

TRAFFIC INFORMATION SUPPORTING CALCULATIONS FOR MANSFIELD WINERY

LOCATED AT:
Conn Valley Road
St. Helena, CA 94574
NAPA COUNTY APN 025-180-017

PREPARED BY:
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WEEKDAY AND AVERAGE WEEKEND TRAFFIC CHARACTERISTICS

Assumptions:

1. Per Napa County Winery Traffic Generation Characteristics, use 2.2 trips/day non-peak and 1.0 trip/day peak for full-time employees with an hour lunch (total 3.2 trips/day).
2. Per Napa County Winery Traffic Generation Characteristics, use 1.0 trips/day non-peak and 1.0 trip/day peak for part-time employees with a half hour lunch (total 2 trips/day).
3. Per Napa County Winery Traffic Generation Characteristics, use 1.05 employees per automobile.
4. Per Napa County Winery Traffic Generation Characteristics, use 2.6 visitors per automobile (for a purpose of this analysis, the use of 2.8 visitors per automobile on weekends was negligible and thus the more conservative number was used).
5. Per Napa County Winery Traffic Generation Characteristics, 57% of visitor traffic occurs during peak hours.
6. For trips/day totals including a fraction of a trip, round up to the next whole number of trips/day.
7. For purposes of this analysis, "seasonal staff" row on the Napa County Traffic Information Form is used for part-time employee information.
8. Per Napa County Winery Traffic Generation Characteristics, assume crush is 36 days.
9. Per Napa County Winery Traffic Generation Characteristics for service vehicles, assume 1.52 trips/1,000 gallons/season for grape deliveries; 1.47 trips/1,000 gallons/year for material supplies and 0.8 trips/1,000 gallons/year for case goods. Assume 2 trips/day for non agricultural deliveries such as FedEx.

Grape Deliveries

Trips generated from offsite grapes:

$$(20,000 \text{ gallons}) * \frac{1.52 \text{ trips/1,000 gallons}}{\text{season}} * \frac{\text{season}}{36 \text{ days}} = 0.84 \text{ trips/day}$$

Materials/Supplies Deliveries

Trips generated:

$$\frac{1.47 \text{ trips/1,000 gallons}}{\text{year}} * (20,000 \text{ gallons}) * \frac{\text{year}}{250 \text{ days}} = 0.12 \text{ trips/day}$$

Case Goods Deliveries

Trips generated:

$$\frac{0.8 \text{ trips/1,000 gallons}}{\text{year}} * (20,000 \text{ gallons}) * \frac{\text{year}}{250 \text{ days}} = 0.06 \text{ trips/day}$$

Non Agricultural Related Deliveries

Assume 1 delivery per day totaling 2 trips/day

TOTAL DELIVERIES =

$$0.84 \text{ trips/day} + 0.12 \text{ trips/day} + 0.06 \text{ trips/day} + 2 \text{ trips/day} = 3 \text{ trips/day}$$

SUMMARY TABLE:

	Number	No. People/ automobile	Non-peak Trip Generation (trips/day/ automobile)	Peak Trip Generation (trips/day/ automobile)	Non-Peak Trips/day	Peak Trips/day
Full-Time Employees	2	1.05	2.2	1	4.2	1.9
Part-Time Employees	1	1.05	1	1	1.0	1.0
Total Employees					5.1	2.9
Visitors	20	2.6	2	See Note 5	6.6	8.8
Deliveries	N/A	N/A	SEE ABOVE	SEE ABOVE	3	N/A
TOTAL					15	12

MARKETING EVENT TRAFFIC CHARACTERISTICS

Assumptions:

1. Per Napa County Winery Traffic Generation Characteristics, use 2.0 trips/day non-peak for "seasonal" or event staff.
2. Per the proposed marketing plan, all events will occur during non-peak hours.

3. Per Napa County Winery Traffic Generation Characteristics, assume that visitors per automobile are similar to a weekend rate and use 2.8 visitors per automobile.
4. For trips/day totals including a fraction of a trip, round up to the next whole number of trips/day.
5. For purposes of this analysis, "seasonal staff" row on the Napa County Traffic Information Form is used for part-time employee information.
6. During marketing events, assume 1 employee or support staff per automobile and a trip generation of 2 trips/day.

SUMMARY TABLE:

	Minimum Event Number	Maximum Event Number	No. People/ automobile	Trip Generation (trips/day)	Minimum Event Trips/day	Maximum Event Trips/day
Employees	3	3	1	2	6.0	6.0
Support Staff	2	2	1	2	4.0	4.0
Visitors	12	100	2.8	2	8.6	25.7
Deliveries	1	2	N/A	2	2.0	4.0
TOTAL					21	40

TRAFFIC INFORMATION

Project Trip Generation							
	Personnel / Visitors			Vehicle Trips			
	Operations	Marketing Events		Operations	Marketing Events		
	Daily M-F	Minimum	Maximum	Daily M-F	Minimum	Maximum	
Operating Hours		12-4	6-11:30				
Employees				Employee Trips			
Full-Time	2	2	2	Full-Time	4.2	4.0	4.0
Seasonal Peak	1	1	1	Seasonal Peak	1.0	2.0	2.0
Peak Hours P.M.	4-5	3-4	3-4	Peak Hours (FT & PT)	2.9	N/A	N/A
Total Employees	3	3	3	Total Employee Trips	8.1	6.0	6.0
Event Support Staff				Event Support Staff			
Full-Time	N/A	N/A	N/A	Full-Time	N/A	N/A	N/A
Seasonal Peak	N/A	2	2	Seasonal Peak	N/A	4.0	4.0
Total Support Staff	N/A	2	2	Total Support Staff Trips	N/A	4.0	4.0
Visitors	20	12	36	Visitor Trips	6.6	8.6	25.7
Peak Hours	4-5	3-4	3-4	Peak Hours	8.8	N/A	N/A
Total Visitors	20	12	36	Total Visitor Trips	15.4	8.6	25.7
				Total Trucks - Deliveries, Shipping, etc. Trips	3	2	4
Grand Total	23	17	41		27	21	40
Provide supporting documentation for trip generation rates Submit separate spreadsheets for existing & proposed operations, include a trip generation grand total.				*See supporting Calculations			

	Number of People Onsite				
	Full-Time	Seasonal	Marketing Events	Marketing Events	Marketing Events
No. Employees	3 (2FT, 1 PT)	3 (2FT, 1 PT)	3 Min.	3 Ave.	3 Max.
Support Staff, caterers, clean-up, etc.	N/A	N/A	2 Min.	2 Ave.	2 Max.
Visitors	20	20	12 Min.	24 Ave.	36 Max.
Residents	N/A	N/A	N/A	N/A	N/A
Grand Total	23	23	17	29	41

APPS-Traffic Information

TRAFFIC INFORMATION FOR CALTRANS REVIEW

Application should include:

Project Location

- Site Plan showing all driveway location(s)
- Show detail of Caltrans right-of-way
- Aerial photo at a readable scale

Trip Generation Estimate

- Spreadsheet for winery applications
 - Provide separate spreadsheets for existing and proposed operations

Caltrans Information Sources

- Traffic Impact Study Guide
- 2001 Traffic Volumes on California State Highways
- Highway Design Manual
- Traffic manual

NAPA COUNTY WINERY TRAFFIC GENERATION CHARACTERISTICS

EMPLOYEES:

Half-hour lunch: All - 2 trips/day (1 during weekday PM peak)
 Hour lunch: Permanent Full-Time - 3.2 trips/day (1 during weekday PM peak)
 Permanent Part-Time - 2 trips/day (1 during weekday PM peak)
 Seasonal: 2 trips/day (0 during weekday PM peak)—crush
 see full time above—bottling
 Auto Occupancy: 1.05 employees/auto

VISITORS:

Auto occupancy: Weekday - 2.6 visitors/auto Weekend - 2.8 visitors/auto
 Peaking Factors:
 Peak Month: 1.65 x average month
 Average Weekend: 0.22 x average month
 Average Saturday: 0.53 x average weekend
 Peak Saturday: 1.65 x average Saturday
 Average Sunday: 0.8 x average Saturday
 Peak Sunday: 2.0 x average Sunday
 Peak Weekend Hour: Winery (3-4 PM) - 0.57 x total for weekend day involved
 Average 5-Day Week (Monday-Friday) - 1.3 x average weekend
 Average Weekday: 0.2 x average 5-day week
 Peak Weekday Hour: Winery (3-4 PM) - 0.57 x total for weekday involved
 Roadway PM Peak(4-5 PM?) - 0.38 x total for weekday involved

SERVICE VEHICLES:

Grapes (36 days (6weeks)/season): 1.52 trips/1000 gals/season (4 ton loads assumed)
 Materials/Supplies (250 days/yr): 1.47 trips/1000 gals/yr
 Case Goods (250 days/yr): 0.8 trips/1000 gal/yr

APPS-Traffic info/char