



# Trip Generation Memorandum

C-Store Replacement and New Car Wash Use Permit P23-00300-  
MOD  
Planning Commission Hearing Date (May 7, 2025)

**MEMORANDUM**

To: Chris Brown  
PM Design Group, Inc.

From: Ben Huie, P.E.  
Connie Leung, P.E.  
Kimley-Horn and Associates, Inc.

Date: July 8, 2024

Subject: Chevron Angwin Trip Generation Memorandum (FINAL)

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Kimley-Horn understands that a Chevron Franchisee would like to proceed with site improvements of their current fueling station located at 111 Howell Mountain Road in Angwin, CA. Adjacent to the current Chevron station is an existing building that burned down and is now vacant. The existing building was previously a convenience store and auto care shop. The project is now redeveloping the site to remove the auto care shop, expand the convenience store, and construct a car wash. The Project will include replacing the existing building with a new 2,234-square foot convenience store, a new trash enclosure, ADA parking, and a one tunnel, 1,164-square foot car wash.

Based on the pre-application meeting comments provided by the County of Napa via email on May 9, 2023, the project is required to complete a trip generation analysis utilizing the Napa County Traffic Impact Study (TIS) Guidelines. According to the guidelines, if the number of project-generated net new daily trips is less than 110 trips, the project does not need to prepare a TIS. This memorandum summarizes the assumptions, methodology, analysis, and results of the trip generation evaluation.

**Methodology**

Trip generation for projects are typically developed utilizing trip generation rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*. However, due to the rural characteristics of the project location within Angwin and the specific change in land uses, the ITE *Trip Generation Manual* was not utilized. Many of the data sets used to develop the trip generation rates within the ITE *Trip Generation Manual* were collected from sites located in suburban or urban cities with higher populations and within areas with more pass-by traffic. These locations are not similar to the project location, which is in a rural area and located away from major highways or freeways where it is expected to generate primarily local traffic rather than regional traffic. Furthermore, the ITE *Trip Generation Manual* does not contain land uses that best represents the proposed project changes for the increase in convenience store size and addition of the car wash tunnel. Within the ITE *Trip Generation Manual*, there are no land uses available to determine the trip generation for a convenience store size increase since the most similar land uses available assumes an increase in trips associated with the gas station use for the vehicle fueling positions. However, the project is not changing the number of vehicle fueling positions for the existing gas station use. For the car wash use, trip generation rates for land uses within ITE *Trip Generation Manual* are developed based on stand-alone car washes and not for those within a gas station. Therefore, these data points would not

be representative of the proposed project and would not be appropriate to be used to develop the proposed trip generation.

Instead, custom trip generation rates were developed by collecting driveway volumes at locations similar to the proposed project. Traffic counts were collected at a convenience store and car wash (both located within a gas station, similar to the proposed project) to develop the proposed project trip generation. Traffic counts were also collected at an auto care shop to develop the existing land use to be removed. The data locations are similar to Angwin in that they are located within rural cities or towns and located away from major freeways or highways that would result in fewer regional trips. Custom trip generation rates developed from the data collection were then applied to the proposed project land use changes to determine the net new daily trips generated.

## Data Collection

Driveway volumes were collected at the California sites listed below in Royal Oaks, Aromas, and Salinas on Thursday, April 18, 2024 during respective hours of operation and avoided inclement weather. Video cameras were placed in public right-of-way which monitored the driveways that access each site and monitored on-site activities to determine where vehicles were going to (e.g., video was used to monitor if vehicles were accessing only the convenience store or both the convenience store and gas station at the Royal Oaks Market). The convenience market in Royal Oaks, CA and the car wash in Salinas, CA both have associated gas station uses, similar to the project. Trips from the convenience market or car wash uses at these locations were isolated from the total driveway volumes to determine the trips associated with these uses and excludes the gas station trips to assist in determining the trip generation rates for a convenience store and car wash. Since the auto care shop in Aromas, CA is a stand-alone shop, all driveway volumes collected at this location are associated with the auto care shop.

It should be noted that the data collected at the car wash tunnel for the Exxon gas station in Salinas, CA resulted in very few trips (2 daily trips) and were not reasonable to be used to develop the trips for the proposed car wash. Therefore, supplemental data was collected at the Shell gas station in Pleasanton, CA on Wednesday, May 22, 2024 during the PM peak period from 5:00 PM to 6:00 PM. Adjustments were made to account for the difference in area type between Angwin and Pleasanton. Further details are provided in the following section. A summary of the daily, AM peak hour, and PM peak hour traffic volumes for the Royal Oaks Market, Aromas Auto Repair, and Exxon gas station and the PM peak hour traffic volumes for the Shell gas station are shown in **Table 1**. Driveway volume data is included in **Attachment A**.

- Convenience Market Trip Generation
  - Royal Oaks Market at 12 Maher Road in Royal Oaks, CA
  - Data collected from 6:00 AM to 9:00 PM
- Auto Care Center
  - Aromas Auto Repair at 365 Blohm Avenue in Aromas, CA
  - Data collected from 8:00 AM to 5:00 PM
- Car Wash
  - Exxon Gas Station at 273 River Road in Salinas, CA

- Data collected from 5:30 AM to 10:00 PM
- Car Wash (Supplemental Data)
  - Shell Gas Station at 5994 W Las Positas Blvd in Pleasanton CA
  - Data collected during the PM peak hour from 5:00 PM to 6:00 PM

**Table 1: Data Collection Summary**

Location	Land Use	Size	Trip Generation						
			Daily	AM Peak			PM Peak		
				Total	In	Out	Total	In	Out
Royal Oaks Market (Royal Oaks, CA)	Gas Station/Other	4 VFP	606	50	25	25	64	33	31
	Convenience Store	4.73 KSF	592	49	24	25	64	29	35
	Total		1,198	99	49	50	128	62	66
Exxon Gas Station (Salinas, CA)	Gas Station/ Convenience Store	8 VFP	638	48	25	23	61	29	32
	Car Wash	1 Tunnel	2	0	0	0	0	0	0
	Total		640	48	25	23	61	29	32
Aromas Auto Repair (Aromas, CA)	Auto Repair Shop	2.49 KSF	53	5	3	2	10	5	5
	Total		53	5	3	2	10	5	5
Shell Gas Station (Pleasanton, CA)	Gas Station/ Convenience Store	12 VFP	N/A	N/A			140	69	71
	Car Wash	1 Tunnel	N/A	N/A			8	4	4
	Total		N/A	N/A			148	73	75

Notes:

- Daily, AM peak hour, and PM peak hour driveway volumes were collected on Thursday, April 18, 2024 at the Royal Oaks Market, Exxon gas station, and Aromas Auto Repair.
- Supplemental PM peak hour driveway volumes were collected on Wednesday, May 22, 2024 at the Shell gas station. Daily and AM peak hour driveway volumes were not collected and show "N/A" for these time periods in Table 1.

## Trip Generation

Custom trip generation rates were developed based on the land use size and driveway volumes at each data collection site. Traffic volumes at the Royal Oaks convenience market and the Aromas Auto Repair shop were used to develop the trip generation rates for the proposed convenience store expansion and the existing auto care shop to be demolished. A summary of the Daily, AM peak hour, and PM peak hour trip generation rates for the two uses are shown in **Table 2**.

**Table 2: Custom Trip Generation Rates (Convenience Store and Auto Care Center)**

Land Use	Units	Daily	AM Peak Hour			PM Peak Hour		
		Rate	Rate	% In	% Out	Rate	% In	% Out
Convenience Store	KSF	125.2	10.36	49%	51%	13.53	45%	55%
Auto Care Center	KSF	21.3	2.0	60%	40%	4.0	50%	50%

Data collected at the car wash in the Exxon gas station resulted in only 2 daily trips (1 in / 1 out). As mentioned previously, this would result in a low trip generation rate and is not practical, as more trips are expected to be generated by the proposed car wash. Therefore, supplemental data collected at the car wash in the Shell gas station in Pleasanton, CA were used to develop a custom trip generation for the proposed car wash with further adjustments made using data at the Exxon gas station to account for the difference in suburban and rural areas between Pleasanton and Salinas. PM peak hour driveway volumes collected at the Pleasanton Shell gas station were for a gas station with 12 vehicle fueling positions and 1 car wash tunnel. To provide a fair comparison with the Exxon gas station, which has 8 vehicle fueling positions and 1 car wash tunnel, the trips generated at the Shell gas station were linearly reduced to determine the traffic that would be generated by 8 vehicle fueling positions rather than 12 vehicle fueling positions. A summary of the trips generated at the Shell gas station for a 8 vehicle fueling positions in comparison to 12 vehicle fueling positions is shown in **Table 3**.

A ratio was then developed between the PM peak hour trips between the Exxon gas station and Shell gas station trips and applied to the Shell car wash to develop the PM peak hour car wash trips for the proposed project. This step adjusts the car wash trips in a suburban area (Pleasanton) to car wash trips in a rural area (Salinas and Angwin). This results in the proposed car wash generating 6 PM peak hour trips (3 in / 3 out). Based on industry standards, an assumption that PM peak hour volumes are typically 10 percent of the daily volumes was applied to the PM trips to develop the daily trips for the proposed car wash, which results in 60 daily trips.

**Table 3: Custom Trip Generation Rates (Car Wash)**

Location	Land Use	Size	Daily	PM Peak		
				Total	In	Out
Shell Gas Station (Pleasanton CA)	Gas Station/ Convenience Store	12 VFP	-	140	69	71
	Car Wash	1 Tunnel	-	8	4	4
	<b>Total Trips</b>		-	<b>148</b>	<b>73</b>	<b>75</b>
	<b><i>Calculations to Determine Trips for 8 VFP</i></b>					
	8 VFP to 12 VFP Proportion		-	0.66	0.66	0.66
	Gas Station/ Convenience Store (Calculated)	8 VFP	-	93	46	47
Exxon Gas Station (Salinas, CA)	Gas Station/ Convenience Store	8 VFP	638	61	29	32
Proposed Project	Car Wash (Calculated)	1 Tunnel	60	6	3	3

Since the project is proposing to expand the convenience store by 1,894 square feet, construct a one-tunnel car wash, and demolish the existing 2,860-square foot auto care center, these net new changes were applied to the rates developed in **Table 2** and the information within **Table 3** to

determine the net new proposed trip generation. It should be noted that AM peak hour trips were not collected at the Shell car wash in Pleasanton and therefore is shown as “N/A”. Since the daily trip generation is the deciding factor to determine whether a TIS is required and this was calculated based on the PM peak hour trips for the car wash, the AM peak hour trips were not collected. A summary of the increase in daily, AM peak hour, and PM peak hour trips as a result of the project changes is shown in **Table 4**. As shown, the project would generate a net new 99 daily trips, 2 AM peak hour trips, and 6 PM peak hour trips. Since the project is estimated to generate net new 99 daily trips and is below the 110-trip threshold stated in the Napa County TIS guidelines, the project is not required to prepare a TIS.

**Table 4: Proposed Project Trip Generation Summary**

Land Use	Unit	Size	Daily	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
Net New Proposed Uses									
Convenience Store	1.894	KSF	237	20	10	10	26	12	14
Pass-by (58% Daily, 60% AM, and 56% PM)			-137	-12	-6	-6	-15	-8	-7
Car Wash	1	Tunnel	60	N/A	N/A	N/A	6	3	3
Automobile Care Center	-2.860	KSF	-61	-6	-4	-2	-11	-6	-5
Total Net New Trips			99	2	0	2	6	1	5

Notes:

1. Pass-by reduction for the convenience store is determined based on ITE *Trip Generation Manual*, 11<sup>th</sup> Edition for ITE Land Use Code 945 (Convenience store with gas station).
2. Data collection used to determine the car wash trip generation was collected during the PM peak hour only. AM peak hour volumes were not collected and are shown as “N/A” in Table 4. Daily trips are calculated assuming the PM peak hour trips are 10 percent of the daily trips.

## Conclusion

According to the *Napa County Traffic Impact Study (TIS) Guidelines*, the project does not need to prepare a TIS if the number of project-generated net new daily trips is less than 110 trips. The difference between the daily trip generation for the existing uses to be removed and the proposed uses to be constructed is +99 daily trips. Since the difference in daily trips is less than 110 trips, a TIS is not required for the project.

Attachments:

Attachment A – Driveway Counts

Prepared by National Data &amp; Surveying Services

## Trip Generation

Location: Royal Oaks Market, 12 Maher Rd #9056  
City: Royal Oaks, CA

Date: 4/18/2024  
Day: Thursday

TIME	Trip Generation								Trip (Gas Station / Convenience Market / Other)		
	Gas station / Convenience Market / Other				Convenience Market						
	N Dwy [001]		S Dwy [101]		N Dwy [001]		S Dwy [101]				
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	OUTCOME
6:00 AM	5	0	3	3	4	0	1	1	8	3	5
6:15 AM	6	0	2	12	4	0	0	8	8	12	-4
6:30 AM	6	1	3	10	3	1	1	2	9	11	-2
6:45 AM	16	0	1	12	7	0	0	7	17	12	5
7:00 AM	11	2	3	15	7	2	2	6	14	17	-3
7:15 AM	6	0	5	11	4	0	0	5	11	11	0
7:30 AM	9	3	3	12	6	2	2	7	12	15	-3
7:45 AM	9	0	3	7	3	0	0	3	12	7	5
8:00 AM	6	0	1	6	4	0	0	2	7	6	1
8:15 AM	4	0	1	8	3	0	0	3	5	8	-3
8:30 AM	6	1	0	4	6	1	0	1	6	5	1
8:45 AM	5	0	3	8	0	0	0	5	8	8	0
9:00 AM	12	0	0	11	4	0	0	2	12	11	1
9:15 AM	3	0	3	8	2	0	0	3	6	8	-2
9:30 AM	2	0	1	4	0	0	1	1	3	4	-1
9:45 AM	4	1	0	6	1	0	0	1	4	7	-3
10:00 AM	5	1	5	6	3	1	1	3	10	7	3
10:15 AM	4	1	1	5	4	1	1	3	5	6	-1
10:30 AM	4	0	3	7	1	0	1	1	7	7	0
10:45 AM	2	0	1	7	1	0	1	4	3	7	-4
11:00 AM	10	1	4	6	10	0	1	5	14	7	7
11:15 AM	5	2	0	8	3	2	0	6	5	10	-5
11:30 AM	6	0	1	5	4	0	1	4	7	5	2
11:45 AM	8	0	4	8	3	0	2	4	12	8	4
12:00 PM	12	0	1	16	7	0	0	7	13	16	-3
12:15 PM	4	0	0	5	2	0	0	3	4	5	-1
12:30 PM	7	0	1	7	3	0	1	3	8	7	1
12:45 PM	6	0	1	8	2	0	0	5	7	8	-1
1:00 PM	10	0	2	9	8	0	0	4	12	9	3
1:15 PM	9	0	2	11	3	0	0	6	11	11	0
1:30 PM	7	1	1	13	6	0	1	7	8	14	-6
1:45 PM	3	0	0	6	3	0	0	5	3	6	-3
2:00 PM	11	0	1	8	8	0	1	4	12	8	4
2:15 PM	10	1	0	12	7	0	0	10	10	13	-3
2:30 PM	12	0	1	10	4	0	0	5	13	10	3
2:45 PM	22	0	1	14	11	0	0	6	23	14	9
3:00 PM	11	2	1	20	5	2	1	9	12	22	-10
3:15 PM	16	0	0	13	10	0	0	6	16	13	3
3:30 PM	14	0	3	19	7	0	0	10	17	19	-2
3:45 PM	12	0	1	12	6	0	0	7	13	12	1
4:00 PM	15	0	3	18	11	0	1	6	18	18	0
4:15 PM	5	0	3	15	3	0	2	11	8	15	-7
4:30 PM	11	0	0	8	7	0	0	5	11	8	3
4:45 PM	16	0	3	18	10	0	1	11	19	18	1
5:00 PM	10	1	5	13	5	1	1	5	15	14	1
5:15 PM	12	0	1	16	5	0	0	7	13	16	-3
5:30 PM	14	0	1	18	7	0	0	11	15	18	-3
5:45 PM	12	0	2	12	6	0	0	4	14	12	2
6:00 PM	11	1	1	11	5	0	1	3	12	12	0
6:15 PM	9	1	2	13	2	1	0	2	11	14	-3
6:30 PM	8	0	0	8	3	0	0	4	8	8	0
6:45 PM	3	0	1	4	1	0	0	1	4	4	0
7:00 PM	9	0	1	4	5	0	1	2	10	4	6
7:15 PM	9	1	1	14	4	1	0	4	10	15	-5
7:30 PM	12	0	1	11	5	0	0	6	13	11	2
7:45 PM	6	0	0	8	1	0	0	2	6	8	-2
8:00 PM	2	0	0	5	2	0	0	3	2	5	-3
8:15 PM	4	0	0	6	1	0	0	3	4	6	-2
8:30 PM	5	0	0	5	5	0	0	3	5	5	0
8:45 PM	4	2	2	5	1	2	2	2	6	7	-1
Totals	497	23	94	584	268	17	28	279	591	607	-16

## Trip Generation

Location: Exxon, 273 River Rd  
City: Salinas, CA

Date: 4/18/2024  
Day: Thursday

TIME	Trip Generation																Trip (Gas Station & Car Wash)			
	Gas station & Car Wash								Car Wash											
	SE Dwy [002]		SW Dwy [102]		NE Mid Dwy [202]		NE Mid Dwy [302]		SE Dwy [002]		SW Dwy [102]		NE Dwy [202]		NE Mid Dwy [302]					
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	OUTCOME	
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1
6:00 AM	4	1	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	6	5	1
6:15 AM	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0
6:30 AM	6	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	6	5	1
6:45 AM	2	4	4	5	1	0	0	0	0	0	0	0	0	0	0	0	0	7	9	-2
7:00 AM	7	0	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	8	6	2
7:15 AM	3	3	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	6	8	-2
7:30 AM	5	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	6	3	3
7:45 AM	5	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	6	4	2
8:00 AM	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0
8:15 AM	2	7	4	2	0	0	1	0	0	0	0	0	0	0	0	0	0	7	9	-2
8:30 AM	4	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6	4	2
8:45 AM	2	1	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5	-1
9:00 AM	1	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	-2
9:15 AM	3	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	4	2	2
9:30 AM	1	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	-4
9:45 AM	6	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	8	2	6
10:00 AM	4	4	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	6	7	-1
10:15 AM	2	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0
10:30 AM	0	2	4	7	0	0	0	0	0	0	0	0	0	0	0	0	0	4	9	-5
10:45 AM	2	0	1	3	0	0	1	0	0	0	0	0	0	0	0	0	0	4	3	1
11:00 AM	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	-2
11:15 AM	1	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0
11:30 AM	1	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	-2
11:45 AM	2	1	4	1	0	0	0	0	1	0	0	0	0	0	0	0	0	6	3	3
12:00 PM	2	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	-1
12:15 PM	3	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	5	4	1
12:30 PM	4	3	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	8	9	-1
12:45 PM	3	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	1
1:00 PM	4	4	3	3	0	0	0	1	0	0	0	0	0	0	0	0	0	7	8	-1
1:15 PM	3	1	1	5	0	1	0	0	0	0	0	0	0	0	0	0	0	4	7	-3
1:30 PM	3	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	2	3
1:45 PM	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	-3
2:00 PM	7	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7	3	4
2:15 PM	6	1	3	8	1	0	0	0	0	0	0	0	0	0	0	0	0	10	9	1
2:30 PM	3	1	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	4	7	-3
2:45 PM	3	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0
3:00 PM	4	1	3	4	0	1	1	0	0	0	0	0	0	0	0	0	0	8	6	2
3:15 PM	1	5	8	5	0	0	0	1	0	0	0	0	0	0	0	0	0	9	11	-2
3:30 PM	3	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0
3:45 PM	6	1	1	7	0	0	1	1	0	0	0	0	0	0	0	0	0	8	9	-1
4:00 PM	1	1	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	3	7	-4
4:15 PM	5	1	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	6	5	1
4:30 PM	2	1	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	3	6	-3
4:45 PM	5	3	4	4	0	1	0	0	0	0	0	0	0	0	0	0	0	9	8	1
5:00 PM	1	2	3	3	0	1	0	0	0	0	0	0	0	0	0	0	0	4	6	-2
5:15 PM	7	3	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	11	9	2
5:30 PM	1	7	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4	9	-5
5:45 PM	5	3	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	10	8	2
6:00 PM	2	2	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0
6:15 PM	3	3	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	5	6	-1
6:30 PM	1	2	3	1	0	0	0	0	0	0	0	0	0	0	0	1	1	4	3	1
6:45 PM	3	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	5	4	1
7:00 PM	4	1	1	3	0	1	0	0	0	0	0	0	0	0	0	0	0	5	5	0
7:15 PM	3	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	1
7:30 PM	0	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	2	4	-2
7:45 PM	3	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	2	3
8:00 PM	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	-2
8:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	-1
8:30 PM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
8:45 PM	2	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	-2
9:00 PM	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	2	-1
9:15 PM	1	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4	1	3
9:30 PM	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
9:45 PM	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	-2
Totals	178	110	123	205	9	6	5	4	0	0	0	0	0	0	7	7		315	325	-10



## Trip Generation

Location: Aromas Auto Repair

City: Aromas, CA

Date: 4/18/2024

Day: Thursday

TIME	Trip Generation		TRIP
	IN	OUT	
8:00 AM	1	0	1
8:15 AM	0	0	0
8:30 AM	1	2	-1
8:45 AM	1	0	1
9:00 AM	1	1	0
9:15 AM	0	0	0
9:30 AM	0	0	0
9:45 AM	2	2	0
10:00 AM	1	2	-1
10:15 AM	2	1	1
10:30 AM	0	0	0
10:45 AM	0	1	-1
11:00 AM	0	0	0
11:15 AM	1	2	-1
11:30 AM	0	1	-1
11:45 AM	1	2	-1
12:00 PM	0	0	0
12:15 PM	3	1	2
12:30 PM	2	2	0
12:45 PM	0	0	0
1:00 PM	0	0	0
1:15 PM	0	0	0
1:30 PM	1	2	-1
1:45 PM	0	0	0
2:00 PM	0	0	0
2:15 PM	0	0	0
2:30 PM	1	0	1
2:45 PM	2	1	1
3:00 PM	0	1	-1
3:15 PM	0	0	0
3:30 PM	0	0	0
3:45 PM	1	1	0
4:00 PM	2	1	1
4:15 PM	1	2	-1
4:30 PM	1	2	-1
4:45 PM	1	0	1
Totals	26	27	-1

Data Collection Location: Shell Gas Station (5994 W Las Positas Blvd, Pleasanton CA)  
 Date/Time: 5/22/24, 5:00 to 6:00 PM

Time Period	Las Positas Dwy		Hopyard North Dwy		Hopyard South Dwy		Car Wash Entrance	
	In	Out	In	Out	In	Out	In	Out
5:00 PM - 5:15 PM	5	9	8	0	11	9	0	0
5:15 PM - 5:30 PM	9	8	6	2	7	16	1	0
5:30 PM - 5:45 PM	5	9	3	1	3	9	1	2
5:45 PM - 6:00 PM	2	5	3	1	11	6	2	2

Note: Total driveway counts are trips generated from all uses (gas station, convenience store, and car wash)