

Appendix F – Transportation Supporting Documentation

Contains:

- Hexagon Transportation Consultants, Inc. Traffic Analysis for House Family Vineyard. March 15, 2021.
- Fehr & Peers, House Family Winery – Peer Review. March 16, 2021.
- Fehr & Peers. Vehicle Miles Traveled (VMT) Evaluation for the House Family Vineyards Project. August 23, 2024.

Draft Environmental Impact Report – for public review

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HEXAGON TRANSPORTATION CONSULTANTS, INC.

Memorandum

Date: March 15, 2021
To: Dave House
From: Gary Black
 Daniel Choi
Subject: Traffic Analysis for House Family Vineyard

Hexagon Transportation Consultants, Inc. has completed a traffic analysis for the proposed use permit application for House Family Vineyards. We understand that the winery currently has a 3,131 s.f. outdoor tasting area. The winery hosts regular wine tastings throughout the year and also periodically hosts special events. The winery proposes to upgrade an existing road for emergency fire access, install an additional fire hydrant, and add a wine cave. The wine cave will replace existing refrigerator units and would only be used for storage. The wine cave is not expected to change the number of visitors.

The analysis in this memo will compare the trip generation of the vineyard relative to the total traffic along Old Oak Way and Pierce Road. The vineyard is located at the end of Old Oak Way. Pierce Road provides access to Old Oak Way and to other residential streets. These two roadways were selected because the vineyard can only be accessed via these two roadways.

Existing Trips

Project trip generation was estimated based on visitor numbers during open tasting hours and historical event attendance at House Family Vineyards. Open tasting hours are from 12:00 PM – 5:00 PM on Thursdays, Saturdays, and Sundays and from 12:00 PM – 8:00 PM on Fridays. Historical attendance during open tasting hours show that approximately 37 vehicles visit each day during open tasting hours. A summary of the historical existing trips during open tasting hours are shown on Table 1.

**Table 1
 Existing Trips (Open Tasting Hours)**

Average Cars per Day Open		
	2018	2019
January	23	18
February	32	17
March	35	32
April	39	31
May	54	34
June	50	40
July	67	38
August	51	38
September	55	32
October	50	44
November	34	39
December	27	17
Average:	43	32
Average 2018-2019:	37	

House Family Vineyards also opens to visitors for private events. In 2018 and 2019, House Family Vineyards was open for private events for 104 and 105 days, respectively. Less than 15% of private events generate more vehicular trips than open tasting hours. The largest event from 2018-2019 was 60 vehicles for a wine club release. Table 2 shows a summary of trips during private events. Table 3 shows a summary of trips during private events by day of the week.

Table 2
Daily Trips (Private Events)

Year	Event Size (Cars)	1 to 10	11 to 20	21 to 30	31 to 40	41 to 60	Total
2018	Events	44	30	17	8	5	104
	Cars (Average)	7	14	26	36	49	16
2019	Events	39	32	18	7	9	105
	Cars (Average)	6	15	24	49	47	18

Table 3
Private Event Trips by Day of the Week

	2018			2019			2018-2019
	Total ¹	Days	Average	Total ¹	Days	Average	Average
Monday	112	9	12	106	10	11	11
Tuesday	127	11	12	162	14	12	12
Wednesday	270	19	14	389	22	18	16
Thursday	383	23	17	240	19	13	15
Friday	175	12	15	236	13	18	16
Saturday	497	23	22	628	24	26	24
Sunday	136	7	19	29	3	10	17

¹ Total represent the total number of cars parked at House Family Vineyards each weekday for the entire year.

Additionally, 6 full-time employees work at the project site, commuting five times per week.

Table 4 shows the total estimated trip generation per day. The worst-case scenario is based on the highest number of vehicles parked at House Family Vineyards at private events in 2018 and 2019. Therefore, under the worst-case scenario, it is estimated that a maximum of 132 daily trips would be generated by the vineyard.

Table 4
One-Way Trips to/from House Family Vineyard (Daily)

Visitor Type	Open Tasting (trips) ^{1,2}	Private Event (trips) ^{1,3}	Private Event (Worst-Case) (trips) ^{1,4}
Visitors	74	34	120
Employees	12	12	12
Total	86	46	132

Notes:

¹ It is assumed that for each vehicle, one trip in and one trip out is taken.

² Open Tasting is assumed to occur 4 days per week (Thursday, Friday Saturday, Sunday). Estimated number of trips is based on historical attendance in 2018-2019 (see Table 1).

³ Private Events typically occur twice per week. Estimated number of trips is based on average historical attendance in 2018-2019 (see Table 2).

⁴ Large Private Events (average 47 vehicles) are assumed to occur 5-10 times per year. Worst-case number of trips is based on the highest historical attendance in 2018-2019.

Trips Along Old Oak Way

There are 28 homes located along Old Oak Way. Table 5 shows the estimated number of trips taken by residents along Old Oak Way.

Table 5
Residential Trip Generation

Land Use	ITE Land Use Code	Size	Daily	
			Rate	Trips
Trip Generation				
Single-Family Detached Housing	210	28 Dwelling Units	9.44	264

Source: ITE Trip Generation Manual, 10th Edition 2017

Week-long tube counts were conducted along Old Oak Way near the intersection of Pierce Road. Table 6 shows a summary of the number of trips taken from August 26, 2020 to September 1, 2020. The full week-long tube counts can be found in Appendix A. It should be noted that because of the COVID-19 pandemic, counts are lower than usual. It should also be noted that because of the COVID-19 pandemic, House Family Vineyards has limited operations and was only open on Friday, Saturday, and Sunday to their Wine Club members only. Additionally, traffic counts taken for the 2040 Saratoga General Plan update show that approximately 3,400 daily vehicles travel along Pierce Road.

Table 6
Old Oak Way Counts

Day	Date		Old Oak Way
Wednesday	8/26/2020	Closed	194
Thursday	8/27/2020	Closed	247
Friday	8/28/2020	Wine Club Only	228
Saturday	8/29/2020	Wine Club Only	266
Sunday	8/30/2020	Wine Club Only	224
Monday	8/31/2020	Closed	194
Tuesday	9/1/2020	Closed	194
Total:			1547

Note: Due to the COVID-19 pandemic, House Family Vineyard was only open Friday, Saturday, and Sunday to their Wine Club members only. Capacity was limited and reservations were required.

Trip Generation Analysis

Based on trip generation rates from the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 10th Edition*, it is estimated that wine tasting patio generates 144 daily trips. The ITE Trip Generation Manual is a collection of data where trip counts at existing land uses are taken. Since wineries typically attract more visitors on weekends, more data have been collected on weekend days, such as Saturdays, versus weekdays. The ITE Trip Generation Manual averages all the rates from all data points (trips per day) collected. Based on recorded data, existing trips at the House Family Vineyard are lower than the average rates found in the ITE Trip Generation Manual. Therefore, trip generation rates for Winery (ITE Land Use Code 970) were only used to provide a conservative estimate of winery traffic. Table 7 shows the trip generation estimates of the existing outdoor patio using ITE rates compared to the trips estimated based on attendance from previous years.

Table 7
One-Way Trip Generation Estimate

Land Use	ITE Land Use Code	Size	Daily	
			Rate	Trips
ITE Trip Generation Estimate				
Winery	970	3,131 Square Feet	45.96	144
Trips Based on Past Attendance				
House Family Vineyard		3,131 Square Feet		86

Source: ITE Trip Generation Manual, 10th Edition 2017

Traffic Analysis

Based on trip generation rates from the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 10th Edition*, the residents along Old Oak Way are estimated to take approximately 264 daily trips. On an average day with open tasting, House Family Vineyards would generate approximately 86 daily trips, based on past attendance. This represents approximately 25% of the daily traffic along Old Oak Way. Using ITE Trip Generation rates for the Winery shows an estimate of 144 daily trips, representing approximately 35% of the daily traffic along Old Oak Way.

Counts conducted along Pierce Road for the draft 2040 General Plan show that approximately 3,400 vehicles traveled along Pierce Road each day in 2018. The winery traffic of 86 daily trips represents 2.5% of the traffic along Pierce Road. Using ITE Trip Generation estimates, the winery traffic of 144 daily trips represents 4.2% of the traffic volume along Pierce Road.

Traffic Safety

Recreational cyclists often travel along Pierce Road. Since there are no bike lanes along Pierce Road, cyclists that travel along Pierce Road are usually more advanced, experienced cyclists. Vehicles may occasionally pass cyclists along Pierce Road. As previously mentioned, House winery traffic represents only about 4.2% of the traffic volume on Pierce Road.

Old Oak Way is a narrow and steep dead-end road. As previously mentioned, there are 26 residential homes along Old Oak Way. The House Family Vineyards are located at the end of Old Oak Way. House Family Vineyard proposes to form a neighborhood committee to suggest safety improvements along Old Oak Way.

Previous suggestions by neighbors include the installation of a centerline, mirrors for blind driveways, solar powered speed feedback signs, speed humps, and landscaping improvements to improve visibility. The addition of a centerline along Old Oak Way would result in one 12-foot lane in each direction. This would cause vehicles to travel at slower speeds due to the smaller width of designated traveled way. The centerline should be striped as a double-yellow centerline to indicate that passing is not allowed along the roadway. Mirrors for blind driveways would improve safety for drivers exiting residential driveways. If speeding is a problem, especially in the downhill direction, flashing speed feedback signs and/or speed humps could be used to limit vehicle travel speed. A speed limit sign could be beneficial at the exit from the vineyard, as visitors are less likely to be familiar with the speed limit than residents along Old Oak Way.

Conclusions

The House Family Vineyard generates approximately 86 daily one-way vehicle trips along Pierce Road and Old Oak Way. This is a negligible percentage of the traffic on Pierce Road. However, since traffic volume along Old Oak Way is relatively low, the winery trips are noticeable. The winery should work with the other residents and the city to discuss implementing traffic safety measures along Old Oak Way, such as a centerline, mirrors, landscaping improvements, speed feedback signs, and/or speed humps.

Appendix A
Traffic Counts

All Traffic Data Services
www.alltrafficdata.net

Date Start: 26-Aug-20
OLD OAK WAY W.O PIERCE RD
Site Code: 1
Station ID:

Start Time	26-Aug-20		27-Aug-20		28-Aug-20		29-Aug-20		30-Aug-20		31-Aug-20		01-Sep-20		Week Average		
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	
12:00 AM	0	0	0	0	0	1	1	0	0	1	1	0	0	1	1	0	0
01:00	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
03:00	1	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0
04:00	1	1	1	1	1	1	1	1	0	0	1	0	1	1	1	1	1
05:00	1	1	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0
06:00	2	5	2	4	0	2	0	0	0	0	1	4	1	4	1	3	3
07:00	2	5	3	3	1	3	0	0	0	0	1	7	1	3	1	3	3
08:00	5	6	4	1	9	6	3	2	2	3	4	2	5	3	5	3	3
09:00	4	3	7	8	7	7	5	3	0	3	9	6	8	1	6	4	4
10:00	2	7	14	17	8	3	8	6	12	5	9	6	8	17	9	9	9
11:00	4	6	6	4	6	11	4	12	5	7	2	6	9	8	5	8	8
12:00 PM	10	11	4	17	6	15	9	20	4	8	7	10	12	4	7	12	12
01:00	3	10	1	22	9	11	7	21	12	12	3	9	3	4	5	13	13
02:00	7	8	6	16	6	10	11	19	11	21	8	10	5	10	8	13	13
03:00	8	5	13	15	8	21	12	15	6	9	9	13	8	9	9	12	12
04:00	4	14	7	8	3	8	19	13	9	11	10	5	10	11	9	10	10
05:00	2	10	8	8	12	3	20	10	15	10	7	9	5	5	10	8	8
06:00	6	6	6	10	6	13	7	6	6	10	5	7	10	7	7	8	8
07:00	8	6	6	4	4	4	8	9	8	8	3	5	4	5	6	6	6
08:00	3	9	0	7	5	3	4	5	5	6	1	1	0	3	3	5	5
09:00	1	3	3	3	4	4	3	1	5	2	4	6	1	0	3	3	3
10:00	1	2	2	2	3	2	0	1	1	2	0	0	2	1	1	1	1
11:00	0	0	2	2	0	0	0	0	0	0	0	1	0	3	0	1	1
Total	75	119	95	152	99	129	122	144	104	120	85	109	94	100	96	123	123
Day	194		247		228		266		224		194		194		219		219
AM Peak	08:00	10:00	10:00	10:00	08:00	11:00	10:00	11:00	10:00	11:00	09:00	07:00	11:00	10:00	10:00	10:00	10:00
Vol.	5	7	14	17	9	11	8	12	12	7	9	7	9	17	9	9	9
PM Peak	12:00	16:00	15:00	13:00	17:00	15:00	17:00	13:00	17:00	14:00	16:00	15:00	12:00	16:00	17:00	13:00	13:00
Vol.	10	14	13	22	12	21	20	21	15	21	10	13	12	11	10	13	13

Comb. Total	194	247	228	266	224	194	194	219
ADT	ADT 221	AADT 221						

FEHR & PEERS

March 16, 2021

Nicole Johnson, City Planner
John Cherbone, Public Works Director
13777 Fruitvale Avenue
Saratoga, CA 95070

Subject: House Family Winery – Peer Review

Fehr & Peers has completed a peer review of the draft Transportation Analysis (TA) prepared by Hexagon Transportation Consultants, Inc. dated March 15, 2021 for the House Family Winery at 13336 Old Oak Way in Saratoga, California. Specifically, the TA provided trip generation estimates for the proposed project that consists of upgrading an existing road for emergency fire access, installing an additional fire hydrant, and adding a wine cave. None of the proposed changes are anticipated to increase the travel demand to or from the winery. Therefore, the purpose of this report was to document existing conditions and identify potential transportation modifications to address traffic calming concerns from the local residents.

Fehr & Peers agrees with the findings in the memorandum and have no further comments.

Sincerely,

FEHR & PEERS



Franziska Church, AICP
Principal

1025-0446.05



Ashley C. Brooks, PE
Senior Transportation Engineer

Memorandum

Date: August 23, 2024
 To: Nicole Johnson, City of Saratoga and Bill Parkin, Wittwer/Parkin
 CC: Bryan Swanson, City of Saratoga
 From: Franziska Church, AICP
Subject: Vehicle Miles Traveled (VMT) Evaluation for the House Family Vineyards Project in Saratoga, California.

1025-0446.07

This memorandum outlines the vehicle miles traveled (VMT) evaluation for the House Family Vineyards Project in Saratoga, California.

Project Description

House Family Vineyards is a family-owned and operated winery on an approximately 48-acre property at the end of Old Oak Way. The property is bounded by single-family residences to the north, east, and south and Cooper-Garrod Vineyards (Garrod Parcel) to the west. The proposed uses are outlined in **Table 1**.

Table 1: House Family Vineyards Proposed Uses

Event Type	Operations Times
Public wine tastings	Tasting hours are 12:00pm to 5:00pm, Thursday through Sunday, and 12:00pm to 8:00pm on Fridays.
Private wine tastings	Private tasting hours are limited to 8:00am to 10:00pm and could occur on any of the days in the week.
Private events	Private events hours are limited to 8:00am to 10:00pm any day of the week. These events would be birthdays, graduations, anniversaries, weddings, and charity events. These events may include breakfast, lunch, dinner, light appetizers, wine tasting components The maximum number of events would be: <ul style="list-style-type: none"> - 70 per year for small events with up to 50 guests; - 20 per year for medium events with up to 100 guests; and - 5 per year for large groups with up to 148 guests.

Source: City of Saratoga, August 2024.



Table 2 outlines the assumptions for the daily number of guests and employees for an average day that includes one private wine tasting, one public wine tasting, and a medium event. For private events, a medium sized event is assumed, since those are anticipated to occur 20 times per year, where large events are only anticipated five times per year. While small events would occur more frequently (70 times), medium sized event was used to present a conservative average day.

Table 2: Average Daily Attendees by Event -Type

Event Type	Number of Guests			Number of Employees ⁴
	Max Guests ¹	Times per Day ²	Total Average Guests ³	
Vineyard Operations	0	0	0	4
Public Wine Tastings	120	1	120	8
Private Wine Tastings	25	1	25	8 ⁵
Private Events - Medium	100	1	100	10
Average Daily Attendees	n/a	n/a	145	22⁵

Notes:

1. Maximum number of guests from project description.
 2. An average day is assumed to have one occurrence of each event type.
 3. Total Max guests = Max guests x times per day
 4. Numbers of employees from project descriptions.
 5. Private wine tastings and private events are assumed not to overlap; therefore the 8 employees for private wine tastings are not included in the total, since the larger number of employees for private events are used in the total maximum.
- Source: Fehr & Peers, August 2024.

As shown in **Table 2**, the average number of attendees per day from all activities is estimated at 145 guests and 22 employees.

Senate Bill (SB) 743

The operations of transportation facilities have traditionally been described with the term *level of service (LOS)*. LOS describes traffic flow from the driver’s perspective based on factors such as speed, travel time, delay, and freedom to maneuver. SB 743 was adopted in 2013 and directed the State of California’s Office of Planning and Research (OPR) to look at different metrics for identifying transportation impacts and make corresponding revisions to the *CEQA Statute & Guidelines*. Following several years of draft proposals and related public comments, OPR settled upon daily VMT as the preferred metric for assessing passenger vehicle related impacts. OPR issued revised *CEQA Statute & Guidelines* in December 2018 along with a *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018) to assist practitioners in implementing the CEQA Statute & Guidelines to use VMT as the new metric. Under the revised *CEQA Statute & Guidelines*, vehicle LOS will no longer be used as a determinant of transportation



environmental impacts. The City of Saratoga does not yet have an adopted VMT Policy and defers to the OPR guidance published in *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018) when evaluating VMT.

VMT Screening

Consistent with CEQA Guidelines, OPR suggests that lead agencies (in this case the City of Saratoga) may apply a screening threshold to quickly identify when a project should be expected to cause a less-than-significant VMT impact without conducting a detailed study. OPR provides guidance for screening projects that are presumed to have less-than-significant impact without conducting detailed study:

- Small projects: Fewer than 110 trips per day (discussed below)
- Map-based screening for residential and office trips (not applicable)
- Near transit (not applicable)
- Affordable housing (not applicable)

Projects that do not meet specified screening threshold would require a VMT assessment.

The project is neither are residential or office project, is not near any major public transit service, and does not include an affordable housing component; thus, the only screening criteria potentially applicable to the proposed Project is the small project screening. The small project screening is discussed below.

Small Project Screening

OPR states that “projects that generate or attract less than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact.” To determine if the House Family Vineyards meets the small project screening criteria a trip generation assessment was conducted. Specifically, trip generation estimates for the House Family Vineyards were developed for five types of activities, which are discussed in more detail below:

- Non-Tasting Days: Monday to Wednesday
- Tasting Days: Thursday to Sunday
- Small events: up to 50 guests, 70 times per year
- Medium events: up to 100 guests; 20 times per year
- Large groups: up to 148 guests, 5 times per year

Non-Tasting and Tasting Day (Non-Event) Trip Generation

The guest and employee information from **Table 2** was used to determine the trip generation estimates for non-tasting and tasting days (i.e., non-event days). Specifically, the trip generation



estimates were developed based on the anticipated number of employees and guests and the assumed average number of people per car; also known as average vehicle occupancy (AVO).

Table 3 below summarizes the trip generation estimates for the non-event activities at House Family Vineyards.

Table 3: House Family Vineyards Average Non-Event Trip Generation Estimates

Winery Activity	Days of the Week	Number of Days per Week	Daily Non-Event Trips		
			Employee ¹	Visitor ²	Total
Vineyard Operations	Mon to Sun	7	8	0	8
Private Wine Tasting	Mon to Sun	7	16	20	36
Public Wine Tasting	Thurs to Sun	4	16	96	112
Total Average Non-Event Trips			40	116	156

Notes:

1. Assumes each employee from **Table 2** drives alone (i.e. one car per employee) and two trips per employee (one to and one from the vineyard). Employee trips = Number of employees x 2 trips per employee.

2. Assumes an average vehicle occupancy of 2.5 persons per car for wine tasting events. Assumes 2 trips per car (one to and one from the vineyard). Visitor trips = Number of guests / 2.5 people per car x 2 trips per car.

Source: Fehr & Peers, August 2024.

Based on the trip generation estimates presented in **Table 3**, each (non-event) winery activity generates between 8 and 112 trips per day. Considering the public wine tastings alone generate over 110 trips, the House Family Vineyard project does not meet the small project screening criteria of 110 trips.

Event Day Trip Generation

Similar to the non-event trip generation estimates, the trip generation estimates for event days were developed based on the anticipated number of guests per event type (small, medium, large) and the assumed AVO.

Table 4: House Family Vineyards Event Trip Generation Estimates

Event Type	Number of Guests	Number of Employees ¹	Times per Year	AVO ²	Daily Trips		
					Guest ³	Employee ⁴	Total
Small	50	6	70	2.2	46	12	58
Medium	100	8	20	2.4	84	16	100
Large	148	10	5	2.6	114	20	134

Notes:

1. Number of employees based on maximum employees for events from project description.

2. AVO = Average Vehicle Occupancy, i.e., average number of guests per car.

3. Daily guest trips = (Number of guests / AVO) x 2

4. Daily employee trips = Number of employees x 2

Source: Fehr & Peers, August 2024.



Based on the trip generation estimates presented in **Table 4**, small events would generate 58 daily trips, medium events 100 trips, and large events up to 134 daily trips. While small and medium events on their own would meet small project screening threshold of 110 trips, events would overlap with non-event (i.e., public and private wine tastings) trips, as discussed below.

Total Average Trip Generation

Since events could occur on the same day as tastings, the trip generation estimates for non-event days (**Table 3**) were added to the event trip estimates (**Table 4**) to calculate the total daily trips for House Family Vineyards (**Table 5**).

Table 5: House Family Vineyards Total Average Trip Generation Estimates

Event Type	Number of Guests	Times per Year	Daily Trips		
			Non-Event ¹	Event ²	Total
Small	50	70	156	58	214
Medium	100	20	156	100	256
Large	148	5	156	134	290

Notes:

1. From Table 3.

2. From Table 4.

Source: Fehr & Peers, August 2024.

As shown in **Table 5**, the House Family Vineyards would exceed the small project screening threshold of 110 daily trips for all event types assuming they occur on the same day as tastings. It should be noted that there are seasonal variations to vineyard and event activities, where the daily trips would be lower during winter months or days with inclement weather.

Average Annual Daily Trips

Since the activities at the House Family Vineyards vary throughout the week and year, with non-tasting days occurring Monday through Wednesday, tastings occurring Thursday through Sunday, and events occurring up to 95 times per year (70 small + 20 medium + 4 large events), an annual average trip generation rate was calculated for the vineyard as presented in **Table 6**.

When considering all activity throughout the year, the average annual daily trips for the House Family Vineyards is 127 trips and also exceeds the small project screening threshold and the project could not be screened from further VMT analysis and a VMT assessment was prepared.



Table 6: Average Annual Daily Trip Generation Estimates

Day of Week/ Activity Type	Type of activity Included	Daily Trips ¹	Times Per Year	Annual Trips ²
Monday	Operations and private tastings	44	52	2,288
Tuesday	Operations and private tastings	44	52	2,288
Wednesday	Operations and private tastings	44	52	2,288
Thursday	Operations, private tastings, and public tastings	156	52	8,112
Friday	Operations, private tastings, and public tastings	156	52	8,112
Saturday	Operations, private tastings, and public tastings	156	52	8,112
Sunday	Operations, private tastings, and public tastings	156	52	8,112
Small Event	Small Event	58	70	4,060
Medium Event	Medium Event	100	20	2,000
Large Event	Large Event	134	5	670
Total Trips				46,042
Average Annual Daily Trips³				127

Notes:

1. Daily trips from Tables 3 and 4.
 2. Annual trips = Daily trips x Times per year.
 3. Average annual daily trips = Total trips / 365 days
- Source: Fehr & Peers, August 2024.

Theoretical Maximum Capacity

While it is unlikely that all three event types (private wine tastings, private wine tastings, and private events) would each occur at maximum capacity several times per day on the same day; there are no restrictions that would prohibit this from occurring. **Table 7** outlines the assumptions for the daily number of guests and employees at each event type assuming a theoretical maximum capacity for each.

Table 7: Daily Maximum Number of Attendees by Event -Type

Event Type	Number of Guests			Number of Employees ⁴
	Max Guests ¹	Times per Day ²	Total Max Guests ³	
Public wine tastings	120	2	240	8
Private wine tastings	25	3	75	8
Vineyard Operations	0	0	0	4
Maximum Daily Attendees	n/a	n/a	315	22

Notes:

1. Maximum number of guests from project description.
2. Assumed maximum number of times an event could occur in a day.
3. Total Max guests = Max guests x times per day



4. Numbers of employees from project descriptions.
5. Private wine tastings and private events are assumed not to overlap; therefore the 8 employees for private wine tastings are not included in the total, since the larger number of employees for private events are used in the total maximum.

The guest and employee information from **Table 7** was used to determine the trip generation estimates for maximum operations. The same methodology as discussed for the small project screening was applied for the maximum operations. **Table 8** below summarizes the maximum trip generation estimates for the non-event activities at House Family Vineyards.

Table 8: House Family Vineyards Maximum Non-Event Trip Generation Estimates

Winery Activity	Days of the Week	Number of Days per Week	Daily Non-Event Trips		
			Employee ¹	Visitor ²	Total
Vineyard Operations	Mon to Sun	7	8	0	8
Private Wine Tasting	Mon to Sun	7	16	60	76
Public Wine Tasting	Thurs to Sun	4	16	192	208
Total Maximum Non-Event Trips			40	252	292

Notes:

1. Assumes each employee from Table 7 drives alone and two trips per employee (one to and one from the vineyard).
2. Assumes an average vehicle occupancy of 2.5 persons per car for wine tasting events. Assumes 2 trips per car (one to and one from the vineyard).

Source: Fehr & Peers, August 2024.

As shown in **Table 8**, the total maximum non-event trips would be 292 daily trips.

Total Maximum Trip Generation

Since events could occur on the same day as tastings, the maximum trip generation estimates for tasting days (**Table 8**) were added to the event trip estimates (**Table 4**) to calculate the total daily trips for House Family Vineyards (**Table 9**).

Table 9: House Family Vineyards Maximum Total Trip Generation Estimates

Event Type	Number of Guests	Times per Year	Daily Trips		
			Non-Event ¹	Event ²	Total
Small	50	70	292	58	350
Medium	100	20	292	100	392
Large	148	5	292	134	426

Notes:

1. From Table 3.
2. From Table 4.

Source: Fehr & Peers, August 2024.



Based on the information presented in **Table 9**, on the House Family Vineyard would generate a maximum between 350 and 426 daily trips when in full operations.

VMT Assessment

To evaluate VMT for the House Family Vineyards, the VMT metric and threshold needs to be determined. OPR provides guidance for residential, office, and retail projects. The House Family Vineyards is not considered a residential or office project, but more similar to a retail project. Retail redistributes trips rather than creating new trips. Redistribution of trips in the context of the winery means that there is already demand to make trips to visit wineries for wine tasting and larger events, such as weddings or birthdays. Thus, the project is attracting, i.e., redistributing, trips that would have accessed alternate locations, such as existing wineries in Saratoga and other wedding event venues in Santa Clara County. OPR recommends a net increase in total VMT as an impact threshold for retail projects (i.e., the difference in total VMT in the area affected with and without the project).

Since the winery attracts trips from beyond Saratoga, it is reasonable to assume that the project would increase total VMT and therefore is assumed to have a significant VMT impact for retail type projects. This determination is conducted qualitatively and not based on quantitative analysis.

Mitigation Discussion

Typical mitigation for VMT is a travel demand management (TDM) program. TDM programs aim to reduce trips from individual cars by providing incentives for multimodal access and carpooling. Given that the vineyard is not easily accessible by multimodal access such as walking, biking, or transit, TDM measures would need to focus on incentivizing carpooling or providing shuttle services.

Wine Tasting Mitigation

For wine tastings shuttles are less effective, because guests come in smaller groups throughout the day and potentially come from other wineries nearby. The most effective mitigation strategy for wine tastings is limiting the number of parking spaces. House Family Vineyards has 55 parking spaces. For the maximum capacity of 120 wine tasting guests plus 25 private tasting guests, then each car on average would need to have at least 2.6 people ($AVO = 2.6$).

Event Mitigation

The most effective TDM strategy for events that are not easily accessible by public transit, is the provision of shuttles that take guests from pre-determined pick-up locations (such as hotel or park-and-ride) to the event and back. Thus, to mitigate the VMT impact for events the House



Family Vineyards will be required to either provide shuttle services themselves or require anyone booking an event to provide shuttle service for their guests.

Part of the indirect enforcement mechanism for use of shuttles, is the limited parking on site. House Family Vineyards has 55 parking spaces. Based on the assumptions outlined in **Table 4**, medium events have a parking demand for 50 spaces and large events 67 parking spaces¹. Thus, by necessity large events would need to provide shuttles to not cause overflow parking. “No Parking” signage should be included on Old Wood Road to avoid overflow parking along the street. The City could also consider restricting parking supply to limit the number of trips to the site.

Summary of Mitigation Strategies

There are several strategies the City can consider to reduce the VMT for the House Family Vineyards project:

- Prohibit public and private tasting on same day as events; as shown in **Table 4**, this would fully mitigate VMT impact for small and medium size events. Large events would remain significant.
- Provide shuttles for all events. While still significant and unavoidable with mitigation, provision of shuttles would reduce the number of event trips to the winery.
- Limit parking to the 55 spaces to provided and enforce on-street parking restrictions While still significant and unavoidable with mitigation, provision of shuttles would reduce the number of event trips to the winery.
- If House Family Vineyards does not host public and private tastings on the same day as events, then the proposed parking supply of 55 is sufficient to limit daily trips to 110 trips for large events.

¹ Parking demand calculated based on one-way guest trips (daily guest trips from Table 4 divided by 2) plus the number of employees.