66	
09:15	68		131						199		21:15	41		31						72	
09:30	76		115						191		21:30	40		31						71	
09:45	64	264	116	505					180	769	21:45	37	162	17	101					54	263
10:00	45		94						139		22:00	31		19						50	
10:15	67		104						171		22:15	19		9						28	
10:30	70		111						181		22:30	27		6						33	
10:45	79	261	87	396					166	657	22:45	15	92	7	41					22	133
11:00	84		75						159		23:00	12		1						13	
11:15	53		75						128		23:15	6		2						8	
11:30	78		94						172		23:30	13		4						17	
11:45	89	304	97	341					186	645	23:45	13	44	3	10					16	54
TOTALS		1616		3344						4960	TOTALS		4737		3065						7802
SPLIT %		32.6%		67.4%						38.9%	SPLIT %		60.7%		39.3%						61.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	6,353	6,409	0	0	12,762

AM Peak Hour	11:45	07:15			07:15	PM Peak Hour	16:30	16:00			16:30
AM Pk Volume	370	772			1026	PM Pk Volume	787	458			1229
Pk Hr Factor	0.864	0.910			0.940	Pk Hr Factor	0.855	0.923			0.912
7 - 9 Volume	540	1350	0	0	1890	4 - 6 Volume	1483	860	0	0	2343
7 - 9 Peak Hour	08:00	07:15			07:15	4 - 6 Peak Hour	16:30	16:00			16:30
7 - 9 Pk Volume	297	772	0	0	1026	4 - 6 Pk Volume	787	458	0	0	1229
Pk Hr Factor	0.905	0.910	0.000	0.000	0.940	Pk Hr Factor	0.855	0.923	0.000	0.000	0.912

Prepared by NDS/ATD

VOLUME

Placer Hills Rd Bet. Pinewood Way & Winchester Club Dr

Day: Tuesday
Date: 10/3/2017

City: Meadow Vista
Project #: CA17_7775_006

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	4,759	4,711	9,470

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			4		6		10		12:00			84		70		154	
00:15			2		7		9		12:15			76		74		150	
00:30			1		2		3		12:30			66		62		128	
00:45			1	8	1	16	2	24	12:45			79	305	68	274	147	579
01:00			0		3		3		13:00			55		71		126	
01:15			2		5		7		13:15			72		94		166	
01:30			1		0		1		13:30			59		94		153	
01:45			1	4	1	9	2	13	13:45			70	256	100	359	170	615
02:00			0		1		1		14:00			104		78		182	
02:15			1		2		3		14:15			91		72		163	
02:30			0		2		2		14:30			84		64		148	
02:45			3	4	5	10	8	14	14:45			72	351	70	284	142	635
03:00			3		2		5		15:00			62		86		148	
03:15			2		1		3		15:15			67		102		169	
03:30			11		1		12		15:30			104		96		200	
03:45			5	21	1	5	6	26	15:45			68	301	109	393	177	694
04:00			8		1		9		16:00			74		103		177	
04:15			8		0		8		16:15			68		93		161	
04:30			10		2		12		16:30			89		123		212	
04:45			16	42	4	7	20	49	16:45			72	303	120	439	192	742
05:00			21		4		25		17:00			84		124		208	
05:15			28		8		36		17:15			107		126		233	
05:30			39		8		47		17:30			89		161		250	
05:45			36	124	13	33	49	157	17:45			95	375	116	527	211	902
06:00			46		11		57		18:00			92		97		189	
06:15			50		14		64		18:15			55		93		148	
06:30			77		22		99		18:30			54		75		129	
06:45			94	267	26	73	120	340	18:45			41	242	74	339	115	581
07:00			93		26		119		19:00			45		69		114	
07:15			113		40		153		19:15			26		80		106	
07:30			126		61		187		19:30			30		55		85	
07:45			140	472	106	233	246	705	19:45			33	134	59	263	92	397
08:00			131		94		225		20:00			27		61		88	
08:15			85		67		152		20:15			16		60		76	
08:30			103		53		156		20:30			30		50		80	
08:45			107	426	73	287	180	713	20:45			10	83	37	208	47	291
09:00			90		71		161		21:00			12		32		44	
09:15			85		60		145		21:15			9		41		50	
09:30			98		49		147		21:30			6		30		36	
09:45			92	365	58	238	150	603	21:45			3	30	22	125	25	155
10:00			68		52		120		22:00			9		13		22	
10:15			68		53		121		22:15			6		18		24	
10:30			81		58		139		22:30			4		11		15	
10:45			92	309	75	238	167	547	22:45			2	21	8	50	10	71
11:00			85		52		137		23:00			3		8		11	
11:15			72		65		137		23:15			4		9		13	
11:30			79		68		147		23:30			4		8		12	
11:45			67	303	88	273	155	576	23:45			2	13	3	28	5	41
TOTALS				2345		1422		3767	TOTALS				2414		3289		5703
SPLIT %				62.3%		37.7%		39.8%	SPLIT %				42.3%		57.7%		60.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	4,759	4,711	9,470

AM Peak Hour			07:15	07:30	07:15	PM Peak Hour			17:15	16:45	17:00
AM Pk Volume			510	328	811	PM Pk Volume			383	531	902
Pk Hr Factor			0.911	0.774	0.824	Pk Hr Factor			0.895	0.825	0.902
7 - 9 Volume	0	0	898	520	1418	4 - 6 Volume	0	0	678	966	1644
7 - 9 Peak Hour			07:15	07:30	07:15	4 - 6 Peak Hour			17:00	16:45	17:00
7 - 9 Pk Volume	0	0	510	328	811	4 - 6 Pk Volume	0	0	375	531	902
Pk Hr Factor	0.000	0.000	0.911	0.774	0.824	Pk Hr Factor	0.000	0.000	0.876	0.825	0.902

Prepared by NDS/ATD

VOLUME

Auburn Folsom Rd Bet. Dick Cook Rd & Horseshoe Bar Rd

Day: Thursday
Date: 10/19/2017

City: Loomis
Project #: CA17_7775_007

DAILY TOTALS	NB	SB	EB	WB	Total
	4,489	4,264	0	0	8,753

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	2		2						4		12:00	59		70						129	
00:15	2		0						2		12:15	62		70						132	
00:30	2		2						4		12:30	62		63						125	
00:45	1	7	1	5					2	12	12:45	65	248	61	264					126	512
01:00	0		0						0		13:00	52		53						105	
01:15	2		0						2		13:15	62		60						122	
01:30	1		2						3		13:30	73		55						128	
01:45	0	3	1	3					1	6	13:45	69	256	57	225					126	481
02:00	0		1						1		14:00	71		47						118	
02:15	1		4						5		14:15	80		64						144	
02:30	1		3						4		14:30	89		89						178	
02:45	0	2	3	11					3	13	14:45	98	338	75	275					173	613
03:00	3		4						7		15:00	93		81						174	
03:15	0		2						2		15:15	89		87						176	
03:30	4		2						6		15:30	124		65						189	
03:45	2	9	1	9					3	18	15:45	100	406	60	293					160	699
04:00	2		1						3		16:00	118		84						202	
04:15	1		8						9		16:15	132		78						210	
04:30	1		8						9		16:30	126		72						198	
04:45	3	7	11	28					14	35	16:45	121	497	67	301					188	798
05:00	6		17						23		17:00	108		86						194	
05:15	9		28						37		17:15	136		103						239	
05:30	10		35						45		17:30	124		60						184	
05:45	17	42	50	130					67	172	17:45	118	486	73	322					191	808
06:00	27		58						85		18:00	98		64						162	
06:15	35		88						123		18:15	107		73						180	
06:30	44		67						111		18:30	88		51						139	
06:45	40	146	89	302					129	448	18:45	55	348	42	230					97	578
07:00	50		93						143		19:00	65		41						106	
07:15	71		111						182		19:15	46		37						83	
07:30	76		112						188		19:30	45		28						73	
07:45	79	276	110	426					189	702	19:45	25	181	26	132					51	313
08:00	85		113						198		20:00	21		27						48	
08:15	68		131						199		20:15	38		33						71	
08:30	68		73						141		20:30	37		31						68	
08:45	47	268	73	390					120	658	20:45	31	127	25	116					56	243
09:00	52		58						110		21:00	32		28						60	
09:15	73		57						130		21:15	22		22						44	
09:30	53		60						113		21:30	27		31						58	
09:45	54	232	55	230					109	462	21:45	12	93	15	96					27	189
10:00	54		36						90		22:00	19		12						31	
10:15	48		58						106		22:15	13		10						23	
10:30	58		52						110		22:30	6		6						12	
10:45	58	218	54	200					112	418	22:45	2	40	8	36					10	76
11:00	60		53						113		23:00	8		5						13	
11:15	51		53						104		23:15	3		6						9	
11:30	68		63						131		23:30	8		3						11	
11:45	58	237	54	223					112	460	23:45	3	22	3	17					6	39
TOTALS		1447		1957						3404	TOTALS		3042		2307						5349
SPLIT %		42.5%		57.5%						38.9%	SPLIT %		56.9%		43.1%						61.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	4,489	4,264	0	0	8,753

AM Peak Hour	07:15	07:30			07:30	PM Peak Hour	16:00	14:30			16:30
AM Pk Volume	311	466			774	PM Pk Volume	497	332			819
Pk Hr Factor	0.915	0.889			0.972	Pk Hr Factor	0.941	0.933			0.857
7 - 9 Volume	544	816	0	0	1360	4 - 6 Volume	983	623	0	0	1606
7 - 9 Peak Hour	07:15	07:30			07:30	4 - 6 Peak Hour	16:00	16:30			16:30
7 - 9 Pk Volume	311	466	0	0	774	4 - 6 Pk Volume	497	328	0	0	819
Pk Hr Factor	0.915	0.889	0.000	0.000	0.972	Pk Hr Factor	0.941	0.796	0.000	0.000	0.857

Prepared by NDS/ATD

VOLUME

Horseshoe Bar Rd Bet. Val Verde Rd & Auburn Folsom Rd

Day: Tuesday
Date: 10/3/2017

City: Loomis
Project #: CA17_7775_008

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,765	1,780	3,545

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			1		0		1		12:00			25		24		49	
00:15			1		1		2		12:15			27		28		55	
00:30			2		1		3		12:30			25		29		54	
00:45			0	4	0	2	0	6	12:45			16	93	33	114	49	207
01:00			0		0		0		13:00			24		26		50	
01:15			1		0		1		13:15			25		25		50	
01:30			0		0		0		13:30			27		26		53	
01:45			0	1	0		0	1	13:45			37	113	20	97	57	210
02:00			1		1		2		14:00			55		18		73	
02:15			0		0		0		14:15			42		56		98	
02:30			0		0		0		14:30			36		89		125	
02:45			1	2	1	2	2	4	14:45			33	166	37	200	70	366
03:00			0		0		0		15:00			31		34		65	
03:15			0		1		1		15:15			45		28		73	
03:30			1		2		3		15:30			23		27		50	
03:45			0	1	2	5	2	6	15:45			26	125	23	112	49	237
04:00			0		4		4		16:00			42		23		65	
04:15			2		2		4		16:15			41		28		69	
04:30			0		5		5		16:30			24		12		36	
04:45			2	4	1	12	3	16	16:45			36	143	23	86	59	229
05:00			2		2		4		17:00			40		40		80	
05:15			0		9		9		17:15			52		67		119	
05:30			6		10		16		17:30			45		38		83	
05:45			2	10	12	33	14	43	17:45			49	186	20	165	69	351
06:00			6		11		17		18:00			32		21		53	
06:15			8		20		28		18:15			28		30		58	
06:30			13		21		34		18:30			23		25		48	
06:45			16	43	10	62	26	105	18:45			46	129	15	91	61	220
07:00			10		31		41		19:00			26		46		72	
07:15			29		27		56		19:15			22		13		35	
07:30			31		36		67		19:30			20		6		26	
07:45			57	127	44	138	101	265	19:45			19	87	5	70	24	157
08:00			71		81		152		20:00			13		3		16	
08:15			39		95		134		20:15			15		8		23	
08:30			21		28		49		20:30			11		3		14	
08:45			15	146	24	228	39	374	20:45			12	51	4	18	16	69
09:00			25		28		53		21:00			16		2		18	
09:15			22		26		48		21:15			14		3		17	
09:30			16		23		39		21:30			13		6		19	
09:45			17	80	20	97	37	177	21:45			14	57	2	13	16	70
10:00			15		26		41		22:00			11		5		16	
10:15			15		25		40		22:15			6		1		7	
10:30			25		34		59		22:30			5		3		8	
10:45			30	85	34	119	64	204	22:45			4	26	2	11	6	37
11:00			17		21		38		23:00			6		2		8	
11:15			15		22		37		23:15			2		1		3	
11:30			24		28		52		23:30			2		0		2	
11:45			18	74	31	102	49	176	23:45			2	12	0	3	2	15
TOTALS				577		800		1377	TOTALS				1188		980		2168
SPLIT %				41.9%		58.1%		38.8%	SPLIT %				54.8%		45.2%		61.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,765	1,780	3,545

AM Peak Hour			07:30	07:30	07:30	PM Peak Hour			17:00	14:15	14:00
AM Pk Volume			198	256	454	PM Pk Volume			186	216	366
Pk Hr Factor			0.697	0.674	0.747	Pk Hr Factor			0.894	0.607	0.732
7 - 9 Volume	0	0	273	366	639	4 - 6 Volume	0	0	329	251	580
7 - 9 Peak Hour			07:30	07:30	07:30	4 - 6 Peak Hour			17:00	16:45	17:00
7 - 9 Pk Volume	0	0	198	256	454	4 - 6 Pk Volume	0	0	186	168	351
Pk Hr Factor	0.000	0.000	0.697	0.674	0.747	Pk Hr Factor	0.000	0.000	0.894	0.627	0.737

Prepared by NDS/ATD

VOLUME

Wise Rd Bet. Country Ln & Crater Hill Rd

Day: Tuesday
Date: 10/3/2017

City: Newcastle
Project #: CA17_7775_009

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	606	562	1,168

AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00			0	0	0		12:00			7	4	11	
00:15			0	0	0		12:15			8	7	15	
00:30			0	1	1		12:30			5	11	16	
00:45			0	1	1	2	12:45			8	28 5	27 13	55
01:00			0	1	1		13:00			9	12	21	
01:15			0	0	0		13:15			7	9	16	
01:30			0	0	0		13:30			7	9	16	
01:45			0	0	0	1	13:45			5	28 5	35 10	63
02:00			0	0	0		14:00			8	5	13	
02:15			0	0	0		14:15			10	3	13	
02:30			0	0	0		14:30			13	16	29	
02:45			0	0	0		14:45			14	45 14	38 28	83
03:00			0	0	0		15:00			16	9	25	
03:15			0	0	0		15:15			14	15	29	
03:30			1	0	1		15:30			6	8	14	
03:45			1	0	1	2	15:45			5	41 10	42 15	83
04:00			2	0	2		16:00			11	10	21	
04:15			0	0	0		16:15			10	17	27	
04:30			2	0	2		16:30			11	17	28	
04:45			7	0	7	11	16:45			7	39 17	61 24	100
05:00			4	0	4		17:00			12	18	30	
05:15			1	0	1		17:15			8	10	18	
05:30			1	2	3		17:30			7	14	21	
05:45			7	5	12	20	17:45			14	41 15	57 29	98
06:00			4	0	4		18:00			14	18	32	
06:15			7	2	9		18:15			13	18	31	
06:30			13	2	15		18:30			10	12	22	
06:45			17	2	19	47	18:45			8	45 7	55 15	100
07:00			13	6	19		19:00			9	8	17	
07:15			17	7	24		19:15			6	7	13	
07:30			15	4	19		19:30			3	10	13	
07:45			14	6	20	82	19:45			1	19 8	33 9	52
08:00			17	13	30		20:00			3	11	14	
08:15			21	7	28		20:15			3	9	12	
08:30			14	13	27		20:30			2	5	7	
08:45			10	4	14	99	20:45			0	8 6	31 6	39
09:00			7	7	14		21:00			3	5	8	
09:15			9	7	16		21:15			2	5	7	
09:30			8	7	15		21:30			1	1	2	
09:45			9	3	12	57	21:45			1	7 2	13 3	20
10:00			7	7	14		22:00			0	5	5	
10:15			11	13	24		22:15			2	4	6	
10:30			10	2	12		22:30			1	1	2	
10:45			15	11	26	76	22:45			2	5 2	12 4	17
11:00			9	9	18		23:00			1	3	4	
11:15			8	6	14		23:15			0	1	1	
11:30			8	1	9		23:30			0	3	3	
11:45			10	2	12	53	23:45			0	1 0	7 0	8
TOTALS			299	151	450		TOTALS			307	411	718	
SPLIT %			66.4%	33.6%	38.5%		SPLIT %			42.8%	57.2%	61.5%	

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	606	562	1,168

AM Peak Hour			07:30	07:45	07:45		PM Peak Hour			14:30	16:15	17:45
AM Pk Volume			67	39	105		PM Pk Volume			57	69	114
Pk Hr Factor			0.798	0.750	0.875		Pk Hr Factor			0.891	0.958	0.891
7 - 9 Volume	0	0	121	60	181		4 - 6 Volume	0	0	80	118	198
7 - 9 Peak Hour			07:30	07:45	07:45		4 - 6 Peak Hour			17:00	16:15	16:15
7 - 9 Pk Volume	0	0	67	39	105		4 - 6 Pk Volume	0	0	41	69	109
Pk Hr Factor	0.000	0.000	0.798	0.750	0.875		Pk Hr Factor	0.000	0.000	0.732	0.958	0.908

Prepared by NDS/ATD

VOLUME

Wise Rd Bet. Bald Hill Rd & Ophir Rd

Day: Tuesday
Date: 10/3/2017

City: Auburn
Project #: CA17_7775_010

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	508	492	1,000

AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00			0	0	0		12:00			6	9	15	
00:15			0	0	0		12:15			8	6	14	
00:30			0	0	0		12:30			3	9	12	
00:45			0	0	0		12:45			8	25 6	30 14	55
01:00			0	0	0		13:00			10	6	16	
01:15			0	0	0		13:15			10	6	16	
01:30			0	0	0		13:30			6	7	13	
01:45			0	0	0		13:45			5	31 7	26 12	57
02:00			0	0	0		14:00			12	12	24	
02:15			0	0	0		14:15			5	16	21	
02:30			0	0	0		14:30			14	13	27	
02:45			0	1 1	1	1	14:45			16	47 14	55 30	102
03:00			1	0	1		15:00			9	12	21	
03:15			0	1	1		15:15			10	9	19	
03:30			0	0	0		15:30			9	6	15	
03:45			0 1	0 1	0	2	15:45			11	39 11	38 22	77
04:00			0	0	0		16:00			9	7	16	
04:15			0	0	0		16:15			10	12	22	
04:30			0	0	0		16:30			8	14	22	
04:45			1 1	0	1	1	16:45			12	39 6	39 18	78
05:00			1	0	1		17:00			5	6	11	
05:15			0	1	1		17:15			18	16	34	
05:30			2	1	3		17:30			7	17	24	
05:45			6 9	3 5	9	14	17:45			14	44 5	44 19	88
06:00			2	3	5		18:00			13	14	27	
06:15			4	1	5		18:15			7	8	15	
06:30			5	3	8		18:30			5	13	18	
06:45			12 23	2 9	14	32	18:45			9	34 5	40 14	74
07:00			6	6	12		19:00			7	4	11	
07:15			12	2	14		19:15			5	6	11	
07:30			15	4	19		19:30			7	4	11	
07:45			13 46	10 22	23	68	19:45			2	21 10	24 12	45
08:00			8	20	28		20:00			3	7	10	
08:15			13	16	29		20:15			3	8	11	
08:30			14	7	21		20:30			2	1	3	
08:45			11 46	5 48	16	94	20:45			1	9 4	20 5	29
09:00			7	6	13		21:00			1	5	6	
09:15			5	3	8		21:15			3	4	7	
09:30			8	10	18		21:30			2	0	2	
09:45			7 27	7 26	14	53	21:45			0	6 4	13 4	19
10:00			7	3	10		22:00			1	2	3	
10:15			5	8	13		22:15			1	2	3	
10:30			8	4	12		22:30			1	0	1	
10:45			8 28	7 22	15	50	22:45			0	3 2	6 2	9
11:00			6	2	8		23:00			0	0	0	
11:15			11	8	19		23:15			0	0	0	
11:30			4	8	12		23:30			0	0	0	
11:45			8 29	5 23	13	52	23:45			0	0	0	
TOTALS			210	157		**367**	**TOTALS**			298	335		**633**
SPLIT %			57.2%	42.8%		**36.7%**	**SPLIT %**			47.1%	52.9%		**63.3%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	508	492	1,000

AM Peak Hour			07:30	07:45	**07:45**		**PM Peak Hour**			17:15	14:00	**17:15**
AM Pk Volume			49	53	**101**		**PM Pk Volume**			52	55	**104**
Pk Hr Factor			0.817	0.663	**0.871**		**Pk Hr Factor**			0.722	0.859	**0.765**
7 - 9 Volume	0	0	92	70	**162**		**4 - 6 Volume**	0	0	83	83	**166**
7 - 9 Peak Hour			07:30	07:45	**07:45**		**4 - 6 Peak Hour**			17:00	16:45	**17:00**
7 - 9 Pk Volume	0	0	49	53	**101**		**4 - 6 Pk Volume**	0	0	44	45	**88**
Pk Hr Factor	0.000	0.000	0.817	0.663	**0.871**		**Pk Hr Factor**	0.000	0.000	0.611	0.662	**0.647**

Prepared by NDS/ATD

VOLUME

Bell Rd Bet. Coyote Ridge Ct & Miracle Dr

Day: Tuesday
Date: 10/3/2017

City: Auburn
Project #: CA17_7775_011

DAILY TOTALS	NB	SB	EB	WB	Total
	687	713	0	0	1,400

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	13		7						20	
00:15	1		1						2		12:15	8		11						19	
00:30	2		1						3		12:30	6		13						19	
00:45	0	3	0	2					0	5	12:45	10	37	15	46					25	83
01:00	0		0						0		13:00	13		11						24	
01:15	0		0						0		13:15	11		14						25	
01:30	1		1						2		13:30	11		10						21	
01:45	0	1	0	1					0	2	13:45	11	46	7	42					18	88
02:00	0		0						0		14:00	14		15						29	
02:15	0		0						0		14:15	22		12						34	
02:30	2		0						2		14:30	10		12						22	
02:45	0	2	0						0	2	14:45	17	63	11	50					28	113
03:00	0		0						0		15:00	19		10						29	
03:15	0		1						1		15:15	20		13						33	
03:30	0		1						1		15:30	10		7						17	
03:45	0		1	3					1	3	15:45	18	67	11	41					29	108
04:00	1		0						1		16:00	17		13						30	
04:15	0		1						1		16:15	19		14						33	
04:30	0		2						2		16:30	13		12						25	
04:45	1	2	0	3					1	5	16:45	17	66	10	49					27	115
05:00	2		3						5		17:00	23		9						32	
05:15	1		2						3		17:15	20		13						33	
05:30	0		4						4		17:30	13		16						29	
05:45	0	3	4	13					4	16	17:45	18	74	9	47					27	121
06:00	1		6						7		18:00	13		14						27	
06:15	0		5						5		18:15	10		10						20	
06:30	1		7						8		18:30	12		4						16	
06:45	5	7	10	28					15	35	18:45	15	50	13	41					28	91
07:00	9		7						16		19:00	12		7						19	
07:15	6		25						31		19:15	11		3						14	
07:30	6		22						28		19:30	10		4						14	
07:45	6	27	32	86					38	113	19:45	7	40	1	15					8	55
08:00	11		21						32		20:00	5		2						7	
08:15	5		7						12		20:15	7		2						9	
08:30	8		15						23		20:30	3		2						5	
08:45	7	31	15	58					22	89	20:45	5	20	3	9					8	29
09:00	6		15						21		21:00	5		5						10	
09:15	8		14						22		21:15	9		2						11	
09:30	10		10						20		21:30	2		0						2	
09:45	12	36	11	50					23	86	21:45	4	20	2	9					6	29
10:00	10		21						31		22:00	4		0						4	
10:15	5		8						13		22:15	2		3						5	
10:30	7		17						24		22:30	3		1						4	
10:45	14	36	10	56					24	92	22:45	2	11	0	4					2	15
11:00	7		12						19		23:00	0		1						1	
11:15	7		20						27		23:15	2		0						2	
11:30	18		14						32		23:30	0		0						0	
11:45	9	41	13	59					22	100	23:45	2	4	0	1					2	5
TOTALS		189		359						548	TOTALS		498		354						852
SPLIT %		34.5%		65.5%						39.1%	SPLIT %		58.5%		41.5%						60.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	687	713	0	0	1,400

AM Peak Hour	11:30	07:15			07:15	PM Peak Hour	17:00	12:30			16:45
AM Pk Volume	48	100			129	PM Pk Volume	74	53			121
Pk Hr Factor	0.667	0.781			0.849	Pk Hr Factor	0.804	0.883			0.917
7 - 9 Volume	58	144	0	0	202	4 - 6 Volume	140	96	0	0	236
7 - 9 Peak Hour	08:00	07:15			07:15	4 - 6 Peak Hour	17:00	16:00			16:45
7 - 9 Pk Volume	31	100	0	0	129	4 - 6 Pk Volume	74	49	0	0	121
Pk Hr Factor	0.705	0.781	0.000	0.000	0.849	Pk Hr Factor	0.804	0.875	0.000	0.000	0.917

Prepared by NDS/ATD

VOLUME

Bell Rd Bet. Mallard Way & Cramer Rd

Day: Tuesday
Date: 10/3/2017

City: Auburn
Project #: CA17_7775_012

DAILY TOTALS	NB	SB	EB	WB	Total
	290	324	0	0	614

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	5		5						10	
00:15	0		1						1		12:15	5		6						11	
00:30	1		0						1		12:30	3		7						10	
00:45	0	1	1	2					1	3	12:45	5	18	3	21					8	39
01:00	1		0						1		13:00	7		7						14	
01:15	0		0						0		13:15	2		2						4	
01:30	0		0						0		13:30	4		10						14	
01:45	0	1	0						0	1	13:45	3	16	4	23					7	39
02:00	0		0						0		14:00	5		5						10	
02:15	0		0						0		14:15	5		4						9	
02:30	0		0						0		14:30	5		5						10	
02:45	0		0						0		14:45	6	21	8	22					14	43
03:00	1		0						1		15:00	10		8						18	
03:15	0		0						0		15:15	10		6						16	
03:30	0		0						0		15:30	7		7						14	
03:45	0	1	0						0	1	15:45	9	36	6	27					15	63
04:00	0		1						1		16:00	5		4						9	
04:15	0		2						2		16:15	9		7						16	
04:30	0		1						1		16:30	2		5						7	
04:45	0		2	6					2	6	16:45	7	23	4	20					11	43
05:00	0		1						1		17:00	16		6						22	
05:15	2		2						4		17:15	9		5						14	
05:30	0		2						2		17:30	7		6						13	
05:45	0	2	2	7					2	9	17:45	5	37	8	25					13	62
06:00	0		3						3		18:00	7		3						10	
06:15	1		3						4		18:15	8		3						11	
06:30	0		1						1		18:30	3		3						6	
06:45	2	3	2	9					4	12	18:45	5	23	9	18					14	41
07:00	1		3						4		19:00	3		1						4	
07:15	2		8						10		19:15	9		2						11	
07:30	2		9						11		19:30	8		2						10	
07:45	3	8	8	28					11	36	19:45	1	21	1	6					2	27
08:00	6		6						12		20:00	2		1						3	
08:15	2		6						8		20:15	3		0						3	
08:30	1		7						8		20:30	3		2						5	
08:45	3	12	8	27					11	39	20:45	3	11	1	4					4	15
09:00	4		11						15		21:00	0		1						1	
09:15	3		10						13		21:15	2		0						2	
09:30	1		7						8		21:30	0		0						0	
09:45	6	14	4	32					10	46	21:45	1	3	2	3					3	6
10:00	4		11						15		22:00	1		0						1	
10:15	4		4						8		22:15	3		1						4	
10:30	3		3						6		22:30	0		0						0	
10:45	6	17	4	22					10	39	22:45	2	6	1	2					3	8
11:00	7		3						10		23:00	0		0						0	
11:15	3		6						9		23:15	1		0						1	
11:30	4		5						9		23:30	0		0						0	
11:45	1	15	6	20					7	35	23:45	0	1	0						0	1
TOTALS		74		153						227	TOTALS		216		171						387
SPLIT %		32.6%		67.4%						37.0%	SPLIT %		55.8%		44.2%						63.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	290	324	0	0	614

AM Peak Hour	10:15	08:30			08:30	PM Peak Hour	16:45	14:45			15:00
AM Pk Volume	20	36			47	PM Pk Volume	39	29			63
Pk Hr Factor	0.714	0.818			0.783	Pk Hr Factor	0.609	0.906			0.875
7 - 9 Volume	20	55	0	0	75	4 - 6 Volume	60	45	0	0	105
7 - 9 Peak Hour	07:15	07:15			07:15	4 - 6 Peak Hour	16:45	17:00			17:00
7 - 9 Pk Volume	13	31	0	0	44	4 - 6 Pk Volume	39	25	0	0	62
Pk Hr Factor	0.542	0.861	0.000	0.000	0.917	Pk Hr Factor	0.609	0.781	0.000	0.000	0.705

Prepared by NDS/ATD

VOLUME

Lone Star Rd W/O SR 49

Day: Tuesday
Date: 10/3/2017

City: Auburn
Project #: CA17_7775_013

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	648	680	1,328

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			11		8		19	
00:15			0		0		0		12:15			10		13		23	
00:30			0		1		1		12:30			14		12		26	
00:45			0		0	1	0	1	12:45			6	41	5	38	11	79
01:00			0		0		0		13:00			12		12		24	
01:15			0		0		0		13:15			7		17		24	
01:30			0		0		0		13:30			12		14		26	
01:45			0		0		0		13:45			14	45	15	58	29	103
02:00			0		0		0		14:00			20		10		30	
02:15			0		0		0		14:15			14		10		24	
02:30			1		0		1		14:30			15		8		23	
02:45			0	1	0		0	1	14:45			12	61	17	45	29	106
03:00			0		0		0		15:00			21		11		32	
03:15			1		0		1		15:15			10		13		23	
03:30			0		0		0		15:30			20		16		36	
03:45			1	2	0		1	2	15:45			16	67	12	52	28	119
04:00			1		0		1		16:00			11		11		22	
04:15			1		1		2		16:15			11		6		17	
04:30			1		0		1		16:30			12		10		22	
04:45			1	4	0	1	1	5	16:45			13	47	10	37	23	84
05:00			1		0		1		17:00			11		15		26	
05:15			4		0		4		17:15			10		14		24	
05:30			4		4		8		17:30			12		12		24	
05:45			3	12	6	10	9	22	17:45			14	47	10	51	24	98
06:00			7		5		12		18:00			10		14		24	
06:15			6		6		12		18:15			8		16		24	
06:30			6		5		11		18:30			8		11		19	
06:45			6	25	10	26	16	51	18:45			11	37	8	49	19	86
07:00			15		8		23		19:00			5		5		10	
07:15			14		16		30		19:15			6		10		16	
07:30			15		11		26		19:30			5		6		11	
07:45			13	57	15	50	28	107	19:45			6	22	5	26	11	48
08:00			15		12		27		20:00			3		7		10	
08:15			16		7		23		20:15			1		9		10	
08:30			11		9		20		20:30			4		4		8	
08:45			13	55	12	40	25	95	20:45			1	9	5	25	6	34
09:00			10		14		24		21:00			0		3		3	
09:15			9		14		23		21:15			0		2		2	
09:30			6		13		19		21:30			2		3		5	
09:45			10	35	14	55	24	90	21:45			1	3	1	9	2	12
10:00			8		12		20		22:00			0		3		3	
10:15			9		11		20		22:15			0		0		0	
10:30			19		16		35		22:30			0		2		2	
10:45			9	45	9	48	18	93	22:45			1	1	2	7	3	8
11:00			12		14		26		23:00			0		3		3	
11:15			9		15		24		23:15			0		0		0	
11:30			7		7		14		23:30			0		0		0	
11:45			4	32	13	49	17	81	23:45			0		0	3	0	3
TOTALS				268		280		548	TOTALS				380		400		780
SPLIT %				48.9%		51.1%		41.3%	SPLIT %				48.7%		51.3%		58.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	648	680	1,328

AM Peak Hour			07:30	09:00	07:15	PM Peak Hour			15:00	13:00	14:45
AM Pk Volume			59	55	111	PM Pk Volume			67	58	120
Pk Hr Factor			0.922	0.982	0.925	Pk Hr Factor			0.798	0.853	0.833
7 - 9 Volume	0	0	112	90	202	4 - 6 Volume	0	0	94	88	182
7 - 9 Peak Hour			07:30	07:15	07:15	4 - 6 Peak Hour			16:00	16:45	17:00
7 - 9 Pk Volume	0	0	59	54	111	4 - 6 Pk Volume	0	0	47	51	98
Pk Hr Factor	0.000	0.000	0.922	0.844	0.925	Pk Hr Factor	0.000	0.000	0.904	0.850	0.942

Prepared by NDS/ATD

VOLUME

Bald Hill Rd Bet. Crater Hill Rd & Valle Vista Ct

Day: Tuesday
Date: 10/3/2017

City: Auburn
Project #: CA17_7775_014

DAILY TOTALS	NB	SB	EB	WB	Total
	688	621	0	0	1,309

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	9		10						19	
00:15	2		0						2		12:15	11		13						24	
00:30	0		0						0		12:30	7		6						13	
00:45	0	2	1	1					1	3	12:45	6	33	12	41					18	74
01:00	2		0						2		13:00	12		10						22	
01:15	0		1						1		13:15	9		13						22	
01:30	0		0						0		13:30	12		10						22	
01:45	0	2	0	1					0	3	13:45	5	38	13	46					18	84
02:00	1		0						1		14:00	13		12						25	
02:15	1		0						1		14:15	11		15						26	
02:30	1		1						2		14:30	19		14						33	
02:45	2	5	1	2					3	7	14:45	25	68	9	50					34	118
03:00	0		0						0		15:00	13		12						25	
03:15	0		1						1		15:15	13		8						21	
03:30	1		1						2		15:30	11		10						21	
03:45	0	1	0	2					0	3	15:45	15	52	8	38					23	90
04:00	0		0						0		16:00	16		20						36	
04:15	1		0						1		16:15	16		12						28	
04:30	1		1						2		16:30	11		15						26	
04:45	2	4	2	3					4	7	16:45	10	53	16	63					26	116
05:00	1		1						2		17:00	15		18						33	
05:15	0		1						1		17:15	10		11						21	
05:30	1		6						7		17:30	17		16						33	
05:45	4	6	2	10					6	16	17:45	15	57	11	56					26	113
06:00	5		2						7		18:00	17		13						30	
06:15	6		4						10		18:15	10		12						22	
06:30	5		7						12		18:30	12		18						30	
06:45	10	26	13	26					23	52	18:45	5	44	3	46					8	90
07:00	7		9						16		19:00	9		6						15	
07:15	9		9						18		19:15	9		10						19	
07:30	10		9						19		19:30	6		3						9	
07:45	7	33	15	42					22	75	19:45	7	31	6	25					13	56
08:00	12		15						27		20:00	2		4						6	
08:15	19		17						36		20:15	2		6						8	
08:30	14		13						27		20:30	6		2						8	
08:45	16	61	11	56					27	117	20:45	4	14	1	13					5	27
09:00	14		13						27		21:00	5		4						9	
09:15	12		7						19		21:15	2		3						5	
09:30	9		5						14		21:30	2		3						5	
09:45	9	44	3	28					12	72	21:45	3	12	1	11					4	23
10:00	10		10						20		22:00	0		4						4	
10:15	8		7						15		22:15	0		1						1	
10:30	7		7						14		22:30	3		1						4	
10:45	12	37	10	34					22	71	22:45	0	3	0	6					0	9
11:00	15		4						19		23:00	1		0						1	
11:15	13		6						19		23:15	3		1						4	
11:30	14		6						20		23:30	0		1						1	
11:45	15	57	3	19					18	76	23:45	1	5	0	2					1	7
TOTALS		278		224						502	TOTALS		410		397						807
SPLIT %		55.4%		44.6%						38.3%	SPLIT %		50.8%		49.2%						61.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	688	621	0	0	1,309

AM Peak Hour	08:15	07:45			08:00	PM Peak Hour	14:30	16:00			14:00
AM Pk Volume	63	60			117	PM Pk Volume	70	63			118
Pk Hr Factor	0.829	0.882			0.813	Pk Hr Factor	0.700	0.788			0.868
7 - 9 Volume	94	98	0	0	192	4 - 6 Volume	110	119	0	0	229
7 - 9 Peak Hour	08:00	07:45			08:00	4 - 6 Peak Hour	17:00	16:00			16:00
7 - 9 Pk Volume	61	60	0	0	117	4 - 6 Pk Volume	57	63	0	0	116
Pk Hr Factor	0.803	0.882	0.000	0.000	0.813	Pk Hr Factor	0.838	0.788	0.000	0.000	0.806

Prepared by NDS/ATD

VOLUME

Baxter Grade Rd Bet. Wise Rd & Mt. Vernon Rd

Day: Tuesday
Date: 10/3/2017

City: Auburn
Project #: CA17_7775_015

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	492	479	971

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			3		8		11	
00:15			0		0		0		12:15			6		12		18	
00:30			0		1		1		12:30			4		11		15	
00:45			1	1	1	2	2	3	12:45			6	19	5	36	11	55
01:00			0		1		1		13:00			4		10		14	
01:15			1		0		1		13:15			8		6		14	
01:30			0		0		0		13:30			6		6		12	
01:45			0	1	0	1	0	2	13:45			10	28	12	34	22	62
02:00			0		0		0		14:00			11		3		14	
02:15			0		0		0		14:15			5		12		17	
02:30			0		0		0		14:30			8		13		21	
02:45			0		0		0		14:45			10	34	10	38	20	72
03:00			0		0		0		15:00			10		13		23	
03:15			0		0		0		15:15			11		5		16	
03:30			0		0		0		15:30			13		12		25	
03:45			0		0		0		15:45			11	45	6	36	17	81
04:00			0		1		1		16:00			11		9		20	
04:15			0		0		0		16:15			8		16		24	
04:30			0		0		0		16:30			7		20		27	
04:45			1	1	2	3	3	4	16:45			7	33	14	59	21	92
05:00			0		1		1		17:00			19		25		44	
05:15			2		1		3		17:15			8		18		26	
05:30			3		3		6		17:30			8		13		21	
05:45			10	15	1	6	11	21	17:45			7	42	6	62	13	104
06:00			6		6		12		18:00			7		8		15	
06:15			6		1		7		18:15			8		8		16	
06:30			6		3		9		18:30			2		9		11	
06:45			8	26	6	16	14	42	18:45			6	23	2	27	8	50
07:00			15		6		21		19:00			3		2		5	
07:15			17		6		23		19:15			5		3		8	
07:30			14		9		23		19:30			3		3		6	
07:45			25	71	11	32	36	103	19:45			2	13	4	12	6	25
08:00			14		9		23		20:00			3		0		3	
08:15			8		8		16		20:15			2		3		5	
08:30			11		9		20		20:30			2		1		3	
08:45			12	45	6	32	18	77	20:45			3	10	2	6	5	16
09:00			6		7		13		21:00			0		2		2	
09:15			5		12		17		21:15			1		1		2	
09:30			6		4		10		21:30			0		4		4	
09:45			12	29	7	30	19	59	21:45			1	2	0	7	1	9
10:00			6		4		10		22:00			1		0		1	
10:15			7		4		11		22:15			2		1		3	
10:30			3		2		5		22:30			1		1		2	
10:45			7	23	9	19	16	42	22:45			1	5	1	3	2	8
11:00			6		4		10		23:00			1		0		1	
11:15			6		2		8		23:15			0		0		0	
11:30			8		8		16		23:30			3		0		3	
11:45			2	22	2	16	4	38	23:45			0	4	2	2	2	6
TOTALS				234		157		391	TOTALS				258		322		580
SPLIT %				59.8%		40.2%		40.3%	SPLIT %				44.5%		55.5%		59.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	492	479	971

AM Peak Hour			07:00	07:30	07:15	PM Peak Hour			15:15	16:30	16:30
AM Pk Volume			71	37	105	PM Pk Volume			46	77	118
Pk Hr Factor			0.710	0.841	0.729	Pk Hr Factor			0.885	0.770	0.670
7 - 9 Volume	0	0	116	64	180	4 - 6 Volume	0	0	75	121	196
7 - 9 Peak Hour			07:00	07:30	07:15	4 - 6 Peak Hour			16:45	16:30	16:30
7 - 9 Pk Volume	0	0	71	37	105	4 - 6 Pk Volume	0	0	42	77	118
Pk Hr Factor	0.000	0.000	0.710	0.841	0.729	Pk Hr Factor	0.000	0.000	0.553	0.770	0.670

Prepared by NDS/ATD

VOLUME

Combie Rd Bet. Placer Hills Rd & Wooley Creek Ln

Day: Thursday
Date: 10/12/2017

City: Meadow Vista
Project #: CA17_7775_016

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,330	1,358	2,688

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			12		20		32	
00:15			0		1		1		12:15			24		19		43	
00:30			0		0		0		12:30			21		27		48	
00:45			1	1	1	2	2	3	12:45			22	79	34	100	56	179
01:00			1		0		1		13:00			20		23		43	
01:15			0		0		0		13:15			15		20		35	
01:30			0		0		0		13:30			20		19		39	
01:45			0	1	1	1	1	2	13:45			26	81	25	87	51	168
02:00			0		1		1		14:00			16		24		40	
02:15			1		0		1		14:15			20		23		43	
02:30			0		1		1		14:30			31		35		66	
02:45			0	1	0	2	0	3	14:45			23	90	16	98	39	188
03:00			0		0		0		15:00			28		32		60	
03:15			0		0		0		15:15			21		32		53	
03:30			5		0		5		15:30			25		28		53	
03:45			4	9	0		4	9	15:45			26	100	32	124	58	224
04:00			1		0		1		16:00			33		32		65	
04:15			4		0		4		16:15			24		40		64	
04:30			1		1		2		16:30			18		46		64	
04:45			3	9	2	3	5	12	16:45			22	97	37	155	59	252
05:00			6		0		6		17:00			21		38		59	
05:15			4		2		6		17:15			18		35		53	
05:30			11		0		11		17:30			23		34		57	
05:45			14	35	1	3	15	38	17:45			21	83	25	132	46	215
06:00			9		1		10		18:00			12		39		51	
06:15			20		2		22		18:15			19		20		39	
06:30			19		5		24		18:30			9		23		32	
06:45			19	67	10	18	29	85	18:45			16	56	22	104	38	160
07:00			36		6		42		19:00			8		17		25	
07:15			31		14		45		19:15			11		24		35	
07:30			39		8		47		19:30			7		21		28	
07:45			43	149	18	46	61	195	19:45			5	31	21	83	26	114
08:00			36		19		55		20:00			6		18		24	
08:15			27		18		45		20:15			9		12		21	
08:30			34		15		49		20:30			4		14		18	
08:45			24	121	24	76	48	197	20:45			1	20	13	57	14	77
09:00			26		18		44		21:00			2		10		12	
09:15			18		11		29		21:15			1		7		8	
09:30			34		17		51		21:30			1		12		13	
09:45			23	101	10	56	33	157	21:45			2	6	8	37	10	43
10:00			19		14		33		22:00			1		6		7	
10:15			24		19		43		22:15			1		6		7	
10:30			27		13		40		22:30			1		4		5	
10:45			21	91	15	61	36	152	22:45			2	5	3	19	5	24
11:00			20		25		45		23:00			1		2		3	
11:15			27		28		55		23:15			0		0		0	
11:30			24		13		37		23:30			1		1		2	
11:45			24	95	23	89	47	184	23:45			0	2	2	5	2	7
TOTALS				680		357		1037	TOTALS				650		1001		1651
SPLIT %				65.6%		34.4%		38.6%	SPLIT %				39.4%		60.6%		61.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,330	1,358	2,688

AM Peak Hour			07:00	11:00	07:45	PM Peak Hour			15:30	16:15	16:00
AM Pk Volume			149	89	210	PM Pk Volume			108	161	252
Pk Hr Factor			0.866	0.795	0.861	Pk Hr Factor			0.818	0.875	0.969
7 - 9 Volume	0	0	270	122	392	4 - 6 Volume	0	0	180	287	467
7 - 9 Peak Hour			07:00	08:00	07:45	4 - 6 Peak Hour			16:00	16:15	16:00
7 - 9 Pk Volume	0	0	149	76	210	4 - 6 Pk Volume	0	0	97	161	252
Pk Hr Factor	0.000	0.000	0.866	0.792	0.861	Pk Hr Factor	0.000	0.000	0.735	0.875	0.969

Prepared by NDS/ATD

VOLUME

Chili Hill Rd Bet. Lozanos Rd & Gold Hill Rd

Day: Tuesday
Date: 10/3/2017

City: Newcastle
Project #: CA17_7775_017

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	175	180	355

AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00			0	0	0		12:00			1	1	2	
00:15			0	0	0		12:15			3	2	5	
00:30			0	0	0		12:30			3	2	5	
00:45			0	0	0		12:45			2	9 3	8 5	17
01:00			0	0	0		13:00			2	3	5	
01:15			0	0	0		13:15			2	2	4	
01:30			0	0	0		13:30			2	4	6	
01:45			0	0	0		13:45			4	10 2	11 6	21
02:00			0	0	0		14:00			1	2	3	
02:15			0	0	0		14:15			3	2	5	
02:30			0	0	0		14:30			1	3	4	
02:45			0	0	0		14:45			2	7 5	12 7	19
03:00			0	0	0		15:00			5	3	8	
03:15			0	0	0		15:15			1	3	4	
03:30			0	0	0		15:30			3	7	10	
03:45			0	0	0		15:45			2	11 5	18 7	29
04:00			0	1	1		16:00			2	3	5	
04:15			1	0	1		16:15			4	3	7	
04:30			1	0	1		16:30			3	5	8	
04:45			3 5	0 1	3	6	16:45			7	16 2	13 9	29
05:00			2	0	2		17:00			1	7	8	
05:15			0	0	0		17:15			5	3	8	
05:30			3	0	3		17:30			5	5	10	
05:45			3 8	0	3	8	17:45			2	13 2	17 4	30
06:00			2	0	2		18:00			1	5	6	
06:15			4	0	4		18:15			3	2	5	
06:30			5	0	5		18:30			2	6	8	
06:45			5 16	2 2	7	18	18:45			4	10 6	19 10	29
07:00			1	3	4		19:00			2	4	6	
07:15			5	3	8		19:15			2	3	5	
07:30			10	3	13		19:30			1	1	2	
07:45			3 19	2 11	5	30	19:45			2	7 2	10 4	17
08:00			5	2	7		20:00			1	2	3	
08:15			2	1	3		20:15			2	3	5	
08:30			4	3	7		20:30			0	1	1	
08:45			3 14	2 8	5	22	20:45			0	3 2	8 2	11
09:00			1	3	4		21:00			0	3	3	
09:15			1	2	3		21:15			0	0	0	
09:30			2	1	3		21:30			0	2	2	
09:45			1 5	2 8	3	13	21:45			1	1 3	8 4	9
10:00			2	2	4		22:00			1	4	5	
10:15			2	4	6		22:15			2	1	3	
10:30			1	1	2		22:30			0	0	0	
10:45			2 7	2 9	4	16	22:45			0	3 0	5 0	8
11:00			3	3	6		23:00			1	0	1	
11:15			1	3	4		23:15			0	0	0	
11:30			3	1	4		23:30			0	0	0	
11:45			3 10	4 11	7	21	23:45			0	1 1	1 1	2
TOTALS			84	50		134	TOTALS			91	130		221
SPLIT %			62.7%	37.3%		37.7%	SPLIT %			41.2%	58.8%		62.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	175	180	355

AM Peak Hour			07:15	06:45	07:15	PM Peak Hour			16:45	18:00	16:45
AM Pk Volume			23	11	33	PM Pk Volume			18	19	35
Pk Hr Factor			0.575	0.917	0.635	Pk Hr Factor			0.643	0.792	0.875
7 - 9 Volume	0	0	33	19	52	4 - 6 Volume	0	0	29	30	59
7 - 9 Peak Hour			07:15	07:00	07:15	4 - 6 Peak Hour			16:45	16:15	16:45
7 - 9 Pk Volume	0	0	23	11	33	4 - 6 Pk Volume	0	0	18	17	35
Pk Hr Factor	0.000	0.000	0.575	0.917	0.635	Pk Hr Factor	0.000	0.000	0.643	0.607	0.875

Prepared by NDS/ATD

VOLUME

Delmar Ave Bet. Sierra College Blvd & Rock Hill Winery

Day: Tuesday
Date: 10/3/2017

City: Loomis
Project #: CA17_7775_018

DAILY TOTALS	NB	SB	EB	WB	Total
	580	546	0	0	1,126

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	8		6						14	
00:15	0		0						0		12:15	6		12						18	
00:30	0		0						0		12:30	9		4						13	
00:45	0		0						0		12:45	13	36	8	30					21	66
01:00	1		0						1		13:00	12		12						24	
01:15	0		0						0		13:15	11		6						17	
01:30	0		0						0		13:30	13		9						22	
01:45	0	1	0						0	1	13:45	8	44	9	36					17	80
02:00	1		0						1		14:00	12		7						19	
02:15	0		0						0		14:15	12		5						17	
02:30	0		0						0		14:30	16		9						25	
02:45	0	1	0						0	1	14:45	15	55	8	29					23	84
03:00	0		0						0		15:00	12		10						22	
03:15	0		0						0		15:15	8		21						29	
03:30	0		0						0		15:30	10		10						20	
03:45	0		1	1					1	1	15:45	12	42	3	44					15	86
04:00	0		1						1		16:00	11		11						22	
04:15	0		1						1		16:15	11		8						19	
04:30	1		0						1		16:30	14		6						20	
04:45	1	2	2	4					3	6	16:45	11	47	15	40					26	87
05:00	1		3						4		17:00	16		5						21	
05:15	0		0						0		17:15	16		9						25	
05:30	0		5						5		17:30	15		14						29	
05:45	3	4	7	15					10	19	17:45	20	67	11	39					31	106
06:00	5		10						15		18:00	4		9						13	
06:15	2		8						10		18:15	8		5						13	
06:30	4		7						11		18:30	17		9						26	
06:45	7	18	8	33					15	51	18:45	6	35	8	31					14	66
07:00	4		14						18		19:00	12		6						18	
07:15	5		9						14		19:15	5		6						11	
07:30	5		16						21		19:30	4		5						9	
07:45	6	20	8	47					14	67	19:45	11	32	1	18					12	50
08:00	11		11						22		20:00	14		3						17	
08:15	8		12						20		20:15	6		2						8	
08:30	13		8						21		20:30	5		1						6	
08:45	8	40	8	39					16	79	20:45	4	29	4	10					8	39
09:00	2		12						14		21:00	5		2						7	
09:15	6		9						15		21:15	6		0						6	
09:30	10		9						19		21:30	3		2						5	
09:45	8	26	10	40					18	66	21:45	5	19	2	6					7	25
10:00	7		12						19		22:00	4		0						4	
10:15	6		8						14		22:15	4		1						5	
10:30	4		10						14		22:30	5		2						7	
10:45	6	23	10	40					16	63	22:45	1	14	1	4					2	18
11:00	5		10						15		23:00	0		0						0	
11:15	3		6						9		23:15	1		2						3	
11:30	9		6						15		23:30	0		0						0	
11:45	6	23	16	38					22	61	23:45	1	2	0	2					1	4
TOTALS		158		257						415	TOTALS		422		289						711
SPLIT %		38.1%		61.9%						36.9%	SPLIT %		59.4%		40.6%						63.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	580	546	0	0	1,126

AM Peak Hour	08:00	06:45			08:00	PM Peak Hour	17:00	14:45			17:00
AM Pk Volume	40	47			79	PM Pk Volume	67	49			106
Pk Hr Factor	0.769	0.734			0.898	Pk Hr Factor	0.838	0.583			0.855
7 - 9 Volume	60	86	0	0	146	4 - 6 Volume	114	79	0	0	193
7 - 9 Peak Hour	08:00	07:00			08:00	4 - 6 Peak Hour	17:00	16:45			17:00
7 - 9 Pk Volume	40	47	0	0	79	4 - 6 Pk Volume	67	43	0	0	106
Pk Hr Factor	0.769	0.734	0.000	0.000	0.898	Pk Hr Factor	0.838	0.717	0.000	0.000	0.855

Prepared by NDS/ATD

VOLUME

Fowler Rd Bet. SR 193 & Virginiatown Rd

Day: Wednesday
Date: 10/4/2017

City: Lincoln
Project #: CA17_7775_019

DAILY TOTALS	NB	SB	EB	WB	Total
	1,701	1,711	0	0	3,412

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	1		1						2		12:00	28		29						57	
00:15	2		1						3		12:15	14		21						35	
00:30	2		1						3		12:30	29		20						49	
00:45	1	6	0	3					1	9	12:45	36	107	12	82					48	189
01:00	3		0						3		13:00	19		30						49	
01:15	1		0						1		13:15	22		25						47	
01:30	0		0						0		13:30	20		26						46	
01:45	1	5	0						1	5	13:45	28	89	17	98					45	187
02:00	0		1						1		14:00	29		24						53	
02:15	1		1						2		14:15	19		40						59	
02:30	1		1						2		14:30	31		28						59	
02:45	1	3	0	3					1	6	14:45	36	115	18	110					54	225
03:00	2		0						2		15:00	40		22						62	
03:15	0		3						3		15:15	44		21						65	
03:30	2		2						4		15:30	52		37						89	
03:45	0	4	4	9					4	13	15:45	40	176	23	103					63	279
04:00	2		0						2		16:00	42		22						64	
04:15	1		2						3		16:15	40		29						69	
04:30	1		2						3		16:30	44		28						72	
04:45	9	13	9	13					18	26	16:45	47	173	25	104					72	277
05:00	4		11						15		17:00	30		33						63	
05:15	7		9						16		17:15	42		34						76	
05:30	6		26						32		17:30	46		33						79	
05:45	13	30	14	60					27	90	17:45	36	154	25	125					61	279
06:00	14		20						34		18:00	39		31						70	
06:15	19		13						32		18:15	32		24						56	
06:30	24		29						53		18:30	21		28						49	
06:45	23	80	33	95					56	175	18:45	22	114	20	103					42	217
07:00	20		39						59		19:00	23		19						42	
07:15	22		47						69		19:15	21		13						34	
07:30	34		32						66		19:30	13		18						31	
07:45	35	111	44	162					79	273	19:45	9	66	11	61					20	127
08:00	25		35						60		20:00	10		18						28	
08:15	19		51						70		20:15	8		12						20	
08:30	18		33						51		20:30	7		19						26	
08:45	24	86	34	153					58	239	20:45	7	32	17	66					24	98
09:00	23		28						51		21:00	3		6						9	
09:15	26		21						47		21:15	3		15						18	
09:30	33		23						56		21:30	4		6						10	
09:45	31	113	28	100					59	213	21:45	6	16	9	36					15	52
10:00	28		30						58		22:00	4		8						12	
10:15	15		18						33		22:15	2		7						9	
10:30	24		14						38		22:30	2		7						9	
10:45	32	99	21	83					53	182	22:45	2	10	8	30					10	40
11:00	22		24						46		23:00	2		4						6	
11:15	23		23						46		23:15	1		3						4	
11:30	19		23						42		23:30	3		7						10	
11:45	28	92	26	96					54	188	23:45	1	7	2	16					3	23
TOTALS		642		777						1419	TOTALS		1059		934						1993
SPLIT %		45.2%		54.8%						41.6%	SPLIT %		53.1%		46.9%						58.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	1,701	1,711	0	0	3,412

AM Peak Hour	09:15	07:45			07:30	PM Peak Hour	15:15	16:45			16:45
AM Pk Volume	118	163			275	PM Pk Volume	178	125			290
Pk Hr Factor	0.894	0.799			0.870	Pk Hr Factor	0.856	0.919			0.918
7 - 9 Volume	197	315	0	0	512	4 - 6 Volume	327	229	0	0	556
7 - 9 Peak Hour	07:15	07:45			07:30	4 - 6 Peak Hour	16:00	16:45			16:45
7 - 9 Pk Volume	116	163	0	0	275	4 - 6 Pk Volume	173	125	0	0	290
Pk Hr Factor	0.829	0.799	0.000	0.000	0.870	Pk Hr Factor	0.920	0.919	0.000	0.000	0.918

Prepared by NDS/ATD

VOLUME

Fruitvale Rd Bet. Fowler Rd & Gold Hill Rd

Day: Tuesday
Date: 10/3/2017

City: Newcastle
Project #: CA17_7775_020

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	751	735	1,486

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			14		5		19	
00:15			1		0		1		12:15			9		7		16	
00:30			1		1		2		12:30			5		16		21	
00:45			0	2	0	1	0	3	12:45			11	39	15	43	26	82
01:00			1		1		2		13:00			9		14		23	
01:15			0		0		0		13:15			7		9		16	
01:30			0		0		0		13:30			16		14		30	
01:45			0	1	1	2	1	3	13:45			8	40	10	47	18	87
02:00			0		0		0		14:00			10		8		18	
02:15			1		0		1		14:15			8		13		21	
02:30			0		0		0		14:30			14		8		22	
02:45			0	1	1	1	1	2	14:45			13	45	13	42	26	87
03:00			0		0		0		15:00			16		12		28	
03:15			2		1		3		15:15			16		12		28	
03:30			0		1		1		15:30			22		8		30	
03:45			0	2	0	2	0	4	15:45			17	71	20	52	37	123
04:00			0		0		0		16:00			18		10		28	
04:15			0		1		1		16:15			13		14		27	
04:30			1		1		2		16:30			14		21		35	
04:45			0	1	4	6	4	7	16:45			13	58	26	71	39	129
05:00			2		4		6		17:00			20		19		39	
05:15			4		4		8		17:15			14		23		37	
05:30			7		6		13		17:30			22		13		35	
05:45			13	26	6	20	19	46	17:45			15	71	16	71	31	142
06:00			8		6		14		18:00			16		12		28	
06:15			8		13		21		18:15			15		8		23	
06:30			7		8		15		18:30			10		8		18	
06:45			12	35	9	36	21	71	18:45			8	49	10	38	18	87
07:00			12		17		29		19:00			13		6		19	
07:15			9		15		24		19:15			10		9		19	
07:30			20		22		42		19:30			9		10		19	
07:45			19	60	18	72	37	132	19:45			4	36	2	27	6	63
08:00			14		12		26		20:00			11		3		14	
08:15			18		13		31		20:15			8		1		9	
08:30			13		16		29		20:30			5		4		9	
08:45			6	51	11	52	17	103	20:45			5	29	2	10	7	39
09:00			6		13		19		21:00			5		0		5	
09:15			11		11		22		21:15			0		3		3	
09:30			15		13		28		21:30			5		1		6	
09:45			11	43	14	51	25	94	21:45			4	14	0	4	4	18
10:00			12		10		22		22:00			0		1		1	
10:15			6		9		15		22:15			2		2		4	
10:30			7		10		17		22:30			0		3		3	
10:45			8	33	10	39	18	72	22:45			2	4	2	8	4	12
11:00			11		12		23		23:00			2		1		3	
11:15			8		8		16		23:15			3		0		3	
11:30			8		10		18		23:30			2		0		2	
11:45			4	31	9	39	13	70	23:45			2	9	0	1	2	10
TOTALS				286		321		607	TOTALS				465		414		879
SPLIT %				47.1%		52.9%		40.8%	SPLIT %				52.9%		47.1%		59.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	751	735	1,486

AM Peak Hour			07:30	07:00	07:30	PM Peak Hour			15:15	16:30	16:30
AM Pk Volume			71	72	136	PM Pk Volume			73	89	150
Pk Hr Factor			0.888	0.818	0.810	Pk Hr Factor			0.830	0.856	0.962
7 - 9 Volume	0	0	111	124	235	4 - 6 Volume	0	0	129	142	271
7 - 9 Peak Hour			07:30	07:00	07:30	4 - 6 Peak Hour			17:00	16:30	16:30
7 - 9 Pk Volume	0	0	71	72	136	4 - 6 Pk Volume	0	0	71	89	150
Pk Hr Factor	0.000	0.000	0.888	0.818	0.810	Pk Hr Factor	0.000	0.000	0.807	0.856	0.962

Prepared by NDS/ATD

VOLUME

Gold Hill Rd Bet. SR 193 & Virginiatown Rd

Day: Tuesday
Date: 10/3/2017

City: Newcastle
Project #: CA17_7775_021

DAILY TOTALS	NB	SB	EB	WB	Total
	764	778	0	0	1,542

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	8		9						17	
00:15	1		0						1		12:15	7		10						17	
00:30	1		1						2		12:30	15		14						29	
00:45	0	2	0	1					0	3	12:45	11	41	12	45					23	86
01:00	0		0						0		13:00	13		14						27	
01:15	1		0						1		13:15	9		12						21	
01:30	1		1						2		13:30	13		8						21	
01:45	0	2	0	1					0	3	13:45	14	49	16	50					30	99
02:00	0		0						0		14:00	12		13						25	
02:15	0		1						1		14:15	10		7						17	
02:30	0		0						0		14:30	16		16						32	
02:45	1	1	1	2					2	3	14:45	14	52	12	48					26	100
03:00	0		0						0		15:00	12		13						25	
03:15	1		0						1		15:15	15		9						24	
03:30	0		1						1		15:30	14		11						25	
03:45	0	1	0	1					0	2	15:45	20	61	19	52					39	113
04:00	0		1						1		16:00	28		19						47	
04:15	2		1						3		16:15	15		10						25	
04:30	1		2						3		16:30	30		16						46	
04:45	2	5	0	4					2	9	16:45	23	96	9	54					32	150
05:00	0		4						4		17:00	18		9						27	
05:15	2		2						4		17:15	27		11						38	
05:30	4		10						14		17:30	17		15						32	
05:45	2	8	13	29					15	37	17:45	17	79	7	42					24	121
06:00	4		12						16		18:00	16		5						21	
06:15	5		13						18		18:15	16		9						25	
06:30	10		12						22		18:30	12		11						23	
06:45	6	25	13	50					19	75	18:45	12	56	9	34					21	90
07:00	8		17						25		19:00	11		5						16	
07:15	4		23						27		19:15	10		8						18	
07:30	3		31						34		19:30	9		3						12	
07:45	7	22	24	95					31	117	19:45	10	40	3	19					13	59
08:00	11		15						26		20:00	6		10						16	
08:15	14		14						28		20:15	7		2						9	
08:30	11		20						31		20:30	5		4						9	
08:45	5	41	20	69					25	110	20:45	9	27	7	23					16	50
09:00	8		12						20		21:00	7		2						9	
09:15	11		18						29		21:15	9		1						10	
09:30	4		7						11		21:30	8		0						8	
09:45	8	31	14	51					22	82	21:45	8	32	3	6					11	38
10:00	7		6						13		22:00	3		1						4	
10:15	8		17						25		22:15	3		1						4	
10:30	10		15						25		22:30	6		1						7	
10:45	10	35	11	49					21	84	22:45	5	17	1	4					6	21
11:00	8		9						17		23:00	1		1						2	
11:15	8		10						18		23:15	2		1						3	
11:30	10		16						26		23:30	4		1						5	
11:45	7	33	8	43					15	76	23:45	1	8	3	6					4	14
TOTALS		206		395						601	TOTALS		558		383						941
SPLIT %		34.3%		65.7%						39.0%	SPLIT %		59.3%		40.7%						61.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	764	778	0	0	1,542

AM Peak Hour	07:45	07:00			07:30	PM Peak Hour	16:30	15:45			15:45
AM Pk Volume	43	95			119	PM Pk Volume	98	64			157
Pk Hr Factor	0.768	0.766			0.875	Pk Hr Factor	0.817	0.842			0.835
7 - 9 Volume	63	164	0	0	227	4 - 6 Volume	175	96	0	0	271
7 - 9 Peak Hour	07:45	07:00			07:30	4 - 6 Peak Hour	16:30	16:00			16:00
7 - 9 Pk Volume	43	95	0	0	119	4 - 6 Pk Volume	98	54	0	0	150
Pk Hr Factor	0.768	0.766	0.000	0.000	0.875	Pk Hr Factor	0.817	0.711	0.000	0.000	0.798

Prepared by NDS/ATD

VOLUME

Ridge Rd Bet. Uncle Joe's Ln & Ralston Ln

Day: Tuesday
Date: 10/3/2017

City: Newcastle
Project #: CA17_7775_023

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	387	402	789

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			11		9		20	
00:15			0		0		0		12:15			3		4		7	
00:30			0		0		0		12:30			5		4		9	
00:45			0		0		0		12:45			6	25	10	27	16	52
01:00			1		0		1		13:00			2		6		8	
01:15			0		0		0		13:15			3		6		9	
01:30			0		0		0		13:30			5		11		16	
01:45			1	2	1	1	2	3	13:45			7	17	9	32	16	49
02:00			0		0		0		14:00			9		6		15	
02:15			0		0		0		14:15			4		8		12	
02:30			0		0		0		14:30			7		4		11	
02:45			0		0		0		14:45			8	28	8	26	16	54
03:00			0		0		0		15:00			7		16		23	
03:15			0		0		0		15:15			5		12		17	
03:30			0		0		0		15:30			4		14		18	
03:45			0		0		0		15:45			8	24	10	52	18	76
04:00			0		0		0		16:00			5		7		12	
04:15			1		0		1		16:15			7		11		18	
04:30			0		0		0		16:30			6		6		12	
04:45			3	4	0		3	4	16:45			10	28	6	30	16	58
05:00			1		0		1		17:00			2		10		12	
05:15			2		0		2		17:15			8		5		13	
05:30			2		0		2		17:30			3		14		17	
05:45			3	8	0		3	8	17:45			7	20	10	39	17	59
06:00			5		1		6		18:00			6		8		14	
06:15			3		1		4		18:15			6		9		15	
06:30			7		1		8		18:30			3		15		18	
06:45			4	19	2	5	6	24	18:45			2	17	5	37	7	54
07:00			5		1		6		19:00			4		9		13	
07:15			9		2		11		19:15			4		6		10	
07:30			20		3		23		19:30			1		6		7	
07:45			13	47	5	11	18	58	19:45			2	11	5	26	7	37
08:00			9		6		15		20:00			0		4		4	
08:15			5		5		10		20:15			3		5		8	
08:30			8		2		10		20:30			2		2		4	
08:45			11	33	2	15	13	48	20:45			4	9	3	14	7	23
09:00			5		3		8		21:00			1		3		4	
09:15			6		2		8		21:15			0		5		5	
09:30			10		3		13		21:30			3		4		7	
09:45			9	30	3	11	12	41	21:45			2	6	6	18	8	24
10:00			5		5		10		22:00			2		5		7	
10:15			10		6		16		22:15			2		1		3	
10:30			4		4		8		22:30			0		2		2	
10:45			5	24	5	20	10	44	22:45			1	5	2	10	3	15
11:00			10		3		13		23:00			1		2		3	
11:15			5		6		11		23:15			1		0		1	
11:30			6		8		14		23:30			0		1		1	
11:45			7	28	5	22	12	50	23:45			0	2	3	6	3	8
TOTALS				195		85		280	TOTALS				192		317		509
SPLIT %				69.6%		30.4%		35.5%	SPLIT %				37.7%		62.3%		64.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	387	402	789

AM Peak Hour			07:15	11:15	07:15	PM Peak Hour			14:00	15:00	15:00
AM Pk Volume			51	28	67	PM Pk Volume			28	52	76
Pk Hr Factor			0.638	0.778	0.728	Pk Hr Factor			0.778	0.813	0.826
7 - 9 Volume	0	0	80	26	106	4 - 6 Volume	0	0	48	69	117
7 - 9 Peak Hour			07:15	07:30	07:15	4 - 6 Peak Hour			16:00	17:00	17:00
7 - 9 Pk Volume	0	0	51	19	67	4 - 6 Pk Volume	0	0	28	39	59
Pk Hr Factor	0.000	0.000	0.638	0.792	0.728	Pk Hr Factor	0.000	0.000	0.700	0.696	0.868

Prepared by NDS/ATD

VOLUME

Mt Vernon Rd Bet. Hastings Ln & Meyer Ln

Day: Tuesday
Date: 10/3/2017

City: Auburn
Project #: CA17_7775_024

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	998	1,012	2,010

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			12		23		35	
00:15			0		0		0		12:15			22		14		36	
00:30			0		0		0		12:30			10		8		18	
00:45			0		0		0		12:45			18	62	18	63	36	125
01:00			0		0		0		13:00			11		16		27	
01:15			0		0		0		13:15			7		17		24	
01:30			1		0		1		13:30			19		18		37	
01:45			0	1	0		0	1	13:45			17	54	10	61	27	115
02:00			0		0		0		14:00			19		13		32	
02:15			0		0		0		14:15			21		9		30	
02:30			2		0		2		14:30			16		15		31	
02:45			0	2	0		0	2	14:45			19	75	30	67	49	142
03:00			0		0		0		15:00			18		20		38	
03:15			1		0		1		15:15			14		29		43	
03:30			0		0		0		15:30			12		24		36	
03:45			3	4	0		3	4	15:45			14	58	15	88	29	146
04:00			1		3		4		16:00			20		30		50	
04:15			4		1		5		16:15			17		32		49	
04:30			0		4		4		16:30			20		28		48	
04:45			3	8	0	8	3	16	16:45			20	77	28	118	48	195
05:00			1		0		1		17:00			19		36		55	
05:15			1		6		7		17:15			15		25		40	
05:30			13		1		14		17:30			12		36		48	
05:45			12	27	5	12	17	39	17:45			13	59	25	122	38	181
06:00			11		3		14		18:00			9		17		26	
06:15			10		6		16		18:15			15		20		35	
06:30			11		11		22		18:30			13		14		27	
06:45			23	55	10	30	33	85	18:45			4	41	12	63	16	104
07:00			24		9		33		19:00			6		11		17	
07:15			25		9		34		19:15			5		16		21	
07:30			36		10		46		19:30			6		8		14	
07:45			42	127	20	48	62	175	19:45			6	23	7	42	13	65
08:00			31		11		42		20:00			4		9		13	
08:15			21		12		33		20:15			5		9		14	
08:30			21		17		38		20:30			4		11		15	
08:45			19	92	11	51	30	143	20:45			4	17	5	34	9	51
09:00			18		6		24		21:00			3		4		7	
09:15			16		12		28		21:15			2		4		6	
09:30			26		12		38		21:30			1		9		10	
09:45			15	75	17	47	32	122	21:45			4	10	4	21	8	31
10:00			13		13		26		22:00			1		3		4	
10:15			21		14		35		22:15			0		0		0	
10:30			15		12		27		22:30			1		2		3	
10:45			14	63	15	54	29	117	22:45			1	3	3	8	4	11
11:00			20		20		40		23:00			1		3		4	
11:15			9		15		24		23:15			0		2		2	
11:30			17		15		32		23:30			0		2		2	
11:45			17	63	18	68	35	131	23:45			1	2	0	7	1	9
TOTALS				517		318		**835**	TOTALS				481		694		**1175**
SPLIT %				61.9%		38.1%		**41.5%**	SPLIT %				40.9%		59.1%		**58.5%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	998	1,012	2,010

AM Peak Hour			07:15	11:15	**07:15**	**PM Peak Hour**			16:00	16:45	**16:15**
AM Pk Volume			134	71	**184**	**PM Pk Volume**			77	125	**200**
Pk Hr Factor			0.798	0.772	**0.742**	**Pk Hr Factor**			0.963	0.868	**0.909**
7 - 9 Volume	0	0	219	99	**318**	**4 - 6 Volume**	0	0	136	240	**376**
7 - 9 Peak Hour			07:15	07:45	**07:15**	**4 - 6 Peak Hour**			16:00	16:45	**16:15**
7 - 9 Pk Volume	0	0	134	60	**184**	**4 - 6 Pk Volume**	0	0	77	125	**200**
Pk Hr Factor	0.000	0.000	0.798	0.750	**0.742**	**Pk Hr Factor**	0.000	0.000	0.963	0.868	**0.909**

Prepared by NDS/ATD

VOLUME

Mt Vernon Rd Bet. Vineyard Dr & Millertown Rd

Day: Tuesday
Date: 10/3/2017

City: Auburn
Project #: CA17_7775_025

DAILY TOTALS	NB	SB	EB	WB	Total
	1,476	1,519	0	0	2,995

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	2		4						6		12:00	25		27						52	
00:15	3		0						3		12:15	27		21						48	
00:30	0		2						2		12:30	17		26						43	
00:45	1	6	1	7					2	13	12:45	19	88	30	104					49	192
01:00	1		0						1		13:00	26		23						49	
01:15	1		0						1		13:15	29		18						47	
01:30	0		2						2		13:30	20		26						46	
01:45	0	2	0	2					0	4	13:45	22	97	30	97					52	194
02:00	0		0						0		14:00	18		30						48	
02:15	0		0						0		14:15	24		25						49	
02:30	2		0						2		14:30	39		34						73	
02:45	0	2	1	1					1	3	14:45	53	134	25	114					78	248
03:00	0		1						1		15:00	44		29						73	
03:15	3		1						4		15:15	48		24						72	
03:30	1		2						3		15:30	36		23						59	
03:45	1	5	1	5					2	10	15:45	37	165	18	94					55	259
04:00	0		0						0		16:00	43		27						70	
04:15	0		2						2		16:15	39		32						71	
04:30	0		3						3		16:30	42		36						78	
04:45	0		3	8					3	8	16:45	41	165	28	123					69	288
05:00	0		7						7		17:00	28		43						71	
05:15	0		6						6		17:15	51		29						80	
05:30	0		3						3		17:30	37		19						56	
05:45	0		10	26					10	26	17:45	25	141	21	112					46	253
06:00	2		11						13		18:00	21		13						34	
06:15	3		11						14		18:15	28		22						50	
06:30	3		22						25		18:30	20		15						35	
06:45	10	18	22	66					32	84	18:45	21	90	13	63					34	153
07:00	12		34						46		19:00	10		11						21	
07:15	15		42						57		19:15	20		12						32	
07:30	20		44						64		19:30	18		9						27	
07:45	33	80	49	169					82	249	19:45	14	62	6	38					20	100
08:00	31		36						67		20:00	14		7						21	
08:15	14		30						44		20:15	12		3						15	
08:30	17		25						42		20:30	13		2						15	
08:45	10	72	33	124					43	196	20:45	9	48	6	18					15	66
09:00	17		27						44		21:00	9		3						12	
09:15	16		18						34		21:15	9		6						15	
09:30	15		33						48		21:30	9		0						9	
09:45	19	67	33	111					52	178	21:45	13	40	3	12					16	52
10:00	22		25						47		22:00	5		3						8	
10:15	18		19						37		22:15	3		3						6	
10:30	16		29						45		22:30	4		1						5	
10:45	21	77	29	102					50	179	22:45	3	15	1	8					4	23
11:00	23		34						57		23:00	3		1						4	
11:15	23		22						45		23:15	2		1						3	
11:30	28		26						54		23:30	1		0						1	
11:45	22	96	31	113					53	209	23:45	0	6	0	2					0	8
TOTALS		425		734						1159	TOTALS		1051		785						1836
SPLIT %		36.7%		63.3%						38.7%	SPLIT %		57.2%		42.8%						61.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	1,476	1,519	0	0	2,995

AM Peak Hour	11:30	07:15			07:15	PM Peak Hour	14:30	16:15			16:30
AM Pk Volume	102	171			270	PM Pk Volume	184	139			298
Pk Hr Factor	0.911	0.872			0.823	Pk Hr Factor	0.868	0.808			0.931
7 - 9 Volume	152	293	0	0	445	4 - 6 Volume	306	235	0	0	541
7 - 9 Peak Hour	07:15	07:15			07:15	4 - 6 Peak Hour	16:00	16:15			16:30
7 - 9 Pk Volume	99	171	0	0	270	4 - 6 Pk Volume	165	139	0	0	298
Pk Hr Factor	0.750	0.872	0.000	0.000	0.823	Pk Hr Factor	0.959	0.808	0.000	0.000	0.931

Prepared by NDS/ATD

VOLUME

Virginiatown Rd Bet. Coyote Ln & Fowler Rd

Day: Thursday
Date: 10/12/2017

City: Newcastle
Project #: CA17_7775_026

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	395	378	773

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			4		5		9	
00:15			0		0		0		12:15			8		7		15	
00:30			0		1		1		12:30			8		8		16	
00:45			1	1	4	5	5	6	12:45			7	27	6	26	13	53
01:00			0		0		0		13:00			4		3		7	
01:15			0		0		0		13:15			1		2		3	
01:30			0		0		0		13:30			2		3		5	
01:45			0		1	1	1	1	13:45			3	10	4	12	7	22
02:00			0		0		0		14:00			9		7		16	
02:15			0		0		0		14:15			4		4		8	
02:30			0		0		0		14:30			4		7		11	
02:45			0		0		0		14:45			9	26	7	25	16	51
03:00			0		0		0		15:00			9		6		15	
03:15			1		0		1		15:15			10		12		22	
03:30			1		0		1		15:30			5		7		12	
03:45			0	2	0		0	2	15:45			4	28	8	33	12	61
04:00			2		0		2		16:00			7		23		30	
04:15			1		1		2		16:15			5		8		13	
04:30			1		0		1		16:30			7		10		17	
04:45			1	5	1	2	2	7	16:45			5	24	11	52	16	76
05:00			0		0		0		17:00			8		8		16	
05:15			0		0		0		17:15			4		12		16	
05:30			4		1		5		17:30			6		8		14	
05:45			2	6	0	1	2	7	17:45			8	26	6	34	14	60
06:00			3		0		3		18:00			5		9		14	
06:15			6		2		8		18:15			1		7		8	
06:30			18		2		20		18:30			3		7		10	
06:45			19	46	2	6	21	52	18:45			8	17	10	33	18	50
07:00			8		3		11		19:00			10		11		21	
07:15			9		0		9		19:15			5		3		8	
07:30			10		2		12		19:30			4		2		6	
07:45			8	35	9	14	17	49	19:45			1	20	6	22	7	42
08:00			15		3		18		20:00			3		4		7	
08:15			6		1		7		20:15			2		5		7	
08:30			5		6		11		20:30			4		6		10	
08:45			4	30	5	15	9	45	20:45			2	11	4	19	6	30
09:00			9		3		12		21:00			2		1		3	
09:15			6		4		10		21:15			3		7		10	
09:30			3		1		4		21:30			1		3		4	
09:45			7	25	5	13	12	38	21:45			0	6	0	11	0	17
10:00			4		6		10		22:00			3		7		10	
10:15			7		6		13		22:15			1		1		2	
10:30			4		9		13		22:30			0		0		0	
10:45			5	20	2	23	7	43	22:45			0	4	1	9	1	13
11:00			6		6		12		23:00			0		0		0	
11:15			6		6		12		23:15			1		0		1	
11:30			7		5		12		23:30			1		0		1	
11:45			4	23	4	21	8	44	23:45			1	3	1	1	2	4
TOTALS				193		101		294	TOTALS				202		277		479
SPLIT %				65.6%		34.4%		38.0%	SPLIT %				42.2%		57.8%		62.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	395	378	773

AM Peak Hour			06:30	09:45	06:30	PM Peak Hour			14:45	16:00	15:15
AM Pk Volume			54	26	61	PM Pk Volume			33	52	76
Pk Hr Factor			0.711	0.722	0.726	Pk Hr Factor			0.825	0.565	0.633
7 - 9 Volume	0	0	65	29	94	4 - 6 Volume	0	0	50	86	136
7 - 9 Peak Hour			07:15	07:45	07:15	4 - 6 Peak Hour			17:00	16:00	16:00
7 - 9 Pk Volume	0	0	42	19	56	4 - 6 Pk Volume	0	0	26	52	76
Pk Hr Factor	0.000	0.000	0.700	0.528	0.778	Pk Hr Factor	0.000	0.000	0.813	0.565	0.633

Prepared by NDS/ATD

VOLUME

Fleming Rd Bet. Gladding Rd & McCourtney Rd

Day: Thursday
Date: 10/12/2017

City: Lincoln
Project #: CA17_7775_027

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	17	30	47

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00					0		0		0		12:00					0		0		0	
00:15					0		0		0		12:15					0		0		0	
00:30					0		0		0		12:30					0		0		0	
00:45					0		0		0		12:45					0		1	1	1	1
01:00					0		0		0		13:00					1		0		1	
01:15					0		0		0		13:15					1		1		2	
01:30					0		0		0		13:30					0		0		0	
01:45					0		0		0		13:45					0	2	0	1	0	3
02:00					0		0		0		14:00					1		1		2	
02:15					0		0		0		14:15					0		0		0	
02:30					0		0		0		14:30					0		1		1	
02:45					0		0		0		14:45					1	2	0	2	1	4
03:00					0		0		0		15:00					0		1		1	
03:15					0		0		0		15:15					0		1		1	
03:30					0		0		0		15:30					1		1		2	
03:45					0		0		0		15:45					0	1	2	5	2	6
04:00					0		0		0		16:00					0		0		0	
04:15					0		0		0		16:15					0		0		0	
04:30					0		0		0		16:30					0		1		1	
04:45					0		0		0		16:45					0		3	4	3	4
05:00					0		0		0		17:00					0		0		0	
05:15					0		0		0		17:15					0		1		1	
05:30					0		0		0		17:30					2		0		2	
05:45					0		0		0		17:45					0	2	0	1	0	3
06:00					0		0		0		18:00					0		2		2	
06:15					0		0		0		18:15					0		1		1	
06:30					0		0		0		18:30					0		1		1	
06:45					0		0		0		18:45					0		1	5	1	5
07:00					1		0		1		19:00					0		0		0	
07:15					0		0		0		19:15					0		1		1	
07:30					0		0		0		19:30					0		0		0	
07:45					1	2	0		1	2	19:45					1	1	0	1	1	2
08:00					2		0		2		20:00					0		0		0	
08:15					0		0		0		20:15					0		1		1	
08:30					0		0		0		20:30					1		0		1	
08:45					0	2	1	1	1	3	20:45					0	1	1	2	1	3
09:00					1		0		1		21:00					0		0		0	
09:15					1		0		1		21:15					0		0		0	
09:30					0		0		0		21:30					0		1		1	
09:45					0	2	0		0	2	21:45					0		0	1	0	1
10:00					0		0		0		22:00					0		0		0	
10:15					0		0		0		22:15					0		0		0	
10:30					0		2		2		22:30					0		0		0	
10:45					0		0	2	0	2	22:45					0		0		0	
11:00					0		1		1		23:00					0		0		0	
11:15					0		2		2		23:15					0		0		0	
11:30					1		0		1		23:30					0		0		0	
11:45					1	2	1	4	2	6	23:45					0		0		0	
TOTALS					8		7		15		TOTALS					9		23		32	
SPLIT %					53.3%		46.7%		31.9%		SPLIT %					28.1%		71.9%		68.1%	

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	17	30	47

AM Peak Hour			07:15	10:30	11:00	PM Peak Hour			12:30	15:00	15:00
AM Pk Volume			3	5	6	PM Pk Volume			2	5	6
Pk Hr Factor			0.375	0.625	0.750	Pk Hr Factor			0.500	0.625	0.750
7 - 9 Volume	0	0	4	1	5	4 - 6 Volume	0	0	2	5	7
7 - 9 Peak Hour			07:15	08:00	07:15	4 - 6 Peak Hour			16:45	16:30	16:45
7 - 9 Pk Volume	0	0	3	1	3	4 - 6 Pk Volume	0	0	2	5	6
Pk Hr Factor	0.000	0.000	0.375	0.250	0.375	Pk Hr Factor	0.000	0.000	0.250	0.417	0.500

Prepared by NDS/ATD

VOLUME

Ayers Holmes Rd Bet. Mt. Vernon Rd & Wise Rd

Day: Tuesday
Date: 10/3/2017

City: Auburn
Project #: CA17_7775_029

DAILY TOTALS	NB	SB	EB	WB	Total
	195	217	0	0	412

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	2		4						6	
00:15	0		0						0		12:15	5		2						7	
00:30	0		0						0		12:30	4		7						11	
00:45	0		0						0		12:45	4	15	5	18					9	33
01:00	0		0						0		13:00	1		2						3	
01:15	1		0						1		13:15	2		2						4	
01:30	0		0						0		13:30	2		3						5	
01:45	0	1	0						0	1	13:45	3	8	2	9					5	17
02:00	0		0						0		14:00	1		6						7	
02:15	0		0						0		14:15	3		2						5	
02:30	1		0						1		14:30	4		1						5	
02:45	0	1	0						0	1	14:45	7	15	2	11					9	26
03:00	0		0						0		15:00	4		3						7	
03:15	0		0						0		15:15	4		5						9	
03:30	0		0						0		15:30	4		6						10	
03:45	0		1	1					1	1	15:45	4	16	1	15					5	31
04:00	1		1						2		16:00	6		6						12	
04:15	0		0						0		16:15	9		3						12	
04:30	0		3						3		16:30	7		3						10	
04:45	0	1	1	5					1	6	16:45	6	28	3	15					9	43
05:00	0		2						2		17:00	6		7						13	
05:15	0		0						0		17:15	2		1						3	
05:30	0		3						3		17:30	5		5						10	
05:45	0		5	10					5	10	17:45	5	18	4	17					9	35
06:00	1		6						7		18:00	11		2						13	
06:15	1		5						6		18:15	3		2						5	
06:30	1		7						8		18:30	6		1						7	
06:45	0	3	6	24					6	27	18:45	3	23	0	5					3	28
07:00	2		3						5		19:00	1		1						2	
07:15	2		9						11		19:15	2		0						2	
07:30	0		7						7		19:30	5		0						5	
07:45	1	5	2	21					3	26	19:45	3	11	1	2					4	13
08:00	1		5						6		20:00	2		1						3	
08:15	3		4						7		20:15	2		0						2	
08:30	2		3						5		20:30	2		0						2	
08:45	1	7	2	14					3	21	20:45	0	6	1	2					1	8
09:00	2		4						6		21:00	1		1						2	
09:15	4		1						5		21:15	1		0						1	
09:30	2		5						7		21:30	1		0						1	
09:45	4	12	3	13					7	25	21:45	1	4	1	2					2	6
10:00	2		2						4		22:00	1		2						3	
10:15	1		4						5		22:15	3		1						4	
10:30	2		4						6		22:30	0		1						1	
10:45	3	8	1	11					4	19	22:45	1	5	1	5					2	10
11:00	0		3						3		23:00	1		1						2	
11:15	1		3						4		23:15	1		0						1	
11:30	0		5						5		23:30	0		2						2	
11:45	4	5	3	14					7	19	23:45	1	3	0	3					1	6
TOTALS		43		113						156	TOTALS		152		104						256
SPLIT %		27.6%		72.4%						37.9%	SPLIT %		59.4%		40.6%						62.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	195	217	0	0	412

AM Peak Hour	11:45	06:30			11:45	PM Peak Hour	16:00	12:00			16:15
AM Pk Volume	15	25			31	PM Pk Volume	28	18			44
Pk Hr Factor	0.750	0.694			0.705	Pk Hr Factor	0.778	0.643			0.846
7 - 9 Volume	12	35	0	0	47	4 - 6 Volume	46	32	0	0	78
7 - 9 Peak Hour	07:45	07:15			07:15	4 - 6 Peak Hour	16:00	17:00			16:15
7 - 9 Pk Volume	7	23	0	0	27	4 - 6 Pk Volume	28	17	0	0	44
Pk Hr Factor	0.583	0.639	0.000	0.000	0.614	Pk Hr Factor	0.778	0.607	0.000	0.000	0.846

Prepared by NDS/ATD

VOLUME

Cramer Rd Bet. Bell Rd & SR 49

Day: Tuesday
Date: 10/3/2017

City: Auburn
Project #: CA17_7775_030

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	280	278	558

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			5		6		11	
00:15			0		0		0		12:15			3		6		9	
00:30			0		0		0		12:30			5		7		12	
00:45			0		0		0		12:45			1	14	3	22	4	36
01:00			0		1		1		13:00			2		5		7	
01:15			0		0		0		13:15			5		3		8	
01:30			0		1		1		13:30			8		4		12	
01:45			0		0	2	0	2	13:45			6	21	4	16	10	37
02:00			0		0		0		14:00			5		4		9	
02:15			0		1		1		14:15			2		1		3	
02:30			0		1		1		14:30			3		3		6	
02:45			1	1	1	3	2	4	14:45			4	14	3	11	7	25
03:00			0		0		0		15:00			8		7		15	
03:15			0		0		0		15:15			10		2		12	
03:30			1		1		2		15:30			7		5		12	
03:45			0	1	0	1	0	2	15:45			5	30	9	23	14	53
04:00			1		0		1		16:00			8		8		16	
04:15			0		0		0		16:15			7		2		9	
04:30			1		0		1		16:30			5		4		9	
04:45			3	5	1	1	4	6	16:45			3	23	3	17	6	40
05:00			3		0		3		17:00			3		10		13	
05:15			2		1		3		17:15			8		8		16	
05:30			3		0		3		17:30			7		9		16	
05:45			3	11	0	1	3	12	17:45			2	20	9	36	11	56
06:00			6		1		7		18:00			1		7		8	
06:15			4		1		5		18:15			4		6		10	
06:30			4		3		7		18:30			2		5		7	
06:45			1	15	2	7	3	22	18:45			5	12	5	23	10	35
07:00			3		6		9		19:00			3		7		10	
07:15			4		3		7		19:15			1		6		7	
07:30			8		1		9		19:30			4		7		11	
07:45			0	15	3	13	3	28	19:45			3	11	2	22	5	33
08:00			3		4		7		20:00			1		3		4	
08:15			7		3		10		20:15			0		5		5	
08:30			6		2		8		20:30			0		3		3	
08:45			7	23	1	10	8	33	20:45			1	2	4	15	5	17
09:00			7		8		15		21:00			1		1		2	
09:15			3		2		5		21:15			0		1		1	
09:30			9		4		13		21:30			3		2		5	
09:45			7	26	2	16	9	42	21:45			2	6	1	5	3	11
10:00			5		1		6		22:00			0		1		1	
10:15			2		4		6		22:15			0		2		2	
10:30			1		3		4		22:30			0		1		1	
10:45			2	10	4	12	6	22	22:45			1	1	0	4	1	5
11:00			3		3		6		23:00			1		1		2	
11:15			4		3		7		23:15			1		1		2	
11:30			6		7		13		23:30			0		1		1	
11:45			4	17	2	15	6	32	23:45			0	2	0	3	0	5
TOTALS				124		81		205	TOTALS				156		197		353
SPLIT %				60.5%		39.5%		36.7%	SPLIT %				44.2%		55.8%		63.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	280	278	558

AM Peak Hour			08:15	11:30	09:00	PM Peak Hour			15:00	17:00	17:00
AM Pk Volume			27	21	42	PM Pk Volume			30	36	56
Pk Hr Factor			0.964	0.750	0.700	Pk Hr Factor			0.750	0.900	0.875
7 - 9 Volume	0	0	38	23	61	4 - 6 Volume	0	0	43	53	96
7 - 9 Peak Hour			08:00	07:00	08:00	4 - 6 Peak Hour			16:00	17:00	17:00
7 - 9 Pk Volume	0	0	23	13	33	4 - 6 Pk Volume	0	0	23	36	56
Pk Hr Factor	0.000	0.000	0.821	0.542	0.825	Pk Hr Factor	0.000	0.000	0.719	0.900	0.875

Prepared by NDS/ATD

VOLUME

Crosby Herold Rd Bet. Wise Rd & Meadow Creek Rd

Day: Thursday
Date: 10/12/2017

City: Lincoln
Project #: CA17_7775_031

DAILY TOTALS	NB	SB	EB	WB	Total
	258	267	0	0	525

AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	0			0		12:00	1	5			6	
00:15	0	0			0		12:15	4	3			7	
00:30	0	0			0		12:30	4	4			8	
00:45	0	0			0		12:45	7	16 4	16		11	32
01:00	0	0			0		13:00	5	5			10	
01:15	0	0			0		13:15	4	2			6	
01:30	0	0			0		13:30	3	5			8	
01:45	0	2	2		2	2	13:45	7	19 1	13		8	32
02:00	0	0			0		14:00	5	6			11	
02:15	0	0			0		14:15	4	8			12	
02:30	0	0			0		14:30	4	2			6	
02:45	0	0			0		14:45	4	17 4	20		8	37
03:00	0	1			1		15:00	8	5			13	
03:15	0	1			1		15:15	6	7			13	
03:30	0	0			0		15:30	4	5			9	
03:45	0	0	2		0	2	15:45	7	25 2	19		9	44
04:00	0	0			0		16:00	9	1			10	
04:15	0	1			1		16:15	2	2			4	
04:30	0	2			2		16:30	7	3			10	
04:45	0	1	4		1	4	16:45	5	23 7	13		12	36
05:00	0	1			1		17:00	5	9			14	
05:15	0	3			3		17:15	5	3			8	
05:30	1	4			5		17:30	4	7			11	
05:45	0 1	2	10		2	11	17:45	9	23 3	22		12	45
06:00	0	1			1		18:00	2	4			6	
06:15	0	5			5		18:15	5	3			8	
06:30	3	4			7		18:30	4	5			9	
06:45	3 6	3	13		6	19	18:45	6	17 2	14		8	31
07:00	2	7			9		19:00	4	4			8	
07:15	1	10			11		19:15	3	1			4	
07:30	1	9			10		19:30	3	1			4	
07:45	5 9	6	32		11	41	19:45	8	18 3	9		11	27
08:00	6	2			8		20:00	1	2			3	
08:15	2	4			6		20:15	5	1			6	
08:30	6	6			12		20:30	1	2			3	
08:45	2 16	3	15		5	31	20:45	8	15 1	6		9	21
09:00	3	6			9		21:00	5	1			6	
09:15	1	3			4		21:15	5	1			6	
09:30	6	3			9		21:30	2	1			3	
09:45	2 12	5	17		7	29	21:45	2	14 1	4		3	18
10:00	3	6			9		22:00	1	0			1	
10:15	3	7			10		22:15	0	1			1	
10:30	3	2			5		22:30	3	0			3	
10:45	2 11	3	18		5	29	22:45	0	4 0	1		0	5
11:00	1	4			5		23:00	1	1			2	
11:15	4	2			6		23:15	0	0			0	
11:30	4	3			7		23:30	1	0			1	
11:45	1 10	7	16		8	26	23:45	0	2 0	1		0	3
TOTALS	65		129			194	TOTALS	193		138			331
SPLIT %	33.5%		66.5%			37.0%	SPLIT %	58.3%		41.7%			63.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	258	267	0	0	525

AM Peak Hour	07:45	07:00			07:00	PM Peak Hour	15:15	16:45			16:45
AM Pk Volume	19	32			41	PM Pk Volume	26	26			45
Pk Hr Factor	0.792	0.800			0.932	Pk Hr Factor	0.722	0.722			0.804
7 - 9 Volume	25	47	0	0	72	4 - 6 Volume	46	35	0	0	81
7 - 9 Peak Hour	07:45	07:00			07:00	4 - 6 Peak Hour	16:00	16:45			16:45
7 - 9 Pk Volume	19	32	0	0	41	4 - 6 Pk Volume	23	26	0	0	45
Pk Hr Factor	0.792	0.800	0.000	0.000	0.932	Pk Hr Factor	0.639	0.722	0.000	0.000	0.804

Prepared by NDS/ATD

VOLUME

Wise Rd Bet. Crosby Herold Rd & Garden Bar Rd

Day: Thursday
Date: 10/12/2017

City: Lincoln
Project #: CA17_7775_032

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	913	944	1,857

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			0		0		0		12:00			17		13		30	
00:15			1		2		3		12:15			12		13		25	
00:30			0		0		0		12:30			14		15		29	
00:45			0	1	0	2	0	3	12:45			10	53	11	52	21	105
01:00			2		0		2		13:00			7		16		23	
01:15			1		1		2		13:15			6		9		15	
01:30			0		0		0		13:30			16		10		26	
01:45			0	3	2	3	2	6	13:45			14	43	14	49	28	92
02:00			0		1		1		14:00			11		17		28	
02:15			1		1		2		14:15			19		17		36	
02:30			0		0		0		14:30			15		11		26	
02:45			0	1	0	2	0	3	14:45			12	57	13	58	25	115
03:00			0		0		0		15:00			16		18		34	
03:15			0		0		0		15:15			11		19		30	
03:30			0		2		2		15:30			14		21		35	
03:45			0		1	3	1	3	15:45			19	60	13	71	32	131
04:00			1		1		2		16:00			20		32		52	
04:15			6		3		9		16:15			25		18		43	
04:30			2		4		6		16:30			28		22		50	
04:45			3	12	1	9	4	21	16:45			22	95	25	97	47	192
05:00			3		1		4		17:00			18		28		46	
05:15			5		7		12		17:15			27		25		52	
05:30			8		6		14		17:30			12		19		31	
05:45			5	21	12	26	17	47	17:45			17	74	14	86	31	160
06:00			13		11		24		18:00			20		21		41	
06:15			16		8		24		18:15			19		17		36	
06:30			6		31		37		18:30			17		22		39	
06:45			14	49	14	64	28	113	18:45			13	69	9	69	22	138
07:00			15		19		34		19:00			11		8		19	
07:15			14		11		25		19:15			10		12		22	
07:30			29		20		49		19:30			13		6		19	
07:45			12	70	17	67	29	137	19:45			3	37	4	30	7	67
08:00			9		19		28		20:00			4		7		11	
08:15			11		15		26		20:15			9		11		20	
08:30			12		12		24		20:30			3		6		9	
08:45			11	43	17	63	28	106	20:45			6	22	5	29	11	51
09:00			13		13		26		21:00			3		4		7	
09:15			20		14		34		21:15			5		8		13	
09:30			16		7		23		21:30			1		6		7	
09:45			15	64	6	40	21	104	21:45			5	14	3	21	8	35
10:00			14		9		23		22:00			4		2		6	
10:15			15		6		21		22:15			2		3		5	
10:30			13		9		22		22:30			1		2		3	
10:45			12	54	16	40	28	94	22:45			4	11	3	10	7	21
11:00			14		14		28		23:00			1		1		2	
11:15			10		9		19		23:15			1		2		3	
11:30			22		10		32		23:30			2		2		4	
11:45			7	53	13	46	20	99	23:45			3	7	2	7	5	14
TOTALS				371		365		736	TOTALS				542		579		1121
SPLIT %				50.4%		49.6%		39.6%	SPLIT %				48.3%		51.7%		60.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	913	944	1,857

AM Peak Hour			06:45	06:30	07:00	PM Peak Hour			16:00	16:30	16:30
AM Pk Volume			72	75	137	PM Pk Volume			95	100	195
Pk Hr Factor			0.621	0.605	0.699	Pk Hr Factor			0.848	0.893	0.938
7 - 9 Volume	0	0	113	130	243	4 - 6 Volume	0	0	169	183	352
7 - 9 Peak Hour			07:00	07:30	07:00	4 - 6 Peak Hour			16:00	16:30	16:30
7 - 9 Pk Volume	0	0	70	71	137	4 - 6 Pk Volume	0	0	95	100	195
Pk Hr Factor	0.000	0.000	0.603	0.888	0.699	Pk Hr Factor	0.000	0.000	0.848	0.893	0.938

DAILY COUNTS
DRIVEWAYS

KDA

Prepared by NDS/ATD

VOLUME

Dono dal Cielo Vineyard & Winery dwy S/O Wise Rd

Day: Friday
Date: 6/16/2017

City: Newcastle
Project #: CA17_7499_001

DAILY TOTALS	NB	SB	EB	WB	Total
	7	7	0	0	14

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	0	0			0	12:00	0	1			1
00:15	0	0			0	12:15	1	0			1
00:30	0	0			0	12:30	1	0			1
00:45	0	0			0	12:45	1	3	1	2	2 5
01:00	0	0			0	13:00	0	0			0
01:15	0	0			0	13:15	0	0			0
01:30	0	0			0	13:30	0	0			0
01:45	0	0			0	13:45	0	0			0
02:00	0	0			0	14:00	0	1			1
02:15	0	0			0	14:15	1	1			2
02:30	0	0			0	14:30	0	0			0
02:45	0	0			0	14:45	1	2	0	2	1 4
03:00	0	0			0	15:00	0	0			0
03:15	0	0			0	15:15	0	0			0
03:30	0	0			0	15:30	0	0			0
03:45	0	0			0	15:45	0	1	1		1 1
04:00	0	0			0	16:00	0	0			0
04:15	0	0			0	16:15	0	0			0
04:30	0	0			0	16:30	0	1			1
04:45	0	0			0	16:45	1	1	0	1	1 2
05:00	0	0			0	17:00	0	0			0
05:15	0	0			0	17:15	1	0			1
05:30	0	0			0	17:30	0	0			0
05:45	0	0			0	17:45	0	1	0		0 1
06:00	0	0			0	18:00	0	0			0
06:15	0	0			0	18:15	0	0			0
06:30	0	0			0	18:30	0	0			0
06:45	0	0			0	18:45	0	0			0
07:00	0	0			0	19:00	0	0			0
07:15	0	0			0	19:15	0	0			0
07:30	0	0			0	19:30	0	0			0
07:45	0	0			0	19:45	0	0			0
08:00	0	0			0	20:00	0	0			0
08:15	0	0			0	20:15	0	0			0
08:30	0	0			0	20:30	0	0			0
08:45	0	0			0	20:45	0	0			0
09:00	0	0			0	21:00	0	0			0
09:15	0	0			0	21:15	0	0			0
09:30	0	0			0	21:30	0	0			0
09:45	0	0			0	21:45	0	0			0
10:00	0	0			0	22:00	0	0			0
10:15	0	0			0	22:15	0	0			0
10:30	0	0			0	22:30	0	0			0
10:45	0	0			0	22:45	0	0			0
11:00	0	0			0	23:00	0	0			0
11:15	0	1			1	23:15	0	0			0
11:30	0	0			0	23:30	0	0			0
11:45	0	0	1		0 1	23:45	0	0			0
TOTALS		1			1	TOTALS	7	6			13
SPLIT %		100.0%			7.1%	SPLIT %	53.8%	46.2%			92.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	7	7	0	0	14

AM Peak Hour	11:45	11:15			11:45	PM Peak Hour	12:00	12:00			12:00
AM Pk Volume	2	2			3	PM Pk Volume	3	2			5
Pk Hr Factor	0.500	0.500			0.750	Pk Hr Factor	0.750	0.500			0.625
7 - 9 Volume	0	0	0	0	0	4 - 6 Volume	2	1	0	0	3
7 - 9 Peak Hour						4 - 6 Peak Hour	16:30	16:00			16:30
7 - 9 Pk Volume	0	0	0	0	0	4 - 6 Pk Volume	2	1	0	0	3
Pk Hr Factor	0.000	0.000	0.000	0.000	0.000	Pk Hr Factor	0.500	0.250	0.000	0.000	0.750

Prepared by NDS/ATD

VOLUME

Dono dal Cielo Vineyard & Winery dwy S/O Wise Rd

Day: Saturday
Date: 6/17/2017

City: Newcastle
Project #: CA17_7499_001

DAILY TOTALS	NB	SB	EB	WB	Total
	102	102	0	0	204

AM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0	
00:15	0		0						0	
00:30	0		0						0	
00:45	0		0						0	
01:00	0		0						0	
01:15	0		0						0	
01:30	0		0						0	
01:45	0		0						0	
02:00	0		0						0	
02:15	0		0						0	
02:30	0		0						0	
02:45	0		0						0	
03:00	0		0						0	
03:15	0		0						0	
03:30	0		0						0	
03:45	0		0						0	
04:00	0		0						0	
04:15	0		0						0	
04:30	0		0						0	
04:45	0		0						0	
05:00	0		0						0	
05:15	0		0						0	
05:30	0		0						0	
05:45	0		0						0	
06:00	0		0						0	
06:15	0		0						0	
06:30	0		0						0	
06:45	0		0						0	
07:00	0		0						0	
07:15	0		0						0	
07:30	0		0						0	
07:45	0		0						0	
08:00	0		0						0	
08:15	0		0						0	
08:30	0		0						0	
08:45	0		0						0	
09:00	0		0						0	
09:15	0		0						0	
09:30	0		0						0	
09:45	0		0						0	
10:00	0		0						0	
10:15	0		1						1	
10:30	0		0						0	
10:45	0		0		1				0	1
11:00	1		1						2	
11:15	0		0						0	
11:30	0		0						0	
11:45	0	1	2		3				2	4
TOTALS		1			4					5
SPLIT %		20.0%			80.0%					2.5%

PM Period	NB		SB		EB		WB		TOTAL	
12:00	0		0						0	
12:15	1		4						5	
12:30	0		0						0	
12:45	1	2	5	9					6	11
13:00	0		6						6	
13:15	1		2						3	
13:30	1		1						2	
13:45	1	3	3	12					4	15
14:00	5		4						9	
14:15	1		4						5	
14:30	0		2						2	
14:45	2	8	4	14					6	22
15:00	3		1						4	
15:15	5		6						11	
15:30	1		1						2	
15:45	1	10	0	8					1	18
16:00	2		4						6	
16:15	4		3						7	
16:30	7		5						12	
16:45	9	22	0	12					9	34
17:00	4		5						9	
17:15	4		3						7	
17:30	0		1						1	
17:45	2	10	2	11					4	21
18:00	1		10						11	
18:15	1		5						6	
18:30	1		3						4	
18:45	0	3	3	21					3	24
19:00	0		2						2	
19:15	1		2						3	
19:30	2		1						3	
19:45	0	3	0	5					0	8
20:00	1		1						2	
20:15	0		1						1	
20:30	1		1						2	
20:45	6	8	1	4					7	12
21:00	4		1						5	
21:15	17		0						17	
21:30	3		0						3	
21:45	0	24	0	1					0	25
22:00	8		1						9	
22:15	0		0						0	
22:30	0		0						0	
22:45	0	8	0	1					0	9
23:00	0		0						0	
23:15	0		0						0	
23:30	0		0						0	
23:45	0		0						0	
TOTALS		101		98						199
SPLIT %		50.8%		49.2%						97.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	102	102	0	0	204

AM Peak Hour	10:15	11:30			11:30	PM Peak Hour	20:45	18:00			16:15
AM Pk Volume	1	6			7	PM Pk Volume	30	21			37
Pk Hr Factor	0.250	0.375			0.350	Pk Hr Factor	0.441	0.525			0.771
7 - 9 Volume	0	0	0	0	0	4 - 6 Volume	32	23	0	0	55
7 - 9 Peak Hour						4 - 6 Peak Hour	16:15	16:15			16:15
7 - 9 Pk Volume	0	0	0	0	0	4 - 6 Pk Volume	24	13	0	0	37
Pk Hr Factor	0.000	0.000	0.000	0.000	0.000	Pk Hr Factor	0.667	0.650	0.000	0.000	0.771

Prepared by NDS/ATD

VOLUME

Dono dal Cielo Vineyard & Winery dwy S/O Wise Rd

Day: Sunday
Date: 6/18/2017

City: Newcastle
Project #: CA17_7499_001

DAILY TOTALS	NB	SB	EB	WB	Total
	23	23	0	0	46

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	0	0			0	12:00	0	0			0
00:15	0	0			0	12:15	0	0			0
00:30	0	0			0	12:30	1	2			3
00:45	0	0			0	12:45	0 1	2 4			2 5
01:00	0	0			0	13:00	1	1			2
01:15	0	0			0	13:15	1	3			4
01:30	0	0			0	13:30	0	0			0
01:45	0	0			0	13:45	2 4	7 11			9 15
02:00	0	0			0	14:00	0	0			0
02:15	0	0			0	14:15	3	3			6
02:30	0	0			0	14:30	0	0			0
02:45	0	0			0	14:45	6 9	0 3			6 12
03:00	0	0			0	15:00	3	2			5
03:15	0	0			0	15:15	0	0			0
03:30	0	0			0	15:30	1	0			1
03:45	0	0			0	15:45	0 4	0 2			0 6
04:00	0	0			0	16:00	1	0			1
04:15	0	0			0	16:15	0	0			0
04:30	0	0			0	16:30	0	0			0
04:45	0	0			0	16:45	4 5	0			4 5
05:00	0	0			0	17:00	0	0			0
05:15	0	0			0	17:15	0	0			0
05:30	0	0			0	17:30	0	0			0
05:45	0	0			0	17:45	0	0			0
06:00	0	0			0	18:00	0	0			0
06:15	0	0			0	18:15	0	0			0
06:30	0	0			0	18:30	0	0			0
06:45	0	0			0	18:45	0	0			0
07:00	0	0			0	19:00	0	0			0
07:15	0	0			0	19:15	0	0			0
07:30	0	0			0	19:30	0	0			0
07:45	0	0			0	19:45	0	0			0
08:00	0	0			0	20:00	0	0			0
08:15	0	0			0	20:15	0	0			0
08:30	0	0			0	20:30	0	0			0
08:45	0	0			0	20:45	0	0			0
09:00	0	0			0	21:00	0	0			0
09:15	0	0			0	21:15	0	0			0
09:30	0	0			0	21:30	0	0			0
09:45	0	0			0	21:45	0	0			0
10:00	0	0			0	22:00	0	0			0
10:15	0	0			0	22:15	0	0			0
10:30	0	0			0	22:30	0	0			0
10:45	0	0			0	22:45	0	0			0
11:00	0	0			0	23:00	0	0			0
11:15	0	1			1	23:15	0	0			0
11:30	0	0			0	23:30	0	0			0
11:45	0	2	3		2 3	23:45	0	0			0
TOTALS		3			3	TOTALS	23	20			43
SPLIT %		100.0%			6.5%	SPLIT %	53.5%	46.5%			93.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	23	23	0	0	46

AM Peak Hour	11:45	11:45			11:45	PM Peak Hour	14:15	13:00			14:15
AM Pk Volume	1	4			5	PM Pk Volume	12	11			17
Pk Hr Factor	0.250	0.500			0.417	Pk Hr Factor	0.500	0.393			0.708
7 - 9 Volume	0	0	0	0	0	4 - 6 Volume	5	0	0	0	5
7 - 9 Peak Hour						4 - 6 Peak Hour	16:00				16:00
7 - 9 Pk Volume	0	0	0	0	0	4 - 6 Pk Volume	5	0	0	0	5
Pk Hr Factor	0.000	0.000	0.000	0.000	0.000	Pk Hr Factor	0.313	0.000	0.000	0.000	0.313

Prepared by NDS/ATD

In & Out

Fawnridge Winery dwy E/O Fawnridge Rd

Day: Friday
Date: 6/9/2017

City: Auburn
Project #: CA17_7499_002

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	4	4	8

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			0	0	0	12:00			0	0	0
00:15			0	0	0	12:15			0	0	0
00:30			0	0	0	12:30			0	0	0
00:45			0	0	0	12:45			0	0	0
01:00			0	0	0	13:00			0	0	0
01:15			0	0	0	13:15			0	0	0
01:30			0	0	0	13:30			0	0	0
01:45			0	0	0	13:45			0	0	0
02:00			0	0	0	14:00			0	0	0
02:15			0	0	0	14:15			0	0	0
02:30			0	0	0	14:30			0	1	1
02:45			0	0	0	14:45			0	0 1	0 1
03:00			0	0	0	15:00			0	0	0
03:15			0	0	0	15:15			0	0	0
03:30			0	0	0	15:30			0	0	0
03:45			0	0	0	15:45			1 1	0	1 1
04:00			0	0	0	16:00			0	0	0
04:15			0	0	0	16:15			0	0	0
04:30			0	0	0	16:30			0	0	0
04:45			0	0	0	16:45			0	0	0
05:00			0	0	0	17:00			0	0	0
05:15			0	0	0	17:15			0	0	0
05:30			0	0	0	17:30			0	0	0
05:45			0	0	0	17:45			1 1	0	1 1
06:00			0	0	0	18:00			0	0	0
06:15			0	0	0	18:15			0	0	0
06:30			0	0	0	18:30			0	0	0
06:45			0	0	0	18:45			0	1 1	1 1
07:00			0	0	0	19:00			0	0	0
07:15			0	0	0	19:15			0	0	0
07:30			0	0	0	19:30			0	0	0
07:45			0	0	0	19:45			0	0	0
08:00			0	0	0	20:00			0	0	0
08:15			0	0	0	20:15			0	0	0
08:30			0	0	0	20:30			0	0	0
08:45			0	0	0	20:45			0	0	0
09:00			0	0	0	21:00			0	0	0
09:15			0	0	0	21:15			0	0	0
09:30			0	0	0	21:30			0	0	0
09:45			0	1 1	1 1	21:45			1 1	0	1 1
10:00			0	0	0	22:00			0	0	0
10:15			0	0	0	22:15			0	0	0
10:30			1	0	1	22:30			0	0	0
10:45			0 1	1 1	1 2	22:45			0	0	0
11:00			0	0	0	23:00			0	0	0
11:15			0	0	0	23:15			0	0	0
11:30			0	0	0	23:30			0	0	0
11:45			0	0	0	23:45			0	0	0
TOTALS			1	2	3	TOTALS			3	2	5
SPLIT %			33.3%	66.7%	37.5%	SPLIT %			60.0%	40.0%	62.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	4	4	8

AM Peak Hour			09:45	09:00	09:45	PM Peak Hour			15:00	13:45	13:45
AM Pk Volume			1	1	2	PM Pk Volume			1	1	1
Pk Hr Factor			0.250	0.250	0.500	Pk Hr Factor			0.250	0.250	0.250
7 - 9 Volume	0	0	0	0	0	4 - 6 Volume	0	0	1	0	1
7 - 9 Peak Hour						4 - 6 Peak Hour			17:00		17:00
7 - 9 Pk Volume	0	0	0	0	0	4 - 6 Pk Volume	0	0	1	0	1
Pk Hr Factor	0.000	0.000	0.000	0.000	0.000	Pk Hr Factor	0.000	0.000	0.250	0.000	0.250

Prepared by NDS/ATD

VOLUME

Fawnridge Winery dwy E/O Fawnridge Rd

Day: Saturday
Date: 6/10/2017

City: Auburn
Project #: CA17_7499_002

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	6	7	13

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00					0		0		0		12:00					0		0		0	
00:15					0		0		0		12:15					0		0		0	
00:30					0		0		0		12:30					0		0		0	
00:45					0		0		0		12:45					0		0		0	
01:00					0		0		0		13:00					0		0		0	
01:15					0		0		0		13:15					0		0		0	
01:30					0		0		0		13:30					0		0		0	
01:45					0		0		0		13:45					0		0		0	
02:00					0		0		0		14:00					0		0		0	
02:15					0		0		0		14:15					0		0		0	
02:30					0		0		0		14:30					0		0		0	
02:45					0		0		0		14:45					0		0		0	
03:00					0		0		0		15:00					0		0		0	
03:15					0		0		0		15:15					0		0		0	
03:30					0		0		0		15:30					0		0		0	
03:45					0		0		0		15:45					0		0		0	
04:00					0		0		0		16:00					0		0		0	
04:15					0		0		0		16:15					0		0		0	
04:30					0		0		0		16:30					0		0		0	
04:45					0		0		0		16:45					0		0		0	
05:00					0		0		0		17:00					0		0		0	
05:15					0		0		0		17:15					0		0		0	
05:30					0		0		0		17:30					0		0		0	
05:45					0		0		0		17:45					0		1	1	1	1
06:00					0		0		0		18:00					0		0		0	
06:15					0		0		0		18:15					0		0		0	
06:30					0		0		0		18:30					1		0		1	
06:45					0		0		0		18:45					0	1	0		0	1
07:00					0		0		0		19:00					1		0		1	
07:15					0		0		0		19:15					0		0		0	
07:30					0		0		0		19:30					0		0		0	
07:45					0		0		0		19:45					0	1	0		0	1
08:00					0		0		0		20:00					0		0		0	
08:15					0		0		0		20:15					0		0		0	
08:30					0		0		0		20:30					0		0		0	
08:45					0		0		0		20:45					0		0		0	
09:00					0		0		0		21:00					0		1		1	
09:15					0		1		1		21:15					0		0		0	
09:30					0		0		0		21:30					0		0		0	
09:45					0		0	1	0	1	21:45					0		0	1	0	1
10:00					1		1		2		22:00					0		0		0	
10:15					0		0		0		22:15					0		0		0	
10:30					1		0		1		22:30					0		0		0	
10:45				2	0		1	2	1	4	22:45					0		0		0	
11:00					0		1		1		23:00					0		0		0	
11:15					1		0		1		23:15					0		0		0	
11:30					1		1		2		23:30					0		0		0	
11:45				2	0		0	2	0	4	23:45					0		0		0	
TOTALS					4			5		9	TOTALS						2		2		4
SPLIT %					44.4%			55.6%		69.2%	SPLIT %						50.0%		50.0%		30.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	6	7	13

AM Peak Hour			09:45	10:45	10:45	PM Peak Hour			18:15	17:00	17:45
AM Pk Volume			2	3	5	PM Pk Volume			2	1	2
Pk Hr Factor			0.500	0.750	0.625	Pk Hr Factor			0.500	0.250	0.500
7 - 9 Volume	0	0	0	0	0	4 - 6 Volume	0	0	0	1	1
7 - 9 Peak Hour						4 - 6 Peak Hour				17:00	17:00
7 - 9 Pk Volume	0	0	0	0	0	4 - 6 Pk Volume	0	0	0	1	1
Pk Hr Factor	0.000	0.000	0.000	0.000	0.000	Pk Hr Factor	0.000	0.000	0.000	0.250	0.250

Prepared by NDS/ATD

VOLUME

Fawnridge Winery dwy E/O Fawnridge Rd

Day: Sunday
Date: 6/11/2017

City: Auburn
Project #: CA17_7499_002

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	3	3	6

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			0	0	0	12:00			0	0	0
00:15			0	0	0	12:15			0	0	0
00:30			0	0	0	12:30			0	0	0
00:45			0	0	0	12:45			0	0	0
01:00			0	0	0	13:00			0	0	0
01:15			0	0	0	13:15			0	0	0
01:30			0	0	0	13:30			0	0	0
01:45			0	0	0	13:45			0	0	0
02:00			0	0	0	14:00			0	0	0
02:15			0	0	0	14:15			0	0	0
02:30			0	0	0	14:30			0	0	0
02:45			0	0	0	14:45			0	0	0
03:00			0	0	0	15:00			0	0	0
03:15			0	0	0	15:15			0	1	1
03:30			0	0	0	15:30			0	0	0
03:45			0	0	0	15:45			0	0	1 0 1
04:00			0	0	0	16:00			0	0	0
04:15			0	0	0	16:15			0	0	0
04:30			0	0	0	16:30			0	0	0
04:45			0	0	0	16:45			0	0	0
05:00			0	0	0	17:00			0	0	0
05:15			0	0	0	17:15			0	0	0
05:30			0	0	0	17:30			0	0	0
05:45			0	0	0	17:45			0	0	0
06:00			0	0	0	18:00			0	0	0
06:15			0	0	0	18:15			0	0	0
06:30			0	0	0	18:30			0	0	0
06:45			0	0	0	18:45			0	0	0
07:00			0	0	0	19:00			1	1	2
07:15			0	0	0	19:15			0	0	0
07:30			0	0	0	19:30			1	0	1
07:45			0	0	0	19:45			0 2	0 1	0 3
08:00			0	0	0	20:00			0	0	0
08:15			0	0	0	20:15			0	0	0
08:30			0	0	0	20:30			0	0	0
08:45			0	0	0	20:45			0	0	0
09:00			0	0	0	21:00			0	0	0
09:15			0	0	0	21:15			0	0	0
09:30			0	0	0	21:30			0	0	0
09:45			0	0	0	21:45			0	0	0
10:00			0	0	0	22:00			0	0	0
10:15			0	0	0	22:15			0	0	0
10:30			0	0	0	22:30			0	0	0
10:45			0	1 1	1 1	22:45			0	0	0
11:00			0	0	0	23:00			1	0	1
11:15			0	0	0	23:15			0	0	0
11:30			0	0	0	23:30			0	0	0
11:45			0	0	0	23:45			0 1	0	0 1
TOTALS				1	1	TOTALS			3	2	5
SPLIT %				100.0%	16.7%	SPLIT %			60.0%	40.0%	83.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	3	3	6

AM Peak Hour				10:00	10:00	PM Peak Hour			18:45	14:30	18:45
AM Pk Volume				1	1	PM Pk Volume			2	1	3
Pk Hr Factor				0.250	0.250	Pk Hr Factor			0.500	0.250	0.375
7 - 9 Volume	0	0	0	0	0	4 - 6 Volume	0	0	0	0	0
7 - 9 Peak Hour						4 - 6 Peak Hour					
7 - 9 Pk Volume	0	0	0	0	0	4 - 6 Pk Volume	0	0	0	0	0
Pk Hr Factor	0.000	0.000	0.000	0.000	0.000	Pk Hr Factor	0.000	0.000	0.000	0.000	0.000

Prepared by NDS/ATD

In & Out

Lone Buffalo Vineyards Dwy W/O Buttes View Ln

Day: Friday
Date: 6/16/2017

City: Newcastle
Project #: CA17_7499_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	11	11	22

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			0	0	0	12:00			1	0	1
00:15			0	0	0	12:15			0	0	0
00:30			0	0	0	12:30			0	1	1
00:45			0	0	0	12:45		1	0	1	0 2
01:00			0	0	0	13:00			2	1	3
01:15			0	0	0	13:15			0	0	0
01:30			0	0	0	13:30			1	1	2
01:45			0	0	0	13:45		3	0	2	0 5
02:00			0	0	0	14:00			1	0	1
02:15			0	0	0	14:15			0	0	0
02:30			0	0	0	14:30			0	0	0
02:45			0	0	0	14:45		1	1	1	1 2
03:00			0	0	0	15:00			1	2	3
03:15			0	0	0	15:15			0	1	1
03:30			0	0	0	15:30			0	0	0
03:45			0	0	0	15:45		3	2	3	2 6
04:00			0	0	0	16:00			0	0	0
04:15			0	0	0	16:15			0	1	1
04:30			0	0	0	16:30			1	0	1
04:45			0	0	0	16:45		1	0	1	0 2
05:00			0	0	0	17:00			1	0	1
05:15			0	0	0	17:15			0	0	0
05:30			0	0	0	17:30			0	0	0
05:45			0	0	0	17:45		1	0		0 1
06:00			0	0	0	18:00			1	1	2
06:15			0	0	0	18:15			0	0	0
06:30			0	0	0	18:30			0	0	0
06:45			0	0	0	18:45		1	0	1	0 2
07:00			0	0	0	19:00			0	0	0
07:15			0	0	0	19:15			0	0	0
07:30			0	0	0	19:30			0	0	0
07:45			0	0	0	19:45			0	0	0
08:00			0	0	0	20:00			0	0	0
08:15			0	0	0	20:15			0	1	1
08:30			0	0	0	20:30			0	0	0
08:45			0	0	0	20:45			0	0 1	0 1
09:00			0	0	0	21:00			0	0	0
09:15			0	0	0	21:15			0	0	0
09:30			0	0	0	21:30			0	0	0
09:45			0	0	0	21:45			0	0	0
10:00			0	0	0	22:00			0	0	0
10:15			0	0	0	22:15			0	0	0
10:30			0	0	0	22:30			0	0	0
10:45			0	0	0	22:45			0	0	0
11:00			0	1	1	23:00			0	0	0
11:15			0	0	0	23:15			0	0	0
11:30			0	0	0	23:30			0	0	0
11:45			0	0 1	0 1	23:45			0	0	0
TOTALS				1	1	TOTALS			11	10	21
SPLIT %				100.0%	4.5%	SPLIT %			52.4%	47.6%	95.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	11	11	22

AM Peak Hour			11:15	10:15	11:45	PM Peak Hour			12:45	14:30	15:00
AM Pk Volume			1	1	2	PM Pk Volume			3	4	6
Pk Hr Factor			0.250	0.250	0.500	Pk Hr Factor			0.375	0.500	0.500
7 - 9 Volume	0	0	0	0	0	4 - 6 Volume	0	0	2	1	3
7 - 9 Peak Hour						4 - 6 Peak Hour			16:15	16:00	16:15
7 - 9 Pk Volume	0	0	0	0	0	4 - 6 Pk Volume	0	0	2	1	3
Pk Hr Factor	0.000	0.000	0.000	0.000	0.000	Pk Hr Factor	0.000	0.000	0.500	0.250	0.750

Prepared by NDS/ATD

VOLUME

Lone Buffalo Vineyards Dwy W/O Buttes View Ln

Day: Saturday
Date: 6/17/2017

City: Newcastle
Project #: CA17_7499_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	19	19	38

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			0	0	0	12:00			0	1	1
00:15			0	0	0	12:15			0	1	1
00:30			0	0	0	12:30			0	1	1
00:45			0	0	0	12:45			1	0	1
01:00			0	0	0	13:00			0	1	1
01:15			0	0	0	13:15			0	0	0
01:30			0	0	0	13:30			0	4	4
01:45			0	0	0	13:45			1	0	1
02:00			0	0	0	14:00			3	1	4
02:15			0	0	0	14:15			1	0	1
02:30			0	0	0	14:30			2	1	3
02:45			0	0	0	14:45			2	1	3
03:00			0	0	0	15:00			1	1	2
03:15			0	0	0	15:15			2	3	5
03:30			0	0	0	15:30			1	0	1
03:45			0	0	0	15:45			0	0	0
04:00			0	0	0	16:00			2	1	3
04:15			0	0	0	16:15			0	0	0
04:30			0	0	0	16:30			0	0	0
04:45			0	0	0	16:45			1	0	1
05:00			0	0	0	17:00			0	0	0
05:15			0	0	0	17:15			0	0	0
05:30			0	0	0	17:30			0	0	0
05:45			0	0	0	17:45			0	0	0
06:00			0	0	0	18:00			0	0	0
06:15			0	0	0	18:15			0	0	0
06:30			0	0	0	18:30			0	0	0
06:45			0	0	0	18:45			0	0	0
07:00			0	0	0	19:00			0	0	0
07:15			0	0	0	19:15			0	0	0
07:30			0	0	0	19:30			0	0	0
07:45			0	0	0	19:45			0	0	0
08:00			0	0	0	20:00			0	0	0
08:15			0	0	0	20:15			0	0	0
08:30			0	0	0	20:30			0	0	0
08:45			0	0	0	20:45			0	0	0
09:00			0	0	0	21:00			0	0	0
09:15			0	0	0	21:15			0	0	0
09:30			0	0	0	21:30			0	0	0
09:45			0	0	0	21:45			0	0	0
10:00			0	0	0	22:00			0	0	0
10:15			0	0	0	22:15			0	0	0
10:30			0	0	0	22:30			0	0	0
10:45			0	0	0	22:45			0	0	0
11:00			0	0	0	23:00			0	0	0
11:15			1	1	2	23:15			0	0	0
11:30			0	1	1	23:30			0	0	0
11:45			1	1	2	23:45			0	0	0
TOTALS			2	3	5	TOTALS			17	16	33
SPLIT %			40.0%	60.0%	13.2%	SPLIT %			51.5%	48.5%	86.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	19	19	38

AM Peak Hour			11:00	11:15	11:15	PM Peak Hour			14:00	14:30	14:30
AM Pk Volume			2	4	6	PM Pk Volume			8	6	13
Pk Hr Factor			0.500	1.000	0.750	Pk Hr Factor			0.667	0.500	0.650
7 - 9 Volume	0	0	0	0	0	4 - 6 Volume	0	0	3	1	4
7 - 9 Peak Hour						4 - 6 Peak Hour			16:00	16:00	16:00
7 - 9 Pk Volume	0	0	0	0	0	4 - 6 Pk Volume	0	0	3	1	4
Pk Hr Factor	0.000	0.000	0.000	0.000	0.000	Pk Hr Factor	0.000	0.000	0.375	0.250	0.333

Prepared by NDS/ATD

VOLUME

Lone Buffalo Vineyards Dwy W/O Buttes View Ln

Day: Sunday
Date: 6/18/2017

City: Newcastle
Project #: CA17_7499_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	21	20	41

AM Period	NB		SB		EB		WB		TOTAL	
00:00					0		0		0	
00:15					0		0		0	
00:30					0		0		0	
00:45					0		0		0	
01:00					0		0		0	
01:15					0		0		0	
01:30					0		0		0	
01:45					0		0		0	
02:00					0		0		0	
02:15					0		0		0	
02:30					0		0		0	
02:45					0		0		0	
03:00					0		0		0	
03:15					0		0		0	
03:30					0		0		0	
03:45					0		0		0	
04:00					0		0		0	
04:15					0		0		0	
04:30					0		0		0	
04:45					0		0		0	
05:00					0		0		0	
05:15					0		0		0	
05:30					0		0		0	
05:45					0		0		0	
06:00					0		0		0	
06:15					0		0		0	
06:30					0		0		0	
06:45					0		0		0	
07:00					0		0		0	
07:15					0		0		0	
07:30					0		0		0	
07:45					0		0		0	
08:00					0		0		0	
08:15					0		0		0	
08:30					0		0		0	
08:45					0		0		0	
09:00					0		0		0	
09:15					0		0		0	
09:30					0		0		0	
09:45					0		0		0	
10:00					0		0		0	
10:15					1		1		2	
10:30					0		0		0	
10:45					0	1	0	1	0	2
11:00					0		0		0	
11:15					0		0		0	
11:30					0		1		1	
11:45					1	1	2	3	3	4
TOTALS						2		4		6
SPLIT %						33.3%		66.7%		14.6%

PM Period	NB		SB		EB		WB		TOTAL	
12:00					1		1		2	
12:15					1		2		3	
12:30					1		3		4	
12:45					2	5	1	7	3	12
13:00					1		1		2	
13:15					3		1		4	
13:30					2		0		2	
13:45					1	7	2	4	3	11
14:00					0		0		0	
14:15					0		0		0	
14:30					1		0		1	
14:45					0	1	1	1	1	2
15:00					0		0		0	
15:15					1		0		1	
15:30					0		0		0	
15:45					0	1	0		0	1
16:00					0		1		1	
16:15					0		0		0	
16:30					0		0		0	
16:45					0		1	2	1	2
17:00					1		0		1	
17:15					0		0		0	
17:30					1		0		1	
17:45					0	2	0		0	2
18:00					1		0		1	
18:15					0		0		0	
18:30					0		0		0	
18:45					0	1	2	2	2	3
19:00					0		0		0	
19:15					0		0		0	
19:30					1		0		1	
19:45					0	1	0		0	1
20:00					0		0		0	
20:15					0		0		0	
20:30					0		0		0	
20:45					0		0		0	
21:00					0		0		0	
21:15					0		0		0	
21:30					0		0		0	
21:45					0		0		0	
22:00					0		0		0	
22:15					1		0		1	
22:30					0		0		0	
22:45					0	1	0		0	1
23:00					0		0		0	
23:15					0		0		0	
23:30					0		0		0	
23:45					0		0		0	
TOTALS						19		16		35
SPLIT %						54.3%		45.7%		85.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	21	20	41

AM Peak Hour			11:45		11:45		**11:45**	PM Peak Hour		12:45		12:00	**12:30**
AM Pk Volume			4		8		**12**	PM Pk Volume		8		7	**13**
Pk Hr Factor			1.000		0.667		**0.750**	Pk Hr Factor		0.667		0.583	**0.813**
7 - 9 Volume	0	0	0		0		**0**	4 - 6 Volume	0	2		2	**4**
7 - 9 Peak Hour								4 - 6 Peak Hour		16:45		16:00	**16:45**
7 - 9 Pk Volume	0	0	0		0		**0**	4 - 6 Pk Volume	0	2		2	**3**
Pk Hr Factor	0.000	0.000	0.000		0.000		**0.000**	Pk Hr Factor	0.000	0.500		0.500	**0.750**

Prepared by NDS/ATD

In & Out

Pescatore Vineyard & Winery Dwy N/O Ridge Rd

Day: Friday
Date: 6/9/2017

City: Newcastle
Project #: CA17_7499_004

DAILY TOTALS	NB	SB	EB	WB	Total
	22	21	0	0	43

AM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0	
00:15	0		0						0	
00:30	0		0						0	
00:45	0		0						0	
01:00	0		0						0	
01:15	0		0						0	
01:30	0		0						0	
01:45	0		0						0	
02:00	0		0						0	
02:15	0		0						0	
02:30	0		0						0	
02:45	0		0						0	
03:00	0		0						0	
03:15	0		0						0	
03:30	0		0						0	
03:45	0		0						0	
04:00	0		0						0	
04:15	0		0						0	
04:30	0		0						0	
04:45	0		0						0	
05:00	0		0						0	
05:15	0		0						0	
05:30	0		0						0	
05:45	0		0						0	
06:00	0		0						0	
06:15	0		0						0	
06:30	0		0						0	
06:45	1	1	0						1	1
07:00	1		1						2	
07:15	0		1						1	
07:30	1		0						1	
07:45	0	2	0	2					0	4
08:00	0		1						1	
08:15	0		0						0	
08:30	2		3						5	
08:45	0	2	0	4					0	6
09:00	0		0						0	
09:15	0		1						1	
09:30	0		0						0	
09:45	0		0	1					0	1
10:00	1		0						1	
10:15	0		0						0	
10:30	1		1						2	
10:45	0	2	1	2					1	4
11:00	0		0						0	
11:15	0		0						0	
11:30	1		1						2	
11:45	0	1	0	1					0	2
TOTALS		8		10						**18**
SPLIT %		44.4%		55.6%						**41.9%**

PM Period	NB		SB		EB		WB		TOTAL	
12:00	0		0						0	
12:15	0		0						0	
12:30	0		0						0	
12:45	0		0						0	
13:00	0		0						0	
13:15	0		1						1	
13:30	0		0						0	
13:45	1	1	1	2					2	3
14:00	0		0						0	
14:15	0		0						0	
14:30	0		0						0	
14:45	2	2	0						2	2
15:00	0		2						2	
15:15	2		1						3	
15:30	0		0						0	
15:45	0	2	0	3					0	5
16:00	0		0						0	
16:15	1		1						2	
16:30	0		1						1	
16:45	0	1	1	3					1	4
17:00	0		0						0	
17:15	1		1						2	
17:30	0		0						0	
17:45	0	1	0	1					0	2
18:00	0		0						0	
18:15	0		1						1	
18:30	1		0						1	
18:45	0	1	0	1					0	2
19:00	0		0						0	
19:15	0		0						0	
19:30	1		0						1	
19:45	1	2	0						1	2
20:00	0		0						0	
20:15	0		0						0	
20:30	0		0						0	
20:45	0		1	1					1	1
21:00	0		0						0	
21:15	0		0						0	
21:30	1		0						1	
21:45	0	1	0						0	1
22:00	0		0						0	
22:15	1		0						1	
22:30	1		0						1	
22:45	0	2	0						0	2
23:00	0		0						0	
23:15	0		0						0	
23:30	0		0						0	
23:45	1	1	0						1	1
TOTALS		14		11						**25**
SPLIT %		56.0%		44.0%						**58.1%**

DAILY TOTALS	NB	SB	EB	WB	Total
	22	21	0	0	43

AM Peak Hour	06:45	07:45			**07:45**	**PM Peak Hour**	14:30	14:30			**14:30**
AM Pk Volume	3	4			**6**	**PM Pk Volume**	4	3			**7**
Pk Hr Factor	0.750	0.333			**0.300**	**Pk Hr Factor**	0.500	0.375			**0.583**
7 - 9 Volume	4	6	0	0	**10**	**4 - 6 Volume**	2	4	0	0	**6**
7 - 9 Peak Hour	07:00	07:45			**07:45**	**4 - 6 Peak Hour**	16:00	16:00			**16:00**
7 - 9 Pk Volume	2	4	0	0	**6**	**4 - 6 Pk Volume**	1	3	0	0	**4**
Pk Hr Factor	0.500	0.333	0.000	0.000	**0.300**	**Pk Hr Factor**	0.250	0.750	0.000	0.000	**0.500**

Prepared by NDS/ATD

VOLUME

Pescatore Vineyard & Winery Dwy N/O Ridge Rd

Day: Saturday
Date: 6/10/2017

City: Newcastle
Project #: CA17_7499_004

DAILY TOTALS	NB	SB	EB	WB	Total
	41	41	0	0	82

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	0		1						1	
00:15	0		0						0		12:15	0		0						0	
00:30	0		0						0		12:30	1		0						1	
00:45	0		0						0		12:45	0	1	0	1					0	2
01:00	0		0						0		13:00	0		0						0	
01:15	0		0						0		13:15	1		1						2	
01:30	0		0						0		13:30	0		1						1	
01:45	0		0						0		13:45	0	1	1	3					1	4
02:00	0		0						0		14:00	0		2						2	
02:15	0		0						0		14:15	1		0						1	
02:30	0		0						0		14:30	1		1						2	
02:45	0		0						0		14:45	1	3	0	3					1	6
03:00	0		0						0		15:00	1		0						1	
03:15	0		0						0		15:15	0		0						0	
03:30	0		0						0		15:30	0		1						1	
03:45	0		0						0		15:45	1	2	1	2					2	4
04:00	0		0						0		16:00	2		0						2	
04:15	0		0						0		16:15	0		2						2	
04:30	0		0						0		16:30	2		0						2	
04:45	0		0						0		16:45	2	6	0	2					2	8
05:00	0		0						0		17:00	0		1						1	
05:15	0		0						0		17:15	1		1						2	
05:30	0		0						0		17:30	3		0						3	
05:45	0		0						0		17:45	7	11	1	3					8	14
06:00	0		0						0		18:00	5		1						6	
06:15	0		0						0		18:15	1		0						1	
06:30	0		0						0		18:30	2		0						2	
06:45	0		0						0		18:45	1	9	0	1					1	10
07:00	0		0						0		19:00	0		0						0	
07:15	0		0						0		19:15	0		0						0	
07:30	0		0						0		19:30	0		0						0	
07:45	0		0						0		19:45	0		0						0	
08:00	0		1						1		20:00	0		1						1	
08:15	0		0						0		20:15	0		0						0	
08:30	0		0						0		20:30	0		4						4	
08:45	0		1	2					1	2	20:45	0		3	8					3	8
09:00	1		1						2		21:00	0		3						3	
09:15	0		0						0		21:15	0		3						3	
09:30	0		0						0		21:30	0		0						0	
09:45	1	2	0	1					1	3	21:45	0		1	7					1	7
10:00	1		1						2		22:00	0		4						4	
10:15	0		0						0		22:15	0		0						0	
10:30	1		1						2		22:30	0		0						0	
10:45	0	2	0	2					0	4	22:45	0		0	4					0	4
11:00	0		0						0		23:00	0		0						0	
11:15	1		1						2		23:15	0		0						0	
11:30	1		1						2		23:30	0		0						0	
11:45	2	4	0	2					2	6	23:45	0		0						0	
TOTALS		8		7						15	TOTALS		33		34						67
SPLIT %		53.3%		46.7%						18.3%	SPLIT %		49.3%		50.7%						81.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	41	41	0	0	82

AM Peak Hour	11:00	11:15			11:15	PM Peak Hour	17:15	20:30			17:15
AM Pk Volume	4	3			7	PM Pk Volume	16	13			19
Pk Hr Factor	0.500	0.750			0.875	Pk Hr Factor	0.571	0.813			0.594
7 - 9 Volume	0	2	0	0	2	4 - 6 Volume	17	5	0	0	22
7 - 9 Peak Hour		08:00			08:00	4 - 6 Peak Hour	17:00	16:15			17:00
7 - 9 Pk Volume	0	2	0	0	2	4 - 6 Pk Volume	11	3	0	0	14
Pk Hr Factor	0.000	0.500	0.000	0.000	0.500	Pk Hr Factor	0.393	0.375	0.000	0.000	0.438

Prepared by NDS/ATD

VOLUME

Pescatore Vineyard & Winery Dwy N/O Ridge Rd

Day: Sunday
Date: 6/11/2017

City: Newcastle
Project #: CA17_7499_004

DAILY TOTALS	NB	SB	EB	WB	Total
	2	5	0	0	7

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	0	0			0	12:00	0	0			0
00:15	0	0			0	12:15	0	0			0
00:30	0	0			0	12:30	0	0			0
00:45	0	0			0	12:45	0	0			0
01:00	0	0			0	13:00	0	0			0
01:15	0	0			0	13:15	0	0			0
01:30	0	0			0	13:30	0	0			0
01:45	0	0			0	13:45	0	0			0
02:00	0	0			0	14:00	0	0			0
02:15	0	0			0	14:15	0	0			0
02:30	0	0			0	14:30	0	0			0
02:45	0	0			0	14:45	0	0			0
03:00	0	0			0	15:00	0	0			0
03:15	0	0			0	15:15	0	0			0
03:30	0	0			0	15:30	0	0			0
03:45	0	0			0	15:45	0	0			0
04:00	0	0			0	16:00	0	0			0
04:15	0	0			0	16:15	0	0			0
04:30	0	0			0	16:30	0	0			0
04:45	0	0			0	16:45	0	0			0
05:00	0	0			0	17:00	0	0			0
05:15	0	0			0	17:15	0	0			0
05:30	0	0			0	17:30	0	0			0
05:45	0	0			0	17:45	0	0			0
06:00	0	0			0	18:00	0	0			0
06:15	0	0			0	18:15	0	0			0
06:30	0	0			0	18:30	0	0			0
06:45	0	0			0	18:45	0	0			0
07:00	0	0			0	19:00	0	0			0
07:15	0	1			1	19:15	0	0			0
07:30	0	0			0	19:30	1	1			2
07:45	0	0	1		0 1	19:45	0 1	1	2		1 3
08:00	0	0			0	20:00	0	0			0
08:15	0	1			1	20:15	0	0			0
08:30	0	0			0	20:30	0	0			0
08:45	1 1	0	1		1 2	20:45	0	0			0
09:00	0	0			0	21:00	0	0			0
09:15	0	1			1	21:15	0	0			0
09:30	0	0			0	21:30	0	0			0
09:45	0	0	1		0 1	21:45	0	0			0
10:00	0	0			0	22:00	0	0			0
10:15	0	0			0	22:15	0	0			0
10:30	0	0			0	22:30	0	0			0
10:45	0	0			0	22:45	0	0			0
11:00	0	0			0	23:00	0	0			0
11:15	0	0			0	23:15	0	0			0
11:30	0	0			0	23:30	0	0			0
11:45	0	0			0	23:45	0	0			0
TOTALS	1	3			4	TOTALS	1	2			3
SPLIT %	25.0%	75.0%			57.1%	SPLIT %	33.3%	66.7%			42.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	2	5	0	0	7

AM Peak Hour	08:00	06:30			08:00	PM Peak Hour	18:45	19:00			19:00
AM Pk Volume	1	1			2	PM Pk Volume	1	2			3
Pk Hr Factor	0.250	0.250			0.500	Pk Hr Factor	0.250	0.500			0.375
7 - 9 Volume	1	2	0	0	3	4 - 6 Volume	0	0	0	0	0
7 - 9 Peak Hour	08:00	07:00			08:00	4 - 6 Peak Hour					
7 - 9 Pk Volume	1	1	0	0	2	4 - 6 Pk Volume	0	0	0	0	0
Pk Hr Factor	0.250	0.250	0.000	0.000	0.500	Pk Hr Factor	0.000	0.000	0.000	0.000	0.000

Prepared by NDS/ATD

In & Out

Pescatore Vineyard & Winery Dwy N/O Ridge Rd

Day: Friday
Date: 6/16/2017

City: Newcastle
Project #: CA17_7499_004

DAILY TOTALS	NB	SB	EB	WB	Total
	20	20	0	0	40

AM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0	
00:15	0		0						0	
00:30	0		0						0	
00:45	0		0						0	
01:00	0		0						0	
01:15	0		0						0	
01:30	0		0						0	
01:45	0		0						0	
02:00	0		0						0	
02:15	0		0						0	
02:30	0		0						0	
02:45	0		0						0	
03:00	0		0						0	
03:15	0		0						0	
03:30	0		0						0	
03:45	0		0						0	
04:00	0		0						0	
04:15	0		0						0	
04:30	0		0						0	
04:45	0		0						0	
05:00	0		0						0	
05:15	0		0						0	
05:30	0		0						0	
05:45	0		0						0	
06:00	0		0						0	
06:15	0		0						0	
06:30	0		0						0	
06:45	0		0						0	
07:00	0		0						0	
07:15	0		0						0	
07:30	0		0						0	
07:45	1	1	0						1	1
08:00	0		0						0	
08:15	1		1						2	
08:30	2		0						2	
08:45	2	5	1	2					3	7
09:00	1		0						1	
09:15	3		0						3	
09:30	1		0						1	
09:45	0	5	0						0	5
10:00	0		0						0	
10:15	1		0						1	
10:30	0		0						0	
10:45	0	1	1	1					1	2
11:00	0		0						0	
11:15	1		0						1	
11:30	1		1						2	
11:45	1	3	0	1					1	4
TOTALS		15		4						19
SPLIT %		78.9%		21.1%						47.5%

PM Period	NB		SB		EB		WB		TOTAL	
12:00	0		0						0	
12:15	1		1						2	
12:30	0		1						1	
12:45	0	1	0	2					0	3
13:00	0		0						0	
13:15	0		0						0	
13:30	0		1						1	
13:45	0		0	1					0	1
14:00	1		0						1	
14:15	0		2						2	
14:30	0		3						3	
14:45	0	1	4	9					4	10
15:00	0		1						1	
15:15	0		1						1	
15:30	0		0						0	
15:45	0		0	2					0	2
16:00	1		0						1	
16:15	0		0						0	
16:30	0		0						0	
16:45	0	1	0						0	1
17:00	1		0						1	
17:15	0		0						0	
17:30	0		0						0	
17:45	1	2	0						1	2
18:00	0		1						1	
18:15	0		0						0	
18:30	0		0						0	
18:45	0		0	1					0	1
19:00	0		0						0	
19:15	0		0						0	
19:30	0		0						0	
19:45	0		1	1					1	1
20:00	0		0						0	
20:15	0		0						0	
20:30	0		0						0	
20:45	0		0						0	
21:00	0		0						0	
21:15	0		0						0	
21:30	0		0						0	
21:45	0		0						0	
22:00	0		0						0	
22:15	0		0						0	
22:30	0		0						0	
22:45	0		0						0	
23:00	0		0						0	
23:15	0		0						0	
23:30	0		0						0	
23:45	0		0						0	
TOTALS		5		16						21
SPLIT %		23.8%		76.2%						52.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	20	20	0	0	40

AM Peak Hour	08:30	08:00			08:30	PM Peak Hour	17:00	14:15			14:00
AM Pk Volume	8	2			9	PM Pk Volume	2	10			10
Pk Hr Factor	0.667	0.500			0.750	Pk Hr Factor	0.500	0.625			0.625
7 - 9 Volume	6	2	0	0	8	4 - 6 Volume	3	0	0	0	3
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	17:00				17:00
7 - 9 Pk Volume	5	2	0	0	7	4 - 6 Pk Volume	2	0	0	0	2
Pk Hr Factor	0.625	0.500	0.000	0.000	0.583	Pk Hr Factor	0.500	0.000	0.000	0.000	0.500

Prepared by NDS/ATD

VOLUME

Pescatore Vineyard & Winery Dwy N/O Ridge Rd

Day: Saturday
Date: 6/17/2017

City: Newcastle
Project #: CA17_7499_004

DAILY TOTALS	NB	SB	EB	WB	Total
	17	17	0	0	34

AM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0	
00:15	0		0						0	
00:30	0		0						0	
00:45	0		0						0	
01:00	0		0						0	
01:15	0		0						0	
01:30	0		0						0	
01:45	0		0						0	
02:00	0		0						0	
02:15	0		0						0	
02:30	0		0						0	
02:45	0		0						0	
03:00	0		0						0	
03:15	0		0						0	
03:30	0		0						0	
03:45	0		0						0	
04:00	0		0						0	
04:15	0		0						0	
04:30	0		0						0	
04:45	0		0						0	
05:00	0		0						0	
05:15	0		0						0	
05:30	0		0						0	
05:45	0		0						0	
06:00	0		0						0	
06:15	0		0						0	
06:30	0		0						0	
06:45	0		0						0	
07:00	0		0						0	
07:15	0		0						0	
07:30	0		0						0	
07:45	0		0						0	
08:00	0		0						0	
08:15	0		0						0	
08:30	0		0						0	
08:45	0		0						0	
09:00	0		0						0	
09:15	1		1						2	
09:30	0		0						0	
09:45	0	1	0	1					0	2
10:00	0		0						0	
10:15	0		0						0	
10:30	0		0						0	
10:45	0		0						0	
11:00	0		1						1	
11:15	0		0						0	
11:30	1		0						1	
11:45	2	3	0	1					2	4
TOTALS		4		2						6
SPLIT %		66.7%		33.3%						17.6%

PM Period	NB		SB		EB		WB		TOTAL	
12:00	1		1						2	
12:15	2		0						2	
12:30	0		0						0	
12:45	1	4	1	2					2	6
13:00	1		1						2	
13:15	0		1						1	
13:30	1		0						1	
13:45	1	3	1	3					2	6
14:00	1		1						2	
14:15	0		1						1	
14:30	0		1						1	
14:45	0	1	0	3					0	4
15:00	1		0						1	
15:15	0		0						0	
15:30	2		1						3	
15:45	0	3	1	2					1	5
16:00	0		0						0	
16:15	0		1						1	
16:30	0		2						2	
16:45	0		2	5					2	5
17:00	0		0						0	
17:15	0		0						0	
17:30	0		0						0	
17:45	0		0						0	
18:00	2		0						2	
18:15	0		0						0	
18:30	0		0						0	
18:45	0	2	0						0	2
19:00	0		0						0	
19:15	0		0						0	
19:30	0		0						0	
19:45	0		0						0	
20:00	0		0						0	
20:15	0		0						0	
20:30	0		0						0	
20:45	0		0						0	
21:00	0		0						0	
21:15	0		0						0	
21:30	0		0						0	
21:45	0		0						0	
22:00	0		0						0	
22:15	0		0						0	
22:30	0		0						0	
22:45	0		0						0	
23:00	0		0						0	
23:15	0		0						0	
23:30	0		0						0	
23:45	0		0						0	
TOTALS		13		15						28
SPLIT %		46.4%		53.6%						82.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	17	17	0	0	34

AM Peak Hour	11:30	08:30			11:30
AM Pk Volume	6	1			7
Pk Hr Factor	0.750	0.250			0.875
7 - 9 Volume	0	0	0	0	0
7 - 9 Peak Hour					
7 - 9 Pk Volume	0	0	0	0	0
Pk Hr Factor	0.000	0.000	0.000	0.000	0.000

PM Peak Hour	12:00	16:00			12:00
PM Pk Volume	4	5			6
Pk Hr Factor	0.500	0.625			0.750
4 - 6 Volume	0	5	0	0	5
4 - 6 Peak Hour		16:00			16:00
4 - 6 Pk Volume	0	5	0	0	5
Pk Hr Factor	0.000	0.625	0.000	0.000	0.625

Prepared by NDS/ATD

VOLUME

Pescatore Vineyard & Winery Dwy N/O Ridge Rd

Day: Sunday
Date: 6/18/2017

City: Newcastle
Project #: CA17_7499_004

DAILY TOTALS	NB	SB	EB	WB	Total
	5	5	0	0	10

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	0		0						0	
00:15	0		0						0		12:15	0		0						0	
00:30	0		0						0		12:30	0		0						0	
00:45	0		0						0		12:45	0		0						0	
01:00	0		0						0		13:00	0		0						0	
01:15	0		0						0		13:15	0		1						1	
01:30	0		0						0		13:30	2		0						2	
01:45	0		0						0		13:45	0	2	0	1					0	3
02:00	0		0						0		14:00	0		0						0	
02:15	0		0						0		14:15	0		0						0	
02:30	0		0						0		14:30	0		0						0	
02:45	0		0						0		14:45	0		0						0	
03:00	0		0						0		15:00	0		0						0	
03:15	0		0						0		15:15	0		0						0	
03:30	0		0						0		15:30	0		0						0	
03:45	0		0						0		15:45	0		0						0	
04:00	0		0						0		16:00	0		0						0	
04:15	0		0						0		16:15	0		0						0	
04:30	0		0						0		16:30	0		0						0	
04:45	0		0						0		16:45	1	1	1	1					2	2
05:00	0		0						0		17:00	0		0						0	
05:15	0		0						0		17:15	0		0						0	
05:30	0		0						0		17:30	0		0						0	
05:45	0		0						0		17:45	0		0						0	
06:00	0		0						0		18:00	0		0						0	
06:15	0		0						0		18:15	0		0						0	
06:30	0		0						0		18:30	0		0						0	
06:45	0		0						0		18:45	0		0						0	
07:00	0		0						0		19:00	0		0						0	
07:15	0		0						0		19:15	0		0						0	
07:30	0		0						0		19:30	0		0						0	
07:45	0		0						0		19:45	0		0						0	
08:00	0		0						0		20:00	0		0						0	
08:15	0		0						0		20:15	0		0						0	
08:30	0		0						0		20:30	0		0						0	
08:45	0		0						0		20:45	0		0						0	
09:00	1		1						2		21:00	0		0						0	
09:15	0		0						0		21:15	0		0						0	
09:30	0		0						0		21:30	0		0						0	
09:45	0	1	0	1					0	2	21:45	0		0						0	
10:00	0		0						0		22:00	0		0						0	
10:15	1		0						1		22:15	0		0						0	
10:30	0		1						1		22:30	0		0						0	
10:45	0	1	0	1					0	2	22:45	0		0						0	
11:00	0		0						0		23:00	0		0						0	
11:15	0		0						0		23:15	0		0						0	
11:30	0		0						0		23:30	0		0						0	
11:45	0		1	1					1	1	23:45	0		0						0	
TOTALS		2		3						5	TOTALS		3		2						5
SPLIT %		40.0%		60.0%						50.0%	SPLIT %		60.0%		40.0%						50.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	5	5	0	0	10

AM Peak Hour	08:15	08:15			08:15	PM Peak Hour	12:45	12:30			12:45
AM Pk Volume	1	1			2	PM Pk Volume	2	1			3
Pk Hr Factor	0.250	0.250			0.250	Pk Hr Factor	0.250	0.250			0.375
7 - 9 Volume	0	0	0	0	0	4 - 6 Volume	1	1	0	0	2
7 - 9 Peak Hour						4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	0	0	0	0	0	4 - 6 Pk Volume	1	1	0	0	2
Pk Hr Factor	0.000	0.000	0.000	0.000	0.000	Pk Hr Factor	0.250	0.250	0.000	0.000	0.250

Prepared by NDS/ATD

In & Out

Rock Hill Winery Dwy N/O Delmar Ave

Day: Friday
Date: 6/9/2017

City: Loomis
Project #: CA17_7499_005

DAILY TOTALS	NB	SB	EB	WB	Total
	7	6	0	0	13

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	0	0			0	12:00	0	0			0
00:15	0	0			0	12:15	0	0			0
00:30	0	0			0	12:30	1	0			1
00:45	0	0			0	12:45	2	1	1		3
01:00	0	0			0	13:00	0	0			0
01:15	0	0			0	13:15	0	0			0
01:30	0	0			0	13:30	1	0			1
01:45	0	0			0	13:45	0	0			0
02:00	0	0			0	14:00	0	0			0
02:15	0	0			0	14:15	0	0			0
02:30	0	0			0	14:30	1	0			1
02:45	0	0			0	14:45	0	0			0
03:00	0	0			0	15:00	0	0			0
03:15	0	0			0	15:15	0	0			0
03:30	0	0			0	15:30	0	0			0
03:45	0	0			0	15:45	0	0			0
04:00	0	0			0	16:00	1	2			3
04:15	0	0			0	16:15	0	1			1
04:30	0	0			0	16:30	0	1			1
04:45	0	0			0	16:45	0	0	4		0
05:00	0	0			0	17:00	0	0			0
05:15	0	0			0	17:15	0	0			0
05:30	0	0			0	17:30	0	0			0
05:45	0	0			0	17:45	0	0			0
06:00	0	0			0	18:00	0	0			0
06:15	0	0			0	18:15	0	0			0
06:30	0	0			0	18:30	0	0			0
06:45	0	0			0	18:45	1	0			1
07:00	0	0			0	19:00	0	1			1
07:15	0	0			0	19:15	0	0			0
07:30	0	0			0	19:30	0	0			0
07:45	0	0			0	19:45	0	0	1		0
08:00	0	0			0	20:00	0	0			0
08:15	0	0			0	20:15	0	0			0
08:30	0	0			0	20:30	0	0			0
08:45	0	0			0	20:45	0	0			0
09:00	0	0			0	21:00	0	0			0
09:15	0	0			0	21:15	0	0			0
09:30	0	0			0	21:30	0	0			0
09:45	0	0			0	21:45	0	0			0
10:00	0	0			0	22:00	0	0			0
10:15	0	0			0	22:15	0	0			0
10:30	0	0			0	22:30	0	0			0
10:45	0	0			0	22:45	0	0			0
11:00	0	0			0	23:00	0	0			0
11:15	0	0			0	23:15	0	0			0
11:30	0	0			0	23:30	0	0			0
11:45	0	0			0	23:45	0	0			0
TOTALS					0	TOTALS	7	6			13
SPLIT %					0.0%	SPLIT %	53.8%	46.2%			100.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	7	6	0	0	13

AM Peak Hour	11:45				11:45	PM Peak Hour	12:00	15:45			15:45
AM Pk Volume	1				1	PM Pk Volume	3	4			5
Pk Hr Factor	0.250				0.250	Pk Hr Factor	0.375	0.500			0.417
7 - 9 Volume	0	0	0	0	0	4 - 6 Volume	1	4	0	0	5
7 - 9 Peak Hour						4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	0	0	0	0	0	4 - 6 Pk Volume	1	4	0	0	5
Pk Hr Factor	0.000	0.000	0.000	0.000	0.000	Pk Hr Factor	0.250	0.500	0.000	0.000	0.417

VOLUME

Rock Hill Winery Dwy N/O Delmar Ave

Day: Saturday
Date: 6/10/2017

City: Loomis
Project #: CA17_7499_005

DAILY TOTALS	NB	SB	EB	WB	Total
	86	85	0	0	171

AM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0	
00:15	0		0						0	
00:30	0		0						0	
00:45	0		0						0	
01:00	0		0						0	
01:15	0		0						0	
01:30	0		0						0	
01:45	0		0						0	
02:00	0		0						0	
02:15	0		0						0	
02:30	0		0						0	
02:45	0		0						0	
03:00	0		0						0	
03:15	0		0						0	
03:30	0		0						0	
03:45	0		0						0	
04:00	0		0						0	
04:15	0		0						0	
04:30	0		0						0	
04:45	0		0						0	
05:00	0		0						0	
05:15	0		0						0	
05:30	0		0						0	
05:45	0		0						0	
06:00	0		0						0	
06:15	0		0						0	
06:30	0		0						0	
06:45	0		0						0	
07:00	1		0						1	
07:15	0		0						0	
07:30	0		0						0	
07:45	0	1	0						0	1
08:00	0		0						0	
08:15	0		0						0	
08:30	0		0						0	
08:45	0		0						0	
09:00	0		0						0	
09:15	0		0						0	
09:30	0		0						0	
09:45	0		1	1					1	1
10:00	0		0						0	
10:15	1		0						1	
10:30	0		0						0	
10:45	1	2	0						1	2
11:00	1		1						2	
11:15	0		0						0	
11:30	0		0						0	
11:45	0	1	0	1					0	2
TOTALS		4		2						6
SPLIT %		66.7%		33.3%						3.5%

PM Period	NB		SB		EB		WB		TOTAL	
12:00	1		0						1	
12:15	1		0						1	
12:30	0		0						0	
12:45	2	4	0						2	4
13:00	2		3						5	
13:15	0		0						0	
13:30	0		1						1	
13:45	1	3	0	4					1	7
14:00	0		0						0	
14:15	0		0						0	
14:30	2		1						3	
14:45	1	3	1	2					2	5
15:00	0		0						0	
15:15	0		0						0	
15:30	0		1						1	
15:45	1	1	1	2					2	3
16:00	0		1						1	
16:15	4		0						4	
16:30	1		1						2	
16:45	0	5	1	3					1	8
17:00	1		0						1	
17:15	2		1						3	
17:30	3		1						4	
17:45	7	13	1	3					8	16
18:00	5		1						6	
18:15	18		0						18	
18:30	13		1						14	
18:45	7	43	1	3					8	46
19:00	4		0						4	
19:15	1		0						1	
19:30	1		1						2	
19:45	1	7	0	1					1	8
20:00	1		1						2	
20:15	1		10						11	
20:30	0		6						6	
20:45	0	2	4	21					4	23
21:00	0		4						4	
21:15	0		3						3	
21:30	0		5						5	
21:45	0		4	16					4	16
22:00	1		15						16	
22:15	0		5						5	
22:30	0		4						4	
22:45	0	1	2	26					2	27
23:00	0		1						1	
23:15	0		1						1	
23:30	0		0						0	
23:45	0		0	2					0	2
TOTALS		82		83						165
SPLIT %		49.7%		50.3%						96.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	86	85	0	0	171

AM Peak Hour	10:15	09:00			10:15
AM Pk Volume	3	1			4
Pk Hr Factor	0.750	0.250			0.500
7 - 9 Volume	1	0	0	0	1
7 - 9 Peak Hour	07:00				07:00
7 - 9 Pk Volume	1	0	0	0	1
Pk Hr Factor	0.250	0.000	0.000	0.000	0.250

PM Peak Hour	17:45	21:30			17:45
PM Pk Volume	43	29			46
Pk Hr Factor	0.597	0.483			0.639
4 - 6 Volume	18	6	0	0	24
4 - 6 Peak Hour	17:00	16:00			17:00
4 - 6 Pk Volume	13	3	0	0	16
Pk Hr Factor	0.464	0.750	0.000	0.000	0.500

Prepared by NDS/ATD

VOLUME

Rock Hill Winery Dwy N/O Delmar Ave

Day: Sunday
Date: 6/11/2017

City: Loomis
Project #: CA17_7499_005

DAILY TOTALS	NB	SB	EB	WB	Total
	40	41	0	0	81

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	1		0						1	
00:15	0		0						0		12:15	1		0						1	
00:30	0		0						0		12:30	0		0						0	
00:45	0		0						0		12:45	2	4	0						2	4
01:00	0		0						0		13:00	2		3						5	
01:15	0		0						0		13:15	0		0						0	
01:30	0		0						0		13:30	1		1						2	
01:45	0		0						0		13:45	2	5	0	4					2	9
02:00	0		0						0		14:00	3		0						3	
02:15	0		0						0		14:15	3		0						3	
02:30	0		0						0		14:30	9		3						12	
02:45	0		0						0		14:45	7	22	3	6					10	28
03:00	0		0						0		15:00	0		2						2	
03:15	0		0						0		15:15	2		0						2	
03:30	0		0						0		15:30	0		1						1	
03:45	0		0						0		15:45	1	3	1	4					2	7
04:00	0		0						0		16:00	1		0						1	
04:15	0		0						0		16:15	0		0						0	
04:30	0		0						0		16:30	0		1						1	
04:45	0		0						0		16:45	0	1	0	1					0	2
05:00	0		0						0		17:00	0		10						10	
05:15	0		0						0		17:15	0		9						9	
05:30	0		0						0		17:30	0		3						3	
05:45	0		0						0		17:45	0		1	23					1	23
06:00	0		0						0		18:00	0		0						0	
06:15	0		0						0		18:15	0		0						0	
06:30	0		0						0		18:30	0		0						0	
06:45	0		0						0		18:45	0		0						0	
07:00	0		0						0		19:00	0		0						0	
07:15	0		0						0		19:15	0		0						0	
07:30	0		0						0		19:30	0		0						0	
07:45	1	1	0						1	1	19:45	0		0						0	
08:00	0		0						0		20:00	0		0						0	
08:15	0		1						1		20:15	0		0						0	
08:30	0		0						0		20:30	0		0						0	
08:45	0		0	1					0	1	20:45	0		0						0	
09:00	0		0						0		21:00	0		0						0	
09:15	0		0						0		21:15	0		0						0	
09:30	1		0						1		21:30	0		0						0	
09:45	0	1	0						0	1	21:45	0		0						0	
10:00	0		0						0		22:00	0		0						0	
10:15	0		0						0		22:15	0		0						0	
10:30	0		0						0		22:30	0		0						0	
10:45	0		0						0		22:45	0		0						0	
11:00	0		1						1		23:00	0		0						0	
11:15	1		0						1		23:15	0		0						0	
11:30	1		1						2		23:30	0		0						0	
11:45	1	3	0	2					1	5	23:45	0		0						0	
TOTALS		5		3						8	TOTALS		35		38						73
SPLIT %		62.5%		37.5%						9.9%	SPLIT %		47.9%		52.1%						90.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	40	41	0	0	81

AM Peak Hour	11:15	10:45			11:00	PM Peak Hour	14:00	17:00			14:00
AM Pk Volume	4	2			5	PM Pk Volume	22	23			28
Pk Hr Factor	1.000	0.500			0.625	Pk Hr Factor	0.611	0.575			0.583
7 - 9 Volume	1	1	0	0	2	4 - 6 Volume	1	24	0	0	25
7 - 9 Peak Hour	07:00	07:30			07:30	4 - 6 Peak Hour	16:00	17:00			17:00
7 - 9 Pk Volume	1	1	0	0	2	4 - 6 Pk Volume	1	23	0	0	23
Pk Hr Factor	0.250	0.250	0.000	0.000	0.500	Pk Hr Factor	0.250	0.575	0.000	0.000	0.575

Prepared by NDS/ATD

IN & OUT

Rock Hill Winery Dwy N/O Delmar Ave

Day: Saturday
Date: 9/30/2017

City: Loomis
Project #: CA17_7772_001

5765-19

DAILY TOTALS	IN	OUT	Total
	116	113	229

AM Period	IN		OUT		TOTAL		PM Period	IN		OUT		TOTAL	
00:00	0		0		0		12:00	0		0		0	
00:15	0		0		0		12:15	0		0		0	
00:30	0		0		0		12:30	0		0		0	
00:45	0		0		0		12:45	0		0		0	
01:00	0		0		0		13:00	0		0		0	
01:15	0		0		0		13:15	1		0		1	
01:30	0		0		0		13:30	1		1		2	
01:45	0		0		0		13:45	2	4	2	3	4	7
02:00	0		0		0		14:00	0		1		1	
02:15	0		0		0		14:15	0		0		0	
02:30	0		0		0		14:30	1		1		2	
02:45	0		0		0		14:45	6	7	0	2	6	9
03:00	0		0		0		15:00	5		3		8	
03:15	0		0		0		15:15	2		0		2	
03:30	0		0		0		15:30	5		1		6	
03:45	0		0		0		15:45	1	13	1	5	2	18
04:00	0		0		0		16:00	2		0		2	
04:15	0		0		0		16:15	1		0		1	
04:30	0		0		0		16:30	3		0		3	
04:45	0		0		0		16:45	2	8	0		2	8
05:00	0		0		0		17:00	1		2		3	
05:15	0		0		0		17:15	6		1		7	
05:30	0		0		0		17:30	19		2		21	
05:45	0		0		0		17:45	11	37	2	7	13	44
06:00	0		0		0		18:00	9		1		10	
06:15	0		0		0		18:15	8		0		8	
06:30	0		0		0		18:30	6		1		7	
06:45	0		0		0		18:45	6	29	4	6	10	35
07:00	0		0		0		19:00	6		2		8	
07:15	0		0		0		19:15	2		2		4	
07:30	0		0		0		19:30	0		9		9	
07:45	0		0		0		19:45	0	8	3	16	3	24
08:00	0		0		0		20:00	1		2		3	
08:15	0		0		0		20:15	0		5		5	
08:30	0		0		0		20:30	0		13		13	
08:45	0		0		0		20:45	2	3	9	29	11	32
09:00	0		0		0		21:00	2		11		13	
09:15	1		0		1		21:15	1		15		16	
09:30	0		0		0		21:30	0		6		6	
09:45	0	1	0		0	1	21:45	0	3	3	35	3	38
10:00	0		0		0		22:00	0		1		1	
10:15	0		0		0		22:15	0		6		6	
10:30	0		0		0		22:30	1		2		3	
10:45	0		0		0		22:45	0	1	0	9	0	10
11:00	0		0		0		23:00	0		0		0	
11:15	0		0		0		23:15	0		0		0	
11:30	0		1		1		23:30	0		0		0	
11:45	2	2	0	1	2	3	23:45	0		0		0	
TOTALS		3		1		4	TOTALS		113		112		225
SPLIT %		75.0%		25.0%		1.7%	SPLIT %		50.2%		49.8%		98.3%

DAILY TOTALS	IN	OUT	Total
	116	113	229

AM Peak Hour	11:00	10:45			11:00	PM Peak Hour	17:30	20:30			20:30
AM Pk Volume	2	1			3	PM Pk Volume	47	48			53
Pk Hr Factor	0.250	0.250			0.375	Pk Hr Factor	0.618	0.800			0.828
7 - 9 Volume	0	0	0	0	0	4 - 6 Volume	45	7	0	0	52
7 - 9 Peak Hour						4 - 6 Peak Hour	17:00	17:00			17:00
7 - 9 Pk Volume	0	0	0	0	0	4 - 6 Pk Volume	37	7	0	0	44
Pk Hr Factor	0.000	0.000	0.000	0.000	0.000	Pk Hr Factor	0.487	0.875	0.000	0.000	0.524

Prepared by NDS/ATD

In & Out

Vina Castellano Winery Dwy E/O Bell Rd

Day: Friday
Date: 6/9/2017

City: Auburn
Project #: CA17_7499_006

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	37	39	76

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			0	0	0	12:00			0	0	0
00:15			0	0	0	12:15			0	0	0
00:30			0	0	0	12:30			0	0	0
00:45			0	0	0	12:45			2 2	1 1	3 3
01:00			0	0	0	13:00			1	1	2
01:15			0	0	0	13:15			4	0	4
01:30			0	0	0	13:30			0	2	2
01:45			0	0	0	13:45			1 6	0 3	1 9
02:00			0	0	0	14:00			0	0	0
02:15			0	0	0	14:15			0	3	3
02:30			0	0	0	14:30			0	0	0
02:45			0	0	0	14:45			0	2 5	2 5
03:00			0	0	0	15:00			1	0	1
03:15			0	0	0	15:15			0	2	2
03:30			0	0	0	15:30			1	0	1
03:45			0	0	0	15:45			1 3	1 3	2 6
04:00			0	0	0	16:00			2	1	3
04:15			0	0	0	16:15			1	1	2
04:30			0	0	0	16:30			1	0	1
04:45			0	0	0	16:45			0 4	1 3	1 7
05:00			0	0	0	17:00			0	1	1
05:15			0	0	0	17:15			2	2	4
05:30			0	0	0	17:30			1	1	2
05:45			0	0	0	17:45			2 5	1 5	3 10
06:00			0	0	0	18:00			2	0	2
06:15			0	0	0	18:15			1	0	1
06:30			0	0	0	18:30			0	0	0
06:45			0	1 1	1 1	18:45			0 3	1 1	1 4
07:00			0	0	0	19:00			0	1	1
07:15			0	0	0	19:15			0	0	0
07:30			0	0	0	19:30			2	0	2
07:45			0	1 1	1 1	19:45			1 3	0 1	1 4
08:00			0	0	0	20:00			0	0	0
08:15			2	0	2	20:15			1	1	2
08:30			0	2	2	20:30			0	2	2
08:45			1 3	0 2	1 5	20:45			1 2	2 5	3 7
09:00			0	1	1	21:00			1	0	1
09:15			0	0	0	21:15			0	1	1
09:30			0	0	0	21:30			0	0	0
09:45			0	0 1	0 1	21:45			0 1	0 1	0 2
10:00			0	0	0	22:00			0	0	0
10:15			1	1	2	22:15			0	4	4
10:30			1	0	1	22:30			1	0	1
10:45			0 2	0 1	0 3	22:45			1 2	0 4	1 6
11:00			0	0	0	23:00			0	1	1
11:15			0	0	0	23:15			0	0	0
11:30			0	0	0	23:30			0	0	0
11:45			0	0	0	23:45			1 1	0 1	1 2
TOTALS			5	6	11	TOTALS			32	33	65
SPLIT %			45.5%	54.5%	14.5%	SPLIT %			49.2%	50.8%	85.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	37	39	76

AM Peak Hour			08:00	07:45	08:15	PM Peak Hour			12:30	13:30	12:45
AM Pk Volume			3	3	6	PM Pk Volume			7	5	11
Pk Hr Factor			0.375	0.375	0.750	Pk Hr Factor			0.438	0.417	0.688
7 - 9 Volume	0	0	3	3	6	4 - 6 Volume	0	0	9	8	17
7 - 9 Peak Hour			08:00	07:45	07:45	4 - 6 Peak Hour			17:00	16:45	17:00
7 - 9 Pk Volume	0	0	3	3	5	4 - 6 Pk Volume	0	0	5	5	10
Pk Hr Factor	0.000	0.000	0.375	0.375	0.625	Pk Hr Factor	0.000	0.000	0.625	0.625	0.625

Prepared by NDS/ATD

VOLUME

Vina Castellano Winery Dwy E/O Bell Rd

Day: Saturday
Date: 6/10/2017

City: Auburn
Project #: CA17_7499_006

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	80	76	156

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			0	0	0	12:00			1	2	3
00:15			0	0	0	12:15			2	0	2
00:30			0	0	0	12:30			4	0	4
00:45			0	0	0	12:45			1 8	1 3	2 11
01:00			0	0	0	13:00			2	0	2
01:15			0	0	0	13:15			1	3	4
01:30			0	0	0	13:30			5	2	7
01:45			0	0	0	13:45			2 10	2 7	4 17
02:00			0	0	0	14:00			3	3	6
02:15			0	0	0	14:15			2	4	6
02:30			0	0	0	14:30			0	1	1
02:45			0	0	0	14:45			3 8	1 9	4 17
03:00			0	0	0	15:00			4	2	6
03:15			0	0	0	15:15			3	1	4
03:30			0	0	0	15:30			0	3	3
03:45			0	0	0	15:45			4 11	1 7	5 18
04:00			0	0	0	16:00			0	3	3
04:15			0	0	0	16:15			0	1	1
04:30			0	0	0	16:30			0	2	2
04:45			0	0	0	16:45			2 2	2 8	4 10
05:00			0	0	0	17:00			7	4	11
05:15			0	0	0	17:15			1	4	5
05:30			0	0	0	17:30			2	3	5
05:45			0	0	0	17:45			0 10	1 12	1 22
06:00			0	0	0	18:00			3	0	3
06:15			0	0	0	18:15			4	1	5
06:30			0	0	0	18:30			2	0	2
06:45			0	0	0	18:45			2 11	1 2	3 13
07:00			0	0	0	19:00			0	2	2
07:15			1	1	2	19:15			1	0	1
07:30			0	0	0	19:30			1	0	1
07:45			0 1	0 1	0 2	19:45			1 3	0 2	1 5
08:00			0	0	0	20:00			0	0	0
08:15			0	0	0	20:15			0	1	1
08:30			0	0	0	20:30			0	0	0
08:45			1 1	0	1 1	20:45			0	0 1	0 1
09:00			0	0	0	21:00			0	0	0
09:15			0	0	0	21:15			0	2	2
09:30			0	0	0	21:30			0	2	2
09:45			2 2	0	2 2	21:45			1 1	9 13	10 14
10:00			1	2	3	22:00			0	1	1
10:15			1	0	1	22:15			1	2	3
10:30			0	0	0	22:30			0	0	0
10:45			1 3	0 2	1 5	22:45			0 1	0 3	0 4
11:00			0	2	2	23:00			0	0	0
11:15			1	1	2	23:15			1	0	1
11:30			4	2	6	23:30			0	0	0
11:45			2 7	1 6	3 13	23:45			0 1	0	0 1
TOTALS			14	9	23	TOTALS			66	67	133
SPLIT %			60.9%	39.1%	14.7%	SPLIT %			49.6%	50.4%	85.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	80	76	156

AM Peak Hour			11:30	11:00	11:15	PM Peak Hour			13:30	21:15	16:45
AM Pk Volume			9	6	14	PM Pk Volume			12	14	25
Pk Hr Factor			0.563	0.750	0.583	Pk Hr Factor			0.600	0.389	0.568
7 - 9 Volume	0	0	2	1	3	4 - 6 Volume	0	0	12	20	32
7 - 9 Peak Hour			07:00	07:00	07:00	4 - 6 Peak Hour			16:45	16:45	16:45
7 - 9 Pk Volume	0	0	1	1	2	4 - 6 Pk Volume	0	0	12	13	25
Pk Hr Factor	0.000	0.000	0.250	0.250	0.250	Pk Hr Factor	0.000	0.000	0.429	0.813	0.568

Prepared by NDS/ATD

VOLUME

Vina Castellano Winery Dwy E/O Bell Rd

Day: Sunday
Date: 6/11/2017

City: Auburn
Project #: CA17_7499_006

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	50	55	105

AM Period	NB		SB		EB		WB		TOTAL	
00:00					0		0		0	
00:15					0		0		0	
00:30					0		0		0	
00:45					0		0		0	
01:00					0		0		0	
01:15					0		0		0	
01:30					0		0		0	
01:45					0		0		0	
02:00					0		0		0	
02:15					0		0		0	
02:30					0		0		0	
02:45					0		0		0	
03:00					0		0		0	
03:15					0		0		0	
03:30					0		0		0	
03:45					0		0		0	
04:00					0		0		0	
04:15					0		0		0	
04:30					0		0		0	
04:45					0		0		0	
05:00					0		0		0	
05:15					0		0		0	
05:30					0		0		0	
05:45					0		0		0	
06:00					0		0		0	
06:15					0		0		0	
06:30					0		0		0	
06:45					0		0		0	
07:00					0		0		0	
07:15					0		0		0	
07:30					0		1		1	
07:45					0		0	1	0	1
08:00					0		0		0	
08:15					0		0		0	
08:30					0		0		0	
08:45					0		0		0	
09:00					0		0		0	
09:15					0		0		0	
09:30					0		0		0	
09:45					1	1	0		1	1
10:00					0		1		1	
10:15					1		1		2	
10:30					0		0		0	
10:45					1	2	1	3	2	5
11:00					1		0		1	
11:15					1		0		1	
11:30					1		0		1	
11:45					0	3	1	1	1	4
TOTALS						6		5		11
SPLIT %						54.5%		45.5%		10.5%

PM Period	NB		SB		EB		WB		TOTAL	
12:00					3		1		4	
12:15					2		0		2	
12:30					2		0		2	
12:45					5	12	0	1	5	13
13:00					1		1		2	
13:15					4		3		7	
13:30					3		0		3	
13:45					5	13	0	4	5	17
14:00					4		1		5	
14:15					3		2		5	
14:30					1		3		4	
14:45					0	8	0	6	0	14
15:00					1		6		7	
15:15					1		5		6	
15:30					0		3		3	
15:45					2	4	4	18	6	22
16:00					0		4		4	
16:15					0		7		7	
16:30					0		0		0	
16:45					0		0	11	0	11
17:00					0		0		0	
17:15					0		0		0	
17:30					0		0		0	
17:45					0		2	2	2	2
18:00					0		0		0	
18:15					2		2		4	
18:30					0		0		0	
18:45					0	2	0	2	0	4
19:00					0		0		0	
19:15					1		0		1	
19:30					1		1		2	
19:45					0	2	1	2	1	4
20:00					1		1		2	
20:15					0		0		0	
20:30					0		1		1	
20:45					0	1	2	4	2	5
21:00					0		0		0	
21:15					0		0		0	
21:30					1		0		1	
21:45					0	1	0		0	1
22:00					0		0		0	
22:15					0		0		0	
22:30					0		0		0	
22:45					0		0		0	
23:00					0		0		0	
23:15					0		0		0	
23:30					0		0		0	
23:45					1	1	0		1	1
TOTALS						44		50		94
SPLIT %						46.8%		53.2%		89.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	50	55	105

AM Peak Hour			11:45	10:00	11:45
AM Pk Volume			7	3	9
Pk Hr Factor			0.583	0.750	0.563
7 - 9 Volume	0	0	0	1	1
7 - 9 Peak Hour				07:00	07:00
7 - 9 Pk Volume	0	0	0	1	1
Pk Hr Factor	0.000	0.000	0.000	0.250	0.250

PM Peak Hour			13:15	15:00	15:00
PM Pk Volume			16	18	22
Pk Hr Factor			0.800	0.750	0.786
4 - 6 Volume	0	0	0	13	13
4 - 6 Peak Hour				16:00	16:00
4 - 6 Pk Volume	0	0	0	11	11
Pk Hr Factor	0.000	0.000	0.000	0.393	0.393

Prepared by NDS/ATD

In & Out

Ciotti Cellars Dwy W/O Crosby Herold Rd

Day: Friday
Date: 6/9/2017

City: Lincoln
Project #: CA17_7499_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	17	14	31

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00					0		0		0		12:00					0		0		0	
00:15					0		0		0		12:15					0		0		0	
00:30					0		0		0		12:30					0		0		0	
00:45					0		0		0		12:45					2	2	0		2	2
01:00					0		0		0		13:00					0		1		1	
01:15					0		0		0		13:15					0		2		2	
01:30					0		0		0		13:30					1		0		1	
01:45					0		0		0		13:45					0	1	0	3	0	4
02:00					0		0		0		14:00					0		0		0	
02:15					0		0		0		14:15					0		0		0	
02:30					0		0		0		14:30					2		0		2	
02:45					0		0		0		14:45					0	2	0		0	2
03:00					0		0		0		15:00					0		0		0	
03:15					0		0		0		15:15					0		0		0	
03:30					0		0		0		15:30					0		0		0	
03:45					0		0		0		15:45					2	2	2	2	4	4
04:00					0		0		0		16:00					1		2		3	
04:15					0		0		0		16:15					2		0		2	
04:30					0		0		0		16:30					0		1		1	
04:45					0		0		0		16:45					2	5	0	3	2	8
05:00					0		0		0		17:00					1		0		1	
05:15					0		0		0		17:15					0		0		0	
05:30					0		0		0		17:30					0		0		0	
05:45					0		0		0		17:45					0	1	0		0	1
06:00					0		0		0		18:00					0		0		0	
06:15					0		0		0		18:15					0		0		0	
06:30					0		0		0		18:30					0		0		0	
06:45					0		1	1	1	1	18:45					0		0		0	
07:00					0		0		0		19:00					0		0		0	
07:15					0		0		0		19:15					0		1		1	
07:30					0		0		0		19:30					0		0		0	
07:45					0		0		0		19:45					0		0	1	0	1
08:00					1		0		1		20:00					0		0		0	
08:15					0		0		0		20:15					0		0		0	
08:30					0		0		0		20:30					0		0		0	
08:45					1	2	0		1	2	20:45					0		2	2	2	2
09:00					0		0		0		21:00					0		0		0	
09:15					0		0		0		21:15					0		0		0	
09:30					0		0		0		21:30					0		0		0	
09:45					0		0		0		21:45					0		0		0	
10:00					0		0		0		22:00					0		0		0	
10:15					1		0		1		22:15					0		0		0	
10:30					0		0		0		22:30					0		0		0	
10:45					0	1	0		0	1	22:45					0		0		0	
11:00					0		0		0		23:00					0		1		1	
11:15					1		0		1		23:15					0		0		0	
11:30					0		1		1		23:30					0		0		0	
11:45					0	1	0	1	0	2	23:45					0		0	1	0	1
TOTALS						4		2		6	TOTALS						13		12		25
SPLIT %			#N/A		#N/A		#N/A		33.3%	19.4%	SPLIT %			#N/A		#N/A		#N/A		48.0%	80.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	17	14	31

AM Peak Hour			08:00	06:00	08:00	PM Peak Hour			15:30	15:45	15:45
AM Pk Volume			2	1	2	PM Pk Volume			5	5	10
Pk Hr Factor			0.500	0.250	0.500	Pk Hr Factor			0.625	0.625	0.625
7 - 9 Volume	0	0	2	0	2	4 - 6 Volume	0	0	6	3	9
7 - 9 Peak Hour			08:00		08:00	4 - 6 Peak Hour			16:00	16:00	16:00
7 - 9 Pk Volume	0	0	2	0	2	4 - 6 Pk Volume	0	0	5	3	8
Pk Hr Factor	0.000	0.000	0.500	0.000	0.500	Pk Hr Factor	0.000	0.000	0.625	0.375	0.667

Prepared by NDS/ATD

VOLUME

Ciotti Cellars Dwy W/O Crosby Herold Rd

Day: Saturday
Date: 6/10/2017

City: Lincoln
Project #: CA17_7499_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	54	59	113

AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00			0	0	0		12:00			2	1	3	
00:15			0	0	0		12:15			2	0	2	
00:30			0	0	0		12:30			1	1	2	
00:45			0	0	0		12:45			1	6	1	3	2	9
01:00			0	0	0		13:00			0	0	0	
01:15			0	0	0		13:15			0	1	1	
01:30			0	0	0		13:30			1	2	3	
01:45			0	0	0		13:45			0	1	1	4	1	5
02:00			0	0	0		14:00			0	3	3	
02:15			0	0	0		14:15			0	5	5	
02:30			0	0	0		14:30			1	2	3	
02:45			0	0	0		14:45			2	3	2	12	4	15
03:00			0	0	0		15:00			1	1	2	
03:15			0	0	0		15:15			1	2	3	
03:30			0	0	0		15:30			1	3	4	
03:45			0	0	0		15:45			1	4	3	9	4	13
04:00			0	0	0		16:00			2	3	5	
04:15			0	0	0		16:15			7	6	13	
04:30			0	0	0		16:30			6	0	6	
04:45			0	0	0		16:45			5	20	1	10	6	30
05:00			0	0	0		17:00			5	0	5	
05:15			0	0	0		17:15			1	0	1	
05:30			0	0	0		17:30			0	0	0	
05:45			0	0	0		17:45			3	9	0	3	9
06:00			0	0	0		18:00			0	0	0	
06:15			0	0	0		18:15			0	0	0	
06:30			0	0	0		18:30			4	0	4	
06:45			0	0	0		18:45			1	5	0	1	5
07:00			0	0	0		19:00			0	0	0	
07:15			0	0	0		19:15			0	0	0	
07:30			0	0	0		19:30			0	0	0	
07:45			0	0	0		19:45			0	0	0	
08:00			0	0	0		20:00			0	0	0	
08:15			0	0	0		20:15			0	0	0	
08:30			1	0	1		20:30			0	0	0	
08:45			0	1	2	2	2	3	20:45			0	0	0	
09:00			0	4	4		21:00			0	0	0	
09:15			0	6	6		21:15			0	0	0	
09:30			0	4	4		21:30			0	0	0	
09:45			0	1	15	1	15	21:45			0	0	0	
10:00			0	0	0		22:00			0	0	0	
10:15			0	0	0		22:15			0	0	0	
10:30			1	1	2		22:30			0	0	0	
10:45			0	1	0	1	0	2	22:45			0	0	0	
11:00			1	1	2		23:00			1	1	2	
11:15			2	1	3		23:15			0	0	0	
11:30			0	0	0		23:30			0	0	0	
11:45			0	3	0	2	0	5	23:45			0	1	0	1	0	2
TOTALS				5	20		25	TOTALS				49	39		88
SPLIT %				20.0%	80.0%		22.1%	SPLIT %				55.7%	44.3%		77.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	54	59	113

AM Peak Hour			11:45	08:45	08:45	PM Peak Hour			16:15	15:30	16:00
AM Pk Volume			5	16	16	PM Pk Volume			23	15	30
Pk Hr Factor			0.625	0.667	0.667	Pk Hr Factor			0.821	0.625	0.577
7 - 9 Volume	0	0	1	2	3	4 - 6 Volume	0	0	29	10	39
7 - 9 Peak Hour			07:45	08:00	08:00	4 - 6 Peak Hour			16:15	16:00	16:00
7 - 9 Pk Volume	0	0	1	2	3	4 - 6 Pk Volume	0	0	23	10	30
Pk Hr Factor	0.000	0.000	0.250	0.250	0.375	Pk Hr Factor	0.000	0.000	0.821	0.417	0.577

Prepared by NDS/ATD

VOLUME

Ciotti Cellars Dwy W/O Crosby Herold Rd

Day: Sunday
Date: 6/11/2017

City: Lincoln
Project #: CA17_7499_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	5	5	10

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			0	0	0	12:00			0	0	0
00:15			0	0	0	12:15			0	1	1
00:30			0	0	0	12:30			1	1	2
00:45			0	0	0	12:45			0 1	0 2	0 3
01:00			0	0	0	13:00			0	0	0
01:15			0	0	0	13:15			1	0	1
01:30			0	0	0	13:30			1	1	2
01:45			0	0	0	13:45			0 2	0 1	0 3
02:00			0	0	0	14:00			1	0	1
02:15			0	0	0	14:15			0	0	0
02:30			0	0	0	14:30			0	0	0
02:45			0	0	0	14:45			0 1	0	0 1
03:00			0	0	0	15:00			0	0	0
03:15			0	0	0	15:15			0	0	0
03:30			0	0	0	15:30			0	0	0
03:45			0	0	0	15:45			0	0	0
04:00			0	0	0	16:00			0	0	0
04:15			0	0	0	16:15			0	0	0
04:30			0	0	0	16:30			0	0	0
04:45			0	0	0	16:45			0	0	0
05:00			0	0	0	17:00			0	0	0
05:15			0	0	0	17:15			0	0	0
05:30			0	0	0	17:30			0	0	0
05:45			0	0	0	17:45			0	0	0
06:00			0	0	0	18:00			0	0	0
06:15			0	0	0	18:15			0	0	0
06:30			0	0	0	18:30			0	0	0
06:45			0	0	0	18:45			0	0	0
07:00			0	0	0	19:00			0	0	0
07:15			0	0	0	19:15			0	0	0
07:30			0	0	0	19:30			0	0	0
07:45			0	0	0	19:45			0	0	0
08:00			0	0	0	20:00			0	0	0
08:15			0	0	0	20:15			0	0	0
08:30			0	0	0	20:30			0	0	0
08:45			0	0	0	20:45			0	0	0
09:00			0	0	0	21:00			0	0	0
09:15			0	0	0	21:15			0	0	0
09:30			0	0	0	21:30			0	0	0
09:45			0	0	0	21:45			0	0	0
10:00			0	0	0	22:00			0	0	0
10:15			0	0	0	22:15			0	0	0
10:30			1	0	1	22:30			0	0	0
10:45			0 1	0	0 1	22:45			0	0	0
11:00			0	1	1	23:00			0	0	0
11:15			0	1	1	23:15			0	0	0
11:30			0	0	0	23:30			0	0	0
11:45			0	0 2	0 2	23:45			0	0	0
TOTALS			1	2	3	TOTALS			4	3	7
SPLIT %			33.3%	66.7%	30.0%	SPLIT %			57.1%	42.9%	70.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	5	5	10

AM Peak Hour			09:45	10:30	10:30	PM Peak Hour			13:15	12:00	13:15
AM Pk Volume			1	2	3	PM Pk Volume			3	2	4
Pk Hr Factor			0.250	0.500	0.750	Pk Hr Factor			0.750	0.500	0.500
7 - 9 Volume	0	0	0	0	0	4 - 6 Volume	0	0	0	0	0
7 - 9 Peak Hour						4 - 6 Peak Hour					
7 - 9 Pk Volume	0	0	0	0	0	4 - 6 Pk Volume	0	0	0	0	0
Pk Hr Factor	0.000	0.000	0.000	0.000	0.000	Pk Hr Factor	0.000	0.000	0.000	0.000	0.000

Prepared by NDS/ATD

In & Out

Ciotti Cellars Dwy W/O Crosby Herold Rd

Day: Friday
Date: 6/16/2017

City: Lincoln
Project #: CA17_7499_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	9	8	17

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			0	0	0	12:00			1	0	1
00:15			0	0	0	12:15			0	0	0
00:30			0	0	0	12:30			0	0	0
00:45			0	0	0	12:45			0	1 0	0 1
01:00			0	0	0	13:00			0	2	2
01:15			0	0	0	13:15			0	0	0
01:30			0	0	0	13:30			2	1	3
01:45			0	0	0	13:45			1	3 0 3	1 6
02:00			0	0	0	14:00			0	0	0
02:15			0	0	0	14:15			0	0	0
02:30			0	0	0	14:30			0	0	0
02:45			0	0	0	14:45			0	1 1	1 1
03:00			0	0	0	15:00			0	0	0
03:15			0	0	0	15:15			0	1	1
03:30			0	0	0	15:30			1	0	1
03:45			0	0	0	15:45			0	1 0 1	0 2
04:00			0	0	0	16:00			0	0	0
04:15			0	0	0	16:15			0	0	0
04:30			0	0	0	16:30			2	1	3
04:45			0	0	0	16:45			0	2 0 1	0 3
05:00			0	0	0	17:00			2	0	2
05:15			0	0	0	17:15			0	0	0
05:30			0	0	0	17:30			0	0	0
05:45			0	0	0	17:45			0	2 0	0 2
06:00			0	0	0	18:00			0	0	0
06:15			0	0	0	18:15			0	0	0
06:30			0	0	0	18:30			0	0	0
06:45			0	0	0	18:45			0	0	0
07:00			0	0	0	19:00			0	0	0
07:15			0	0	0	19:15			0	0	0
07:30			0	0	0	19:30			0	0	0
07:45			0	0	0	19:45			0	0	0
08:00			0	0	0	20:00			0	0	0
08:15			0	0	0	20:15			0	0	0
08:30			0	0	0	20:30			0	0	0
08:45			0	0	0	20:45			0	0	0
09:00			0	0	0	21:00			0	0	0
09:15			0	0	0	21:15			0	1	1
09:30			0	0	0	21:30			0	0	0
09:45			0	0	0	21:45			0	0 1	0 1
10:00			0	0	0	22:00			0	0	0
10:15			0	0	0	22:15			0	0	0
10:30			0	0	0	22:30			0	0	0
10:45			0	0	0	22:45			0	0	0
11:00			0	0	0	23:00			0	0	0
11:15			0	0	0	23:15			0	0	0
11:30			0	0	0	23:30			0	0	0
11:45			0	1 1	1 1	23:45			0	0	0
TOTALS				1	1	TOTALS			9	7	16
SPLIT %	#N/A	#N/A	#N/A	100.0%	5.9%	SPLIT %	#N/A	#N/A	#N/A	43.8%	94.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	9	8	17

AM Peak Hour			11:15	11:00	11:15	PM Peak Hour			16:15	12:45	13:00
AM Pk Volume			1	1	2	PM Pk Volume			4	3	6
Pk Hr Factor			0.250	0.250	0.500	Pk Hr Factor			0.500	0.375	0.500
7 - 9 Volume	0	0	0	0	0	4 - 6 Volume	0	0	4	1	5
7 - 9 Peak Hour						4 - 6 Peak Hour			16:15	16:00	16:15
7 - 9 Pk Volume	0	0	0	0	0	4 - 6 Pk Volume	0	0	4	1	5
Pk Hr Factor	0.000	0.000	0.000	0.000	0.000	Pk Hr Factor	0.000	0.000	0.500	0.250	0.417

Prepared by NDS/ATD

VOLUME

Ciotti Cellars Dwy W/O Crosby Herold Rd

Day: Saturday
Date: 6/17/2017

City: Lincoln
Project #: CA17_7499_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	17	17	34

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			0	0	0	12:00			0	0	0
00:15			0	0	0	12:15			0	1	1
00:30			0	0	0	12:30			0	0	0
00:45			0	0	0	12:45			0	0	1	0	1
01:00			0	0	0	13:00			0	0	0
01:15			0	0	0	13:15			1	2	3
01:30			0	0	0	13:30			0	0	0
01:45			0	0	0	13:45			2	3	1	3	3	6
02:00			0	0	0	14:00			1	0	1
02:15			0	0	0	14:15			0	0	0
02:30			0	0	0	14:30			0	2	2
02:45			0	0	0	14:45			0	1	1	3	1	4
03:00			0	0	0	15:00			3	2	5
03:15			0	0	0	15:15			0	3	3
03:30			0	0	0	15:30			2	0	2
03:45			0	0	0	15:45			2	7	0	5	2	12
04:00			0	0	0	16:00			1	2	3
04:15			0	0	0	16:15			1	0	1
04:30			0	0	0	16:30			1	0	1
04:45			0	0	0	16:45			0	3	1	3	1	6
05:00			0	0	0	17:00			2	0	2
05:15			0	0	0	17:15			0	0	0
05:30			0	0	0	17:30			0	0	0
05:45			0	0	0	17:45			0	2	0	0	2
06:00			0	0	0	18:00			0	0	0
06:15			0	0	0	18:15			0	0	0
06:30			0	0	0	18:30			0	0	0
06:45			0	0	0	18:45			0	0	0
07:00			0	0	0	19:00			0	0	0
07:15			0	0	0	19:15			0	0	0
07:30			0	0	0	19:30			0	0	0
07:45			0	0	0	19:45			0	0	0
08:00			0	0	0	20:00			0	0	0
08:15			0	0	0	20:15			0	0	0
08:30			0	0	0	20:30			0	0	0
08:45			0	0	0	20:45			1	1	0	1	1
09:00			0	0	0	21:00			0	0	0
09:15			0	0	0	21:15			0	0	0
09:30			0	0	0	21:30			0	0	0
09:45			0	0	0	21:45			0	0	0
10:00			0	0	0	22:00			0	0	0
10:15			0	0	0	22:15			0	0	0
10:30			0	0	0	22:30			0	0	0
10:45			0	0	0	22:45			0	0	0
11:00			0	0	0	23:00			0	0	0
11:15			0	0	0	23:15			0	0	0
11:30			0	1	1	23:30			0	0	0
11:45			0	1	2	1	2	23:45			0	0	0
TOTALS					2	2	TOTALS			17	15	32
SPLIT %					100.0%	5.9%	SPLIT %			53.1%	46.9%	94.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	17	17	34

AM Peak Hour				11:30	11:30	PM Peak Hour			15:00	14:30	15:00
AM Pk Volume				3	3	PM Pk Volume			7	8	12
Pk Hr Factor				0.750	0.750	Pk Hr Factor			0.583	0.667	0.600
7 - 9 Volume	0	0	0	0	0	4 - 6 Volume	0	0	5	3	8
7 - 9 Peak Hour						4 - 6 Peak Hour			16:15	16:00	16:00
7 - 9 Pk Volume	0	0	0	0	0	4 - 6 Pk Volume	0	0	4	3	6
Pk Hr Factor	0.000	0.000	0.000	0.000	0.000	Pk Hr Factor	0.000	0.000	0.500	0.375	0.500

Prepared by NDS/ATD

VOLUME

Ciotti Cellars Dwy W/O Crosby Herold Rd

Day: Sunday
Date: 6/18/2017

City: Lincoln
Project #: CA17_7499_007

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	6	6	12

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			0	0	0	12:00			0	0	0
00:15			0	0	0	12:15			0	1	1
00:30			0	0	0	12:30			1	0	1
00:45			0	0	0	12:45			0 1	0 1	0 2
01:00			0	0	0	13:00			0	0	0
01:15			0	0	0	13:15			0	0	0
01:30			0	0	0	13:30			0	1	1
01:45			0	0	0	13:45			1 1	0 1	1 2
02:00			0	0	0	14:00			0	1	1
02:15			0	0	0	14:15			0	0	0
02:30			0	0	0	14:30			1	0	1
02:45			0	0	0	14:45			0 1	1 2	1 3
03:00			0	0	0	15:00			0	0	0
03:15			0	0	0	15:15			1	0	1
03:30			0	0	0	15:30			0	0	0
03:45			0	0	0	15:45			0 1	0	0 1
04:00			0	0	0	16:00			0	0	0
04:15			0	0	0	16:15			0	0	0
04:30			0	0	0	16:30			0	0	0
04:45			0	0	0	16:45			0	0	0
05:00			0	0	0	17:00			2	0	2
05:15			0	0	0	17:15			0	0	0
05:30			0	0	0	17:30			0	0	0
05:45			0	0	0	17:45			0 2	0	0 2
06:00			0	0	0	18:00			0	0	0
06:15			0	0	0	18:15			0	0	0
06:30			0	0	0	18:30			0	0	0
06:45			0	0	0	18:45			0	0	0
07:00			0	0	0	19:00			0	0	0
07:15			0	0	0	19:15			0	0	0
07:30			0	0	0	19:30			0	0	0
07:45			0	0	0	19:45			0	0	0
08:00			0	0	0	20:00			0	0	0
08:15			0	0	0	20:15			0	0	0
08:30			0	0	0	20:30			0	0	0
08:45			0	0	0	20:45			0	0	0
09:00			0	0	0	21:00			0	0	0
09:15			0	0	0	21:15			0	0	0
09:30			0	0	0	21:30			0	0	0
09:45			0	0	0	21:45			0	0	0
10:00			0	0	0	22:00			0	0	0
10:15			0	0	0	22:15			0	0	0
10:30			0	0	0	22:30			0	0	0
10:45			0	0	0	22:45			0	0	0
11:00			0	0	0	23:00			0	0	0
11:15			0	0	0	23:15			0	0	0
11:30			0	1	1	23:30			0	0	0
11:45			0	1 2	1 2	23:45			0	0	0
TOTALS				2	2	TOTALS			6	4	10
SPLIT %				100.0%	16.7%	SPLIT %			60.0%	40.0%	83.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	6	6	12

AM Peak Hour			11:45	11:30	11:30	PM Peak Hour			13:45	13:15	13:15
AM Pk Volume			1	3	3	PM Pk Volume			2	2	3
Pk Hr Factor			0.250	0.750	0.750	Pk Hr Factor			0.500	0.500	0.750
7 - 9 Volume	0	0	0	0	0	4 - 6 Volume	0	0	2	0	2
7 - 9 Peak Hour						4 - 6 Peak Hour			16:15		16:15
7 - 9 Pk Volume	0	0	0	0	0	4 - 6 Pk Volume	0	0	2	0	2
Pk Hr Factor	0.000	0.000	0.000	0.000	0.000	Pk Hr Factor	0.000	0.000	0.250	0.000	0.250

Prepared by NDS/ATD

In & Out

Mt. Vernon Winery Dwy S/O Mt Vernon Rd

Day: Friday
Date: 6/9/2017

City: Auburn
Project #: CA17_7499_008

DAILY TOTALS	NB	SB	EB	WB	Total
	34	33	0	0	67

AM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0	
00:15	0		0						0	
00:30	0		0						0	
00:45	0		0						0	
01:00	0		0						0	
01:15	0		0						0	
01:30	0		0						0	
01:45	0		0						0	
02:00	0		0						0	
02:15	0		0						0	
02:30	0		0						0	
02:45	0		0						0	
03:00	0		0						0	
03:15	0		0						0	
03:30	0		0						0	
03:45	0		0						0	
04:00	0		0						0	
04:15	0		0						0	
04:30	0		0						0	
04:45	0		0						0	
05:00	0		0						0	
05:15	0		0						0	
05:30	0		0						0	
05:45	0		0						0	
06:00	0		0						0	
06:15	0		0						0	
06:30	0		0						0	
06:45	0		1	1					1	1
07:00	0		0						0	
07:15	0		0						0	
07:30	0		0						0	
07:45	0		0						0	
08:00	0		0						0	
08:15	0		1						1	
08:30	0		0						0	
08:45	0		0	1					0	1
09:00	0		0						0	
09:15	0		0						0	
09:30	0		0						0	
09:45	0		0						0	
10:00	0		0						0	
10:15	0		0						0	
10:30	0		1						1	
10:45	1	1	1	2					2	3
11:00	0		1						1	
11:15	0		0						0	
11:30	0		1						1	
11:45	1	1	1	3					2	4
TOTALS		2		7						9
SPLIT %		#N/A		#N/A		#N/A				13.4%

PM Period	NB		SB		EB		WB		TOTAL	
12:00	2		2						4	
12:15	2		1						3	
12:30	1		1						2	
12:45	0	5	0	4					0	9
13:00	0		0						0	
13:15	2		1						3	
13:30	3		4						7	
13:45	0	5	2	7					2	12
14:00	3		0						3	
14:15	0		1						1	
14:30	1		0						1	
14:45	3	7	0	1					3	8
15:00	2		1						3	
15:15	2		3						5	
15:30	0		1						1	
15:45	1	5	1	6					2	11
16:00	3		0						3	
16:15	0		1						1	
16:30	0		1						1	
16:45	1	4	0	2					1	6
17:00	0		0						0	
17:15	1		0						1	
17:30	0		0						0	
17:45	0	1	2	2					2	3
18:00	2		1						3	
18:15	2		0						2	
18:30	0		0						0	
18:45	0	4	0	1					0	5
19:00	0		1						1	
19:15	0		0						0	
19:30	0		0						0	
19:45	0		0	1					0	1
20:00	0		1						1	
20:15	0		0						0	
20:30	0		0						0	
20:45	0		0	1					0	1
21:00	0		0						0	
21:15	0		1						1	
21:30	0		0						0	
21:45	1	1	0	1					1	2
22:00	0		0						0	
22:15	0		0						0	
22:30	0		0						0	
22:45	0		0						0	
23:00	0		0						0	
23:15	0		0						0	
23:30	0		0						0	
23:45	0		0						0	
TOTALS		32		26						58
SPLIT %		#N/A		#N/A		#N/A				86.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	34	33	0	0	67

AM Peak Hour	11:45	11:30			11:45	PM Peak Hour	13:15	13:00			13:15
AM Pk Volume	6	5			11	PM Pk Volume	8	7			15
Pk Hr Factor	0.750	0.625			0.688	Pk Hr Factor	0.667	0.438			0.536
7 - 9 Volume	0	1	0	0	1	4 - 6 Volume	5	4	0	0	9
7 - 9 Peak Hour		07:30			07:30	4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	0	1	0	0	1	4 - 6 Pk Volume	4	2	0	0	6
Pk Hr Factor	0.000	0.250	0.000	0.000	0.250	Pk Hr Factor	0.333	0.500	0.000	0.000	0.500

Prepared by NDS/ATD

VOLUME

Mt. Vernon Winery Dwy S/O Mt Vernon Rd

Day: Saturday
Date: 6/10/2017

City: Auburn
Project #: CA17_7499_008

DAILY TOTALS	NB	SB	EB	WB	Total
	123	127	0	0	250

AM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0	
00:15	0		0						0	
00:30	0		0						0	
00:45	0		0						0	
01:00	0		0						0	
01:15	0		0						0	
01:30	0		0						0	
01:45	0		0						0	
02:00	0		0						0	
02:15	0		0						0	
02:30	0		0						0	
02:45	0		0						0	
03:00	0		0						0	
03:15	0		0						0	
03:30	0		0						0	
03:45	0		0						0	
04:00	0		0						0	
04:15	0		0						0	
04:30	0		0						0	
04:45	0		0						0	
05:00	0		0						0	
05:15	0		0						0	
05:30	0		0						0	
05:45	0		0						0	
06:00	0		0						0	
06:15	0		0						0	
06:30	0		0						0	
06:45	0		0						0	
07:00	0		0						0	
07:15	0		0						0	
07:30	0		0						0	
07:45	1	1	1	1					2	2
08:00	0		0						0	
08:15	0		0						0	
08:30	1		1						2	
08:45	0	1	1	2					1	3
09:00	1		1						2	
09:15	0		0						0	
09:30	1		0						1	
09:45	0	2	1	2					1	4
10:00	0		0						0	
10:15	0		3						3	
10:30	0		0						0	
10:45	2	2	2	5					4	7
11:00	1		2						3	
11:15	3		5						8	
11:30	2		3						5	
11:45	4	10	6	16					10	26
TOTALS		16		26						**42**
SPLIT %		38.1%		61.9%						**16.8%**

PM Period	NB		SB		EB		WB		TOTAL	
12:00	2		3						5	
12:15	1		4						5	
12:30	3		5						8	
12:45	3	9	4	16					7	25
13:00	6		4						10	
13:15	1		3						4	
13:30	7		7						14	
13:45	2	16	7	21					9	37
14:00	5		6						11	
14:15	4		7						11	
14:30	5		4						9	
14:45	7	21	7	24					14	45
15:00	4		3						7	
15:15	6		3						9	
15:30	5		6						11	
15:45	2	17	4	16					6	33
16:00	5		6						11	
16:15	2		2						4	
16:30	3		1						4	
16:45	4	14	3	12					7	26
17:00	6		3						9	
17:15	4		0						4	
17:30	0		0						0	
17:45	5	15	2	5					7	20
18:00	2		1						3	
18:15	1		4						5	
18:30	0		1						1	
18:45	0	3	0	6					0	9
19:00	0		0						0	
19:15	0		0						0	
19:30	0		0						0	
19:45	0		0						0	
20:00	0		0						0	
20:15	0		0						0	
20:30	0		0						0	
20:45	0		0						0	
21:00	0		0						0	
21:15	0		0						0	
21:30	0		0						0	
21:45	3	3	0						3	3
22:00	0		0						0	
22:15	0		1						1	
22:30	6		0						6	
22:45	2	8	0	1					2	9
23:00	1		0						1	
23:15	0		0						0	
23:30	0		0						0	
23:45	0	1	0						0	1
TOTALS		107		101						**208**
SPLIT %		51.4%		48.6%						**83.2%**

DAILY TOTALS	NB	SB	EB	WB	Total
	123	127	0	0	250

AM Peak Hour	11:15	11:45			**11:15**	**PM Peak Hour**	14:30	13:30			**13:30**
AM Pk Volume	11	18			**28**	**PM Pk Volume**	22	27			**45**
Pk Hr Factor	0.688	0.750			**0.700**	**Pk Hr Factor**	0.786	0.964			**0.804**
7 - 9 Volume	2	3	0	0	**5**	**4 - 6 Volume**	29	17	0	0	**46**
7 - 9 Peak Hour	07:45	07:45			**07:45**	**4 - 6 Peak Hour**	16:30	16:00			**16:00**
7 - 9 Pk Volume	2	2	0	0	**4**	**4 - 6 Pk Volume**	17	12	0	0	**26**
Pk Hr Factor	0.500	0.500	0.000	0.000	**0.500**	**Pk Hr Factor**	0.708	0.500	0.000	0.000	**0.591**

Prepared by NDS/ATD

VOLUME

Mt. Vernon Winery Dwy S/O Mt Vernon Rd

Day: Sunday
Date: 6/11/2017

City: Auburn
Project #: CA17_7499_008

DAILY TOTALS	NB	SB	EB	WB	Total
	49	43	0	0	92

AM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0	
00:15	0		0						0	
00:30	0		0						0	
00:45	0		0						0	
01:00	0		0						0	
01:15	0		0						0	
01:30	0		0						0	
01:45	0		0						0	
02:00	0		0						0	
02:15	0		0						0	
02:30	0		0						0	
02:45	0		0						0	
03:00	0		0						0	
03:15	0		0						0	
03:30	0		0						0	
03:45	0		0						0	
04:00	0		0						0	
04:15	0		0						0	
04:30	0		0						0	
04:45	0		0						0	
05:00	0		0						0	
05:15	0		0						0	
05:30	0		0						0	
05:45	0		0						0	
06:00	0		0						0	
06:15	0		0						0	
06:30	0		0						0	
06:45	0		0						0	
07:00	0		0						0	
07:15	0		0						0	
07:30	0		0						0	
07:45	0		0						0	
08:00	0		0						0	
08:15	2		0						2	
08:30	0		0						0	
08:45	0	2	0						0	2
09:00	0		0						0	
09:15	0		1						1	
09:30	0		1						1	
09:45	0		0	2					0	2
10:00	0		0						0	
10:15	0		1						1	
10:30	0		1						1	
10:45	0		2	4					2	4
11:00	0		0						0	
11:15	1		0						1	
11:30	2		2						4	
11:45	1	4	2	4					3	8
TOTALS		6		10						**16**
SPLIT %		37.5%		62.5%						**17.4%**

PM Period	NB		SB		EB		WB		TOTAL	
12:00	0		0						0	
12:15	0		0						0	
12:30	1		1						2	
12:45	4	5	2	3					6	8
13:00	0		1						1	
13:15	1		2						3	
13:30	0		1						1	
13:45	2	3	0	4					2	7
14:00	1		3						4	
14:15	1		2						3	
14:30	2		1						3	
14:45	0	4	1	7					1	11
15:00	1		3						4	
15:15	2		3						5	
15:30	2		1						3	
15:45	3	8	2	9					5	17
16:00	1		2						3	
16:15	6		1						7	
16:30	3		1						4	
16:45	3	13	2	6					5	19
17:00	2		1						3	
17:15	2		2						4	
17:30	3		0						3	
17:45	0	7	1	4					1	11
18:00	0		0						0	
18:15	0		0						0	
18:30	0		0						0	
18:45	0		0						0	
19:00	0		0						0	
19:15	0		0						0	
19:30	3		0						3	
19:45	0	3	0						0	3
20:00	0		0						0	
20:15	0		0						0	
20:30	0		0						0	
20:45	0		0						0	
21:00	0		0						0	
21:15	0		0						0	
21:30	0		0						0	
21:45	0		0						0	
22:00	0		0						0	
22:15	0		0						0	
22:30	0		0						0	
22:45	0		0						0	
23:00	0		0						0	
23:15	0		0						0	
23:30	0		0						0	
23:45	0		0						0	
TOTALS		43		33						**76**
SPLIT %		56.6%		43.4%						**82.6%**

DAILY TOTALS	NB	SB	EB	WB	Total
	49	43	0	0	92

AM Peak Hour	11:00	10:00			**11:00**	**PM Peak Hour**	16:15	15:00			**15:45**
AM Pk Volume	4	4			**8**	**PM Pk Volume**	14	9			**19**
Pk Hr Factor	0.500	0.500			**0.500**	**Pk Hr Factor**	0.583	0.750			**0.679**
7 - 9 Volume	2	0	0	0	**2**	**4 - 6 Volume**	20	10	0	0	**30**
7 - 9 Peak Hour	07:30				**07:30**	**4 - 6 Peak Hour**	16:15	16:00			**16:00**
7 - 9 Pk Volume	2	0	0	0	**2**	**4 - 6 Pk Volume**	14	6	0	0	**19**
Pk Hr Factor	0.250	0.000	0.000	0.000	**0.250**	**Pk Hr Factor**	0.583	0.750	0.000	0.000	**0.679**

Prepared by NDS/ATD

In & Out

Eden Ln S/O Wise Rd

Day: Friday
Date: 6/16/2017

City: Lincoln
Project #: CA17_7499_009

DAILY TOTALS	NB	SB	EB	WB	Total
	34	36	0	0	70

AM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0	
00:15	0		0						0	
00:30	0		0						0	
00:45	0		0						0	
01:00	0		0						0	
01:15	0		0						0	
01:30	0		0						0	
01:45	0		0						0	
02:00	0		0						0	
02:15	0		0						0	
02:30	0		0						0	
02:45	0		0						0	
03:00	0		0						0	
03:15	0		0						0	
03:30	0		0						0	
03:45	0		0						0	
04:00	0		0						0	
04:15	0		0						0	
04:30	0		0						0	
04:45	0		0						0	
05:00	0		0						0	
05:15	0		0						0	
05:30	0		0						0	
05:45	0		0						0	
06:00	0		0						0	
06:15	0		0						0	
06:30	0		0						0	
06:45	0		0						0	
07:00	0		0						0	
07:15	0		0						0	
07:30	0		1						1	
07:45	0		0		1				0	1
08:00	0		0						0	
08:15	1		0						1	
08:30	0		0						0	
08:45	0	1	1		1				1	2
09:00	0		0						0	
09:15	0		0						0	
09:30	0		0						0	
09:45	0		0						0	
10:00	1		0						1	
10:15	0		0						0	
10:30	0		0						0	
10:45	1	2	1		1				2	3
11:00	0		0						0	
11:15	0		1						1	
11:30	0		1						1	
11:45	0		0		2				0	2
TOTALS		3			5					8
SPLIT %		#N/A			#N/A		#N/A			11.4%

PM Period	NB		SB		EB		WB		TOTAL	
12:00	0		0						0	
12:15	0		0						0	
12:30	1		1						2	
12:45	0	1	1	2					1	3
13:00	1		3						4	
13:15	1		0						1	
13:30	0		1						1	
13:45	1	3	3	7					4	10
14:00	0		3						3	
14:15	3		0						3	
14:30	0		4						4	
14:45	2	5	5	12					7	17
15:00	2		0						2	
15:15	0		1						1	
15:30	2		0						2	
15:45	1	5	1	2					2	7
16:00	2		0						2	
16:15	3		0						3	
16:30	0		1						1	
16:45	0	5	2	3					2	8
17:00	1		2						3	
17:15	2		2						4	
17:30	2		0						2	
17:45	1	6	0	4					1	10
18:00	1		1						2	
18:15	5		0						5	
18:30	0		0						0	
18:45	0	6	0	1					0	7
19:00	0		0						0	
19:15	0		0						0	
19:30	0		0						0	
19:45	0		0						0	
20:00	0		0						0	
20:15	0		0						0	
20:30	0		0						0	
20:45	0		0						0	
21:00	0		0						0	
21:15	0		0						0	
21:30	0		0						0	
21:45	0		0						0	
22:00	0		0						0	
22:15	0		0						0	
22:30	0		0						0	
22:45	0		0						0	
23:00	0		0						0	
23:15	0		0						0	
23:30	0		0						0	
23:45	0		0						0	
TOTALS		31		31						62
SPLIT %		#N/A		#N/A		#N/A				88.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	34	36	0	0	70

AM Peak Hour	10:00	10:45			10:45	PM Peak Hour	17:30	14:00			14:00
AM Pk Volume	2	3			4	PM Pk Volume	9	12			17
Pk Hr Factor	0.500	0.750			0.500	Pk Hr Factor	0.450	0.600			0.607
7 - 9 Volume	1	2	0	0	3	4 - 6 Volume	11	7	0	0	18
7 - 9 Peak Hour	07:30	07:00			07:30	4 - 6 Peak Hour	17:00	16:30			16:45
7 - 9 Pk Volume	1	1	0	0	2	4 - 6 Pk Volume	6	7	0	0	11
Pk Hr Factor	0.250	0.250	0.000	0.000	0.500	Pk Hr Factor	0.750	0.875	0.000	0.000	0.688

Prepared by NDS/ATD

VOLUME

Eden Ln S/O Wise Rd

Day: Saturday
Date: 6/17/2017

City: Lincoln
Project #: CA17_7499_009

DAILY TOTALS	NB	SB	EB	WB	Total
	81	80	0	0	161

AM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0	
00:15	0		0						0	
00:30	0		0						0	
00:45	0		0						0	
01:00	0		0						0	
01:15	0		0						0	
01:30	0		0						0	
01:45	0		0						0	
02:00	0		0						0	
02:15	0		0						0	
02:30	0		0						0	
02:45	0		0						0	
03:00	0		0						0	
03:15	0		0						0	
03:30	0		0						0	
03:45	0		0						0	
04:00	0		0						0	
04:15	0		0						0	
04:30	0		0						0	
04:45	0		0						0	
05:00	0		0						0	
05:15	0		0						0	
05:30	0		0						0	
05:45	0		0						0	
06:00	0		0						0	
06:15	0		0						0	
06:30	0		0						0	
06:45	0		0						0	
07:00	0		0						0	
07:15	0		0						0	
07:30	0		0						0	
07:45	0		0						0	
08:00	0		0						0	
08:15	0		0						0	
08:30	0		0						0	
08:45	0		0						0	
09:00	0		0						0	
09:15	0		0						0	
09:30	0		0						0	
09:45	0		1	1					1	1
10:00	0		0						0	
10:15	0		1						1	
10:30	0		0						0	
10:45	0		0	1					0	1
11:00	0		3						3	
11:15	1		4						5	
11:30	1		3						4	
11:45	2	4	3	13					5	17
TOTALS		4		15						19
SPLIT %		21.1%		78.9%						11.8%

PM Period	NB		SB		EB		WB		TOTAL	
12:00	2		1						3	
12:15	1		3						4	
12:30	1		3						4	
12:45	3	7	2	9					5	16
13:00	2		1						3	
13:15	3		2						5	
13:30	1		6						7	
13:45	4	10	6	15					10	25
14:00	1		5						6	
14:15	4		4						8	
14:30	6		6						12	
14:45	2	13	5	20					7	33
15:00	3		5						8	
15:15	9		10						19	
15:30	10		1						11	
15:45	4	26	0	16					4	42
16:00	3		2						5	
16:15	2		1						3	
16:30	3		0						3	
16:45	2	10	1	4					3	14
17:00	7		0						7	
17:15	1		0						1	
17:30	1		0						1	
17:45	1	10	0						1	10
18:00	0		0						0	
18:15	0		0						0	
18:30	0		0						0	
18:45	0		0						0	
19:00	0		0						0	
19:15	0		0						0	
19:30	0		0						0	
19:45	0		0						0	
20:00	0		0						0	
20:15	0		0						0	
20:30	0		0						0	
20:45	0		0						0	
21:00	0		1						1	
21:15	0		0						0	
21:30	0		0						0	
21:45	0		0	1					0	1
22:00	0		0						0	
22:15	1		0						1	
22:30	0		0						0	
22:45	0	1	0						0	1
23:00	0		0						0	
23:15	0		0						0	
23:30	0		0						0	
23:45	0		0						0	
TOTALS		77		65						142
SPLIT %		54.2%		45.8%						88.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	81	80	0	0	161

AM Peak Hour	11:15	11:00			11:00
AM Pk Volume	6	13			17
Pk Hr Factor	0.750	0.813			0.850
7 - 9 Volume	0	0	0	0	0
7 - 9 Peak Hour					
7 - 9 Pk Volume	0	0	0	0	0
Pk Hr Factor	0.000	0.000	0.000	0.000	0.000

PM Peak Hour	15:00	14:30			14:30
PM Pk Volume	26	26			46
Pk Hr Factor	0.650	0.650			0.605
4 - 6 Volume	20	4	0	0	24
4 - 6 Peak Hour	16:15	16:00			16:15
4 - 6 Pk Volume	14	4	0	0	16
Pk Hr Factor	0.500	0.500	0.000	0.000	0.571

Prepared by NDS/ATD

VOLUME

Eden Ln S/O Wise Rd

Day: Sunday
Date: 6/18/2017

City: Lincoln
Project #: CA17_7499_009

DAILY TOTALS	NB	SB	EB	WB	Total
	109	108	0	0	217

AM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0	
00:15	0		0						0	
00:30	0		0						0	
00:45	0		0						0	
01:00	0		0						0	
01:15	0		0						0	
01:30	0		0						0	
01:45	0		0						0	
02:00	0		0						0	
02:15	0		0						0	
02:30	0		0						0	
02:45	0		0						0	
03:00	0		0						0	
03:15	0		0						0	
03:30	0		0						0	
03:45	0		0						0	
04:00	0		0						0	
04:15	0		0						0	
04:30	0		0						0	
04:45	0		0						0	
05:00	0		0						0	
05:15	0		0						0	
05:30	0		0						0	
05:45	0		0						0	
06:00	0		0						0	
06:15	0		0						0	
06:30	0		0						0	
06:45	0		0						0	
07:00	0		0						0	
07:15	0		0						0	
07:30	0		0						0	
07:45	0		0						0	
08:00	0		0						0	
08:15	0		0						0	
08:30	0		0						0	
08:45	0		1	1					1	1
09:00	0		0						0	
09:15	1		0						1	
09:30	0		0						0	
09:45	0	1	0						0	1
10:00	0		0						0	
10:15	1		3						4	
10:30	0		4						4	
10:45	0	1	6	13					6	14
11:00	0		12						12	
11:15	0		7						7	
11:30	3		9						12	
11:45	2	5	7	35					9	40
TOTALS		7		49						56
SPLIT %		12.5%		87.5%						25.8%

PM Period	NB		SB		EB		WB		TOTAL	
12:00	6		5						11	
12:15	13		6						19	
12:30	5		4						9	
12:45	10	34	0	15					10	49
13:00	1		4						5	
13:15	10		2						12	
13:30	4		2						6	
13:45	5	20	4	12					9	32
14:00	3		5						8	
14:15	3		2						5	
14:30	3		6						9	
14:45	5	14	1	14					6	28
15:00	4		1						5	
15:15	2		3						5	
15:30	3		5						8	
15:45	3	12	3	12					6	24
16:00	2		1						3	
16:15	4		0						4	
16:30	5		3						8	
16:45	4	15	2	6					6	21
17:00	5		0						5	
17:15	2		0						2	
17:30	0		0						0	
17:45	0	7	0						0	7
18:00	0		0						0	
18:15	0		0						0	
18:30	0		0						0	
18:45	0		0						0	
19:00	0		0						0	
19:15	0		0						0	
19:30	0		0						0	
19:45	0		0						0	
20:00	0		0						0	
20:15	0		0						0	
20:30	0		0						0	
20:45	0		0						0	
21:00	0		0						0	
21:15	0		0						0	
21:30	0		0						0	
21:45	0		0						0	
22:00	0		0						0	
22:15	0		0						0	
22:30	0		0						0	
22:45	0		0						0	
23:00	0		0						0	
23:15	0		0						0	
23:30	0		0						0	
23:45	0		0						0	
TOTALS		102		59						161
SPLIT %		63.4%		36.6%						74.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	109	108	0	0	217

AM Peak Hour	11:45	11:00			11:30
AM Pk Volume	26	35			51
Pk Hr Factor	0.500	0.729			0.671
7 - 9 Volume	0	1	0	0	1
7 - 9 Peak Hour		08:00			08:00
7 - 9 Pk Volume	0	1	0	0	1
Pk Hr Factor	0.000	0.250	0.000	0.000	0.250

PM Peak Hour	12:00	13:45			12:00
PM Pk Volume	34	17			49
Pk Hr Factor	0.654	0.708			0.645
4 - 6 Volume	22	6	0	0	28
4 - 6 Peak Hour	16:15	16:00			16:15
4 - 6 Pk Volume	18	6	0	0	23
Pk Hr Factor	0.900	0.500	0.000	0.000	0.719

TECHNICAL APPENDIX 4 OF 4

FOR

PLACER COUNTY WINERY AND FARM BREWERY ORDINANCE TRAFFIC IMPACT ANALYSIS

Placer County, California

Prepared For:

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April 10, 2019

Job No. 5765-19

LEVEL OF SERVICE CALCULATIONS

KDA

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	28	30	2415	1718	12
Future Vol, veh/h	12	28	30	2415	1718	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	320
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	28	30	2439	1735	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3015	868	1747	0	-	0
Stage 1	1735	-	-	-	-	-
Stage 2	1280	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 10	296	355	-	-	-
Stage 1	127	-	-	-	-	-
Stage 2	225	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 9	296	355	-	-	-
Mov Cap-2 Maneuver	70	-	-	-	-	-
Stage 1	116	-	-	-	-	-
Stage 2	225	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	37.6	0.2	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	355	-	150	-	-
HCM Lane V/C Ratio	0.085	-	0.269	-	-
HCM Control Delay (s)	16.1	-	37.6	-	-
HCM Lane LOS	C	-	E	-	-
HCM 95th %tile Q(veh)	0.3	-	1	-	-

Notes

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

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	139	198	192	171	21
Future Vol, veh/h	16	139	198	192	171	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	158	225	218	194	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	874	206	218	0	-	0
Stage 1	206	-	-	-	-	-
Stage 2	668	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	320	835	1352	-	-	-
Stage 1	829	-	-	-	-	-
Stage 2	510	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	267	835	1352	-	-	-
Mov Cap-2 Maneuver	267	-	-	-	-	-
Stage 1	691	-	-	-	-	-
Stage 2	510	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.1	4.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1352	-	685	-	-
HCM Lane V/C Ratio	0.166	-	0.257	-	-
HCM Control Delay (s)	8.2	-	12.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.6	-	1	-	-

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	131	18	45	121	9	10	66	64	6	58	15
Future Vol, veh/h	22	131	18	45	121	9	10	66	64	6	58	15
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	147	20	51	136	10	11	74	72	7	65	17
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.4	9.5	9	8.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	7%	13%	26%	8%
Vol Thru, %	47%	77%	69%	73%
Vol Right, %	46%	11%	5%	19%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	140	171	175	79
LT Vol	10	22	45	6
Through Vol	66	131	121	58
RT Vol	64	18	9	15
Lane Flow Rate	157	192	197	89
Geometry Grp	1	1	1	1
Degree of Util (X)	0.206	0.252	0.261	0.122
Departure Headway (Hd)	4.711	4.728	4.778	4.961
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	757	755	747	718
Service Time	2.768	2.783	2.833	3.025
HCM Lane V/C Ratio	0.207	0.254	0.264	0.124
HCM Control Delay	9	9.4	9.5	8.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	1	1	0.4

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	122	12	3	124	6	6	10	1	1	6	21
Future Vol, veh/h	43	122	12	3	124	6	6	10	1	1	6	21
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	131	13	3	133	6	6	11	1	1	6	23
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.4	8	7.8	7.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	35%	24%	2%	4%
Vol Thru, %	59%	69%	93%	21%
Vol Right, %	6%	7%	5%	75%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	17	177	133	28
LT Vol	6	43	3	1
Through Vol	10	122	124	6
RT Vol	1	12	6	21
Lane Flow Rate	18	190	143	30
Geometry Grp	1	1	1	1
Degree of Util (X)	0.024	0.219	0.164	0.035
Departure Headway (Hd)	4.731	4.134	4.139	4.238
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	761	860	857	850
Service Time	2.732	2.198	2.215	2.239
HCM Lane V/C Ratio	0.024	0.221	0.167	0.035
HCM Control Delay	7.8	8.4	8	7.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.8	0.6	0.1

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	92	13	15	109	0	18	45	16	0	18	22
Future Vol, veh/h	37	92	13	15	109	0	18	45	16	0	18	22
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	44	108	15	18	128	0	21	53	19	0	21	26
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.6	8.5	8.3	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	23%	26%	12%	0%
Vol Thru, %	57%	65%	88%	45%
Vol Right, %	20%	9%	0%	55%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	79	142	124	40
LT Vol	18	37	15	0
Through Vol	45	92	109	18
RT Vol	16	13	0	22
Lane Flow Rate	93	167	146	47
Geometry Grp	1	1	1	1
Degree of Util (X)	0.119	0.205	0.181	0.058
Departure Headway (Hd)	4.625	4.419	4.467	4.43
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	776	814	804	808
Service Time	2.649	2.439	2.488	2.456
HCM Lane V/C Ratio	0.12	0.205	0.182	0.058
HCM Control Delay	8.3	8.6	8.5	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.8	0.7	0.2

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	85	48	46	85	48	66	86	69	22	61	13
Future Vol, veh/h	19	85	48	46	85	48	66	86	69	22	61	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	94	53	51	94	53	73	96	77	24	68	14
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.4	9.8	10.3	9.1
HCM LOS	A	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	30%	12%	26%	23%
Vol Thru, %	39%	56%	47%	64%
Vol Right, %	31%	32%	27%	14%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	221	152	179	96
LT Vol	66	19	46	22
Through Vol	86	85	85	61
RT Vol	69	48	48	13
Lane Flow Rate	246	169	199	107
Geometry Grp	1	1	1	1
Degree of Util (X)	0.33	0.229	0.271	0.151
Departure Headway (Hd)	4.834	4.889	4.902	5.111
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	737	726	726	693
Service Time	2.91	2.972	2.982	3.202
HCM Lane V/C Ratio	0.334	0.233	0.274	0.154
HCM Control Delay	10.3	9.4	9.8	9.1
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	1.4	0.9	1.1	0.5

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	80	91	165	179	0	104	0	103	0	0	0
Future Vol, veh/h	0	80	91	165	179	0	104	0	103	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	90	102	185	201	0	117	0	116	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	201	0	0	90	0	0	712	712	141	661	661	201
Stage 1	-	-	-	-	-	-	141	141	-	571	571	-
Stage 2	-	-	-	-	-	-	571	571	-	90	90	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1371	-	-	1505	-	-	347	358	907	376	383	840
Stage 1	-	-	-	-	-	-	862	780	-	506	505	-
Stage 2	-	-	-	-	-	-	506	505	-	917	820	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1371	-	-	1505	-	-	310	309	907	293	330	840
Mov Cap-2 Maneuver	-	-	-	-	-	-	310	309	-	293	330	-
Stage 1	-	-	-	-	-	-	862	780	-	506	435	-
Stage 2	-	-	-	-	-	-	436	435	-	800	820	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.7	14.3	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	617	1371	-	-	1505	-	-	-
HCM Lane V/C Ratio	0.377	-	-	-	0.123	-	-	-
HCM Control Delay (s)	14.3	0	-	-	7.7	0	-	0
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	1.8	0	-	-	0.4	-	-	-

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	241	396	338	31	19	183
Future Vol, veh/h	241	396	338	31	19	183
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	256	421	360	33	20	195

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	393	0	-	0	1310	377
Stage 1	-	-	-	-	377	-
Stage 2	-	-	-	-	933	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1166	-	-	-	175	670
Stage 1	-	-	-	-	694	-
Stage 2	-	-	-	-	383	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1166	-	-	-	137	670
Mov Cap-2 Maneuver	-	-	-	-	137	-
Stage 1	-	-	-	-	541	-
Stage 2	-	-	-	-	383	-

Approach	EB	WB	SB
HCM Control Delay, s	3.4	0	17.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1166	-	-	-	491
HCM Lane V/C Ratio	0.22	-	-	-	0.438
HCM Control Delay (s)	9	-	-	-	17.9
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.8	-	-	-	2.2

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	54	282	304	89	51	28
Future Vol, veh/h	54	282	304	89	51	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	220	-	-	135	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	63	328	353	103	59	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	456	0	-	0	807	353
Stage 1	-	-	-	-	353	-
Stage 2	-	-	-	-	454	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1105	-	-	-	351	691
Stage 1	-	-	-	-	711	-
Stage 2	-	-	-	-	640	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1105	-	-	-	331	691
Mov Cap-2 Maneuver	-	-	-	-	331	-
Stage 1	-	-	-	-	670	-
Stage 2	-	-	-	-	640	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	16.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1105	-	-	-	406
HCM Lane V/C Ratio	0.057	-	-	-	0.226
HCM Control Delay (s)	8.5	-	-	-	16.4
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	0.9

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	18	15	16	10	18	21	60	10	12	49	0
Future Vol, veh/h	3	18	15	16	10	18	21	60	10	12	49	0
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	23	19	20	13	23	26	75	13	15	61	0
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	7.5	7.6	8.2	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	26%	0%	8%	36%	20%
Vol Thru, %	74%	0%	50%	23%	80%
Vol Right, %	0%	100%	42%	41%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	81	10	36	44	61
LT Vol	21	0	3	16	12
Through Vol	60	0	18	10	49
RT Vol	0	10	15	18	0
Lane Flow Rate	101	12	45	55	76
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.137	0.014	0.053	0.065	0.094
Departure Headway (Hd)	4.879	4.048	4.218	4.267	4.435
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	728	874	853	843	813
Service Time	2.653	1.821	2.223	2.273	2.435
HCM Lane V/C Ratio	0.139	0.014	0.053	0.065	0.093
HCM Control Delay	8.4	6.9	7.5	7.6	7.9
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.5	0	0.2	0.2	0.3

Intersection	
Int Delay, s/veh	11.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	1	3	52	0	6	1	1137	91	6	752	4
Future Vol, veh/h	3	1	3	52	0	6	1	1137	91	6	752	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	155	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	1	3	55	0	6	1	1210	97	6	800	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2078	2123	802	2028	2028	1210	804	0	0	1307	0	0
Stage 1	814	814	-	1212	1212	-	-	-	-	-	-	-
Stage 2	1264	1309	-	816	816	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	39	50	384	~ 43	57	223	820	-	-	530	-	-
Stage 1	372	391	-	222	255	-	-	-	-	-	-	-
Stage 2	208	229	-	371	391	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	38	49	384	~ 42	56	223	820	-	-	530	-	-
Mov Cap-2 Maneuver	38	49	-	~ 42	56	-	-	-	-	-	-	-
Stage 1	372	387	-	222	255	-	-	-	-	-	-	-
Stage 2	202	229	-	363	387	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	67.4	$ 390.6	0	0.1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	820	-	-	65	46	530	-	-
HCM Lane V/C Ratio	0.001	-	-	0.115	1.341	0.012	-	-
HCM Control Delay (s)	9.4	-	-	67.4	$ 390.6	11.9	-	-
HCM Lane LOS	A	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	5.9	0	-	-

Notes

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

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	19	25	1301	1171	9
Future Vol, veh/h	1	19	25	1301	1171	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	320
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	20	26	1369	1233	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1970	617	1242	0	-	0
Stage 1	1233	-	-	-	-	-
Stage 2	737	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	55	433	556	-	-	-
Stage 1	238	-	-	-	-	-
Stage 2	434	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	52	433	556	-	-	-
Mov Cap-2 Maneuver	155	-	-	-	-	-
Stage 1	227	-	-	-	-	-
Stage 2	434	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.6	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	556	-	397	-	-
HCM Lane V/C Ratio	0.047	-	0.053	-	-
HCM Control Delay (s)	11.8	-	14.6	-	-
HCM Lane LOS	B	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	98	101	97	71	8
Future Vol, veh/h	9	98	101	97	71	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	110	113	109	80	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	420	85	89	0	-	0
Stage 1	85	-	-	-	-	-
Stage 2	335	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	590	974	1506	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	546	974	1506	-	-	-
Mov Cap-2 Maneuver	546	-	-	-	-	-
Stage 1	868	-	-	-	-	-
Stage 2	725	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	3.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1506	-	914	-	-
HCM Lane V/C Ratio	0.075	-	0.132	-	-
HCM Control Delay (s)	7.6	-	9.5	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	-	-

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	91	13	24	47	3	6	41	42	17	33	4
Future Vol, veh/h	18	91	13	24	47	3	6	41	42	17	33	4
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	112	16	30	58	4	7	51	52	21	41	5
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.4	8.2	8	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	7%	15%	32%	31%
Vol Thru, %	46%	75%	64%	61%
Vol Right, %	47%	11%	4%	7%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	89	122	74	54
LT Vol	6	18	24	17
Through Vol	41	91	47	33
RT Vol	42	13	3	4
Lane Flow Rate	110	151	91	67
Geometry Grp	1	1	1	1
Degree of Util (X)	0.131	0.184	0.115	0.086
Departure Headway (Hd)	4.301	4.407	4.544	4.633
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	835	816	790	775
Service Time	2.319	2.425	2.565	2.653
HCM Lane V/C Ratio	0.132	0.185	0.115	0.086
HCM Control Delay	8	8.4	8.2	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	0.7	0.4	0.3

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	75	9	2	63	5	5	7	5	3	4	17
Future Vol, veh/h	19	75	9	2	63	5	5	7	5	3	4	17
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	80	10	2	67	5	5	7	5	3	4	18
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.7	7.5	7.3	7.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	29%	18%	3%	12%
Vol Thru, %	41%	73%	90%	17%
Vol Right, %	29%	9%	7%	71%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	17	103	70	24
LT Vol	5	19	2	3
Through Vol	7	75	63	4
RT Vol	5	9	5	17
Lane Flow Rate	18	110	74	26
Geometry Grp	1	1	1	1
Degree of Util (X)	0.021	0.123	0.084	0.027
Departure Headway (Hd)	4.152	4.051	4.055	3.863
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	849	883	880	911
Service Time	2.24	2.084	2.096	1.951
HCM Lane V/C Ratio	0.021	0.125	0.084	0.029
HCM Control Delay	7.3	7.7	7.5	7.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.4	0.3	0.1

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	56	13	12	55	1	15	18	18	0	14	18
Future Vol, veh/h	14	56	13	12	55	1	15	18	18	0	14	18
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	63	15	13	62	1	17	20	20	0	16	20
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.6	7.7	7.5	7.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	29%	17%	18%	0%
Vol Thru, %	35%	67%	81%	44%
Vol Right, %	35%	16%	1%	56%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	51	83	68	32
LT Vol	15	14	12	0
Through Vol	18	56	55	14
RT Vol	18	13	1	18
Lane Flow Rate	57	93	76	36
Geometry Grp	1	1	1	1
Degree of Util (X)	0.065	0.106	0.089	0.039
Departure Headway (Hd)	4.102	4.094	4.194	3.934
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	860	868	847	893
Service Time	2.192	2.154	2.256	2.031
HCM Lane V/C Ratio	0.066	0.107	0.09	0.04
HCM Control Delay	7.5	7.6	7.7	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.4	0.3	0.1

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	36	19	33	28	11	30	39	24	4	46	11
Future Vol, veh/h	16	36	19	33	28	11	30	39	24	4	46	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	38	20	35	30	12	32	41	26	4	49	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.7	7.8	7.8	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	32%	23%	46%	7%
Vol Thru, %	42%	51%	39%	75%
Vol Right, %	26%	27%	15%	18%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	93	71	72	61
LT Vol	30	16	33	4
Through Vol	39	36	28	46
RT Vol	24	19	11	11
Lane Flow Rate	99	76	77	65
Geometry Grp	1	1	1	1
Degree of Util (X)	0.117	0.09	0.093	0.077
Departure Headway (Hd)	4.267	4.267	4.379	4.287
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	845	843	821	838
Service Time	2.267	2.278	2.391	2.299
HCM Lane V/C Ratio	0.117	0.09	0.094	0.078
HCM Control Delay	7.8	7.7	7.8	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.3	0.3	0.2

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	62	67	42	77	4	48	2	51	0	3	1
Future Vol, veh/h	0	62	67	42	77	4	48	2	51	0	3	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	67	73	46	84	4	52	2	55	0	3	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	88	0	0	67	0	0	284	284	104	246	245	86
Stage 1	-	-	-	-	-	-	104	104	-	178	178	-
Stage 2	-	-	-	-	-	-	180	180	-	68	67	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1508	-	-	1535	-	-	668	625	951	708	657	973
Stage 1	-	-	-	-	-	-	902	809	-	824	752	-
Stage 2	-	-	-	-	-	-	822	750	-	942	839	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1508	-	-	1535	-	-	649	605	951	649	636	973
Mov Cap-2 Maneuver	-	-	-	-	-	-	649	605	-	649	636	-
Stage 1	-	-	-	-	-	-	902	809	-	824	728	-
Stage 2	-	-	-	-	-	-	791	726	-	885	839	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.5	8	10.2
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1307	1508	-	-	1535	-	-	696
HCM Lane V/C Ratio	0.084	-	-	-	0.03	-	-	0.006
HCM Control Delay (s)	8	0	-	-	7.4	0	-	10.2
HCM Lane LOS	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	158	163	169	15	11	81
Future Vol, veh/h	158	163	169	15	11	81
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	166	172	178	16	12	85

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	194	0	-	0	690	186
Stage 1	-	-	-	-	186	-
Stage 2	-	-	-	-	504	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1379	-	-	-	411	856
Stage 1	-	-	-	-	846	-
Stage 2	-	-	-	-	607	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1379	-	-	-	362	856
Mov Cap-2 Maneuver	-	-	-	-	362	-
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	607	-

Approach	EB	WB	SB
HCM Control Delay, s	3.9	0	10.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1379	-	-	-	736
HCM Lane V/C Ratio	0.121	-	-	-	0.132
HCM Control Delay (s)	8	-	-	-	10.6
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.4	-	-	-	0.5

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	28	146	159	51	34	26
Future Vol, veh/h	28	146	159	51	34	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	220	-	-	135	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	162	177	57	38	29

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	234	0	-	0	401	177
Stage 1	-	-	-	-	177	-
Stage 2	-	-	-	-	224	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1333	-	-	-	605	866
Stage 1	-	-	-	-	854	-
Stage 2	-	-	-	-	813	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1333	-	-	-	591	866
Mov Cap-2 Maneuver	-	-	-	-	591	-
Stage 1	-	-	-	-	834	-
Stage 2	-	-	-	-	813	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	10.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1333	-	-	-	685
HCM Lane V/C Ratio	0.023	-	-	-	0.097
HCM Control Delay (s)	7.8	-	-	-	10.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	10	8	7	4	2	16	45	6	5	23	0
Future Vol, veh/h	0	10	8	7	4	2	16	45	6	5	23	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	12	9	8	5	2	19	52	7	6	27	0
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	7	7.3	7.9	7.4
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	26%	0%	0%	54%	18%
Vol Thru, %	74%	0%	56%	31%	82%
Vol Right, %	0%	100%	44%	15%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	61	6	18	13	28
LT Vol	16	0	0	7	5
Through Vol	45	0	10	4	23
RT Vol	0	6	8	2	0
Lane Flow Rate	71	7	21	15	33
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.093	0.008	0.022	0.017	0.038
Departure Headway (Hd)	4.744	3.913	3.866	4.154	4.19
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	757	916	912	850	851
Service Time	2.463	1.631	1.947	2.234	2.231
HCM Lane V/C Ratio	0.094	0.008	0.023	0.018	0.039
HCM Control Delay	8	6.7	7	7.3	7.4
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.3	0	0.1	0.1	0.1

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	4	3	32	1	2	10	421	45	5	384	2
Future Vol, veh/h	6	4	3	32	1	2	10	421	45	5	384	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	155	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	4	3	34	1	2	11	443	47	5	404	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	905	927	405	884	881	443	406	0	0	490	0	0
Stage 1	415	415	-	465	465	-	-	-	-	-	-	-
Stage 2	490	512	-	419	416	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	257	268	646	266	285	615	1153	-	-	1073	-	-
Stage 1	615	592	-	578	563	-	-	-	-	-	-	-
Stage 2	560	536	-	612	592	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	253	264	646	259	281	615	1153	-	-	1073	-	-
Mov Cap-2 Maneuver	253	264	-	259	281	-	-	-	-	-	-	-
Stage 1	609	589	-	572	557	-	-	-	-	-	-	-
Stage 2	552	531	-	602	589	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.6	20.6	0.2	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1153	-	-	299	268	1073	-	-
HCM Lane V/C Ratio	0.009	-	-	0.046	0.137	0.005	-	-
HCM Control Delay (s)	8.2	-	-	17.6	20.6	8.4	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.5	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	19	20	1628	1158	8
Future Vol, veh/h	8	19	20	1628	1158	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	320
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	19	20	1644	1170	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2032	585	1178	0	-	0
Stage 1	1170	-	-	-	-	-
Stage 2	862	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	50	454	589	-	-	-
Stage 1	257	-	-	-	-	-
Stage 2	374	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	48	454	589	-	-	-
Mov Cap-2 Maneuver	154	-	-	-	-	-
Stage 1	248	-	-	-	-	-
Stage 2	374	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.8	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	589	-	288	-	-
HCM Lane V/C Ratio	0.034	-	0.095	-	-
HCM Control Delay (s)	11.3	-	18.8	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	93	133	129	115	14
Future Vol, veh/h	11	93	133	129	115	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	106	151	147	131	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	588	139	147	0	-	0
Stage 1	139	-	-	-	-	-
Stage 2	449	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	471	909	1435	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	643	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	422	909	1435	-	-	-
Mov Cap-2 Maneuver	422	-	-	-	-	-
Stage 1	795	-	-	-	-	-
Stage 2	643	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.2	4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1435	-	810	-	-
HCM Lane V/C Ratio	0.105	-	0.146	-	-
HCM Control Delay (s)	7.8	-	10.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.4	-	0.5	-	-

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	93	12	37	86	8	7	44	50	6	39	15
Future Vol, veh/h	20	93	12	37	86	8	7	44	50	6	39	15
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	104	13	42	97	9	8	49	56	7	44	17
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.5	8.6	8.1	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	7%	16%	28%	10%
Vol Thru, %	44%	74%	66%	65%
Vol Right, %	50%	10%	6%	25%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	101	125	131	60
LT Vol	7	20	37	6
Through Vol	44	93	86	39
RT Vol	50	12	8	15
Lane Flow Rate	113	140	147	67
Geometry Grp	1	1	1	1
Degree of Util (X)	0.138	0.175	0.185	0.086
Departure Headway (Hd)	4.393	4.488	4.524	4.598
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	816	799	793	779
Service Time	2.42	2.513	2.55	2.627
HCM Lane V/C Ratio	0.138	0.175	0.185	0.086
HCM Control Delay	8.1	8.5	8.6	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	0.6	0.7	0.3

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	33	91	12	2	92	12	8	7	1	9	4	18
Future Vol, veh/h	33	91	12	2	92	12	8	7	1	9	4	18
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	35	98	13	2	99	13	9	8	1	10	4	19
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8	7.7	7.7	7.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	50%	24%	2%	29%
Vol Thru, %	44%	67%	87%	13%
Vol Right, %	6%	9%	11%	58%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	16	136	106	31
LT Vol	8	33	2	9
Through Vol	7	91	92	4
RT Vol	1	12	12	18
Lane Flow Rate	17	146	114	33
Geometry Grp	1	1	1	1
Degree of Util (X)	0.022	0.167	0.129	0.039
Departure Headway (Hd)	4.6	4.104	4.068	4.228
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	783	867	873	852
Service Time	2.601	2.16	2.132	2.229
HCM Lane V/C Ratio	0.022	0.168	0.131	0.039
HCM Control Delay	7.7	8	7.7	7.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.6	0.4	0.1

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	69	19	15	80	0	22	30	16	0	12	15
Future Vol, veh/h	25	69	19	15	80	0	22	30	16	0	12	15
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	81	22	18	94	0	26	35	19	0	14	18
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.1	8.1	7.9	7.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	32%	22%	16%	0%
Vol Thru, %	44%	61%	84%	44%
Vol Right, %	24%	17%	0%	56%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	68	113	95	27
LT Vol	22	25	15	0
Through Vol	30	69	80	12
RT Vol	16	19	0	15
Lane Flow Rate	80	133	112	32
Geometry Grp	1	1	1	1
Degree of Util (X)	0.099	0.157	0.136	0.037
Departure Headway (Hd)	4.439	4.259	4.368	4.239
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	810	847	826	847
Service Time	2.453	2.263	2.37	2.255
HCM Lane V/C Ratio	0.099	0.157	0.136	0.038
HCM Control Delay	7.9	8.1	8.1	7.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.6	0.5	0.1

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	62	35	31	62	7	47	64	46	15	47	14
Future Vol, veh/h	18	62	35	31	62	7	47	64	46	15	47	14
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	69	39	34	69	8	52	71	51	17	52	16
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.4	8.5	8.8	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	30%	16%	31%	20%
Vol Thru, %	41%	54%	62%	62%
Vol Right, %	29%	30%	7%	18%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	157	115	100	76
LT Vol	47	18	31	15
Through Vol	64	62	62	47
RT Vol	46	35	7	14
Lane Flow Rate	174	128	111	84
Geometry Grp	1	1	1	1
Degree of Util (X)	0.217	0.16	0.145	0.108
Departure Headway (Hd)	4.477	4.516	4.702	4.624
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	801	794	762	774
Service Time	2.506	2.547	2.735	2.659
HCM Lane V/C Ratio	0.217	0.161	0.146	0.109
HCM Control Delay	8.8	8.4	8.5	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.6	0.5	0.4

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	54	69	112	120	0	78	0	70	0	0	0
Future Vol, veh/h	0	54	69	112	120	0	78	0	70	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	61	78	126	135	0	88	0	79	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	135	0	0	61	0	0	487	487	100	448	448	135
Stage 1	-	-	-	-	-	-	100	100	-	387	387	-
Stage 2	-	-	-	-	-	-	387	387	-	61	61	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1449	-	-	1542	-	-	491	481	956	521	506	914
Stage 1	-	-	-	-	-	-	906	812	-	637	610	-
Stage 2	-	-	-	-	-	-	637	610	-	950	844	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1449	-	-	1542	-	-	458	439	956	446	461	914
Mov Cap-2 Maneuver	-	-	-	-	-	-	458	439	-	446	461	-
Stage 1	-	-	-	-	-	-	906	812	-	637	556	-
Stage 2	-	-	-	-	-	-	581	556	-	872	844	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.6	10.1	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	869	1449	-	-	1542	-	-	-
HCM Lane V/C Ratio	0.191	-	-	-	0.082	-	-	-
HCM Control Delay (s)	10.1	0	-	-	7.5	0	-	0
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.7	0	-	-	0.3	-	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	184	266	227	24	16	145
Future Vol, veh/h	184	266	227	24	16	145
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	196	283	241	26	17	154

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	267	0	-	0	929	254
Stage 1	-	-	-	-	254	-
Stage 2	-	-	-	-	675	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1297	-	-	-	297	785
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	506	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1297	-	-	-	252	785
Mov Cap-2 Maneuver	-	-	-	-	252	-
Stage 1	-	-	-	-	669	-
Stage 2	-	-	-	-	506	-

Approach	EB	WB	SB
HCM Control Delay, s	3.4	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1297	-	-	-	649
HCM Lane V/C Ratio	0.151	-	-	-	0.264
HCM Control Delay (s)	8.3	-	-	-	12.5
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.5	-	-	-	1.1

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	36	192	207	83	57	19
Future Vol, veh/h	36	192	207	83	57	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	220	-	-	135	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	223	241	97	66	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	338	0	-	0	548	241
Stage 1	-	-	-	-	241	-
Stage 2	-	-	-	-	307	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1221	-	-	-	497	798
Stage 1	-	-	-	-	799	-
Stage 2	-	-	-	-	746	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1221	-	-	-	480	798
Mov Cap-2 Maneuver	-	-	-	-	480	-
Stage 1	-	-	-	-	772	-
Stage 2	-	-	-	-	746	-

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	13.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1221	-	-	-	533
HCM Lane V/C Ratio	0.034	-	-	-	0.166
HCM Control Delay (s)	8.1	-	-	-	13.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	12	10	11	7	12	14	46	7	8	39	0
Future Vol, veh/h	2	12	10	11	7	12	14	46	7	8	39	0
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	15	13	14	9	15	18	58	9	10	49	0
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	7.2	7.3	8	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	23%	0%	8%	37%	17%
Vol Thru, %	77%	0%	50%	23%	83%
Vol Right, %	0%	100%	42%	40%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	60	7	24	30	47
LT Vol	14	0	2	11	8
Through Vol	46	0	12	7	39
RT Vol	0	7	10	12	0
Lane Flow Rate	75	9	30	38	59
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.1	0.01	0.034	0.043	0.069
Departure Headway (Hd)	4.799	3.981	4.078	4.137	4.249
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	745	895	883	870	835
Service Time	2.543	1.724	2.079	2.138	2.313
HCM Lane V/C Ratio	0.101	0.01	0.034	0.044	0.071
HCM Control Delay	8.1	6.8	7.2	7.3	7.6
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.3	0	0.1	0.1	0.2

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	1	2	35	0	4	1	798	61	4	540	3
Future Vol, veh/h	2	1	2	35	0	4	1	798	61	4	540	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	155	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	1	2	37	0	4	1	849	65	4	574	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1470	1500	576	1436	1436	849	577	0	0	914	0	0
Stage 1	584	584	-	851	851	-	-	-	-	-	-	-
Stage 2	886	916	-	585	585	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	105	122	517	111	133	361	996	-	-	746	-	-
Stage 1	498	498	-	355	376	-	-	-	-	-	-	-
Stage 2	339	351	-	497	498	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	103	121	517	109	132	361	996	-	-	746	-	-
Mov Cap-2 Maneuver	103	121	-	109	132	-	-	-	-	-	-	-
Stage 1	498	496	-	355	376	-	-	-	-	-	-	-
Stage 2	335	351	-	491	496	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	28.6	51.8	0	0.1
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	996	-	-	158	117	746	-	-
HCM Lane V/C Ratio	0.001	-	-	0.034	0.355	0.006	-	-
HCM Control Delay (s)	8.6	-	-	28.6	51.8	9.9	-	-
HCM Lane LOS	A	-	-	D	F	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	1.4	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	19	25	1302	1180	10
Future Vol, veh/h	1	19	25	1302	1180	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	320
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	20	26	1371	1242	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1980	621	1253	0	-	0
Stage 1	1242	-	-	-	-	-
Stage 2	738	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	54	430	551	-	-	-
Stage 1	236	-	-	-	-	-
Stage 2	434	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	51	430	551	-	-	-
Mov Cap-2 Maneuver	153	-	-	-	-	-
Stage 1	225	-	-	-	-	-
Stage 2	434	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.7	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	551	-	394	-	-
HCM Lane V/C Ratio	0.048	-	0.053	-	-
HCM Control Delay (s)	11.9	-	14.7	-	-
HCM Lane LOS	B	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	98	101	97	71	8
Future Vol, veh/h	9	98	101	97	71	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	110	113	109	80	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	420	85	89	0	-	0
Stage 1	85	-	-	-	-	-
Stage 2	335	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	590	974	1506	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	546	974	1506	-	-	-
Mov Cap-2 Maneuver	546	-	-	-	-	-
Stage 1	868	-	-	-	-	-
Stage 2	725	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	3.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1506	-	914	-	-
HCM Lane V/C Ratio	0.075	-	0.132	-	-
HCM Control Delay (s)	7.6	-	9.5	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	-	-

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	100	14	25	48	6	6	41	55	17	33	5
Future Vol, veh/h	27	100	14	25	48	6	6	41	55	17	33	5
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	123	17	31	59	7	7	51	68	21	41	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.7	8.3	8.1	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	6%	19%	32%	31%
Vol Thru, %	40%	71%	61%	60%
Vol Right, %	54%	10%	8%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	102	141	79	55
LT Vol	6	27	25	17
Through Vol	41	100	48	33
RT Vol	55	14	6	5
Lane Flow Rate	126	174	98	68
Geometry Grp	1	1	1	1
Degree of Util (X)	0.152	0.216	0.124	0.089
Departure Headway (Hd)	4.333	4.468	4.592	4.714
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	827	804	780	760
Service Time	2.358	2.494	2.62	2.742
HCM Lane V/C Ratio	0.152	0.216	0.126	0.089
HCM Control Delay	8.1	8.7	8.3	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	0.8	0.4	0.3

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	82	11	2	75	20	11	7	5	4	4	18
Future Vol, veh/h	26	82	11	2	75	20	11	7	5	4	4	18
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	87	12	2	80	21	12	7	5	4	4	19
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.8	7.6	7.6	7.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	48%	22%	2%	15%
Vol Thru, %	30%	69%	77%	15%
Vol Right, %	22%	9%	21%	69%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	23	119	97	26
LT Vol	11	26	2	4
Through Vol	7	82	75	4
RT Vol	5	11	20	18
Lane Flow Rate	24	127	103	28
Geometry Grp	1	1	1	1
Degree of Util (X)	0.03	0.144	0.115	0.031
Departure Headway (Hd)	4.424	4.093	4.002	4.072
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	814	871	888	884
Service Time	2.425	2.14	2.057	2.073
HCM Lane V/C Ratio	0.029	0.146	0.116	0.032
HCM Control Delay	7.6	7.8	7.6	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.5	0.4	0.1

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	62	15	13	63	1	34	18	27	0	14	18
Future Vol, veh/h	14	62	15	13	63	1	34	18	27	0	14	18
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	70	17	15	71	1	38	20	30	0	16	20
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.8	7.8	7.8	7.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	43%	15%	17%	0%
Vol Thru, %	23%	68%	82%	44%
Vol Right, %	34%	16%	1%	56%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	79	91	77	32
LT Vol	34	14	13	0
Through Vol	18	62	63	14
RT Vol	27	15	1	18
Lane Flow Rate	89	102	87	36
Geometry Grp	1	1	1	1
Degree of Util (X)	0.105	0.118	0.102	0.041
Departure Headway (Hd)	4.275	4.15	4.256	4.115
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	843	851	829	875
Service Time	2.276	2.241	2.35	2.117
HCM Lane V/C Ratio	0.106	0.12	0.105	0.041
HCM Control Delay	7.8	7.8	7.8	7.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.4	0.3	0.1

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	37	19	33	37	11	35	50	24	4	47	12
Future Vol, veh/h	26	37	19	33	37	11	35	50	24	4	47	12
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	39	20	35	39	12	37	53	26	4	50	13
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	8	8.1	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	32%	32%	41%	6%
Vol Thru, %	46%	45%	46%	75%
Vol Right, %	22%	23%	14%	19%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	109	82	81	63
LT Vol	35	26	33	4
Through Vol	50	37	37	47
RT Vol	24	19	11	12
Lane Flow Rate	116	87	86	67
Geometry Grp	1	1	1	1
Degree of Util (X)	0.14	0.106	0.106	0.081
Departure Headway (Hd)	4.336	4.369	4.445	4.355
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	829	823	808	824
Service Time	2.35	2.383	2.459	2.371
HCM Lane V/C Ratio	0.14	0.106	0.106	0.081
HCM Control Delay	8.1	7.9	8	7.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	0.4	0.4	0.3

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	62	71	43	77	4	61	2	51	0	3	1
Future Vol, veh/h	0	62	71	43	77	4	61	2	51	0	3	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	67	77	47	84	4	66	2	55	0	3	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	88	0	0	67	0	0	288	288	106	248	247	86
Stage 1	-	-	-	-	-	-	106	106	-	180	180	-
Stage 2	-	-	-	-	-	-	182	182	-	68	67	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1508	-	-	1535	-	-	664	622	948	706	655	973
Stage 1	-	-	-	-	-	-	900	807	-	822	750	-
Stage 2	-	-	-	-	-	-	820	749	-	942	839	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1508	-	-	1535	-	-	645	602	948	647	634	973
Mov Cap-2 Maneuver	-	-	-	-	-	-	645	602	-	647	634	-
Stage 1	-	-	-	-	-	-	900	807	-	822	726	-
Stage 2	-	-	-	-	-	-	789	725	-	885	839	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.6	8.5	10.2
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1165	1508	-	-	1535	-	-	694
HCM Lane V/C Ratio	0.106	-	-	-	0.03	-	-	0.006
HCM Control Delay (s)	8.5	0	-	-	7.4	0	-	10.2
HCM Lane LOS	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	199	163	169	21	12	84
Future Vol, veh/h	199	163	169	21	12	84
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	209	172	178	22	13	88

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	200	0	-	0	779	189
Stage 1	-	-	-	-	189	-
Stage 2	-	-	-	-	590	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1372	-	-	-	364	853
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	554	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1372	-	-	-	309	853
Mov Cap-2 Maneuver	-	-	-	-	309	-
Stage 1	-	-	-	-	715	-
Stage 2	-	-	-	-	554	-

Approach	EB	WB	SB
HCM Control Delay, s	4.5	0	11
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1372	-	-	-	699
HCM Lane V/C Ratio	0.153	-	-	-	0.145
HCM Control Delay (s)	8.1	-	-	-	11
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.5	-	-	-	0.5

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	28	147	165	93	38	26
Future Vol, veh/h	28	147	165	93	38	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	220	-	-	135	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	163	183	103	42	29

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	286	0	-	0	408	183
Stage 1	-	-	-	-	183	-
Stage 2	-	-	-	-	225	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1276	-	-	-	599	859
Stage 1	-	-	-	-	848	-
Stage 2	-	-	-	-	812	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1276	-	-	-	585	859
Mov Cap-2 Maneuver	-	-	-	-	585	-
Stage 1	-	-	-	-	828	-
Stage 2	-	-	-	-	812	-

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	11
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1276	-	-	-	672
HCM Lane V/C Ratio	0.024	-	-	-	0.106
HCM Control Delay (s)	7.9	-	-	-	11
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	10	8	7	5	2	16	57	6	5	24	0
Future Vol, veh/h	0	10	8	7	5	2	16	57	6	5	24	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	12	9	8	6	2	19	66	7	6	28	0
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	7.1	7.4	7.9	7.4
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	22%	0%	0%	50%	17%
Vol Thru, %	78%	0%	56%	36%	83%
Vol Right, %	0%	100%	44%	14%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	73	6	18	14	29
LT Vol	16	0	0	7	5
Through Vol	57	0	10	5	24
RT Vol	0	6	8	2	0
Lane Flow Rate	85	7	21	16	34
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.111	0.008	0.023	0.019	0.039
Departure Headway (Hd)	4.725	3.915	3.892	4.178	4.201
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	760	914	904	843	847
Service Time	2.448	1.638	1.985	2.27	2.25
HCM Lane V/C Ratio	0.112	0.008	0.023	0.019	0.04
HCM Control Delay	8	6.7	7.1	7.4	7.4
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.4	0	0.1	0.1	0.1

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	4	3	32	1	2	10	485	45	5	390	2
Future Vol, veh/h	6	4	3	32	1	2	10	485	45	5	390	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	155	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	4	3	34	1	2	11	511	47	5	411	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	980	1002	412	959	956	511	413	0	0	558	0	0
Stage 1	422	422	-	533	533	-	-	-	-	-	-	-
Stage 2	558	580	-	426	423	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	229	242	640	237	258	563	1146	-	-	1013	-	-
Stage 1	609	588	-	531	525	-	-	-	-	-	-	-
Stage 2	514	500	-	606	588	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	225	238	640	230	254	563	1146	-	-	1013	-	-
Mov Cap-2 Maneuver	225	238	-	230	254	-	-	-	-	-	-	-
Stage 1	603	585	-	526	520	-	-	-	-	-	-	-
Stage 2	506	495	-	596	585	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19	22.8	0.2	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1146	-	-	270	239	1013	-	-
HCM Lane V/C Ratio	0.009	-	-	0.051	0.154	0.005	-	-
HCM Control Delay (s)	8.2	-	-	19	22.8	8.6	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.5	0	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	40	35	2425	1735	15
Future Vol, veh/h	18	40	35	2425	1735	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	320
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	40	35	2449	1753	15

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3048	877	1768	0	-	0
Stage 1	1753	-	-	-	-	-
Stage 2	1295	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 10	292	349	-	-	-
Stage 1	124	-	-	-	-	-
Stage 2	221	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 9	292	349	-	-	-
Mov Cap-2 Maneuver	68	-	-	-	-	-
Stage 1	112	-	-	-	-	-
Stage 2	221	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	46.2	0.2	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	349	-	144	-	-
HCM Lane V/C Ratio	0.101	-	0.407	-	-
HCM Control Delay (s)	16.5	-	46.2	-	-
HCM Lane LOS	C	-	E	-	-
HCM 95th %tile Q(veh)	0.3	-	1.8	-	-

Notes

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

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	139	198	192	171	21
Future Vol, veh/h	16	139	198	192	171	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	158	225	218	194	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	874	206	218	0	-	0
Stage 1	206	-	-	-	-	-
Stage 2	668	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	320	835	1352	-	-	-
Stage 1	829	-	-	-	-	-
Stage 2	510	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	267	835	1352	-	-	-
Mov Cap-2 Maneuver	267	-	-	-	-	-
Stage 1	691	-	-	-	-	-
Stage 2	510	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.1	4.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1352	-	685	-	-
HCM Lane V/C Ratio	0.166	-	0.257	-	-
HCM Control Delay (s)	8.2	-	12.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.6	-	1	-	-

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	134	18	47	129	9	10	66	65	6	58	15
Future Vol, veh/h	22	134	18	47	129	9	10	66	65	6	58	15
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	151	20	53	145	10	11	74	73	7	65	17
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.5	9.7	9.1	8.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	7%	13%	25%	8%
Vol Thru, %	47%	77%	70%	73%
Vol Right, %	46%	10%	5%	19%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	141	174	185	79
LT Vol	10	22	47	6
Through Vol	66	134	129	58
RT Vol	65	18	9	15
Lane Flow Rate	158	196	208	89
Geometry Grp	1	1	1	1
Degree of Util (X)	0.209	0.258	0.277	0.123
Departure Headway (Hd)	4.745	4.749	4.79	5
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	751	751	746	711
Service Time	2.808	2.808	2.848	3.071
HCM Lane V/C Ratio	0.21	0.261	0.279	0.125
HCM Control Delay	9.1	9.5	9.7	8.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	1	1.1	0.4

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	124	12	3	130	6	6	11	1	1	9	25
Future Vol, veh/h	44	124	12	3	130	6	6	11	1	1	9	25
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	47	133	13	3	140	6	6	12	1	1	10	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.4	8.1	7.9	7.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	33%	24%	2%	3%
Vol Thru, %	61%	69%	94%	26%
Vol Right, %	6%	7%	4%	71%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	180	139	35
LT Vol	6	44	3	1
Through Vol	11	124	130	9
RT Vol	1	12	6	25
Lane Flow Rate	19	194	149	38
Geometry Grp	1	1	1	1
Degree of Util (X)	0.026	0.223	0.173	0.045
Departure Headway (Hd)	4.762	4.154	4.157	4.284
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	756	854	850	841
Service Time	2.764	2.231	2.244	2.285
HCM Lane V/C Ratio	0.025	0.227	0.175	0.045
HCM Control Delay	7.9	8.4	8.1	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.9	0.6	0.1

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	94	13	15	115	1	18	45	16	4	18	22
Future Vol, veh/h	37	94	13	15	115	1	18	45	16	4	18	22
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	44	111	15	18	135	1	21	53	19	5	21	26
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.6	8.6	8.3	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	23%	26%	11%	9%
Vol Thru, %	57%	65%	88%	41%
Vol Right, %	20%	9%	1%	50%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	79	144	131	44
LT Vol	18	37	15	4
Through Vol	45	94	115	18
RT Vol	16	13	1	22
Lane Flow Rate	93	169	154	52
Geometry Grp	1	1	1	1
Degree of Util (X)	0.12	0.209	0.192	0.065
Departure Headway (Hd)	4.658	4.444	4.481	4.506
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	770	808	801	795
Service Time	2.684	2.465	2.502	2.534
HCM Lane V/C Ratio	0.121	0.209	0.192	0.065
HCM Control Delay	8.3	8.6	8.6	7.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.8	0.7	0.2

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	89	49	46	87	10	67	91	69	22	73	16
Future Vol, veh/h	20	89	49	46	87	10	67	91	69	22	73	16
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	99	54	51	97	11	74	101	77	24	81	18
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.5	9.7	10.3	9.2
HCM LOS	A	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	30%	13%	32%	20%
Vol Thru, %	40%	56%	61%	66%
Vol Right, %	30%	31%	7%	14%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	227	158	143	111
LT Vol	67	20	46	22
Through Vol	91	89	87	73
RT Vol	69	49	10	16
Lane Flow Rate	252	176	159	123
Geometry Grp	1	1	1	1
Degree of Util (X)	0.336	0.239	0.225	0.173
Departure Headway (Hd)	4.795	4.895	5.093	5.036
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	744	725	698	704
Service Time	2.87	2.979	3.18	3.124
HCM Lane V/C Ratio	0.339	0.243	0.228	0.175
HCM Control Delay	10.3	9.5	9.7	9.2
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	1.5	0.9	0.9	0.6

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	82	91	165	180	0	104	0	103	0	0	0
Future Vol, veh/h	0	82	91	165	180	0	104	0	103	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	92	102	185	202	0	117	0	116	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	202	0	0	92	0	0	715	715	143	664	664	202
Stage 1	-	-	-	-	-	-	143	143	-	572	572	-
Stage 2	-	-	-	-	-	-	572	572	-	92	92	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1370	-	-	1503	-	-	346	356	905	374	381	839
Stage 1	-	-	-	-	-	-	860	779	-	505	504	-
Stage 2	-	-	-	-	-	-	505	504	-	915	819	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1370	-	-	1503	-	-	309	307	905	291	328	839
Mov Cap-2 Maneuver	-	-	-	-	-	-	309	307	-	291	328	-
Stage 1	-	-	-	-	-	-	860	779	-	505	434	-
Stage 2	-	-	-	-	-	-	435	434	-	798	819	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.7	14.4	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	615	1370	-	-	1503	-	-	-
HCM Lane V/C Ratio	0.378	-	-	-	0.123	-	-	-
HCM Control Delay (s)	14.4	0	-	-	7.7	0	-	0
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	1.8	0	-	-	0.4	-	-	-

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	243	433	378	31	19	189
Future Vol, veh/h	243	433	378	31	19	189
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	259	461	402	33	20	201

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	435	0	-	0	1398	419
Stage 1	-	-	-	-	419	-
Stage 2	-	-	-	-	979	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1125	-	-	-	155	634
Stage 1	-	-	-	-	664	-
Stage 2	-	-	-	-	364	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1125	-	-	-	119	634
Mov Cap-2 Maneuver	-	-	-	-	119	-
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	364	-

Approach	EB	WB	SB
HCM Control Delay, s	3.3	0	20.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1125	-	-	-	454
HCM Lane V/C Ratio	0.23	-	-	-	0.487
HCM Control Delay (s)	9.2	-	-	-	20.2
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.9	-	-	-	2.6

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	54	319	344	89	51	28
Future Vol, veh/h	54	319	344	89	51	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	220	-	-	135	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	63	371	400	103	59	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	503	0	-	0	897	400
Stage 1	-	-	-	-	400	-
Stage 2	-	-	-	-	497	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1061	-	-	-	310	650
Stage 1	-	-	-	-	677	-
Stage 2	-	-	-	-	611	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1061	-	-	-	292	650
Mov Cap-2 Maneuver	-	-	-	-	292	-
Stage 1	-	-	-	-	637	-
Stage 2	-	-	-	-	611	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	18.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1061	-	-	-	363
HCM Lane V/C Ratio	0.059	-	-	-	0.253
HCM Control Delay (s)	8.6	-	-	-	18.2
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	1

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	18	15	16	10	18	21	60	10	12	49	0
Future Vol, veh/h	3	18	15	16	10	18	21	60	10	12	49	0
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	23	19	20	13	23	26	75	13	15	61	0
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	7.5	7.6	8.2	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	26%	0%	8%	36%	20%
Vol Thru, %	74%	0%	50%	23%	80%
Vol Right, %	0%	100%	42%	41%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	81	10	36	44	61
LT Vol	21	0	3	16	12
Through Vol	60	0	18	10	49
RT Vol	0	10	15	18	0
Lane Flow Rate	101	12	45	55	76
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.137	0.014	0.053	0.065	0.094
Departure Headway (Hd)	4.879	4.048	4.218	4.267	4.435
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	728	874	853	843	813
Service Time	2.653	1.821	2.223	2.273	2.435
HCM Lane V/C Ratio	0.139	0.014	0.053	0.065	0.093
HCM Control Delay	8.4	6.9	7.5	7.6	7.9
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.5	0	0.2	0.2	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	1	3	52	0	6	1	1237	91	6	849	4
Future Volume (veh/h)	3	1	3	52	0	6	1	1237	91	6	849	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3	1	3	55	0	6	1	1316	97	6	903	4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	23	49	269	0	10	5	1906	140	14	2085	9
Arrive On Green	0.07	0.07	0.07	0.07	0.00	0.07	0.00	0.57	0.57	0.01	0.57	0.57
Sat Flow, veh/h	637	335	730	1306	0	142	1781	3356	247	1781	3628	16
Grp Volume(v), veh/h	7	0	0	61	0	0	1	695	718	6	442	465
Grp Sat Flow(s),veh/h/ln	1702	0	0	1448	0	0	1781	1777	1826	1781	1777	1867
Q Serve(g_s), s	0.0	0.0	0.0	1.4	0.0	0.0	0.0	10.5	10.6	0.1	5.3	5.3
Cycle Q Clear(g_c), s	0.1	0.0	0.0	1.5	0.0	0.0	0.0	10.5	10.6	0.1	5.3	5.3
Prop In Lane	0.43		0.43	0.90		0.10	1.00		0.14	1.00		0.01
Lane Grp Cap(c), veh/h	251	0	0	279	0	0	5	1009	1037	14	1021	1073
V/C Ratio(X)	0.03	0.00	0.00	0.22	0.00	0.00	0.21	0.69	0.69	0.42	0.43	0.43
Avail Cap(c_a), veh/h	882	0	0	865	0	0	240	1328	1365	240	1328	1396
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.5	0.0	0.0	17.2	0.0	0.0	18.9	5.8	5.8	18.7	4.6	4.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	21.1	1.0	1.0	18.1	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.5	0.0	0.0	0.0	2.2	2.2	0.1	1.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.6	0.0	0.0	17.6	0.0	0.0	39.9	6.8	6.8	36.8	4.9	4.8
LnGrp LOS	B	A	A	B	A	A	D	A	A	D	A	A
Approach Vol, veh/h		7			61			1414			913	
Approach Delay, s/veh		16.6			17.6			6.8			5.1	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.8	26.0		7.1	4.6	26.3		7.1
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	5.1	28.3		18.1	5.1	28.3		18.1
Max Q Clear Time (g_c+I1), s	2.1	12.6		2.1	2.0	7.3		3.5
Green Ext Time (p_c), s	0.0	8.9		0.0	0.0	6.0		0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.5
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	54	52	1962	1784	17
Future Vol, veh/h	7	54	52	1962	1784	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	320
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	57	55	2065	1878	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3021	939	1896	0	-	0
Stage 1	1878	-	-	-	-	-
Stage 2	1143	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	10	265	311	-	-	-
Stage 1	106	-	-	-	-	-
Stage 2	266	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	8	265	311	-	-	-
Mov Cap-2 Maneuver	59	-	-	-	-	-
Stage 1	87	-	-	-	-	-
Stage 2	266	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	33.5	0.5	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	311	-	189	-	-
HCM Lane V/C Ratio	0.176	-	0.34	-	-
HCM Control Delay (s)	19	-	33.5	-	-
HCM Lane LOS	C	-	D	-	-
HCM 95th %tile Q(veh)	0.6	-	1.4	-	-

Intersection						
Int Delay, s/veh	5					

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	146	150	145	106	12
Future Vol, veh/h	13	146	150	145	106	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	164	169	163	119	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	627	126	132	0	-	0
Stage 1	126	-	-	-	-	-
Stage 2	501	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	447	924	1453	-	-	-
Stage 1	900	-	-	-	-	-
Stage 2	609	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	395	924	1453	-	-	-
Mov Cap-2 Maneuver	395	-	-	-	-	-
Stage 1	796	-	-	-	-	-
Stage 2	609	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.5	4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1453	-	833	-	-
HCM Lane V/C Ratio	0.116	-	0.214	-	-
HCM Control Delay (s)	7.8	-	10.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.4	-	0.8	-	-

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	146	19	39	87	4	9	61	65	25	49	6
Future Vol, veh/h	27	146	19	39	87	4	9	61	65	25	49	6
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	180	23	48	107	5	11	75	80	31	60	7
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10	9.4	9.2	9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	7%	14%	30%	31%
Vol Thru, %	45%	76%	67%	61%
Vol Right, %	48%	10%	3%	7%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	135	192	130	80
LT Vol	9	27	39	25
Through Vol	61	146	87	49
RT Vol	65	19	4	6
Lane Flow Rate	167	237	160	99
Geometry Grp	1	1	1	1
Degree of Util (X)	0.22	0.313	0.219	0.14
Departure Headway (Hd)	4.743	4.75	4.914	5.121
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	752	751	725	694
Service Time	2.81	2.81	2.98	3.196
HCM Lane V/C Ratio	0.222	0.316	0.221	0.143
HCM Control Delay	9.2	10	9.4	9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	1.3	0.8	0.5

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	33	119	13	3	106	7	7	14	7	4	13	33
Future Vol, veh/h	33	119	13	3	106	7	7	14	7	4	13	33
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	35	127	14	3	113	7	7	15	7	4	14	35
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.3	8	7.7	7.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	25%	20%	3%	8%
Vol Thru, %	50%	72%	91%	26%
Vol Right, %	25%	8%	6%	66%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	28	165	116	50
LT Vol	7	33	3	4
Through Vol	14	119	106	13
RT Vol	7	13	7	33
Lane Flow Rate	30	176	123	53
Geometry Grp	1	1	1	1
Degree of Util (X)	0.038	0.203	0.143	0.063
Departure Headway (Hd)	4.552	4.164	4.18	4.246
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	791	850	843	848
Service Time	2.555	2.249	2.278	2.248
HCM Lane V/C Ratio	0.038	0.207	0.146	0.063
HCM Control Delay	7.7	8.3	8	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.8	0.5	0.2

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	90	19	18	94	5	22	27	27	7	21	27
Future Vol, veh/h	21	90	19	18	94	5	22	27	27	7	21	27
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	101	21	20	106	6	25	30	30	8	24	30
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.3	8.3	8	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	29%	16%	15%	13%
Vol Thru, %	36%	69%	80%	38%
Vol Right, %	36%	15%	4%	49%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	76	130	117	55
LT Vol	22	21	18	7
Through Vol	27	90	94	21
RT Vol	27	19	5	27
Lane Flow Rate	85	146	131	62
Geometry Grp	1	1	1	1
Degree of Util (X)	0.106	0.177	0.162	0.075
Departure Headway (Hd)	4.476	4.358	4.433	4.392
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	802	825	811	816
Service Time	2.498	2.377	2.451	2.415
HCM Lane V/C Ratio	0.106	0.177	0.162	0.076
HCM Control Delay	8	8.3	8.3	7.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.6	0.6	0.2

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	58	32	49	44	16	47	73	36	6	95	21
Future Vol, veh/h	27	58	32	49	44	16	47	73	36	6	95	21
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	62	34	52	47	17	50	78	38	6	101	22
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.6	8.7	8.9	8.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	30%	23%	45%	5%
Vol Thru, %	47%	50%	40%	78%
Vol Right, %	23%	27%	15%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	156	117	109	122
LT Vol	47	27	49	6
Through Vol	73	58	44	95
RT Vol	36	32	16	21
Lane Flow Rate	166	124	116	130
Geometry Grp	1	1	1	1
Degree of Util (X)	0.211	0.161	0.154	0.166
Departure Headway (Hd)	4.582	4.648	4.776	4.61
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	782	769	749	776
Service Time	2.621	2.689	2.817	2.65
HCM Lane V/C Ratio	0.212	0.161	0.155	0.168
HCM Control Delay	8.9	8.6	8.7	8.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.6	0.5	0.6

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	96	100	63	118	6	72	3	76	0	4	1
Future Vol, veh/h	0	96	100	63	118	6	72	3	76	0	4	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	104	109	68	128	7	78	3	83	0	4	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	135	0	0	104	0	0	429	430	159	374	372	132
Stage 1	-	-	-	-	-	-	159	159	-	268	268	-
Stage 2	-	-	-	-	-	-	270	271	-	106	104	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1449	-	-	1488	-	-	536	518	886	583	558	917
Stage 1	-	-	-	-	-	-	843	766	-	738	687	-
Stage 2	-	-	-	-	-	-	736	685	-	900	809	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1449	-	-	1488	-	-	512	493	886	506	531	917
Mov Cap-2 Maneuver	-	-	-	-	-	-	512	493	-	506	531	-
Stage 1	-	-	-	-	-	-	843	766	-	738	653	-
Stage 2	-	-	-	-	-	-	694	651	-	813	809	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.5	9.2	11.3
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1029	1449	-	-	1488	-	-	580
HCM Lane V/C Ratio	0.16	-	-	-	0.046	-	-	0.009
HCM Control Delay (s)	9.2	0	-	-	7.5	0	-	11.3
HCM Lane LOS	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	242	289	299	22	16	134
Future Vol, veh/h	242	289	299	22	16	134
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	255	304	315	23	17	141

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	338	0	-	0	1141	327
Stage 1	-	-	-	-	327	-
Stage 2	-	-	-	-	814	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1221	-	-	-	222	714
Stage 1	-	-	-	-	731	-
Stage 2	-	-	-	-	436	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1221	-	-	-	176	714
Mov Cap-2 Maneuver	-	-	-	-	176	-
Stage 1	-	-	-	-	578	-
Stage 2	-	-	-	-	436	-

Approach	EB	WB	SB
HCM Control Delay, s	4	0	14.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1221	-	-	-	538
HCM Lane V/C Ratio	0.209	-	-	-	0.293
HCM Control Delay (s)	8.7	-	-	-	14.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.8	-	-	-	1.2

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	42	264	284	76	51	39
Future Vol, veh/h	42	264	284	76	51	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	220	-	-	135	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	293	316	84	57	43

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	400	0	-	0	703	316
Stage 1	-	-	-	-	316	-
Stage 2	-	-	-	-	387	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1159	-	-	-	404	724
Stage 1	-	-	-	-	739	-
Stage 2	-	-	-	-	686	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1159	-	-	-	387	724
Mov Cap-2 Maneuver	-	-	-	-	387	-
Stage 1	-	-	-	-	709	-
Stage 2	-	-	-	-	686	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	14.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1159	-	-	-	485
HCM Lane V/C Ratio	0.04	-	-	-	0.206
HCM Control Delay (s)	8.2	-	-	-	14.3
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.8

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	15	12	10	6	3	24	67	9	7	34	0
Future Vol, veh/h	0	15	12	10	6	3	24	67	9	7	34	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	17	14	12	7	3	28	78	10	8	40	0
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	7.2	7.5	8.2	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	26%	0%	0%	53%	17%
Vol Thru, %	74%	0%	56%	32%	83%
Vol Right, %	0%	100%	44%	16%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	91	9	27	19	41
LT Vol	24	0	0	10	7
Through Vol	67	0	15	6	34
RT Vol	0	9	12	3	0
Lane Flow Rate	106	10	31	22	48
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.141	0.011	0.036	0.027	0.056
Departure Headway (Hd)	4.784	3.951	4.085	4.371	4.249
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	748	903	882	824	834
Service Time	2.522	1.689	2.086	2.372	2.32
HCM Lane V/C Ratio	0.142	0.011	0.035	0.027	0.058
HCM Control Delay	8.3	6.7	7.2	7.5	7.6
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.5	0	0.1	0.1	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	6	4	48	1	3	15	751	67	7	698	3
Future Volume (veh/h)	9	6	4	48	1	3	15	751	67	7	698	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	6	4	51	1	3	16	791	71	7	735	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	42	28	362	2	6	37	1369	123	17	1465	6
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.02	0.41	0.41	0.01	0.40	0.40
Sat Flow, veh/h	797	531	354	1359	27	80	1781	3298	296	1781	3630	15
Grp Volume(v), veh/h	19	0	0	55	0	0	16	426	436	7	360	378
Grp Sat Flow(s),veh/h/ln	1683	0	0	1465	0	0	1781	1777	1817	1781	1777	1868
Q Serve(g_s), s	0.0	0.0	0.0	0.7	0.0	0.0	0.2	5.0	5.0	0.1	4.1	4.1
Cycle Q Clear(g_c), s	0.3	0.0	0.0	0.9	0.0	0.0	0.2	5.0	5.0	0.1	4.1	4.1
Prop In Lane	0.47		0.21	0.93		0.05	1.00		0.16	1.00		0.01
Lane Grp Cap(c), veh/h	328	0	0	371	0	0	37	737	754	17	717	754
V/C Ratio(X)	0.06	0.00	0.00	0.15	0.00	0.00	0.43	0.58	0.58	0.41	0.50	0.50
Avail Cap(c_a), veh/h	1244	0	0	1200	0	0	328	1210	1237	328	1210	1272
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.7	0.0	0.0	11.9	0.0	0.0	13.1	6.1	6.1	13.4	6.1	6.1
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.0	7.6	0.7	0.7	15.4	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.3	0.0	0.0	0.2	1.0	1.0	0.1	0.8	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.7	0.0	0.0	12.1	0.0	0.0	20.8	6.8	6.8	28.8	6.6	6.6
LnGrp LOS	B	A	A	B	A	A	C	A	A	C	A	A
Approach Vol, veh/h		19			55			878			745	
Approach Delay, s/veh		11.7			12.1			7.1			6.8	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.8	15.8		6.6	5.1	15.5		6.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	5.0	18.5		18.0	5.0	18.5		18.0
Max Q Clear Time (g_c+I1), s	2.1	7.0		2.3	2.2	6.1		2.9
Green Ext Time (p_c), s	0.0	4.3		0.0	0.0	3.7		0.2

Intersection Summary	
HCM 6th Ctrl Delay	7.2
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	63	58	2447	1758	16
Future Vol, veh/h	20	63	58	2447	1758	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	320
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	64	59	2472	1776	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3130	888	1792	0	-	0
Stage 1	1776	-	-	-	-	-
Stage 2	1354	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 9	287	341	-	-	-
Stage 1	121	-	-	-	-	-
Stage 2	205	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 7	287	341	-	-	-
Mov Cap-2 Maneuver	57	-	-	-	-	-
Stage 1	100	-	-	-	-	-
Stage 2	205	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	58.6	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	341	-	146	-	-
HCM Lane V/C Ratio	0.172	-	0.574	-	-
HCM Control Delay (s)	17.7	-	58.6	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	0.6	-	2.9	-	-

Notes

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

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	139	198	192	171	21
Future Vol, veh/h	16	139	198	192	171	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	158	225	218	194	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	874	206	218	0	-	0
Stage 1	206	-	-	-	-	-
Stage 2	668	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	320	835	1352	-	-	-
Stage 1	829	-	-	-	-	-
Stage 2	510	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	267	835	1352	-	-	-
Mov Cap-2 Maneuver	267	-	-	-	-	-
Stage 1	691	-	-	-	-	-
Stage 2	510	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.1	4.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1352	-	685	-	-
HCM Lane V/C Ratio	0.166	-	0.257	-	-
HCM Control Delay (s)	8.2	-	12.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.6	-	1	-	-

Intersection	
Intersection Delay, s/veh	11.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	192	20	69	186	13	12	66	87	10	58	33
Future Vol, veh/h	40	192	20	69	186	13	12	66	87	10	58	33
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	216	22	78	209	15	13	74	98	11	65	37
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.8	12.2	10.5	9.9
HCM LOS	B	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	7%	16%	26%	10%
Vol Thru, %	40%	76%	69%	57%
Vol Right, %	53%	8%	5%	33%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	165	252	268	101
LT Vol	12	40	69	10
Through Vol	66	192	186	58
RT Vol	87	20	13	33
Lane Flow Rate	185	283	301	113
Geometry Grp	1	1	1	1
Degree of Util (X)	0.276	0.409	0.436	0.177
Departure Headway (Hd)	5.362	5.206	5.217	5.622
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	669	691	690	637
Service Time	3.404	3.242	3.252	3.667
HCM Lane V/C Ratio	0.277	0.41	0.436	0.177
HCM Control Delay	10.5	11.8	12.2	9.9
HCM Lane LOS	B	B	B	A
HCM 95th-tile Q	1.1	2	2.2	0.6

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	177	19	3	182	17	13	11	1	12	9	29
Future Vol, veh/h	49	177	19	3	182	17	13	11	1	12	9	29
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	53	190	20	3	196	18	14	12	1	13	10	31
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.4	8.9	8.4	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	52%	20%	1%	24%
Vol Thru, %	44%	72%	90%	18%
Vol Right, %	4%	8%	8%	58%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	25	245	202	50
LT Vol	13	49	3	12
Through Vol	11	177	182	9
RT Vol	1	19	17	29
Lane Flow Rate	27	263	217	54
Geometry Grp	1	1	1	1
Degree of Util (X)	0.038	0.318	0.263	0.071
Departure Headway (Hd)	5.145	4.352	4.359	4.726
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	695	827	825	758
Service Time	3.179	2.371	2.379	2.757
HCM Lane V/C Ratio	0.039	0.318	0.263	0.071
HCM Control Delay	8.4	9.4	8.9	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	1.4	1.1	0.2

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	121	31	20	142	4	36	57	21	6	30	23
Future Vol, veh/h	38	121	31	20	142	4	36	57	21	6	30	23
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	142	36	24	167	5	42	67	25	7	35	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.5	9.4	9.1	8.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	32%	20%	12%	10%
Vol Thru, %	50%	64%	86%	51%
Vol Right, %	18%	16%	2%	39%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	114	190	166	59
LT Vol	36	38	20	6
Through Vol	57	121	142	30
RT Vol	21	31	4	23
Lane Flow Rate	134	224	195	69
Geometry Grp	1	1	1	1
Degree of Util (X)	0.184	0.286	0.255	0.094
Departure Headway (Hd)	4.949	4.611	4.706	4.876
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	722	776	760	730
Service Time	3.004	2.656	2.754	2.938
HCM Lane V/C Ratio	0.186	0.289	0.257	0.095
HCM Control Delay	9.1	9.5	9.4	8.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.7	1.2	1	0.3

Intersection	
Intersection Delay, s/veh	11
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	108	52	46	106	10	70	120	69	22	102	24
Future Vol, veh/h	28	108	52	46	106	10	70	120	69	22	102	24
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	31	120	58	51	118	11	78	133	77	24	113	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.7	10.7	11.8	10.2
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	27%	15%	28%	15%
Vol Thru, %	46%	57%	65%	69%
Vol Right, %	27%	28%	6%	16%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	259	188	162	148
LT Vol	70	28	46	22
Through Vol	120	108	106	102
RT Vol	69	52	10	24
Lane Flow Rate	288	209	180	164
Geometry Grp	1	1	1	1
Degree of Util (X)	0.413	0.308	0.276	0.246
Departure Headway (Hd)	5.167	5.314	5.511	5.394
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	696	675	652	664
Service Time	3.201	3.354	3.551	3.435
HCM Lane V/C Ratio	0.414	0.31	0.276	0.247
HCM Control Delay	11.8	10.7	10.7	10.2
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	2	1.3	1.1	1

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	104	101	166	202	0	114	0	104	0	0	0
Future Vol, veh/h	0	104	101	166	202	0	114	0	104	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	117	113	187	227	0	128	0	117	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	227	0	0	117	0	0	775	775	174	718	718	227
Stage 1	-	-	-	-	-	-	174	174	-	601	601	-
Stage 2	-	-	-	-	-	-	601	601	-	117	117	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1341	-	-	1471	-	-	315	329	869	344	355	812
Stage 1	-	-	-	-	-	-	828	755	-	487	489	-
Stage 2	-	-	-	-	-	-	487	489	-	888	799	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1341	-	-	1471	-	-	280	281	869	265	304	812
Mov Cap-2 Maneuver	-	-	-	-	-	-	280	281	-	265	304	-
Stage 1	-	-	-	-	-	-	828	755	-	487	418	-
Stage 2	-	-	-	-	-	-	416	418	-	769	799	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.5	17.3	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	535	1341	-	-	1471	-	-	-
HCM Lane V/C Ratio	0.458	-	-	-	0.127	-	-	-
HCM Control Delay (s)	17.3	0	-	-	7.8	0	-	0
HCM Lane LOS	C	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	2.4	0	-	-	0.4	-	-	-

Intersection	
Int Delay, s/veh	9.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	326	458	403	34	22	271
Future Vol, veh/h	326	458	403	34	22	271
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	347	487	429	36	23	288

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	465	0	-	0	1628	447
Stage 1	-	-	-	-	447	-
Stage 2	-	-	-	-	1181	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1096	-	-	-	112	612
Stage 1	-	-	-	-	644	-
Stage 2	-	-	-	-	291	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1096	-	-	-	76	612
Mov Cap-2 Maneuver	-	-	-	-	76	-
Stage 1	-	-	-	-	440	-
Stage 2	-	-	-	-	291	-

Approach	EB	WB	SB
HCM Control Delay, s	4.1	0	39.3
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1096	-	-	-	400
HCM Lane V/C Ratio	0.316	-	-	-	0.779
HCM Control Delay (s)	9.8	-	-	-	39.3
HCM Lane LOS	A	-	-	-	E
HCM 95th %tile Q(veh)	1.4	-	-	-	6.6

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	68	334	359	123	85	42
Future Vol, veh/h	68	334	359	123	85	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	220	-	-	135	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	79	388	417	143	99	49

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	560	0	-	0	963	417
Stage 1	-	-	-	-	417	-
Stage 2	-	-	-	-	546	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1011	-	-	-	284	636
Stage 1	-	-	-	-	665	-
Stage 2	-	-	-	-	580	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1011	-	-	-	262	636
Mov Cap-2 Maneuver	-	-	-	-	262	-
Stage 1	-	-	-	-	613	-
Stage 2	-	-	-	-	580	-

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	25
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1011	-	-	-	325
HCM Lane V/C Ratio	0.078	-	-	-	0.454
HCM Control Delay (s)	8.9	-	-	-	25
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0.3	-	-	-	2.3

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	19	20	16	11	18	26	74	10	12	63	0
Future Vol, veh/h	3	19	20	16	11	18	26	74	10	12	63	0
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	24	25	20	14	23	33	93	13	15	79	0
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	7.6	7.7	8.5	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	26%	0%	7%	36%	16%
Vol Thru, %	74%	0%	45%	24%	84%
Vol Right, %	0%	100%	48%	40%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	10	42	45	75
LT Vol	26	0	3	16	12
Through Vol	74	0	19	11	63
RT Vol	0	10	20	18	0
Lane Flow Rate	125	12	52	56	94
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.17	0.014	0.062	0.068	0.116
Departure Headway (Hd)	4.904	4.072	4.285	4.382	4.472
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	724	866	840	821	805
Service Time	2.691	1.859	2.291	2.388	2.48
HCM Lane V/C Ratio	0.173	0.014	0.062	0.068	0.117
HCM Control Delay	8.7	6.9	7.6	7.7	8.1
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.6	0	0.2	0.2	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	1	3	52	0	6	1	1363	91	6	975	4
Future Volume (veh/h)	3	1	3	52	0	6	1	1363	91	6	975	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3	1	3	55	0	6	1	1450	97	6	1037	4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	24	48	247	0	9	4	2053	137	14	2228	9
Arrive On Green	0.07	0.07	0.07	0.07	0.00	0.07	0.00	0.61	0.61	0.01	0.61	0.61
Sat Flow, veh/h	602	372	731	1306	0	143	1781	3381	225	1781	3631	14
Grp Volume(v), veh/h	7	0	0	61	0	0	1	759	788	6	508	533
Grp Sat Flow(s),veh/h/ln	1705	0	0	1449	0	0	1781	1777	1830	1781	1777	1868
Q Serve(g_s), s	0.0	0.0	0.0	1.6	0.0	0.0	0.0	12.4	12.5	0.1	6.5	6.5
Cycle Q Clear(g_c), s	0.2	0.0	0.0	1.7	0.0	0.0	0.0	12.4	12.5	0.1	6.5	6.5
Prop In Lane	0.43		0.43	0.90		0.10	1.00		0.12	1.00		0.01
Lane Grp Cap(c), veh/h	233	0	0	256	0	0	4	1079	1111	14	1090	1146
V/C Ratio(X)	0.03	0.00	0.00	0.24	0.00	0.00	0.24	0.70	0.71	0.42	0.47	0.47
Avail Cap(c_a), veh/h	792	0	0	776	0	0	215	1402	1443	215	1402	1473
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.5	0.0	0.0	19.2	0.0	0.0	21.0	5.7	5.7	20.8	4.4	4.4
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.5	0.0	0.0	26.6	1.1	1.1	18.3	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.5	0.0	0.0	0.0	2.6	2.7	0.1	1.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.6	0.0	0.0	19.7	0.0	0.0	47.6	6.8	6.9	39.1	4.7	4.7
LnGrp LOS	B	A	A	B	A	A	D	A	A	D	A	A
Approach Vol, veh/h		7			61			1548			1047	
Approach Delay, s/veh		18.6			19.7			6.9			4.9	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.8	30.1		7.2	4.6	30.4		7.2
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	5.1	33.3		18.1	5.1	33.3		18.1
Max Q Clear Time (g_c+I1), s	2.1	14.5		2.2	2.0	8.5		3.7
Green Ext Time (p_c), s	0.0	11.1		0.0	0.0	7.6		0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.4
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	58	95	1966	1825	20
Future Vol, veh/h	7	58	95	1966	1825	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	320
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	61	100	2069	1921	21

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3156	961	1942	0	-	0
Stage 1	1921	-	-	-	-	-
Stage 2	1235	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	8	256	298	-	-	-
Stage 1	101	-	-	-	-	-
Stage 2	238	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 5	256	298	-	-	-
Mov Cap-2 Maneuver	43	-	-	-	-	-
Stage 1	67	-	-	-	-	-
Stage 2	238	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	40.8	1.1	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	298	-	167	-	-
HCM Lane V/C Ratio	0.336	-	0.41	-	-
HCM Control Delay (s)	23.1	-	40.8	-	-
HCM Lane LOS	C	-	E	-	-
HCM 95th %tile Q(veh)	1.4	-	1.8	-	-

Notes

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

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	146	150	145	106	12
Future Vol, veh/h	13	146	150	145	106	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	85	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	164	169	163	119	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	627	126	132	0	-	0
Stage 1	126	-	-	-	-	-
Stage 2	501	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	447	924	1453	-	-	-
Stage 1	900	-	-	-	-	-
Stage 2	609	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	395	924	1453	-	-	-
Mov Cap-2 Maneuver	395	-	-	-	-	-
Stage 1	796	-	-	-	-	-
Stage 2	609	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.5	4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1453	-	833	-	-
HCM Lane V/C Ratio	0.116	-	0.214	-	-
HCM Control Delay (s)	7.8	-	10.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.4	-	0.8	-	-

Intersection	
Intersection Delay, s/veh	12.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	252	24	43	96	11	9	61	106	26	49	9
Future Vol, veh/h	60	252	24	43	96	11	9	61	106	26	49	9
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	74	311	30	53	119	14	11	75	131	32	60	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	15.4	10.7	11	10.2
HCM LOS	C	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	5%	18%	29%	31%
Vol Thru, %	35%	75%	64%	58%
Vol Right, %	60%	7%	7%	11%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	176	336	150	84
LT Vol	9	60	43	26
Through Vol	61	252	96	49
RT Vol	106	24	11	9
Lane Flow Rate	217	415	185	104
Geometry Grp	1	1	1	1
Degree of Util (X)	0.324	0.591	0.282	0.17
Departure Headway (Hd)	5.36	5.131	5.483	5.918
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	669	701	654	605
Service Time	3.407	3.168	3.529	3.973
HCM Lane V/C Ratio	0.324	0.592	0.283	0.172
HCM Control Delay	11	15.4	10.7	10.2
HCM Lane LOS	B	C	B	B
HCM 95th-tile Q	1.4	3.9	1.2	0.6

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	197	20	3	133	26	13	14	7	6	13	34
Future Vol, veh/h	41	197	20	3	133	26	13	14	7	6	13	34
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	44	210	21	3	141	28	14	15	7	6	14	36
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.5	8.5	8.2	8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	38%	16%	2%	11%
Vol Thru, %	41%	76%	82%	25%
Vol Right, %	21%	8%	16%	64%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	34	258	162	53
LT Vol	13	41	3	6
Through Vol	14	197	133	13
RT Vol	7	20	26	34
Lane Flow Rate	36	274	172	56
Geometry Grp	1	1	1	1
Degree of Util (X)	0.05	0.329	0.208	0.072
Departure Headway (Hd)	4.943	4.321	4.349	4.602
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	724	834	827	779
Service Time	2.974	2.341	2.37	2.63
HCM Lane V/C Ratio	0.05	0.329	0.208	0.072
HCM Control Delay	8.2	9.5	8.5	8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	1.4	0.8	0.2

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	111	23	19	127	9	54	50	36	7	23	27
Future Vol, veh/h	22	111	23	19	127	9	54	50	36	7	23	27
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	125	26	21	143	10	61	56	40	8	26	30
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9	9.1	9	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	39%	14%	12%	12%
Vol Thru, %	36%	71%	82%	40%
Vol Right, %	26%	15%	6%	47%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	140	156	155	57
LT Vol	54	22	19	7
Through Vol	50	111	127	23
RT Vol	36	23	9	27
Lane Flow Rate	157	175	174	64
Geometry Grp	1	1	1	1
Degree of Util (X)	0.208	0.224	0.225	0.083
Departure Headway (Hd)	4.749	4.61	4.659	4.691
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	753	776	768	760
Service Time	2.791	2.652	2.701	2.741
HCM Lane V/C Ratio	0.208	0.226	0.227	0.084
HCM Control Delay	9	9	9.1	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.9	0.9	0.3

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	61	32	49	80	16	53	127	36	6	100	23
Future Vol, veh/h	42	61	32	49	80	16	53	127	36	6	100	23
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	65	34	52	85	17	56	135	38	6	106	24
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.2	9.5	10	9.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	25%	31%	34%	5%
Vol Thru, %	59%	45%	55%	78%
Vol Right, %	17%	24%	11%	18%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	216	135	145	129
LT Vol	53	42	49	6
Through Vol	127	61	80	100
RT Vol	36	32	16	23
Lane Flow Rate	230	144	154	137
Geometry Grp	1	1	1	1
Degree of Util (X)	0.306	0.197	0.214	0.185
Departure Headway (Hd)	4.791	4.94	5.004	4.863
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	745	721	711	731
Service Time	2.854	3.012	3.076	2.934
HCM Lane V/C Ratio	0.309	0.2	0.217	0.187
HCM Control Delay	10	9.2	9.5	9.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1.3	0.7	0.8	0.7

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	100	107	66	159	6	85	3	76	0	4	1
Future Vol, veh/h	0	100	107	66	159	6	85	3	76	0	4	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	109	116	72	173	7	92	3	83	0	4	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	180	0	0	109	0	0	490	491	167	432	430	177
Stage 1	-	-	-	-	-	-	167	167	-	321	321	-
Stage 2	-	-	-	-	-	-	323	324	-	111	109	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1396	-	-	1481	-	-	489	478	877	534	518	866
Stage 1	-	-	-	-	-	-	835	760	-	691	652	-
Stage 2	-	-	-	-	-	-	689	650	-	894	805	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1396	-	-	1481	-	-	465	452	877	461	490	866
Mov Cap-2 Maneuver	-	-	-	-	-	-	465	452	-	461	490	-
Stage 1	-	-	-	-	-	-	835	760	-	691	617	-
Stage 2	-	-	-	-	-	-	646	615	-	806	805	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.2	10.2	11.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	866	1396	-	-	1481	-	-	537
HCM Lane V/C Ratio	0.206	-	-	-	0.048	-	-	0.01
HCM Control Delay (s)	10.2	0	-	-	7.6	0	-	11.8
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.8	0	-	-	0.2	-	-	0

Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	394	332	306	28	17	147
Future Vol, veh/h	394	332	306	28	17	147
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	415	349	322	29	18	155

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	351	0	-	0	1516	337
Stage 1	-	-	-	-	337	-
Stage 2	-	-	-	-	1179	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1208	-	-	-	131	705
Stage 1	-	-	-	-	723	-
Stage 2	-	-	-	-	292	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1208	-	-	-	86	705
Mov Cap-2 Maneuver	-	-	-	-	86	-
Stage 1	-	-	-	-	474	-
Stage 2	-	-	-	-	292	-

Approach	EB	WB	SB
HCM Control Delay, s	5.2	0	20.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1208	-	-	-	404
HCM Lane V/C Ratio	0.343	-	-	-	0.427
HCM Control Delay (s)	9.5	-	-	-	20.4
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	1.5	-	-	-	2.1

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	65	267	311	138	56	44
Future Vol, veh/h	65	267	311	138	56	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	220	-	-	135	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	72	297	346	153	62	49

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	499	0	-	0	787	346
Stage 1	-	-	-	-	346	-
Stage 2	-	-	-	-	441	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1065	-	-	-	360	697
Stage 1	-	-	-	-	716	-
Stage 2	-	-	-	-	648	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1065	-	-	-	336	697
Mov Cap-2 Maneuver	-	-	-	-	336	-
Stage 1	-	-	-	-	667	-
Stage 2	-	-	-	-	648	-

Approach	EB	WB	SB
HCM Control Delay, s	1.7	0	16.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1065	-	-	-	435
HCM Lane V/C Ratio	0.068	-	-	-	0.255
HCM Control Delay (s)	8.6	-	-	-	16.1
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	1

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	15	14	10	8	3	32	92	9	7	36	0
Future Vol, veh/h	0	15	14	10	8	3	32	92	9	7	36	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	17	16	12	9	3	37	107	10	8	42	0
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	7.3	7.6	8.6	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	26%	0%	0%	48%	16%
Vol Thru, %	74%	0%	52%	38%	84%
Vol Right, %	0%	100%	48%	14%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	124	9	29	21	43
LT Vol	32	0	0	10	7
Through Vol	92	0	15	8	36
RT Vol	0	9	14	3	0
Lane Flow Rate	144	10	34	24	50
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.192	0.012	0.039	0.03	0.06
Departure Headway (Hd)	4.791	3.96	4.17	4.479	4.284
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	747	899	864	804	824
Service Time	2.534	1.703	2.171	2.48	2.374
HCM Lane V/C Ratio	0.193	0.011	0.039	0.03	0.061
HCM Control Delay	8.7	6.8	7.3	7.6	7.7
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.7	0	0.1	0.1	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	6	4	48	1	3	15	982	67	7	718	3
Future Volume (veh/h)	9	6	4	48	1	3	15	982	67	7	718	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	6	4	51	1	3	16	1034	71	7	756	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	41	27	322	2	6	37	1649	113	17	1733	7
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.02	0.49	0.49	0.01	0.48	0.48
Sat Flow, veh/h	796	536	355	1361	27	80	1781	3374	232	1781	3630	14
Grp Volume(v), veh/h	19	0	0	55	0	0	16	544	561	7	370	389
Grp Sat Flow(s),veh/h/ln	1688	0	0	1467	0	0	1781	1777	1829	1781	1777	1868
Q Serve(g_s), s	0.0	0.0	0.0	0.8	0.0	0.0	0.3	7.2	7.2	0.1	4.4	4.4
Cycle Q Clear(g_c), s	0.3	0.0	0.0	1.1	0.0	0.0	0.3	7.2	7.2	0.1	4.4	4.4
Prop In Lane	0.47		0.21	0.93		0.05	1.00		0.13	1.00		0.01
Lane Grp Cap(c), veh/h	295	0	0	330	0	0	37	869	894	17	848	892
V/C Ratio(X)	0.06	0.00	0.00	0.17	0.00	0.00	0.43	0.63	0.63	0.42	0.44	0.44
Avail Cap(c_a), veh/h	1074	0	0	1034	0	0	287	1307	1345	287	1307	1374
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.7	0.0	0.0	14.0	0.0	0.0	15.3	6.0	6.0	15.6	5.5	5.5
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.0	7.8	0.7	0.7	15.6	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.3	0.0	0.0	0.2	1.4	1.5	0.1	0.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.8	0.0	0.0	14.3	0.0	0.0	23.1	6.7	6.7	31.2	5.8	5.8
LnGrp LOS	B	A	A	B	A	A	C	A	A	C	A	A
Approach Vol, veh/h		19			55			1121			766	
Approach Delay, s/veh		13.8			14.3			6.9			6.0	
Approach LOS		B			B			A			A	

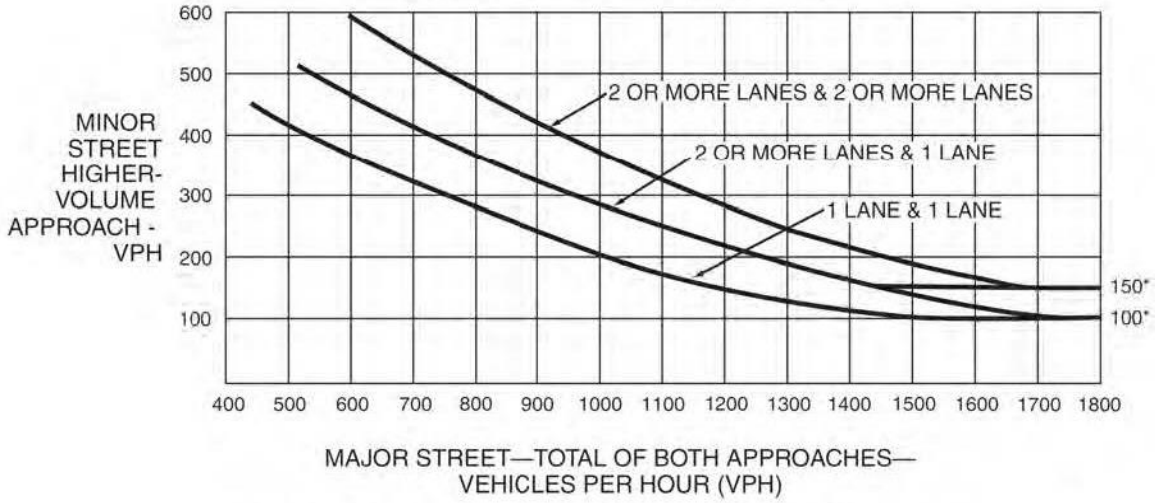
Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.8	20.0		6.9	5.2	19.6		6.9
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	5.1	23.3		18.1	5.1	23.3		18.1
Max Q Clear Time (g_c+I1), s	2.1	9.2		2.3	2.3	6.4		3.1
Green Ext Time (p_c), s	0.0	6.3		0.0	0.0	4.4		0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.9
HCM 6th LOS	A

SIGNAL WARRANT ANALYSIS

KDA

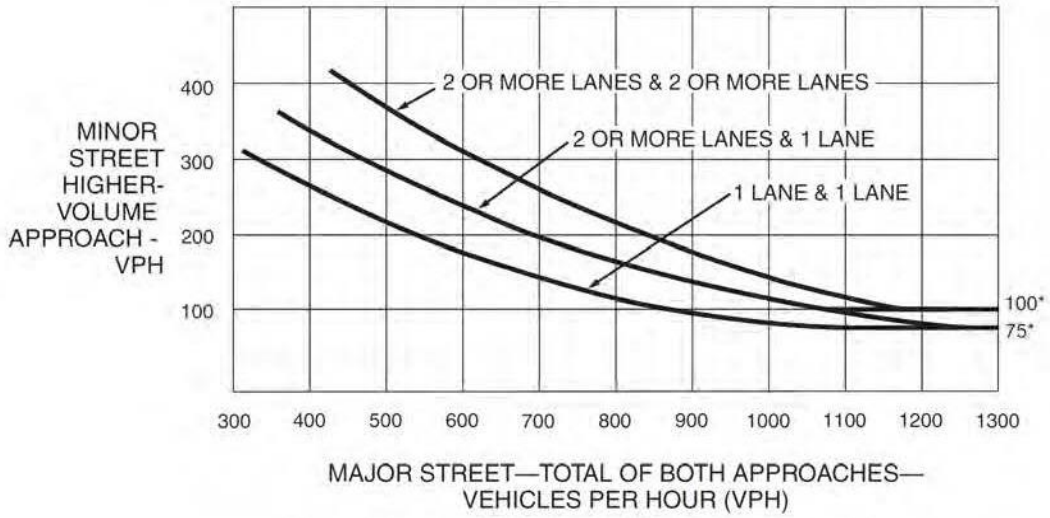
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

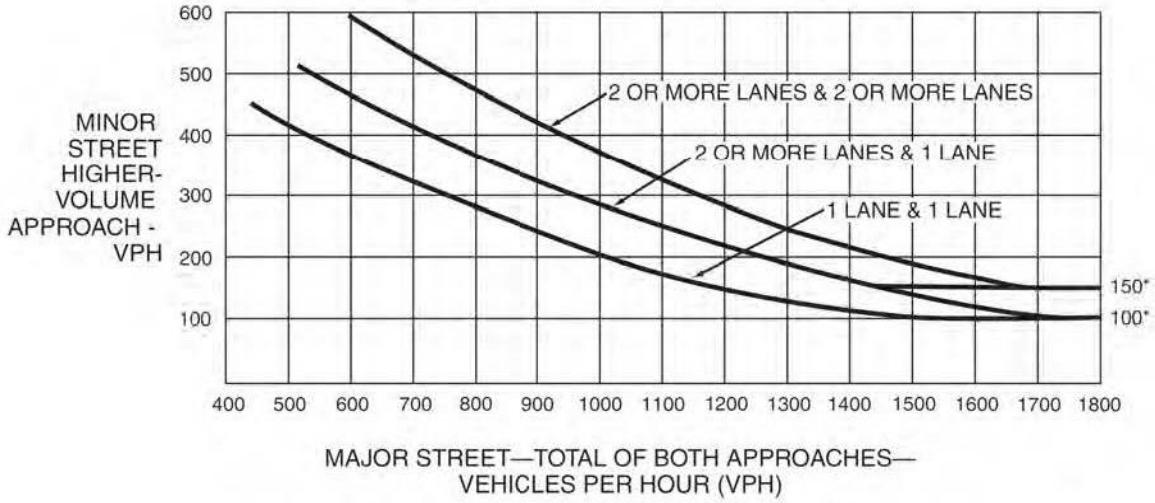


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

SR 49 – CRAMER ROAD : EXISTING PLUS PROJECT

SATURDAY (●) :	MAJOR 2517	MINOR 20
WEEKDAY (■) :	MAJOR 2812	MINOR 27

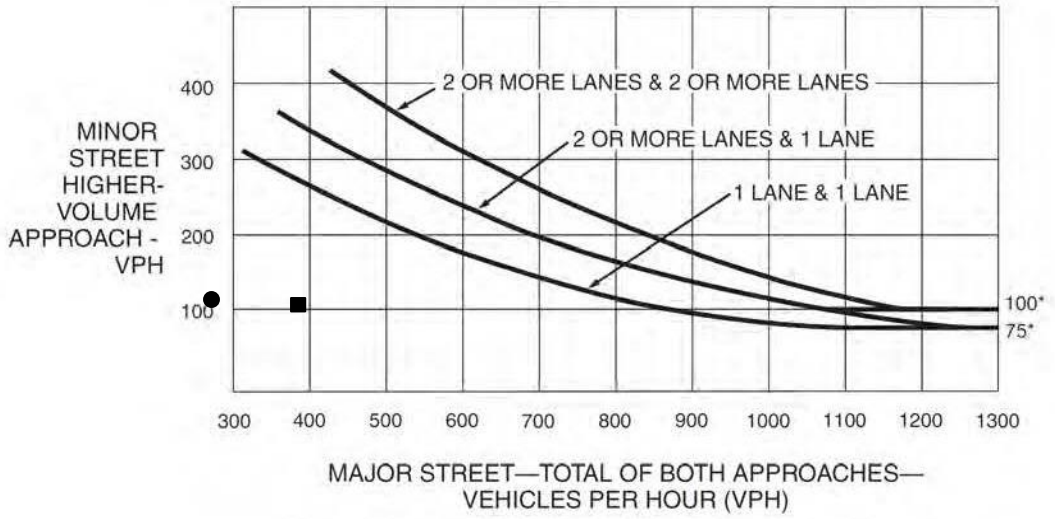
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

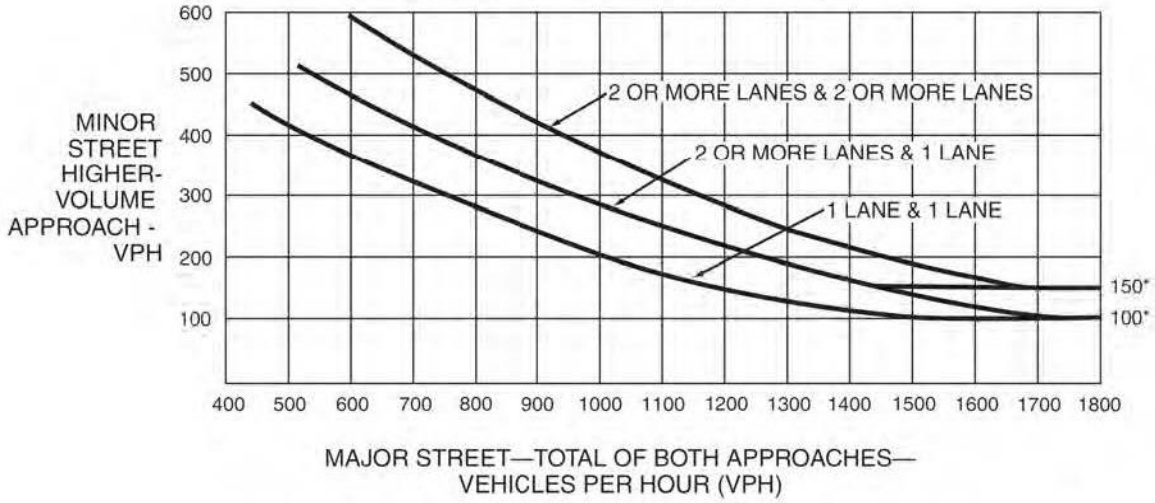


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

PLACER HILLS – COMBIE ROAD : EXISTING PLUS PROJECT

SATURDAY (●) :	MAJOR 277	MINOR 107
WEEKDAY (■) :	MAJOR 391	MINOR 104

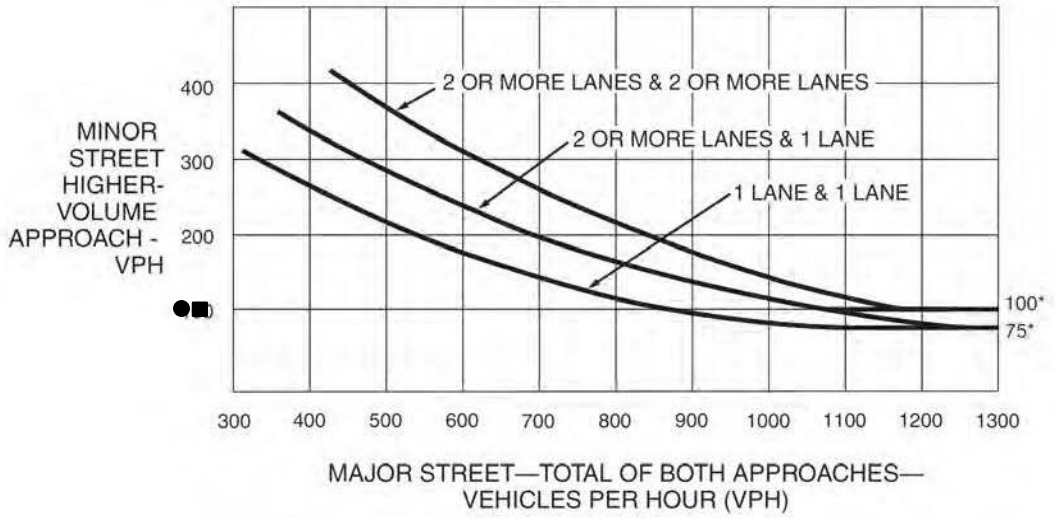
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

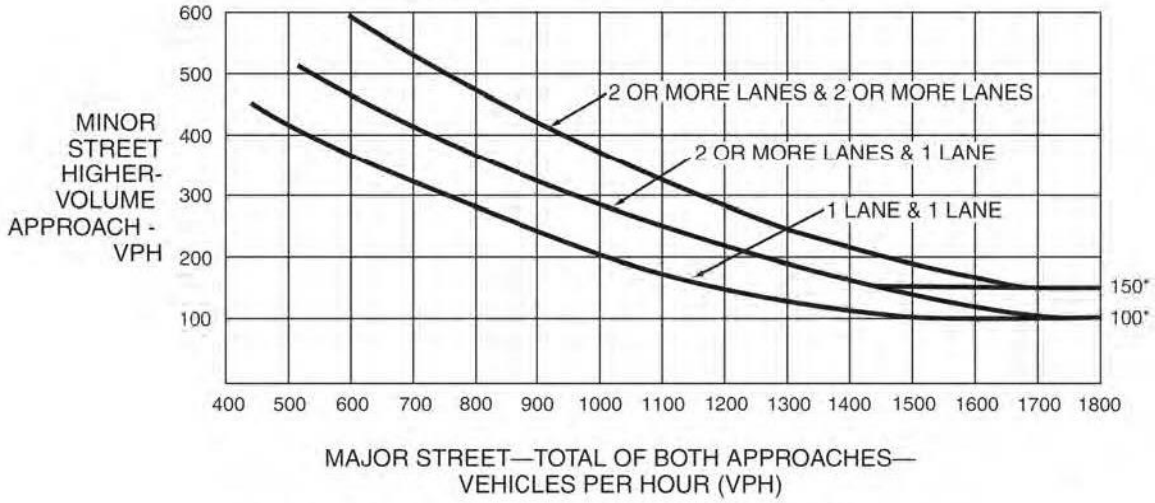


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

MCCOURTNEY ROAD – WISE ROAD : EXISTING PLUS PROJECT

SATURDAY (●) :	MAJOR 220	MINOR 102
WEEKDAY (■) :	MAJOR 256	MINOR 101

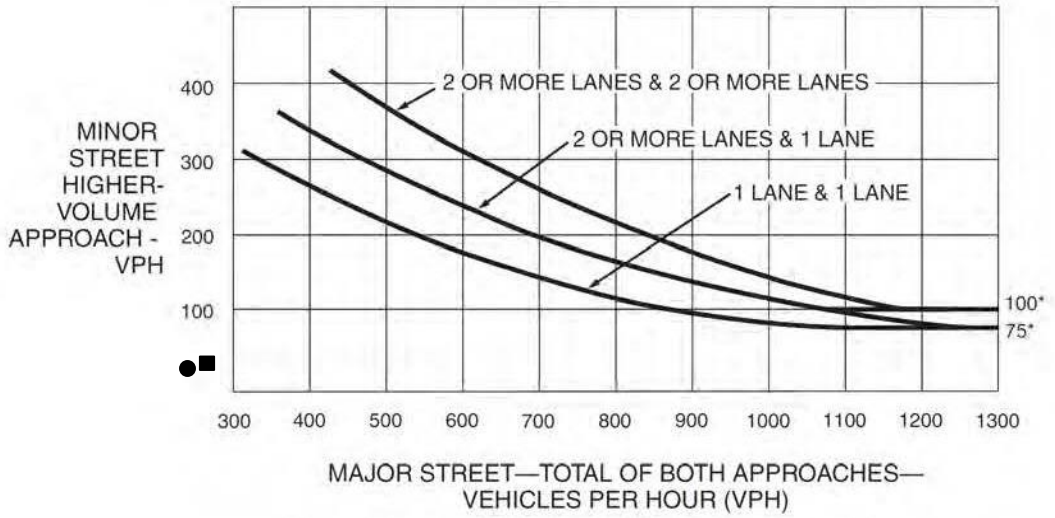
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

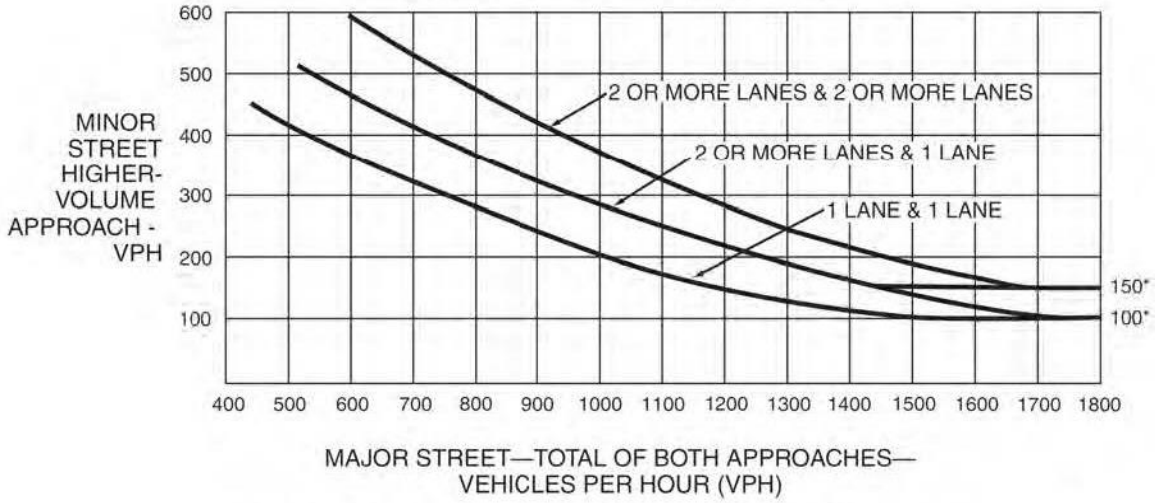


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

CROSBY HEROLD ROAD – WISE ROAD : EXISTING PLUS PROJECT

SATURDAY (●) :	MAJOR 216	MINOR 26
WEEKDAY (■) :	MAJOR 242	MINOR 31

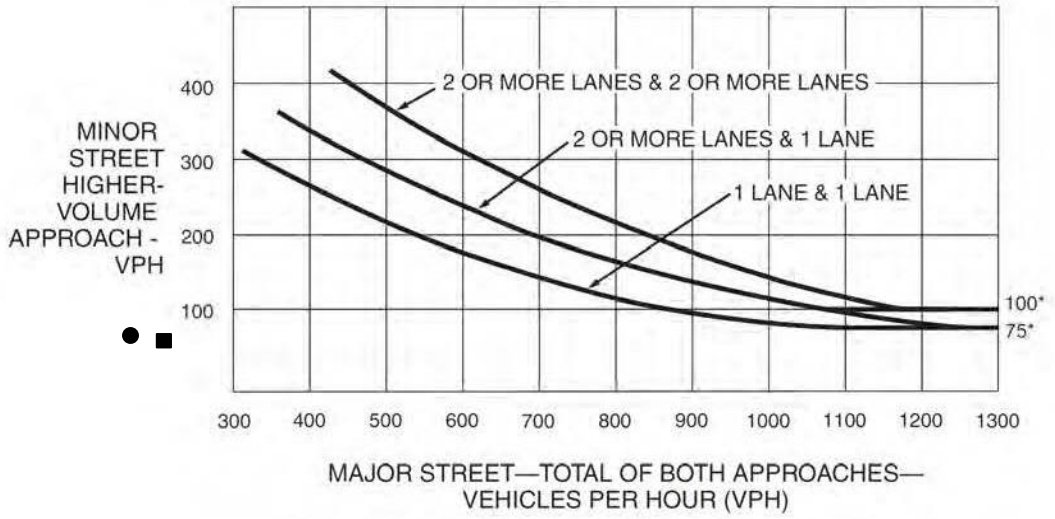
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

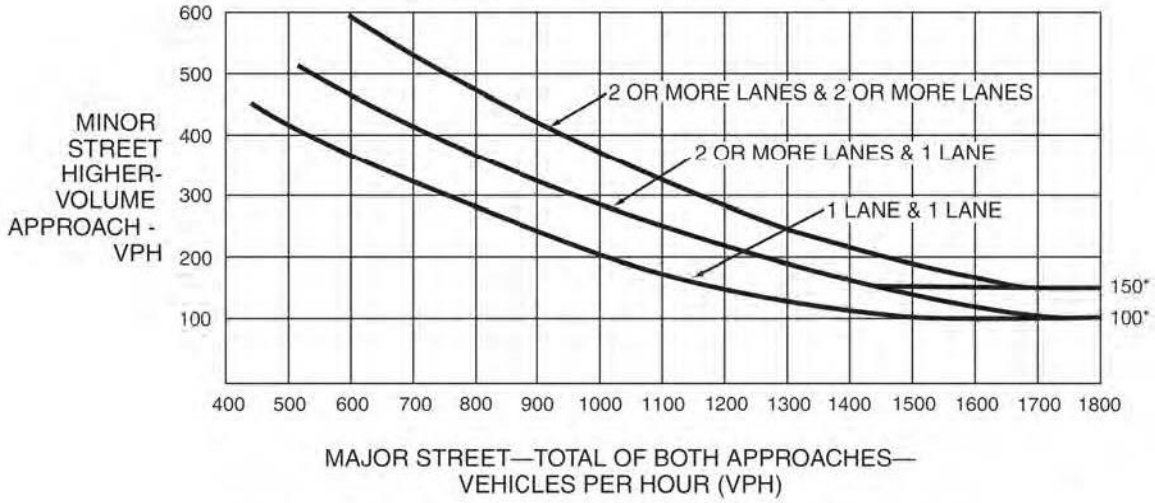


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

GARDEN BAR ROAD – WISE ROAD : EXISTING PLUS PROJECT

SATURDAY (●) :	MAJOR 168	MINOR 79
WEEKDAY (■) :	MAJOR 208	MINOR 68

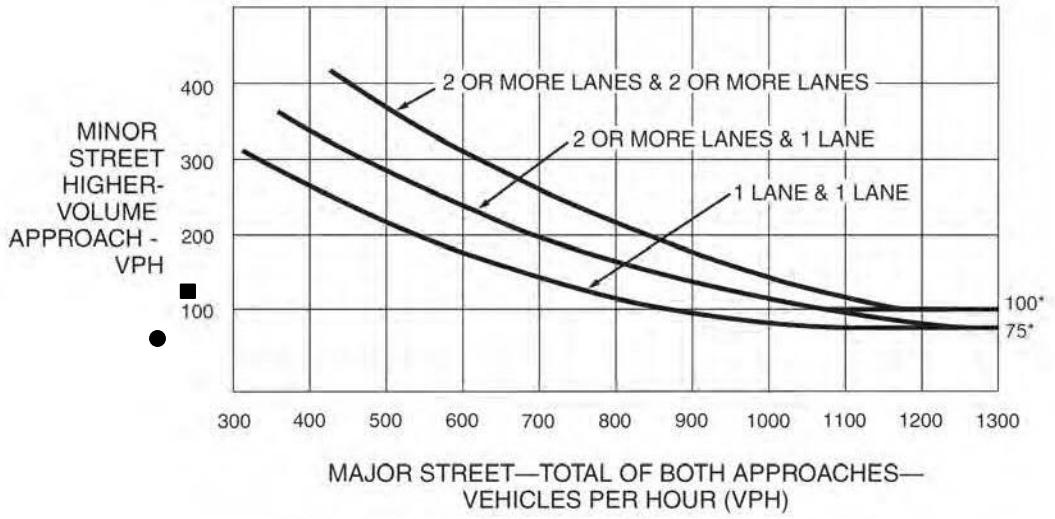
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

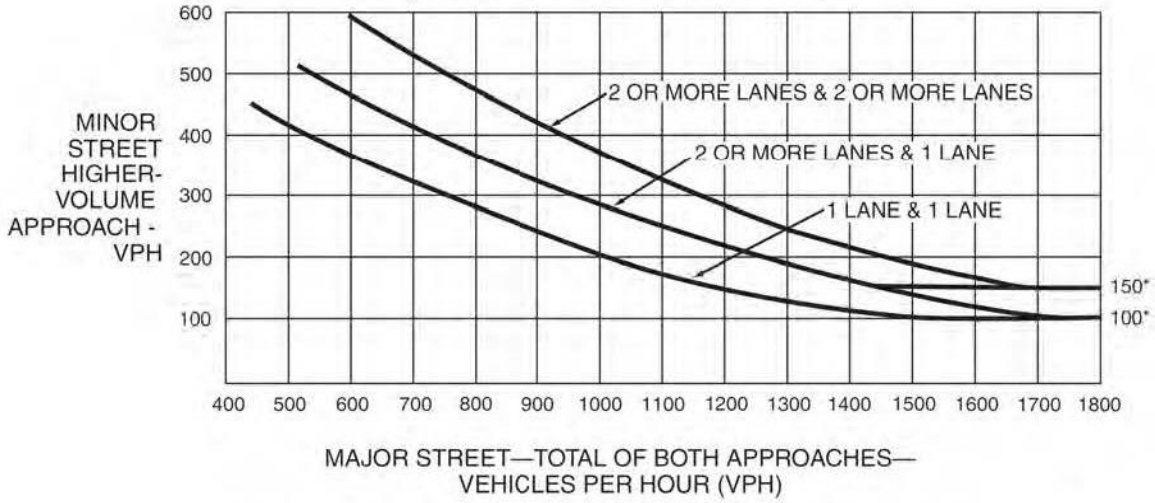


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

BELL ROAD – JOEGER ROAD : EXISTING PLUS PROJECT

SATURDAY (●) :	MAJOR 172	MINOR 82
WEEKDAY (■) :	MAJOR 233	MINOR 115

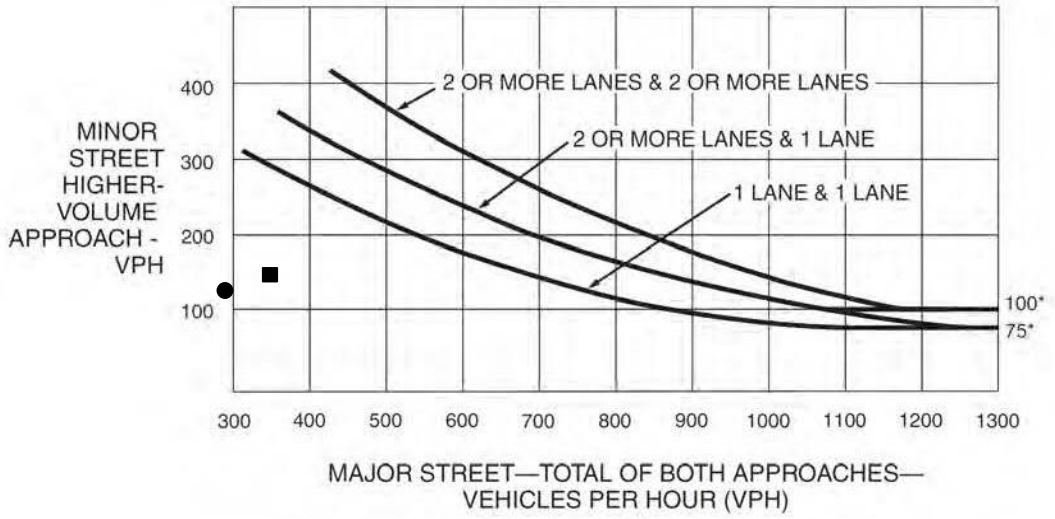
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

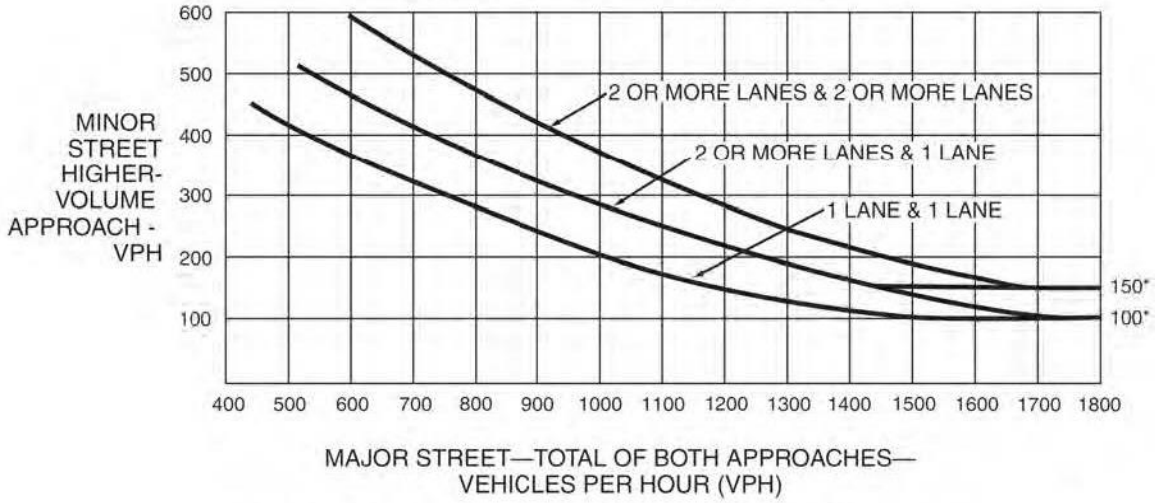


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

MT VERNON ROAD – ATWOOD ROAD : EXISTING PLUS PROJECT

SATURDAY (●) :	MAJOR 257	MINOR 114
WEEKDAY (■) :	MAJOR 355	MINOR 148

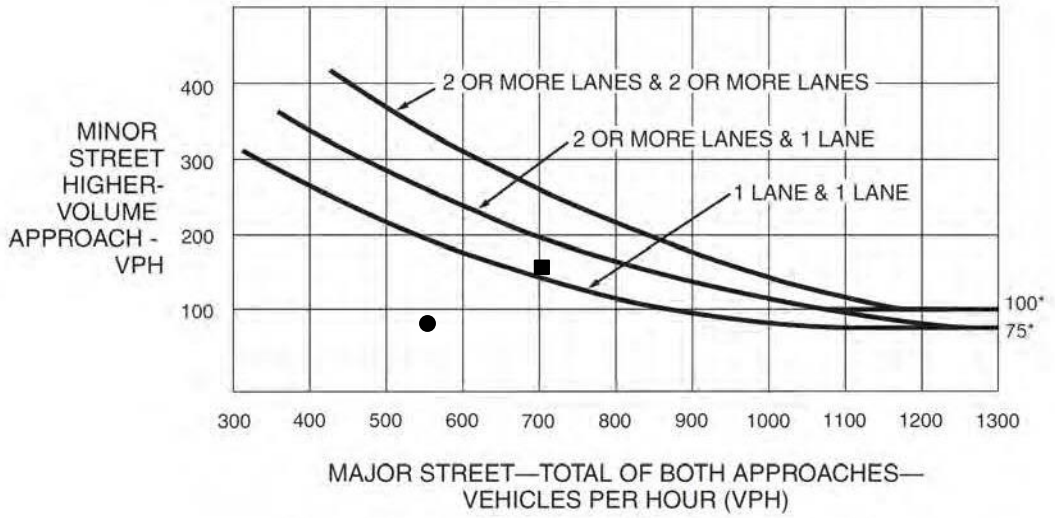
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

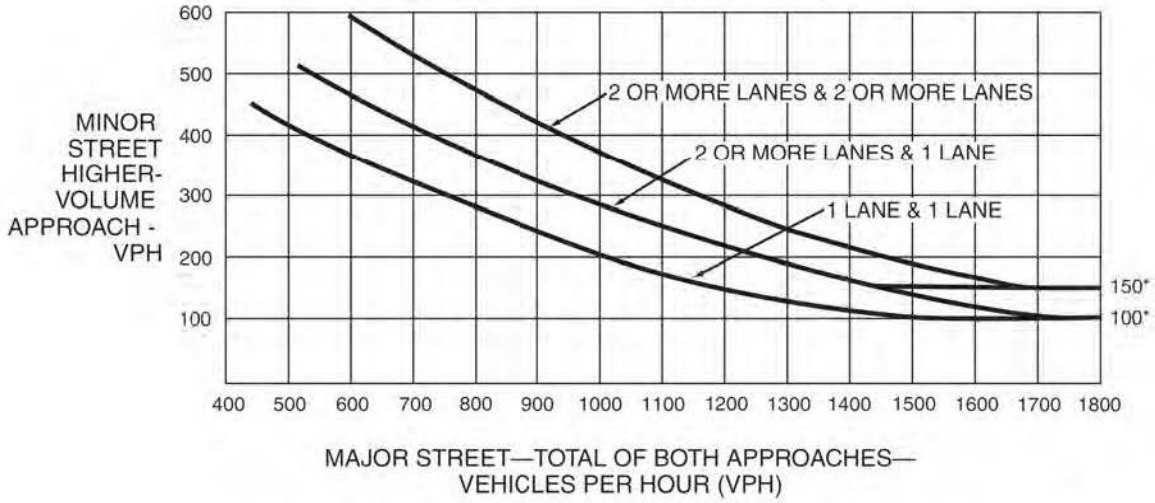


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

FOWLER ROAD – SR 193 : EXISTING PLUS PROJECT

SATURDAY (●) :	MAJOR 552	MINOR 96
WEEKDAY (■) :	MAJOR 701	MINOR 161

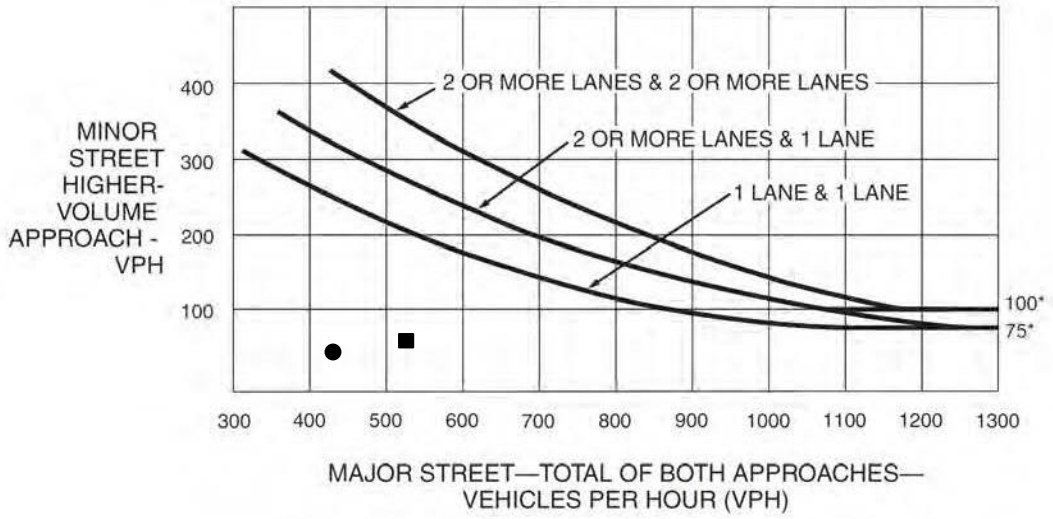
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

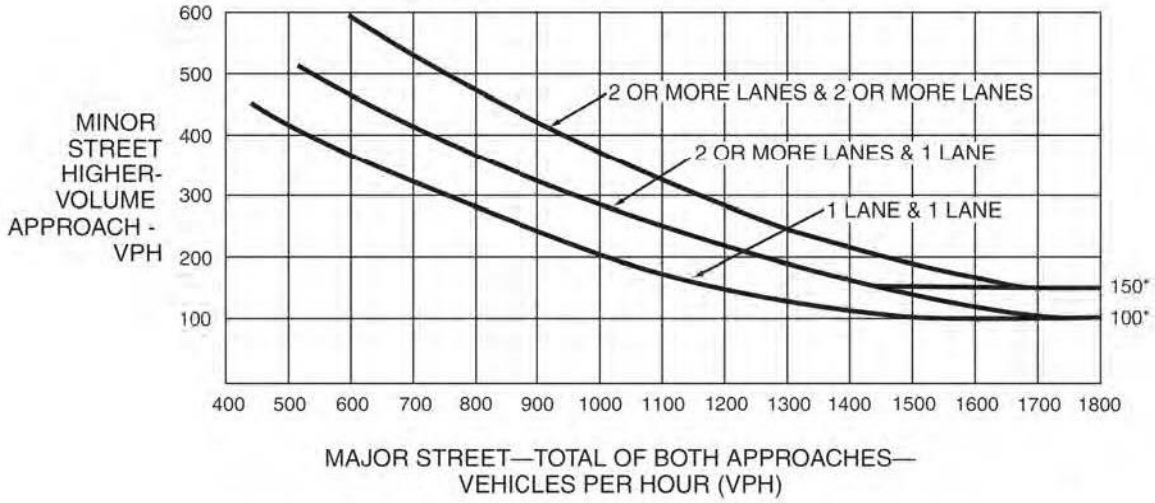


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

GOLD HILL ROAD – SR 193 : EXISTING PLUS PROJECT

SATURDAY (●) :	MAJOR 433	MINOR 64
WEEKDAY (■) :	MAJOR 518	MINOR 76

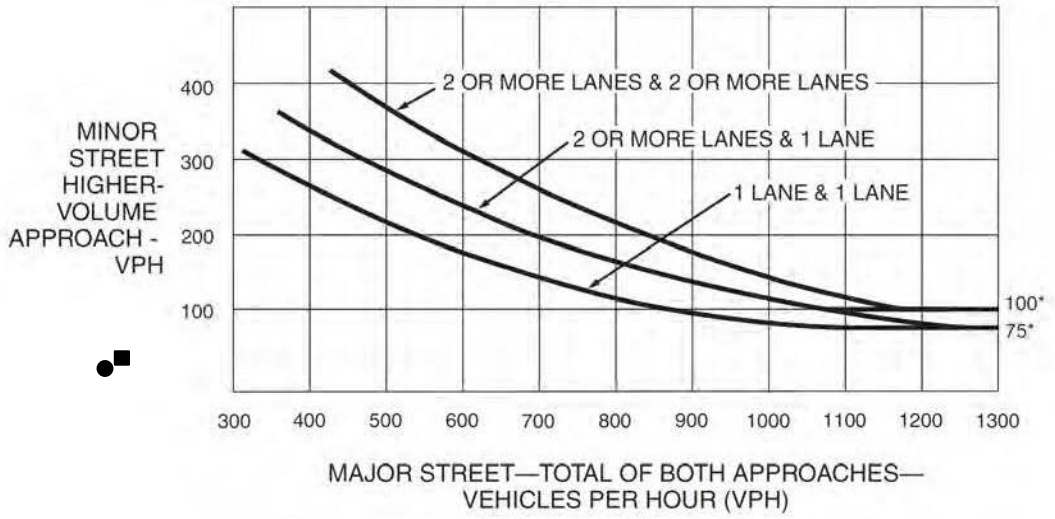
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

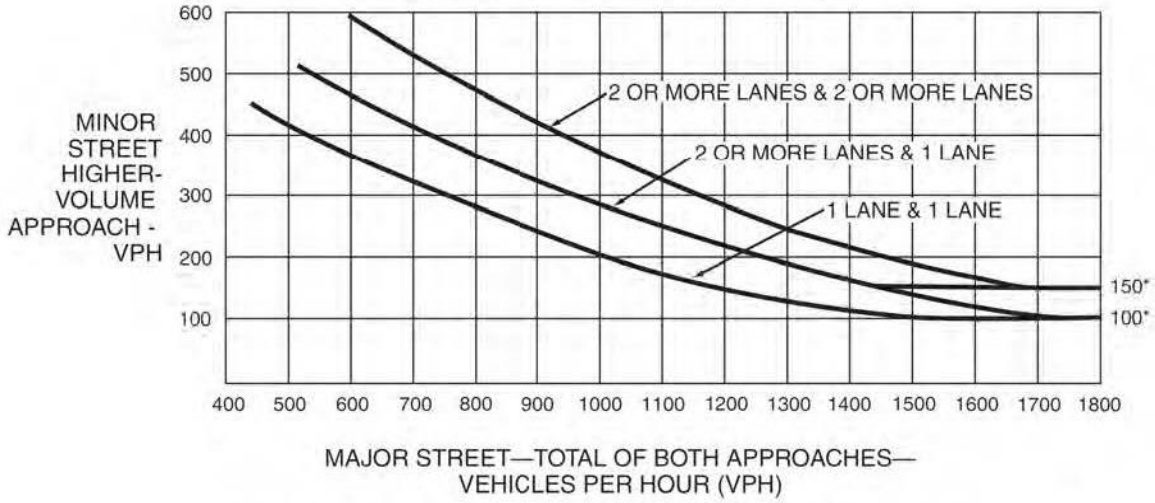


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

WISE ROAD – CRATER HILL ROAD : EXISTING PLUS PROJECT

SATURDAY (●) :	MAJOR 108	MINOR 14
WEEKDAY (■) :	MAJOR 114	MINOR 30

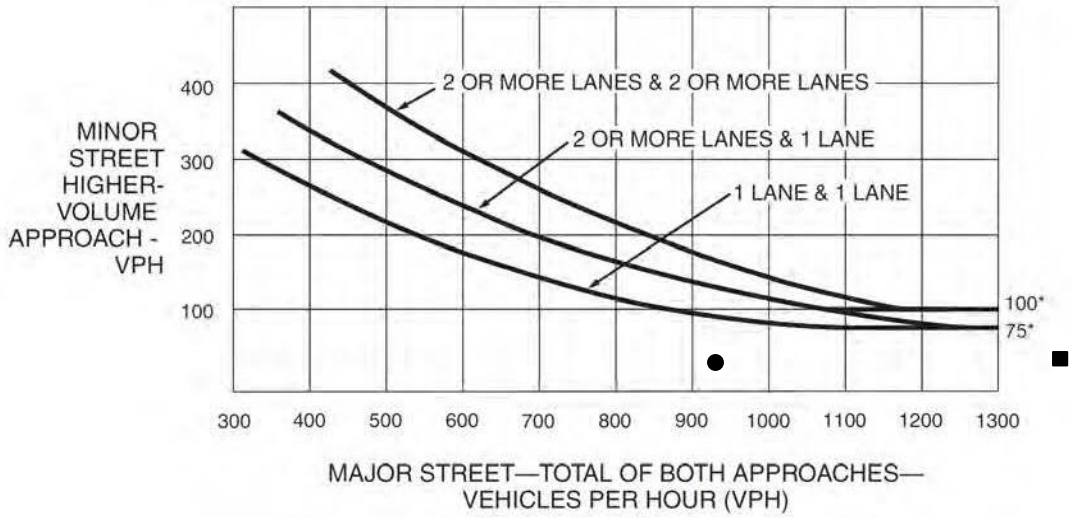
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

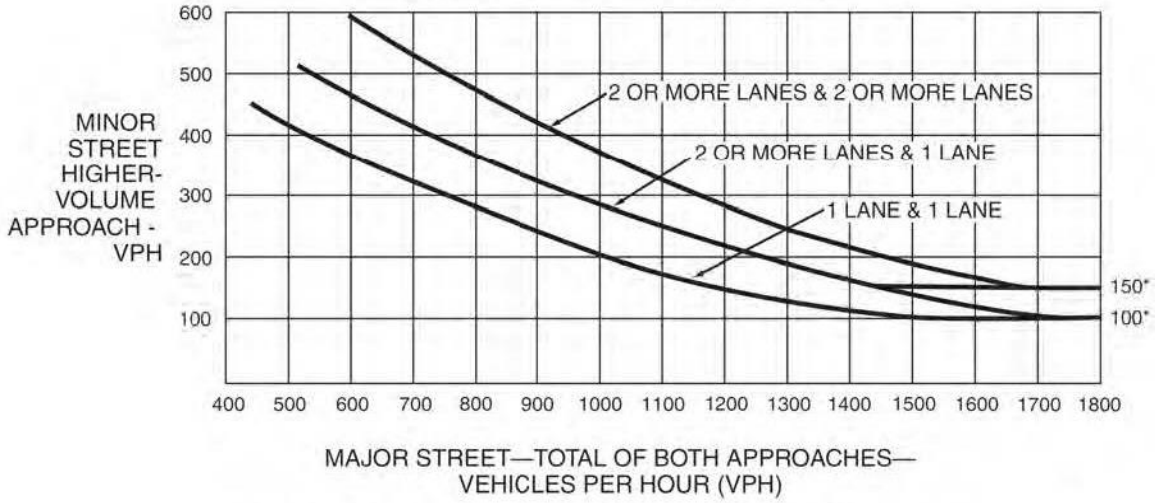


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

SIERRA COLLEGE BLVD – DELMAR AVE : EXISTING PLUS PROJECT

SATURDAY (●) :	MAJOR 937	MINOR 35
WEEKDAY (■) :	MAJOR 1407	MINOR 39

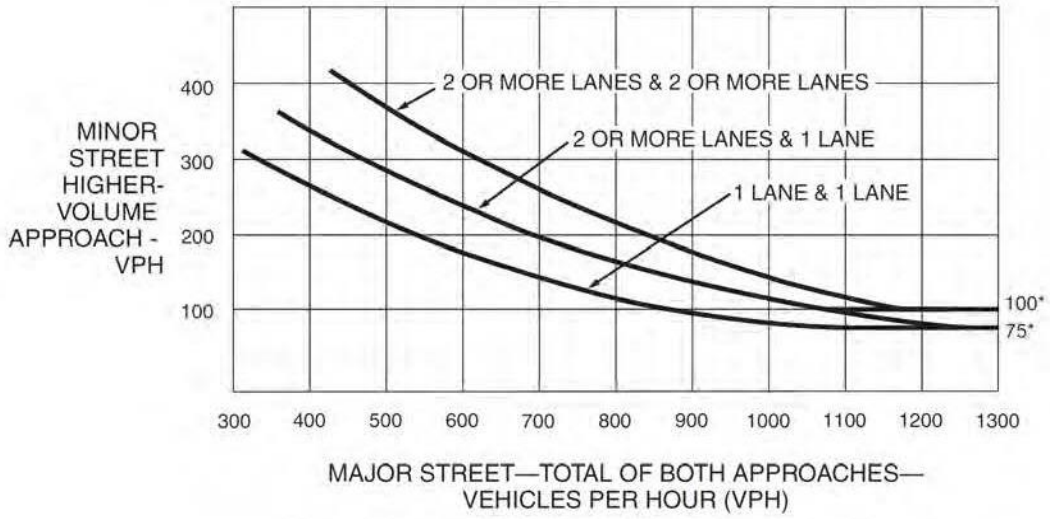
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

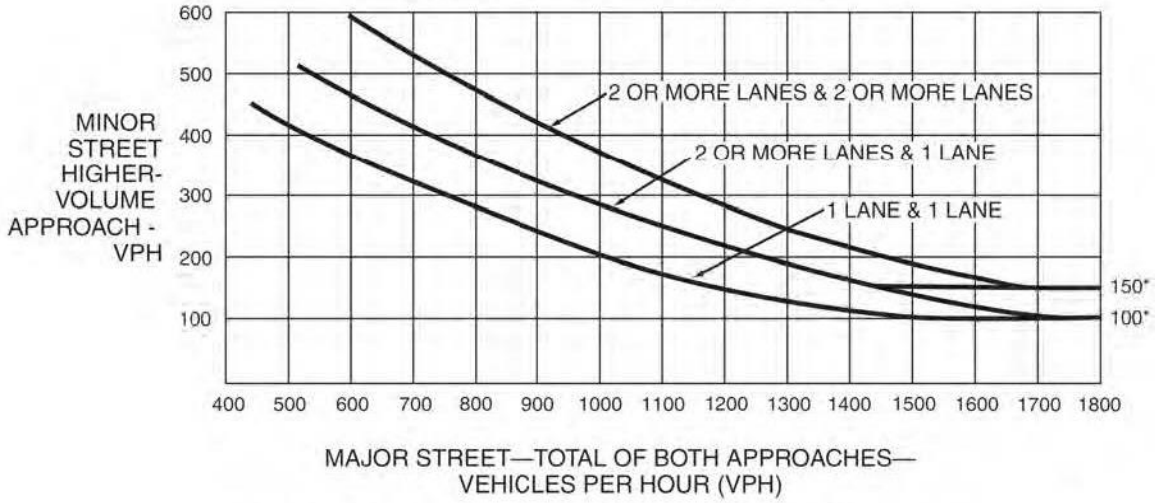


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

SR 49 – CRAMER ROAD : CUMULATIVE 20 YEAR BACKGROUND

SATURDAY (●) :	MAJOR 3815	MINOR 61
WEEKDAY (■) :	MAJOR 2812	MINOR 58

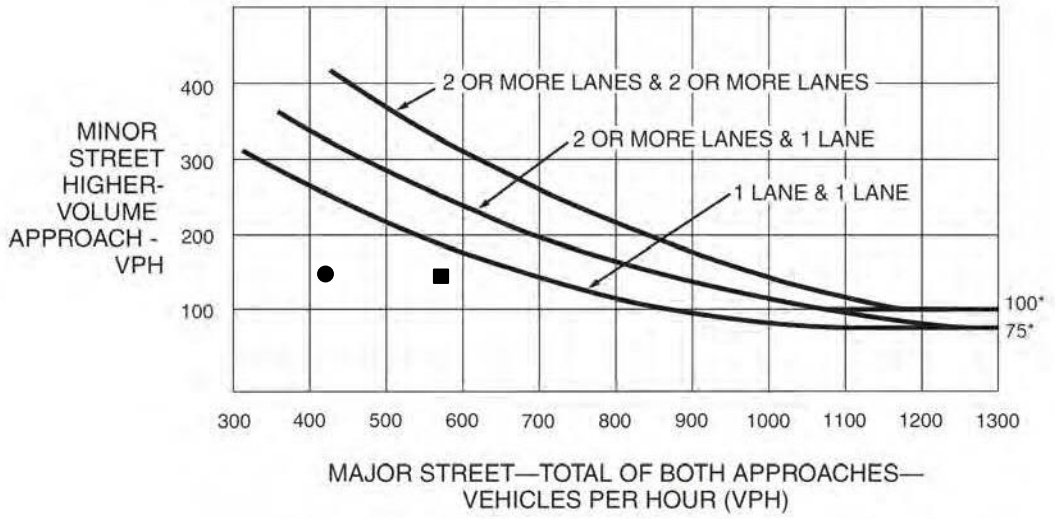
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

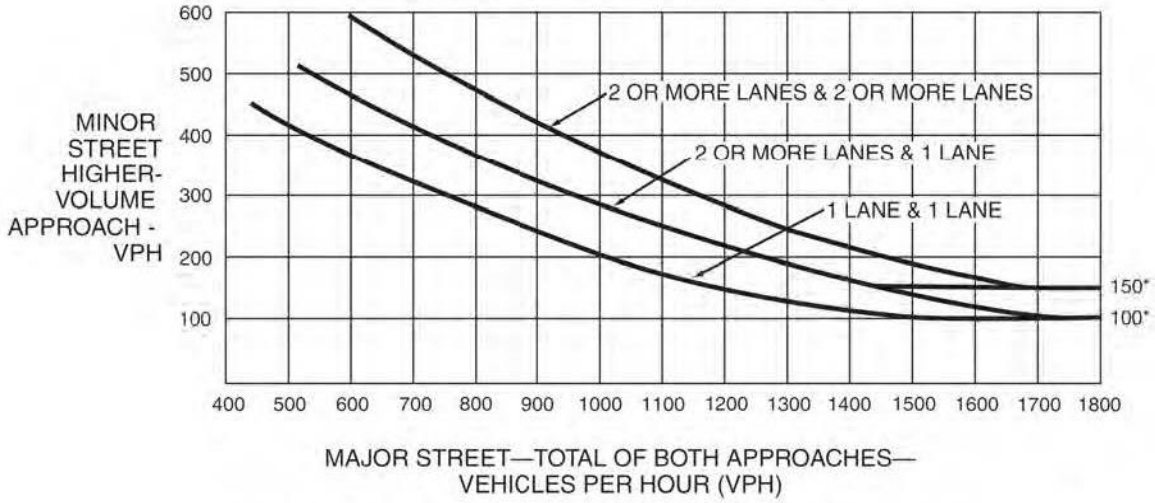


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

PLACER HILLS – COMBIE ROAD : CUMULATIVE 20 YEAR BACKGROUND

SATURDAY (●) :	MAJOR 413	MINOR 159
WEEKDAY (■) :	MAJOR 582	MINOR 155

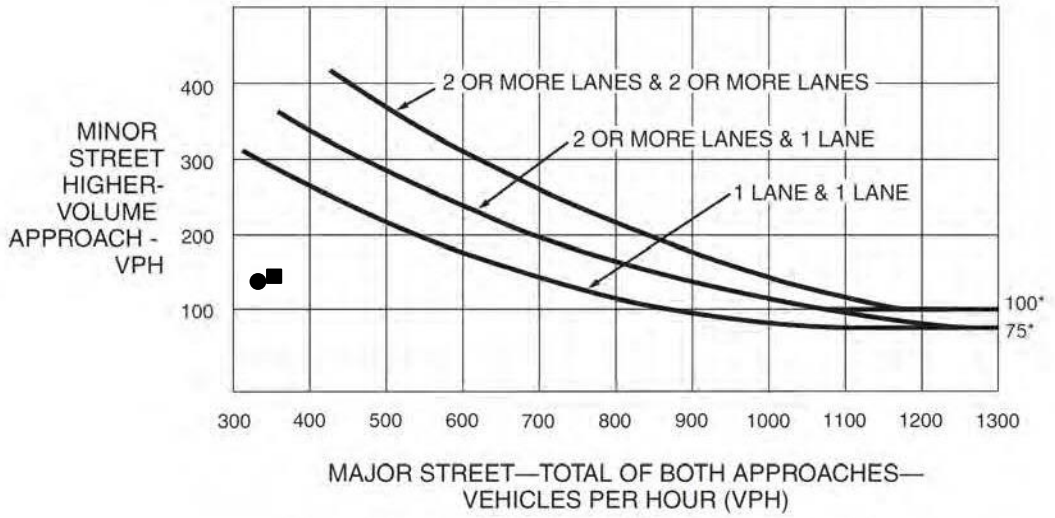
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

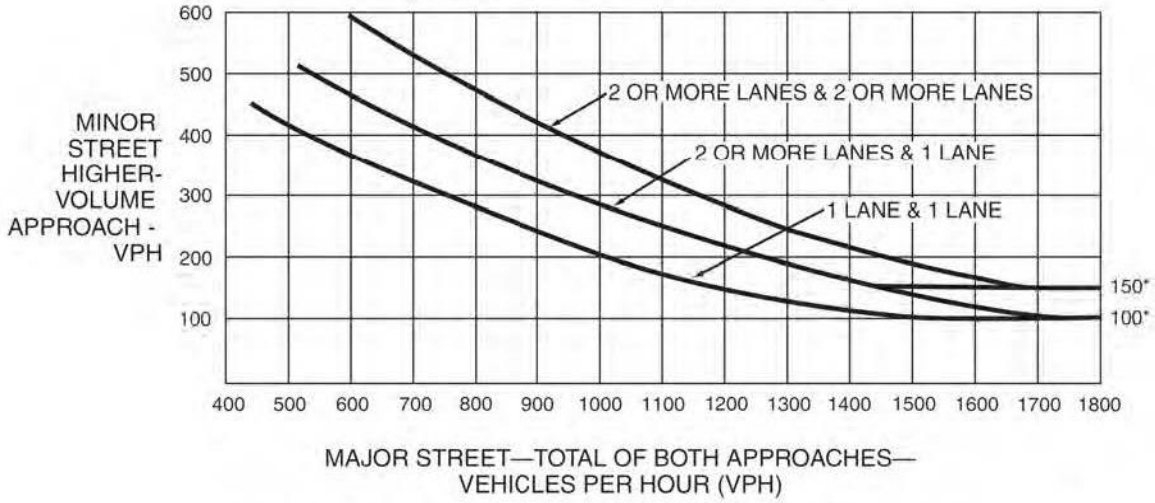


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

MCCOURTNEY ROAD – WISE ROAD : CUMULATIVE 20 YEAR BACKGROUND

SATURDAY (●) :	MAJOR 322	MINOR 135
WEEKDAY (■) :	MAJOR 359	MINOR 141

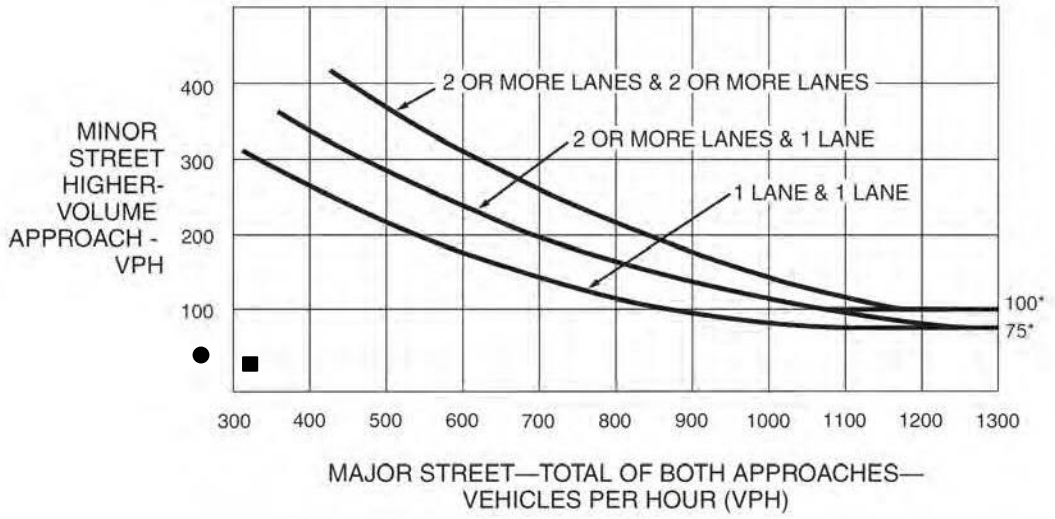
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

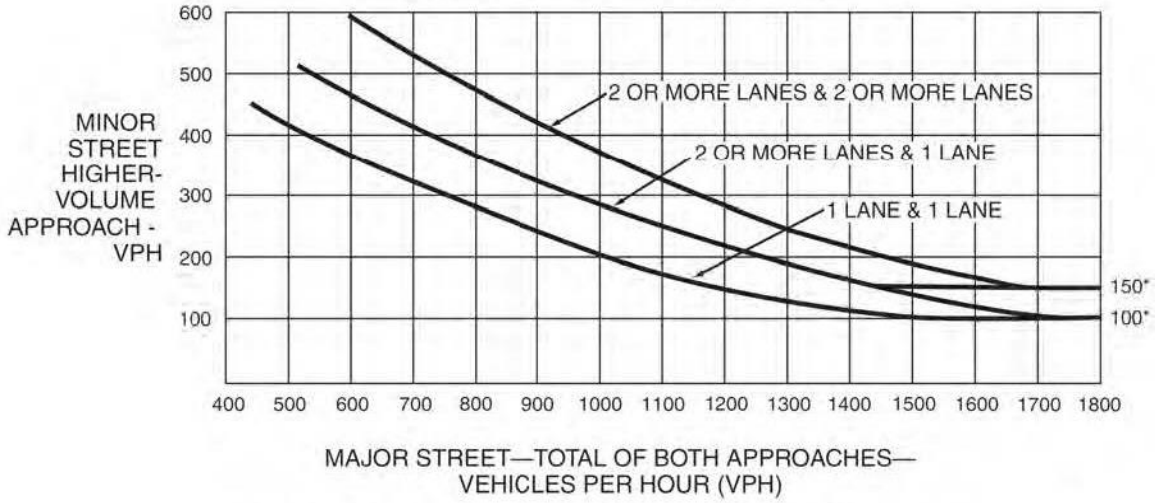


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

CROSBY HEROLD ROAD – WISE ROAD : CUMULATIVE 20 YEAR BACKGROUND

SATURDAY (●) :	MAJOR 281	MINOR 50
WEEKDAY (■) :	MAJOR 319	MINOR 35

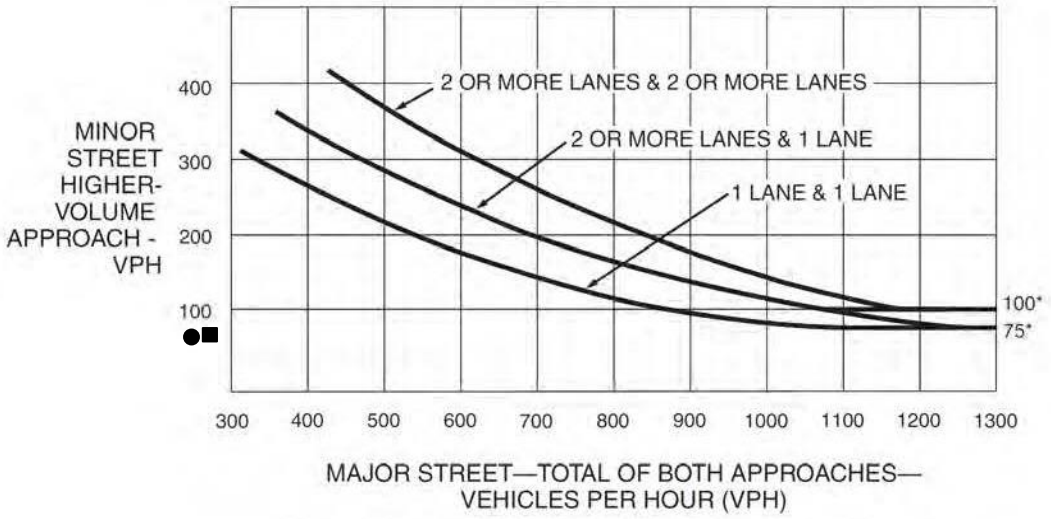
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

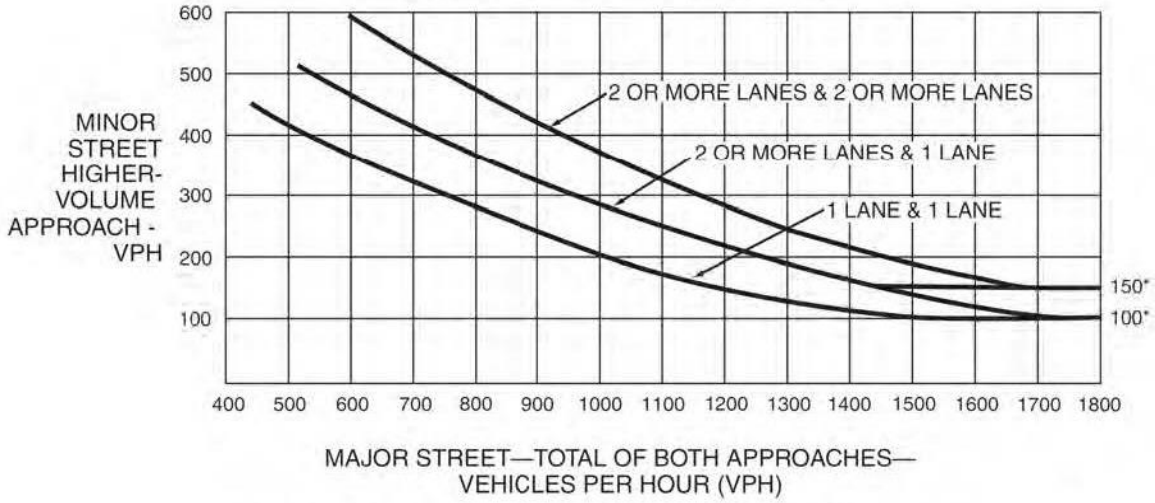


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

GARDEN BAR ROAD – WISE ROAD : CUMULATIVE 20 YEAR BACKGROUND

SATURDAY (●) :	MAJOR 247	MINOR 76
WEEKDAY (■) :	MAJOR 275	MINOR 79

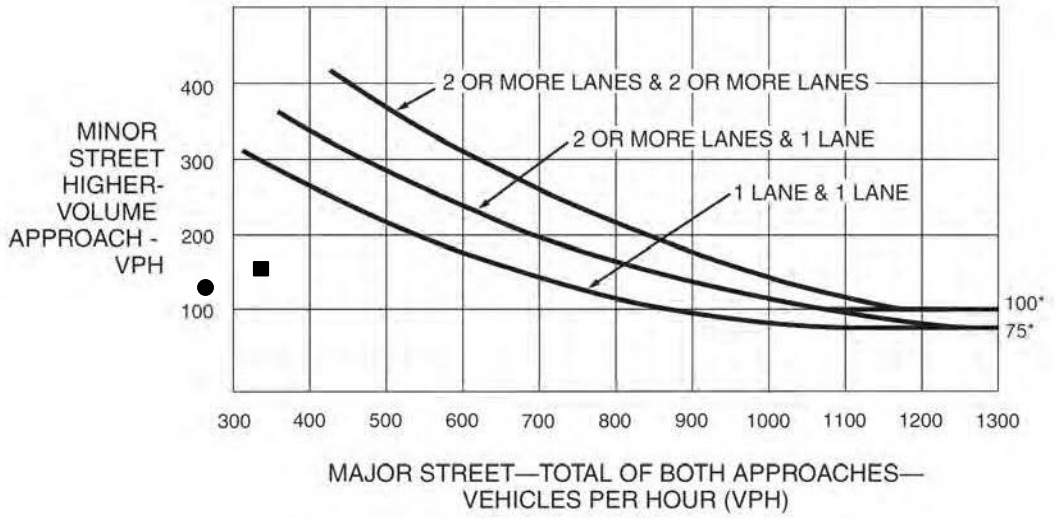
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

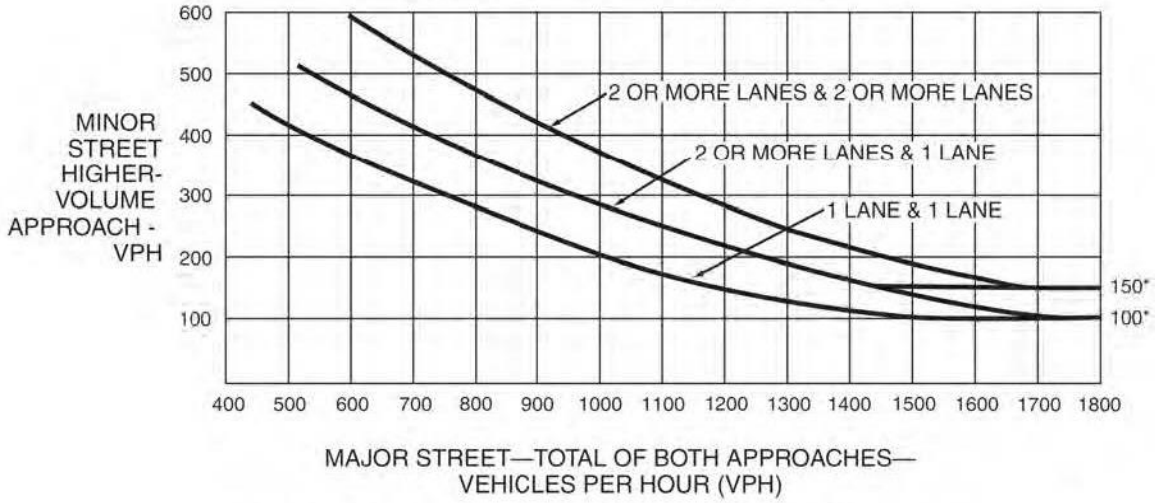


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

BELL ROAD – JOEGER ROAD : CUMULATIVE 20 YEAR BACKGROUND

SATURDAY (●) :	MAJOR 278	MINOR 117
WEEKDAY (■) :	MAJOR 338	MINOR 158

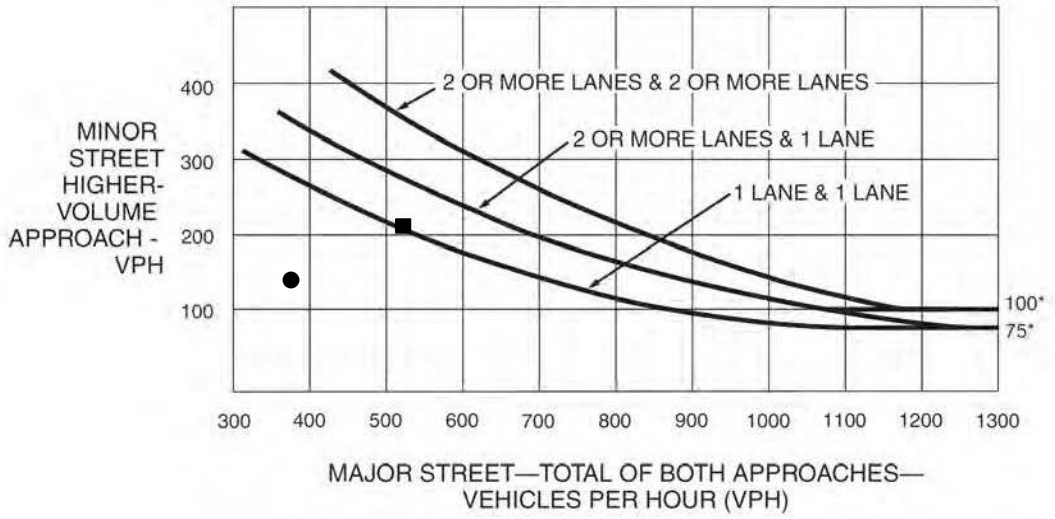
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

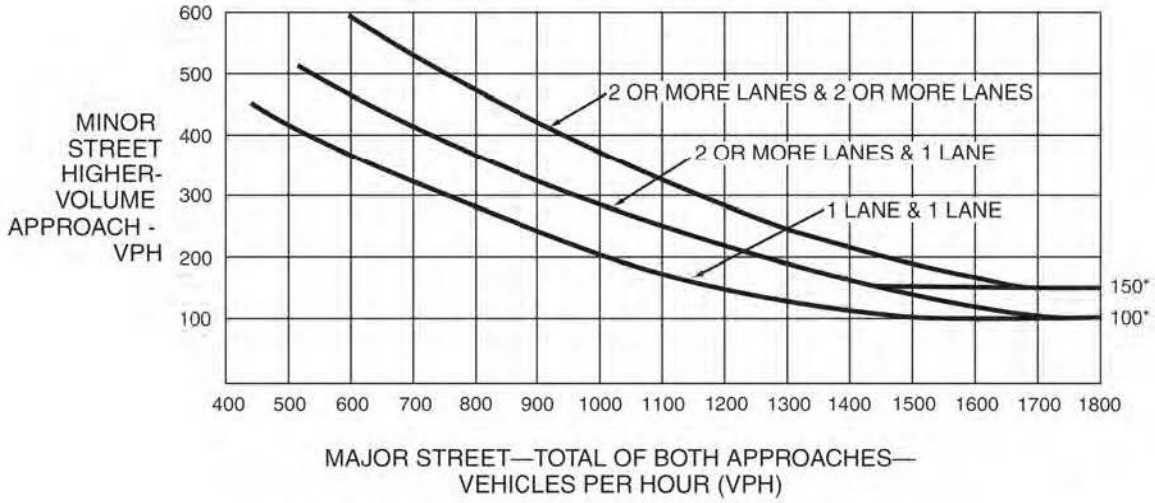


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

MT VERNON ROAD – ATWOOD ROAD : CUMULATIVE 20 YEAR BACKGROUND

SATURDAY (●) :	MAJOR 383	MINOR 151
WEEKDAY (■) :	MAJOR 518	MINOR 207

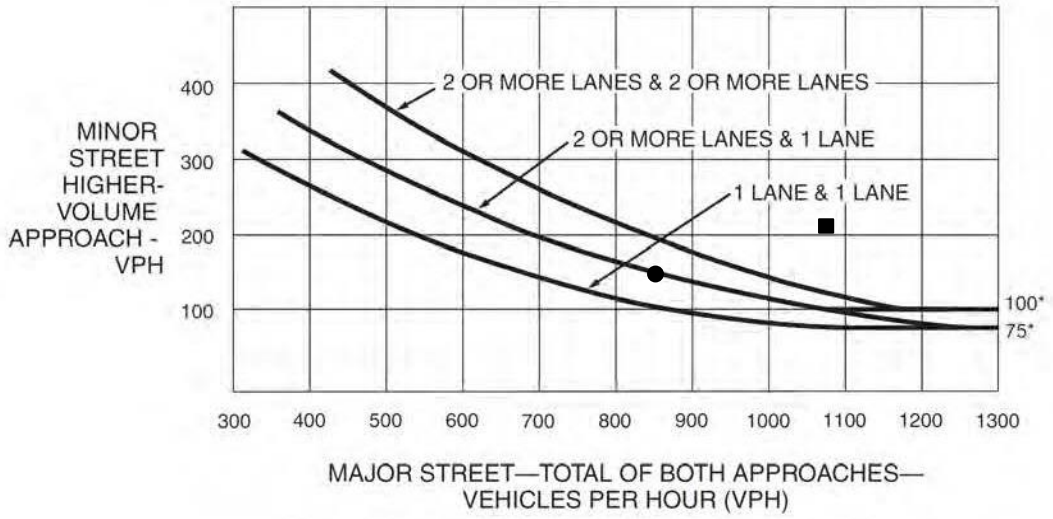
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

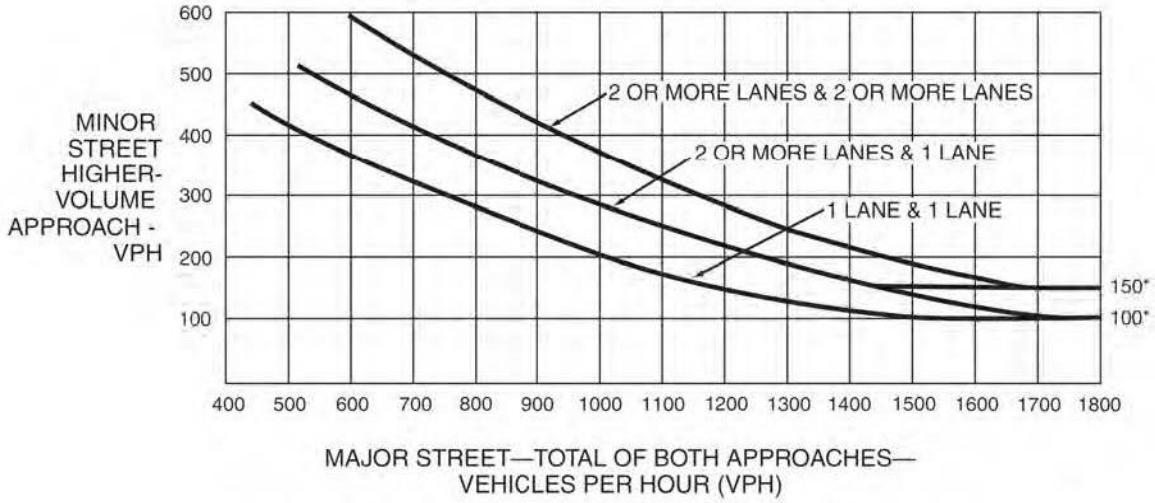


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

FOWLER ROAD – SR 193 : CUMULATIVE 20 YEAR BACKGROUND

SATURDAY (●) :	MAJOR 852	MINOR 150
WEEKDAY (■) :	MAJOR 1085	MINOR 208

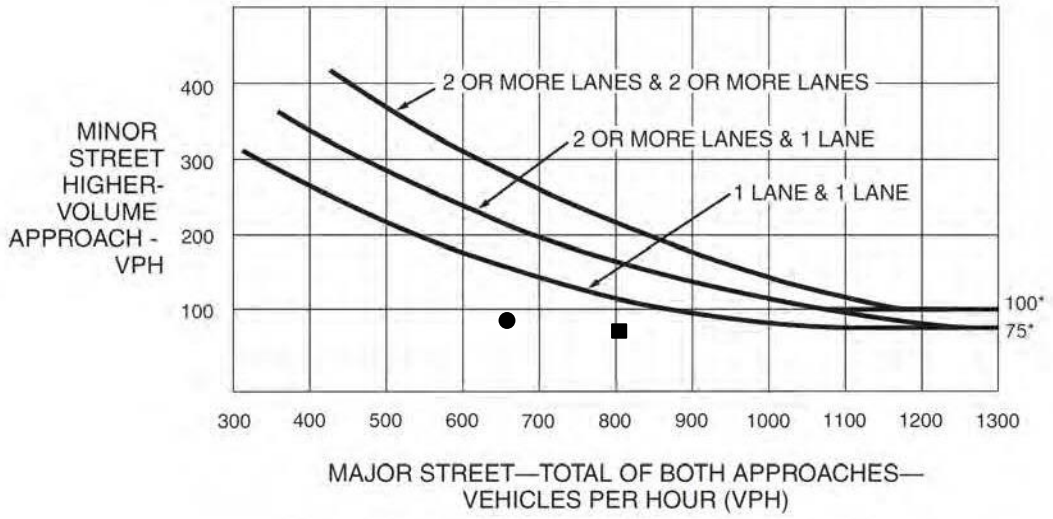
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

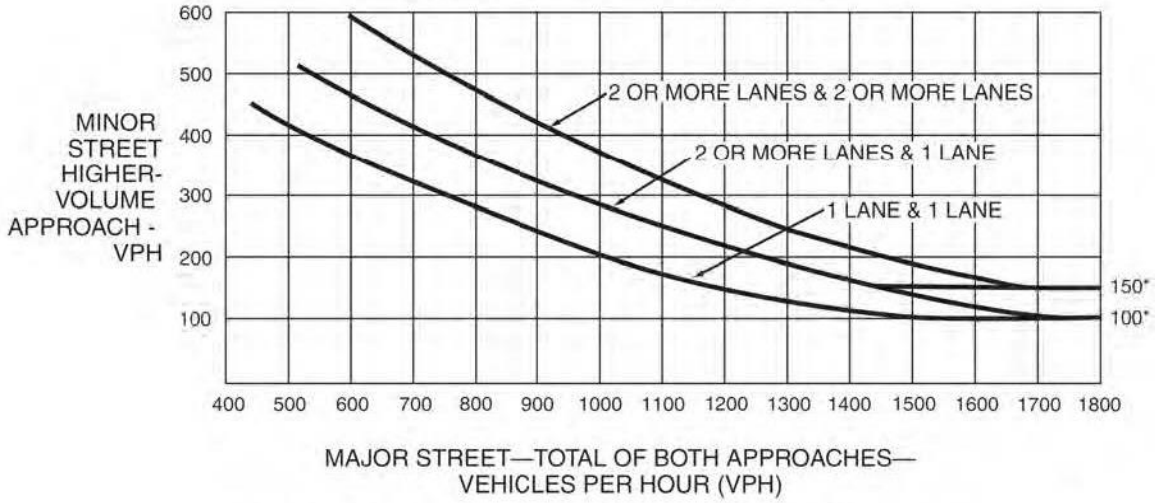


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

GOLD HILL ROAD – SR 193 : CUMULATIVE 20 YEAR BACKGROUND

SATURDAY (●) :	MAJOR 666	MINOR 90
WEEKDAY (■) :	MAJOR 806	MINOR 79

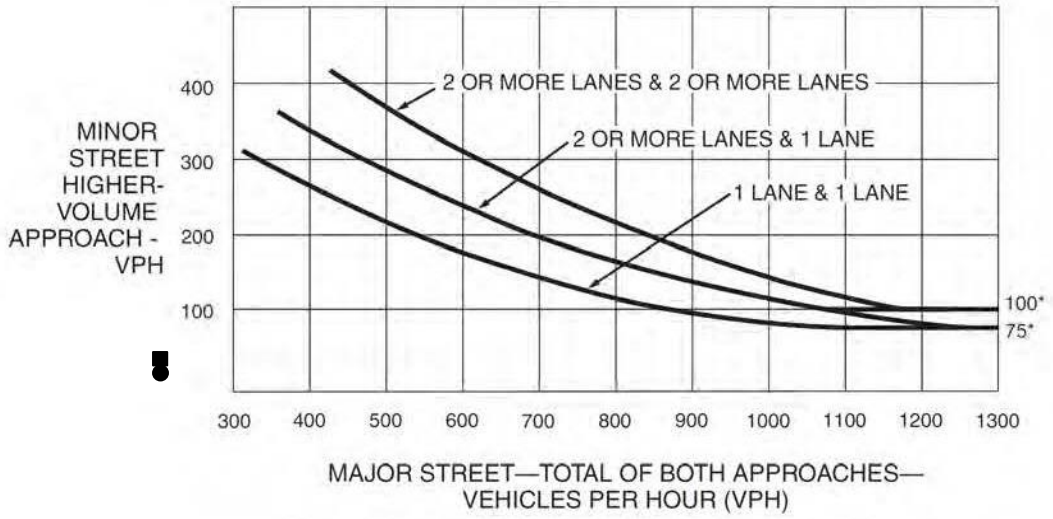
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

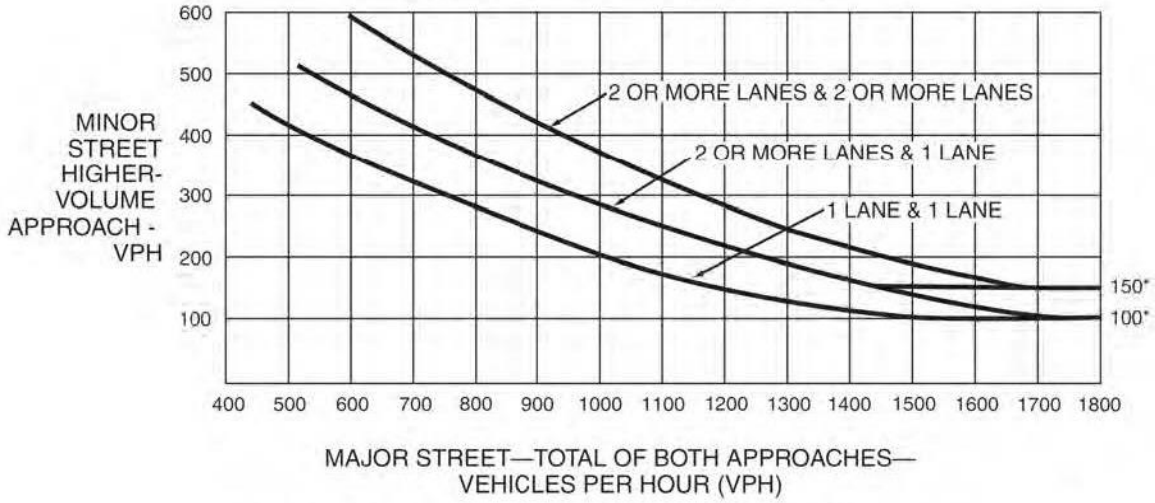


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

WISE ROAD – CRATER HILL ROAD : CUMULATIVE 20 YEAR BACKGROUND

SATURDAY (●) :	MAJOR 141	MINOR 19
WEEKDAY (■) :	MAJOR 152	MINOR 44

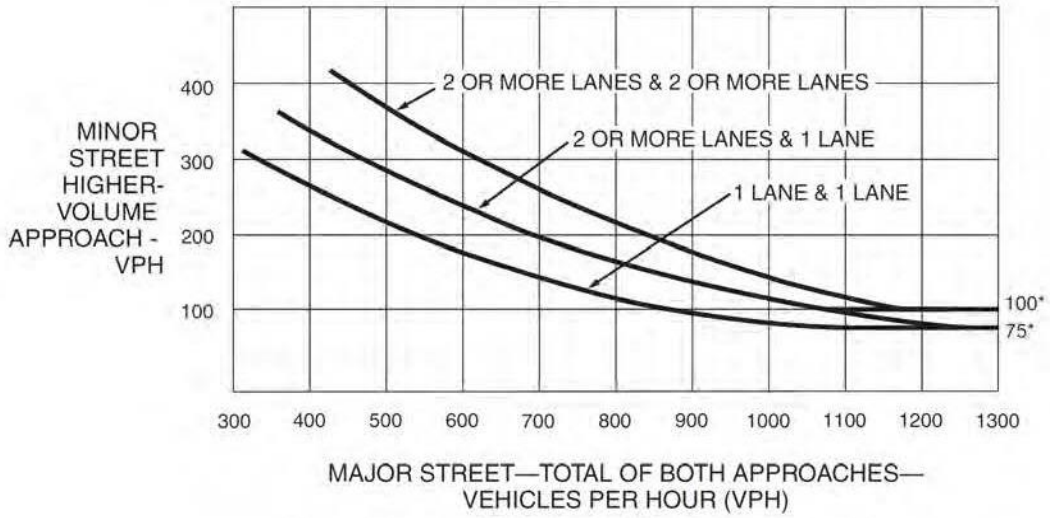
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



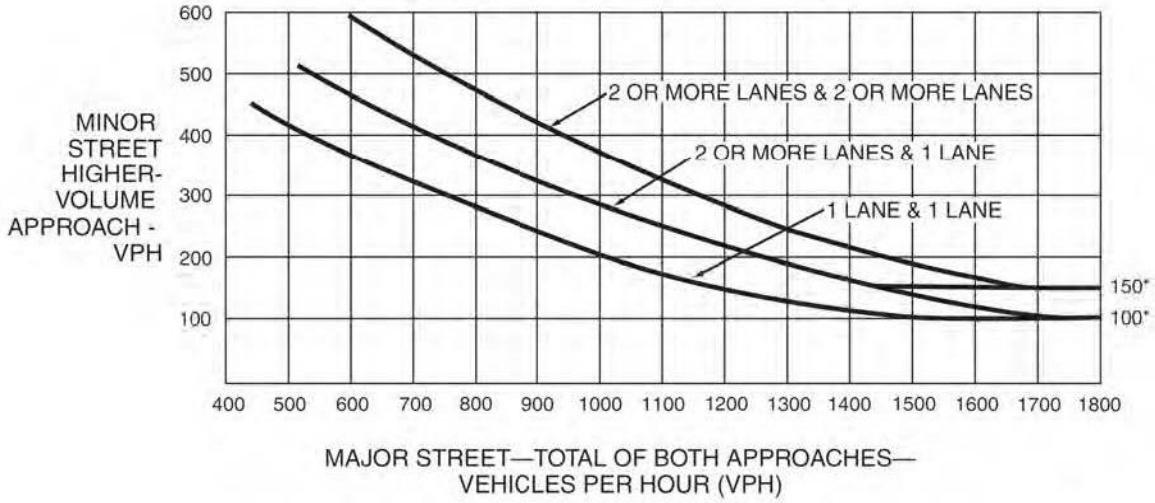
*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

● ■

SIERRA COLLEGE BLVD – DELMAR AVE : CUMULATIVE 20 YEAR BACKGROUND

SATURDAY (●) :	MAJOR 1541	MINOR 52
WEEKDAY (■) :	MAJOR 2188	MINOR 58

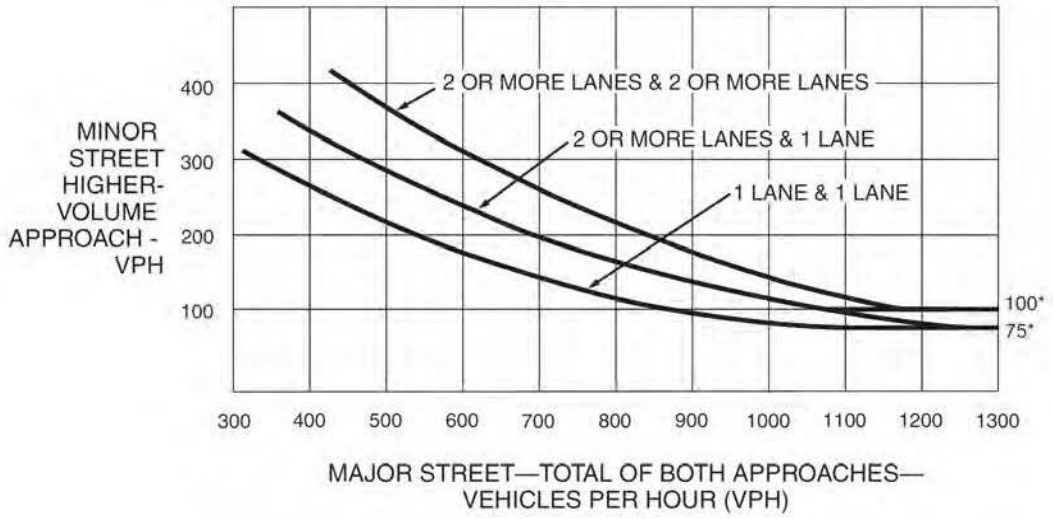
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

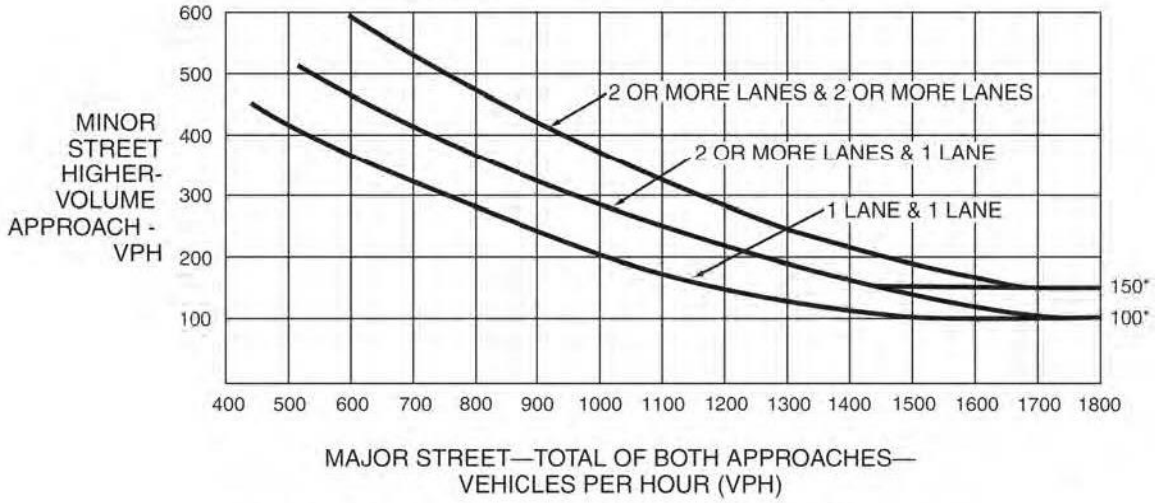


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

SR 49 – CRAMER ROAD : CUMULATIVE PLUS PROJECT

SATURDAY (●) :	MAJOR 3906	MINOR 65
WEEKDAY (■) :	MAJOR 4279	MINOR 83

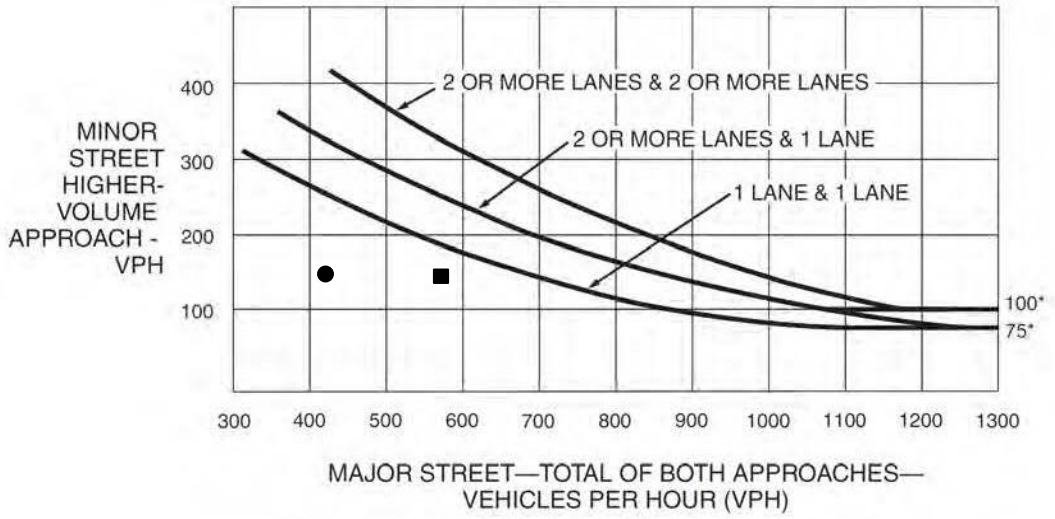
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

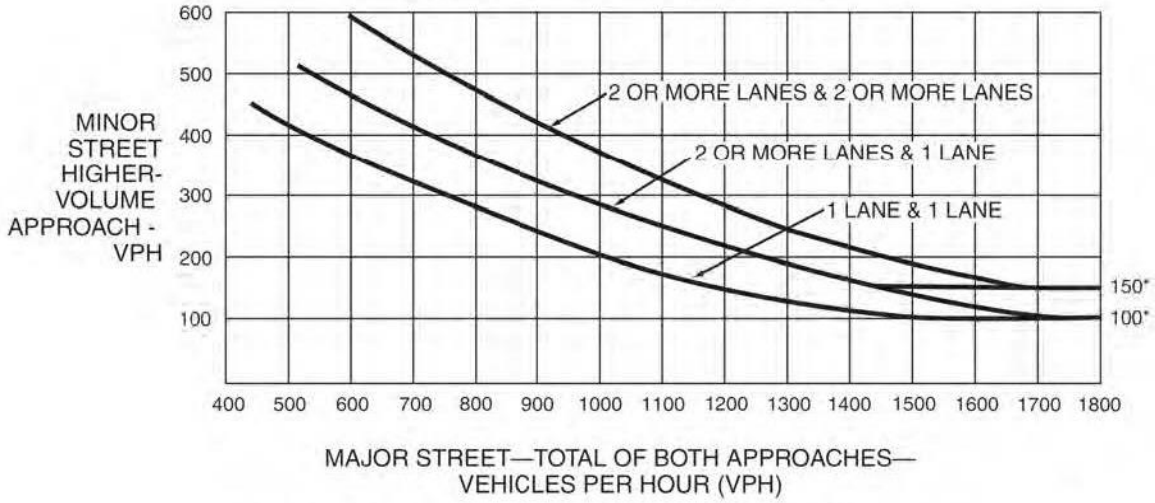


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

PLACER HILLS – COMBIE ROAD : CUMULATIVE PLUS PROJECT

SATURDAY (●) :	MAJOR 413	MINOR 159
WEEKDAY (■) :	MAJOR 582	MINOR 155

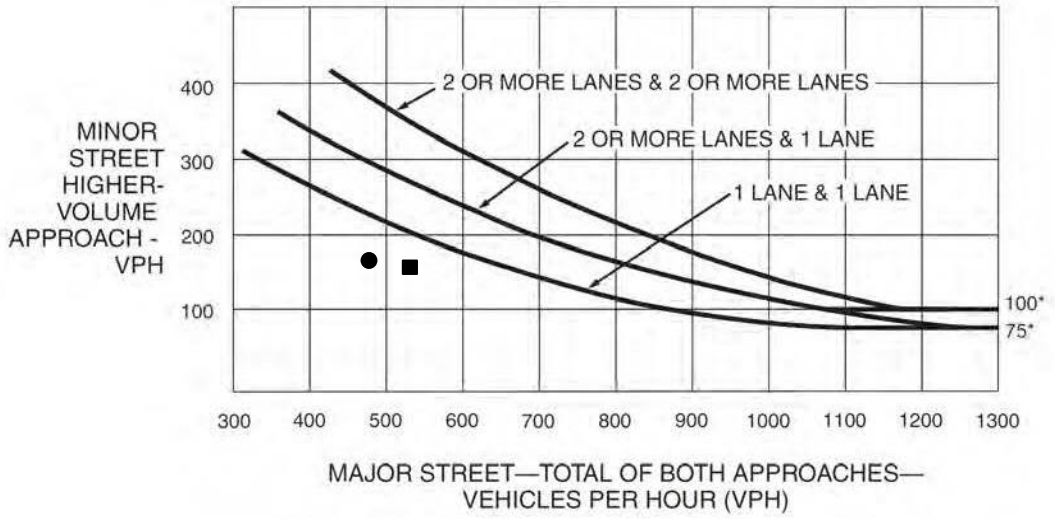
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

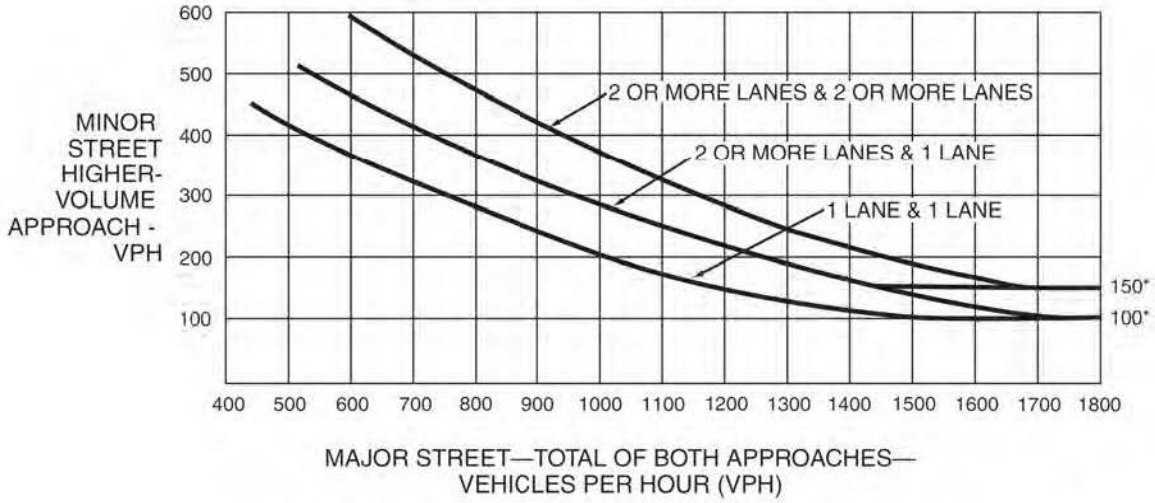


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

MCCOURTNEY ROAD – WISE ROAD : CUMULATIVE PLUS PROJECT

SATURDAY (●) :	MAJOR 486	MINOR 176
WEEKDAY (■) :	MAJOR 520	MINOR 165

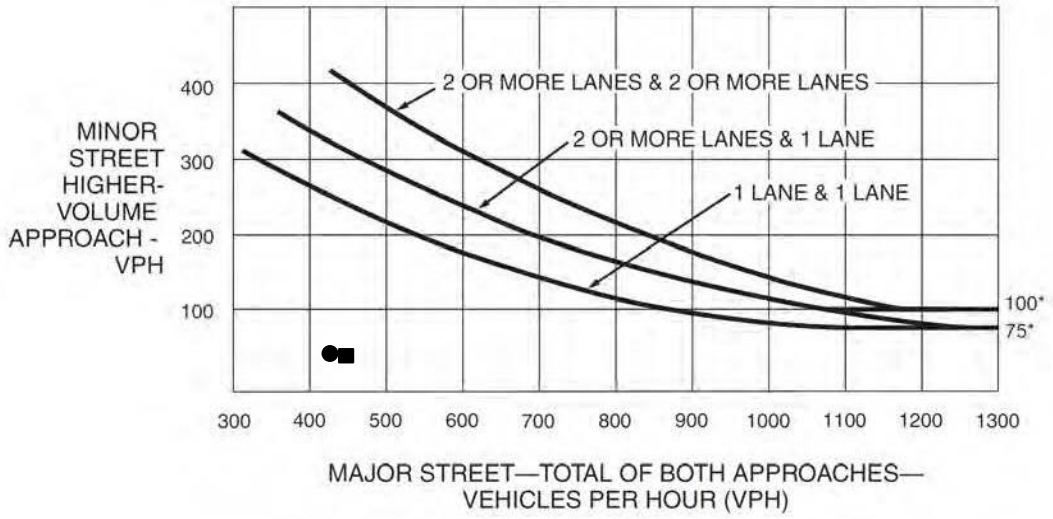
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

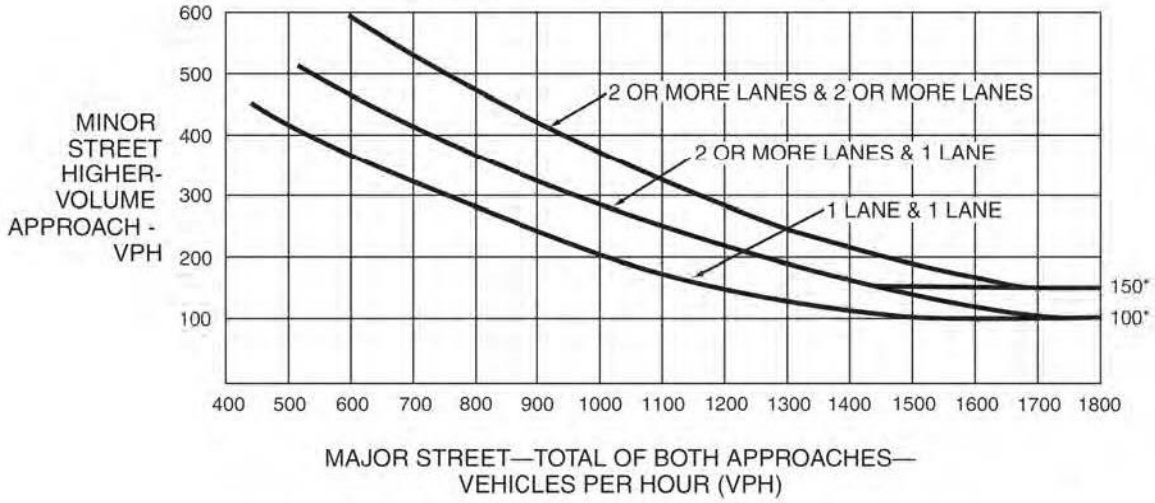


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

CROSBY HEROLD ROAD – WISE ROAD : CUMULATIVE PLUS PROJECT

SATURDAY (●) :	MAJOR 420	MINOR 53
WEEKDAY (■) :	MAJOR 447	MINOR 50

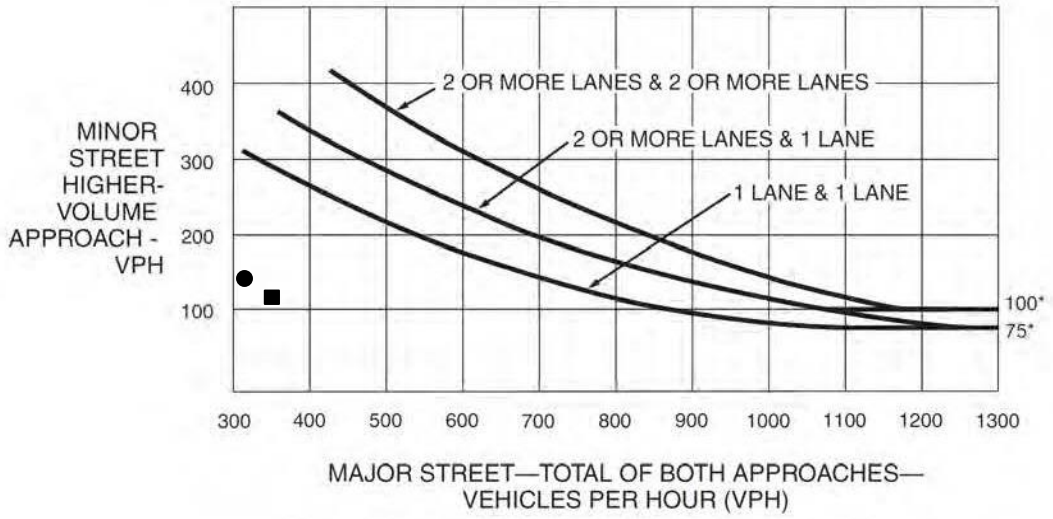
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

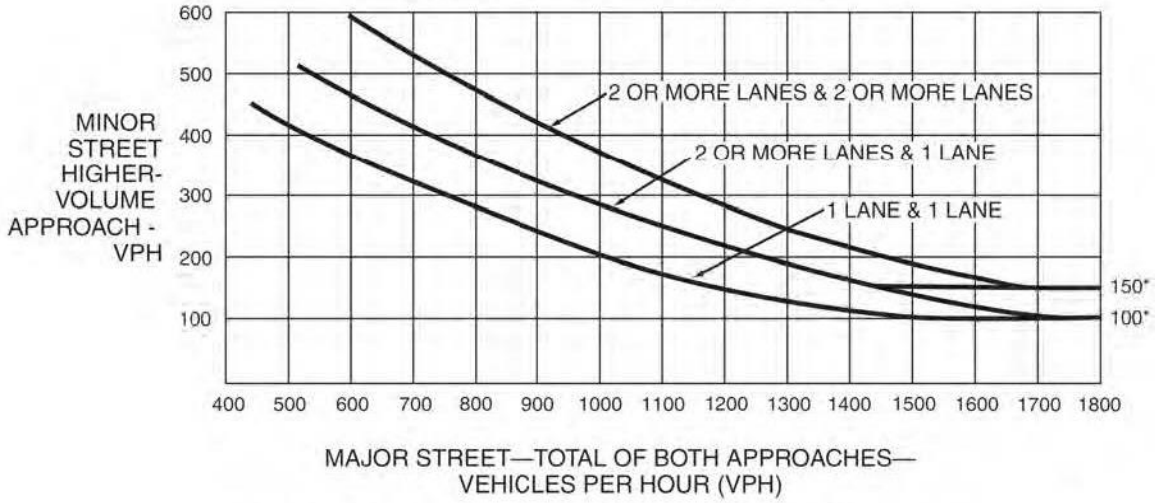


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

GARDEN BAR ROAD – WISE ROAD : CUMULATIVE PLUS PROJECT

SATURDAY (●) :	MAJOR 311	MINOR 140
WEEKDAY (■) :	MAJOR 356	MINOR 114

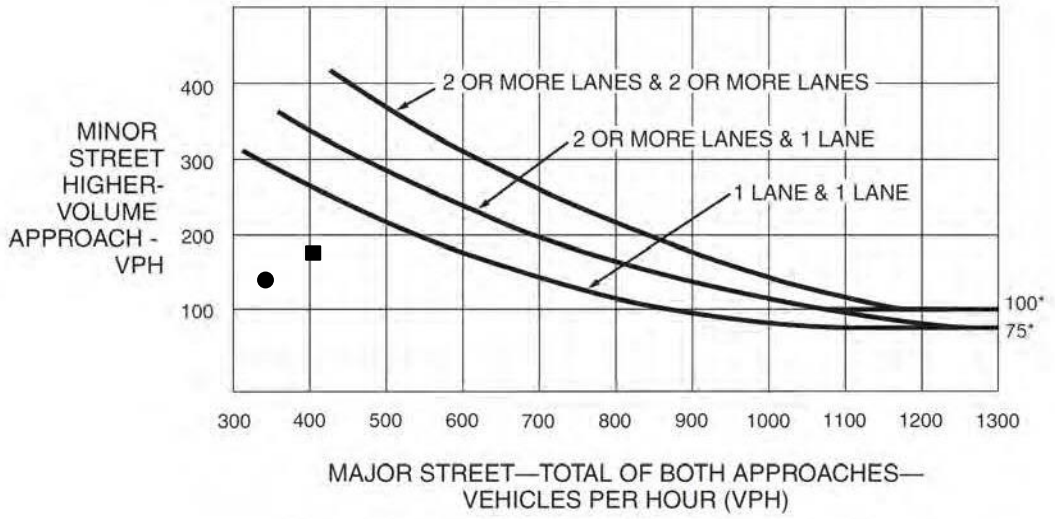
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

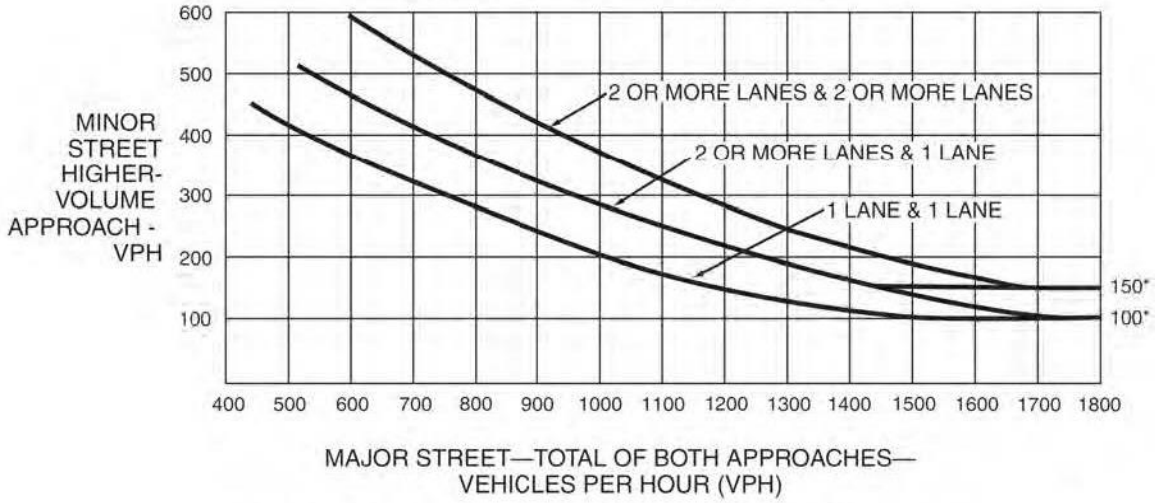


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

BELL ROAD – JOEGER ROAD : CUMULATIVE PLUS PROJECT

SATURDAY (●) :	MAJOR 345	MINOR 135
WEEKDAY (■) :	MAJOR 407	MINOR 188

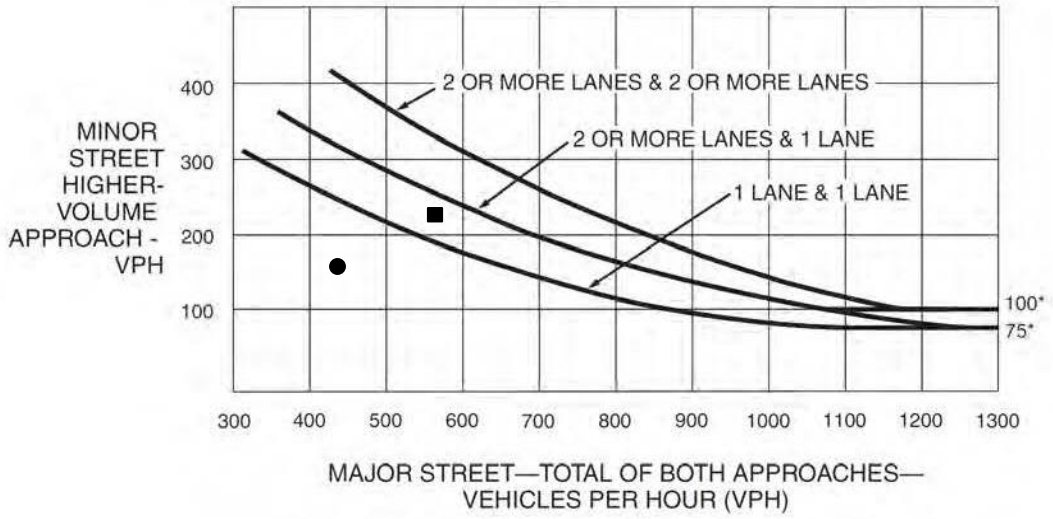
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

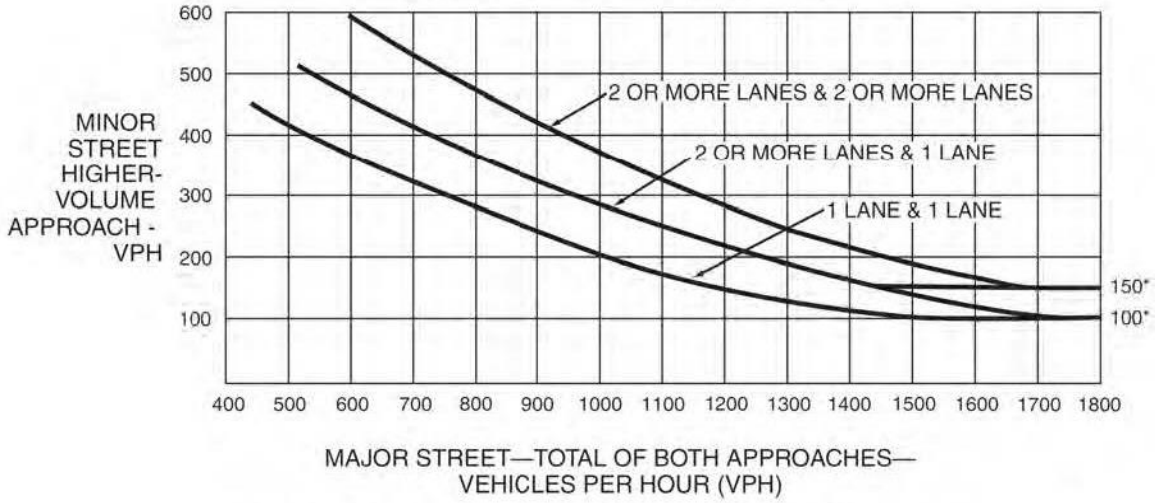


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

MT VERNON ROAD – ATWOOD ROAD : CUMULATIVE PLUS PROJECT

SATURDAY (●) :	MAJOR 438	MINOR 164
WEEKDAY (■) :	MAJOR 573	MINOR 218

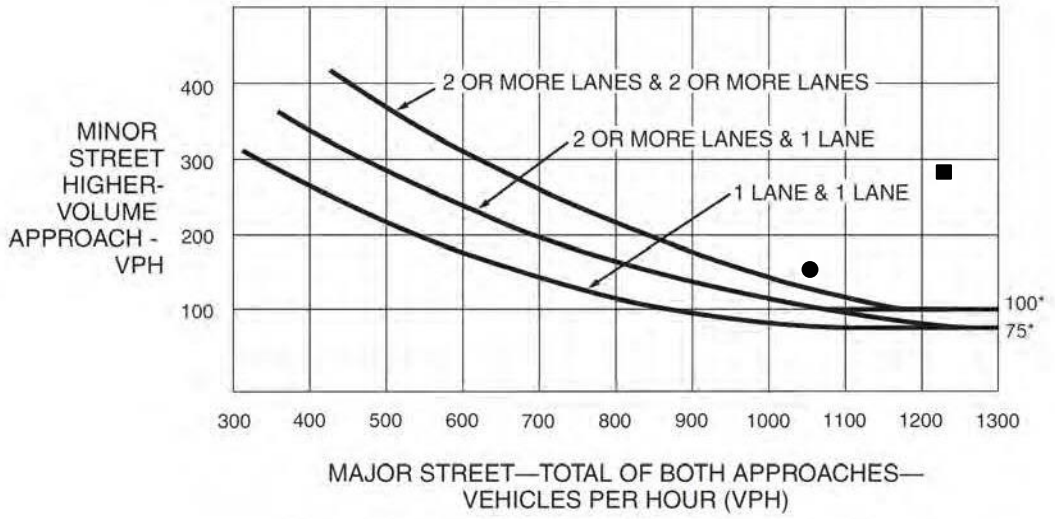
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

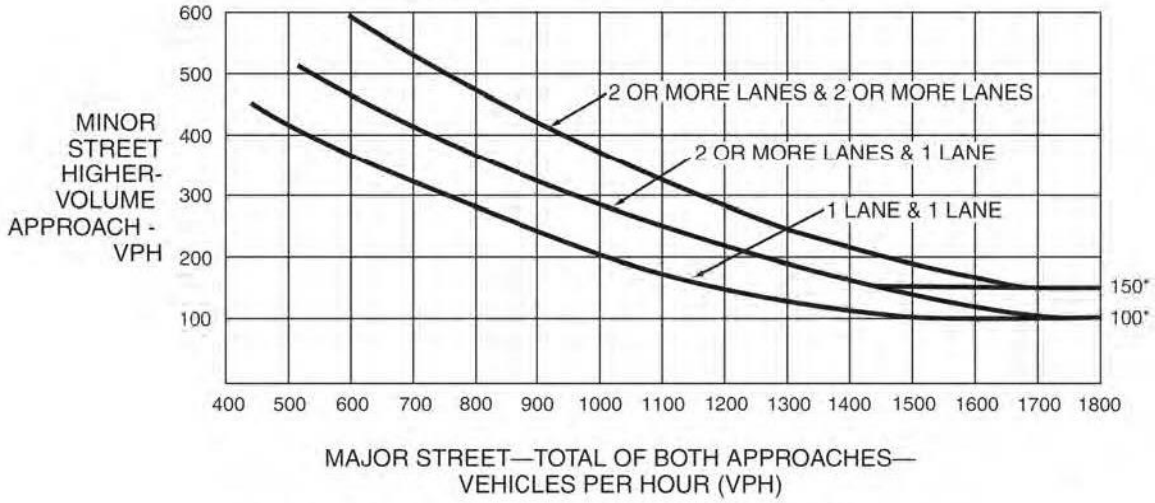


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

FOWLER ROAD – SR 193 : CUMULATIVE PLUS PROJECT

SATURDAY (●) :	MAJOR 1060	MINOR 164
WEEKDAY (■) :	MAJOR 1221	MINOR 293

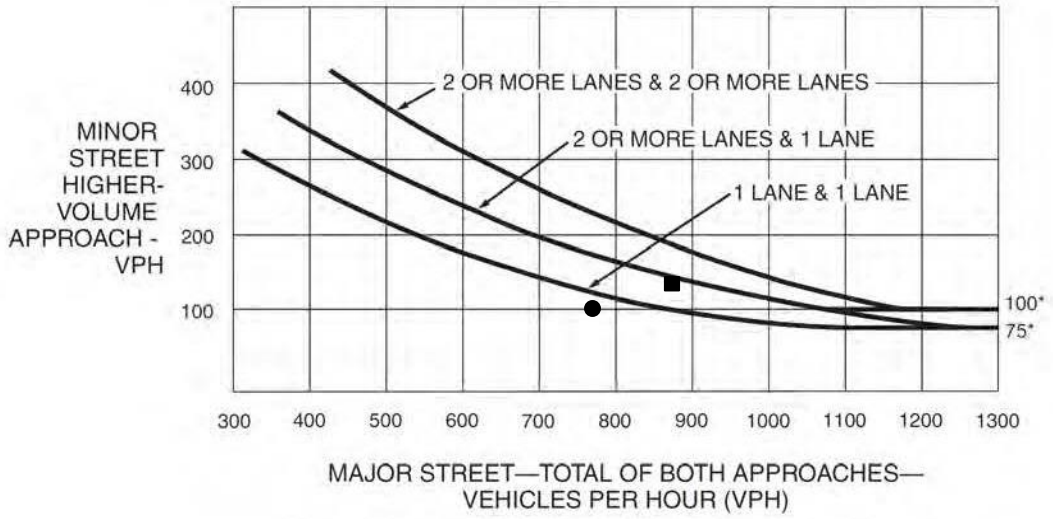
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

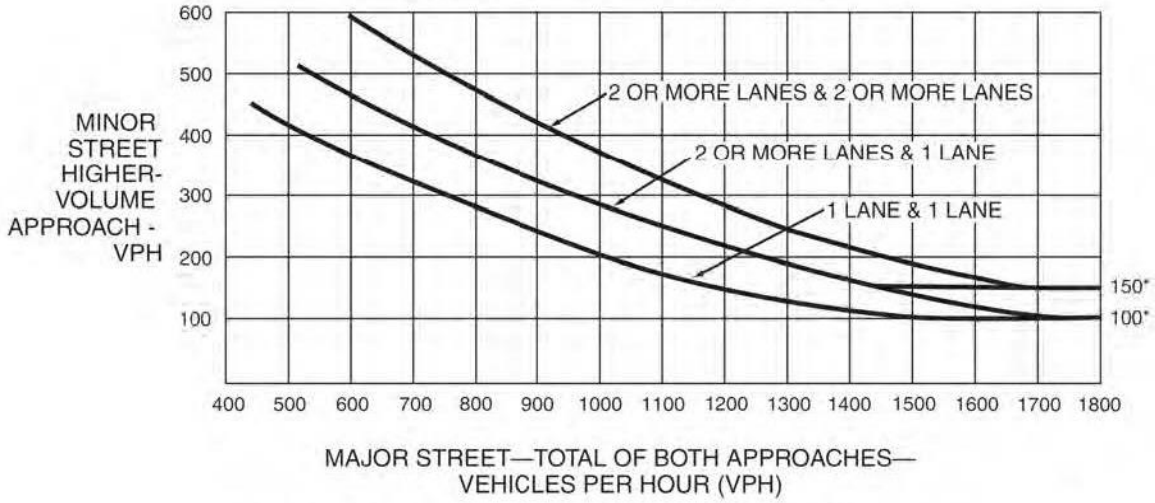


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

GOLD HILL ROAD – SR 193 : CUMULATIVE PLUS PROJECT

SATURDAY (●) :	MAJOR 781	MINOR 100
WEEKDAY (■) :	MAJOR 884	MINOR 127

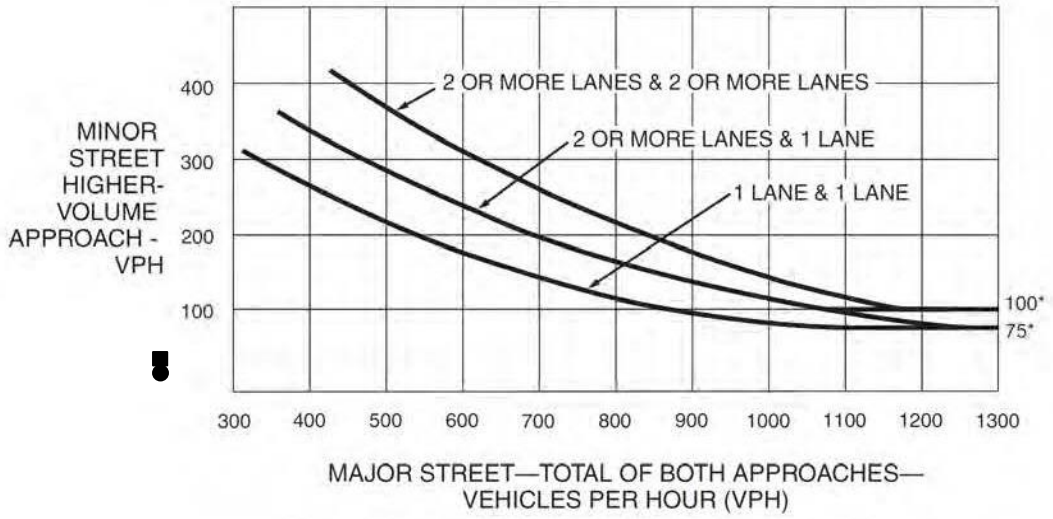
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

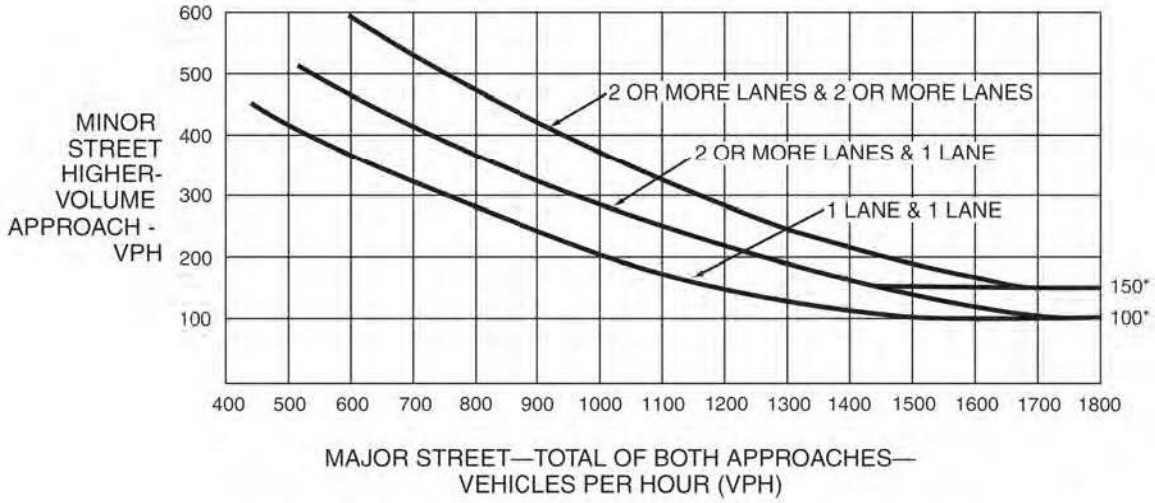


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

WISE ROAD – CRATER HILL ROAD : CUMULATIVE PLUS PROJECT

SATURDAY (●) :	MAJOR 176	MINOR 21
WEEKDAY (■) :	MAJOR 185	MINOR 45

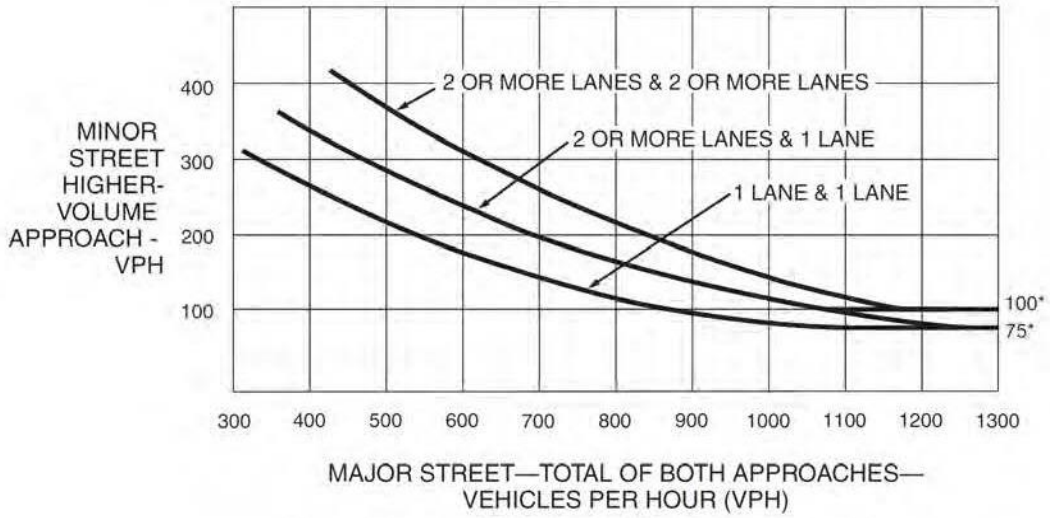
Figure 4C-3. Warrant 3, Peak Hour



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

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

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



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

● ■

SIERRA COLLEGE BLVD – DELMAR AVE : CUMULATIVE PLUS PROJECT

SATURDAY (●) :	MAJOR 1792	MINOR 52
WEEKDAY (■) :	MAJOR 2440	MINOR 58