

Red Light Running Analysis

Arneill Rd Corridor, Camarillo, CA

Tuesday, September 8 through Tuesday, September 15, 2026 (8 days)

Intersections studied

Arneill Rd & Daily Dr

Arneill Rd & Ponderosa Dr

Arneill Rd & Barry St

Arneill Rd & Pickwick Dr

Prepared for

City of Camarillo traffic engineering staff

Camarillo Police Department (Ventura County Sheriff's Office)

Purpose

Identify the locations, approaches and times best suited for red light enforcement, and flag clearance timing items for engineering review.

Executive Summary

Over eight days (Sept 8–15, 2026), video detection at four signalized intersections on Arneill Rd recorded **9,785 red light entries** on through movements. Most (69%) were marginal entries less than one second after red onset, typically inside the all-red clearance. The remaining **3,015 clear red violations** (one second or more into red) average **377 per day** across the corridor and are the recommended enforcement target.

3,015 Clear red violations (≥1 s) 8 days, 4 intersections	377 Clear red violations per day, corridor	8.3 Daily Dr clear red per 1,000 through vehicles (others ~4.1)	69% Share of red entries that are marginal (<1 s)
--	---	--	--

Key findings

- **Daily Dr is the priority location.** Its clear violation rate (8.3 per 1,000 through vehicles) is about twice that of Ponderosa Dr, Barry St and Pickwick Dr (4.1 to 4.2). Southbound Daily Dr alone produced 544 clear violations, 18% of the corridor total.
- **Activity is concentrated in the daytime.** Midday (09–15) and PM (15–19) account for 2,190 of 3,015 clear violations (73%). Overnight (22–06) activity is minimal (105 clear violations in 8 days).
- **Weekdays are heavier than weekends.** The corridor averaged 409 clear violations per weekday versus 281 per weekend day, about 45% higher (30% at Daily Dr, 45% at Barry St, 63% at Ponderosa Dr, 66% at Pickwick Dr). Friday (448), Thursday (421) and Tuesday (401, 412) were the busiest days.
- **Low volume side streets have high rates but low counts.** Barry St EB (29.3 per 1,000), Barry St WB (15.6) and Pickwick Dr EB (11.7) each produced fewer than 70 clear violations in 8 days. Spot checks fit better than sustained details.
- **Marginal entries point to an engineering review, not enforcement.** 6,770 of 9,785 red entries were under one second into red. Observed average yellow intervals are 4.1 to 4.8 s; yellow and all-red intervals should be confirmed against the CA MUTCD for posted speeds.

Recommended enforcement deployments (weekdays, especially Tue, Thu and Fri)

Priority	Location and approach	Recommended window	Clear red, 8 days
1	Daily Dr, southbound	7–9 AM and 1–6 PM	544
2	Daily Dr, northbound	12–5 PM	362
3	Barry St, northbound	10 AM–3 PM	302
4	Ponderosa Dr, northbound	12–1 PM and 3–4 PM	287
5	Pickwick Dr, SB and NB	SB 8–9 AM; NB 12–1 PM	SB 205; NB 254

Clear red counts are totals for the whole approach over 8 days. Hourly detail for each window is in Section 7.

1. Methodology and Definitions

Data source

- Miovision One / SmartSense video detection at four Arneill Rd signals: Daily Dr, Ponderosa Dr, Barry St and Pickwick Dr.
- Study period: Tuesday, September 8 through Tuesday, September 15, 2026 (8 full days, including one weekend).
- **Through movements only.** Left and right turns are not covered by the red light data and are not included in any figure.
- Times are local intersection time.

Entry classifications

Category	Definition	Use in this report
Yellow entry	Vehicle entered the intersection during the yellow interval. Legal under the California Vehicle Code.	Context and exposure only.
Red entry	Vehicle entered after red onset (a red light runner). Split into the two severity groups below.	Total red activity.
Marginal red (<1 s)	Entered less than 1.0 s after red onset, typically within the all-red clearance interval.	Signal timing and clearance review; not a practical enforcement target.
Clear red violation (≥1 s)	Entered 1.0 s or more after red onset. The driver “blew the red.”	Primary enforcement target.

Rates and time periods

- Rates are expressed per 1,000 through vehicles, using through-vehicle volume from turning movement counts (bicycles and pedestrians excluded) for the same period.
- Rates are approximate: the red light crossing data omits some vehicles that could not be matched to a signal phase, while the volume denominator includes them.
- Time periods used throughout: **AM** 06–09, **Midday** 09–15, **PM** 15–19, **Evening** 19–22, **Night** 22–06.
- Hourly figures are labeled by the hour starting (for example, 13 = 1:00 to 1:59 PM).

Color convention



Yellow entries



Marginal red (<1 s)



Clear red violations (≥1 s)

Where charts compare intersections, each intersection has its own color (Daily Dr is always dark red).

2. Intersection Summary

Intersection	Yellow	Red total	Red <1 s	Red ≥1 s	Through volume	Red per 1,000	Red ≥1 s per 1,000	Red ≥1 s per day
Arneill Rd & Daily Dr	12,831	3,560	2,376	1,184	142,052	25.1	8.3	148
Arneill Rd & Ponderosa Dr	12,304	2,232	1,590	642	156,534	14.3	4.1	80
Arneill Rd & Barry St	8,750	2,123	1,496	627	154,359	13.8	4.1	78
Arneill Rd & Pickwick Dr	7,521	1,870	1,308	562	134,704	13.9	4.2	70
Corridor total	41,406	9,785	6,770	3,015	587,649	16.7	5.1	377

Table 1. Eight day totals, Sept 8–15, 2026. Through movements only.

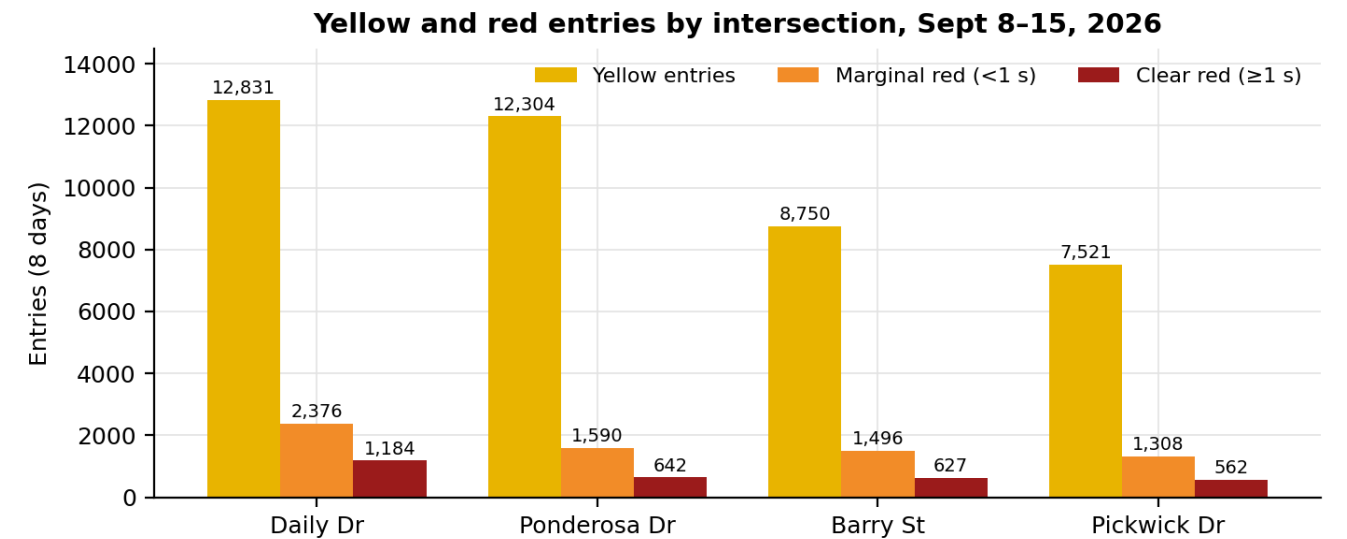


Figure 1. Yellow entries, marginal red entries and clear red violations by intersection.

Daily Dr has fewer through vehicles than Ponderosa Dr or Barry St, yet it produced nearly twice as many clear red violations (1,184 versus 642 and 627). Its red entry rate of 25.1 per 1,000 is also well above the other three (13.8 to 14.3). Ponderosa Dr, Barry St and Pickwick Dr are closely matched on a per-vehicle basis.

3. Results by Approach

Int.	Dir	Yellow	Red total	<1 s	1–3 s	3–10 s	≥10 s	Red ≥1 s	Median s into red	Avg yellow (s)	Through vol	Red ≥1 s per 1,000
Daily	EB	1,046	243	158	46	5	34	85	0.67	4.4	12,264	6.9
Daily	NB	3,433	1,101	739	316	22	24	362	0.65	4.1	46,681	7.8
Daily	SB	5,038	1,523	979	476	14	54	544	0.72	4.1	54,709	9.9
Daily	WB	3,314	693	500	168	5	20	193	0.61	4.4	28,398	6.8
Ponderosa	EB	1,831	267	164	44	25	34	103	0.68	4.8	28,595	3.6
Ponderosa	NB	5,451	1,180	893	236	10	41	287	0.55	4.4	59,720	4.8
Ponderosa	SB	3,415	612	418	124	4	66	194	0.62	4.4	41,994	4.6
Ponderosa	WB	1,607	173	115	21	1	36	58	0.57	4.8	26,225	2.2
Barry	EB	496	111	56	36	6	13	55	0.99	4.1	1,874	29.3
Barry	NB	4,219	1,122	820	276	10	16	302	0.63	4.1	80,657	3.7
Barry	SB	3,559	809	582	175	10	42	227	0.59	4.1	69,075	3.3
Barry	WB	476	81	38	29	3	11	43	1.13	4.1	2,753	15.6
Pickwick	EB	900	168	103	46	3	16	65	0.75	4.1	5,563	11.7
Pickwick	NB	3,609	944	690	219	4	31	254	0.58	4.1	68,077	3.7
Pickwick	SB	2,447	647	442	138	4	63	205	0.67	4.1	55,003	3.7
Pickwick	WB	565	111	73	23	2	13	38	0.67	4.1	6,061	6.3

Table 2. Red entries by approach and severity (seconds after red onset). Shaded rate cells are 10 or more per 1,000. "Red ≥1 s" is the sum of the 1–3 s, 3–10 s and ≥10 s columns.

Clear red violation rate by approach (Daily Dr highlighted)

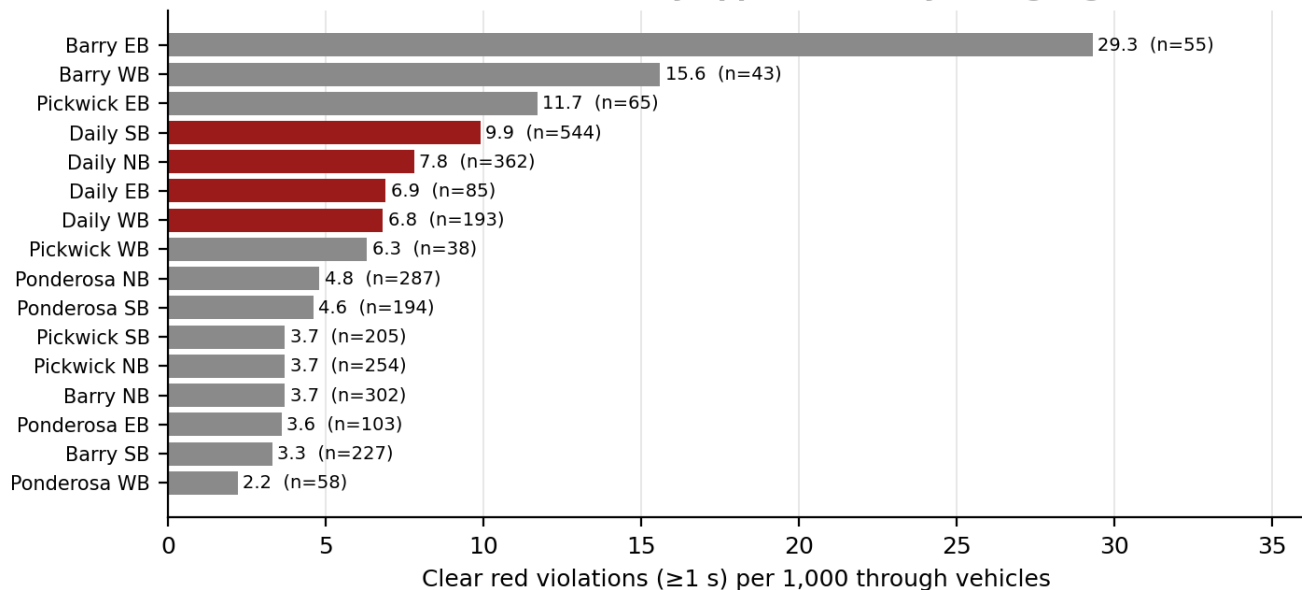


Figure 2. Clear red violation rate by approach, with the 8 day count (n). High rates on Barry EB/WB and Pickwick EB come from very low volumes.

The four Daily Dr approaches all rank in the upper half, and Daily SB has both the highest count and the highest rate of any major approach. The three highest rates belong to side street approaches carrying 1,874 to 5,563 through vehicles in 8 days; their counts are small.

4. Time of Day

Int.	Dir	AM 06–09	Midday 09–15	PM 15–19	Evening 19–22	Night 22–06
		Yel / Red / ≥1 s	Yel / Red / ≥1 s	Yel / Red / ≥1 s	Yel / Red / ≥1 s	Yel / Red / ≥1 s
Daily	EB	116 / 28 / 16	397 / 89 / 33	287 / 64 / 15	164 / 48 / 13	82 / 14 / 8
Daily	NB	407 / 128 / 41	1,430 / 463 / 174	1,088 / 340 / 108	438 / 132 / 28	70 / 38 / 11
Daily	SB	859 / 261 / 97	2,108 / 629 / 227	1,462 / 450 / 160	476 / 135 / 46	133 / 48 / 14
Daily	WB	371 / 74 / 25	1,338 / 283 / 77	1,101 / 262 / 71	398 / 65 / 15	106 / 9 / 5
Ponderosa	EB	313 / 55 / 14	745 / 98 / 38	508 / 81 / 42	155 / 26 / 7	110 / 7 / 2
Ponderosa	NB	476 / 86 / 21	2,445 / 510 / 133	1,853 / 408 / 100	586 / 136 / 27	91 / 40 / 6
Ponderosa	SB	653 / 118 / 29	1,410 / 264 / 101	907 / 134 / 42	333 / 68 / 15	112 / 28 / 7
Ponderosa	WB	263 / 28 / 8	629 / 73 / 22	463 / 50 / 18	147 / 14 / 5	105 / 8 / 5
Barry	EB	69 / 7 / 3	152 / 43 / 24	113 / 35 / 16	98 / 18 / 6	64 / 8 / 6
Barry	NB	417 / 117 / 38	1,938 / 548 / 158	1,354 / 335 / 79	446 / 108 / 22	64 / 14 / 5
Barry	SB	489 / 127 / 43	1,562 / 323 / 93	1,094 / 256 / 62	354 / 81 / 20	60 / 22 / 9
Barry	WB	89 / 14 / 7	138 / 30 / 14	93 / 25 / 13	63 / 6 / 4	93 / 6 / 5
Pickwick	EB	99 / 20 / 9	303 / 72 / 29	212 / 45 / 19	197 / 24 / 6	89 / 7 / 2
Pickwick	NB	386 / 121 / 48	1,450 / 358 / 88	1,268 / 284 / 79	436 / 151 / 31	69 / 30 / 8
Pickwick	SB	423 / 142 / 42	955 / 238 / 78	682 / 151 / 52	324 / 96 / 27	63 / 20 / 6
Pickwick	WB	108 / 12 / 2	167 / 46 / 15	103 / 35 / 10	117 / 10 / 5	70 / 8 / 6

Table 3. Yellow entries / red entries / clear red violations by period, 8 day totals. Shaded cells have 100 or more clear red violations.

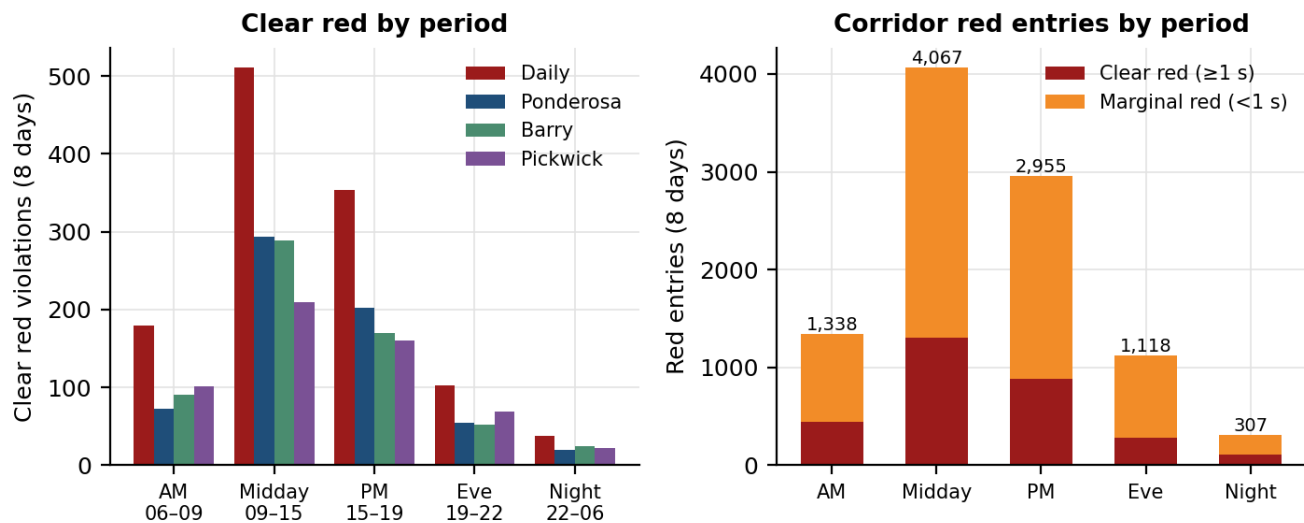


Figure 3. Left: clear red violations by period and intersection. Right: corridor red entries by period, split by severity.

Midday (09–15) is the largest period at every intersection, followed by PM (15–19). Together they account for 2,190 clear red violations (73% of the corridor total). Night (22–06) produced 105 in 8 days across all four intersections.

5. Hourly Profile

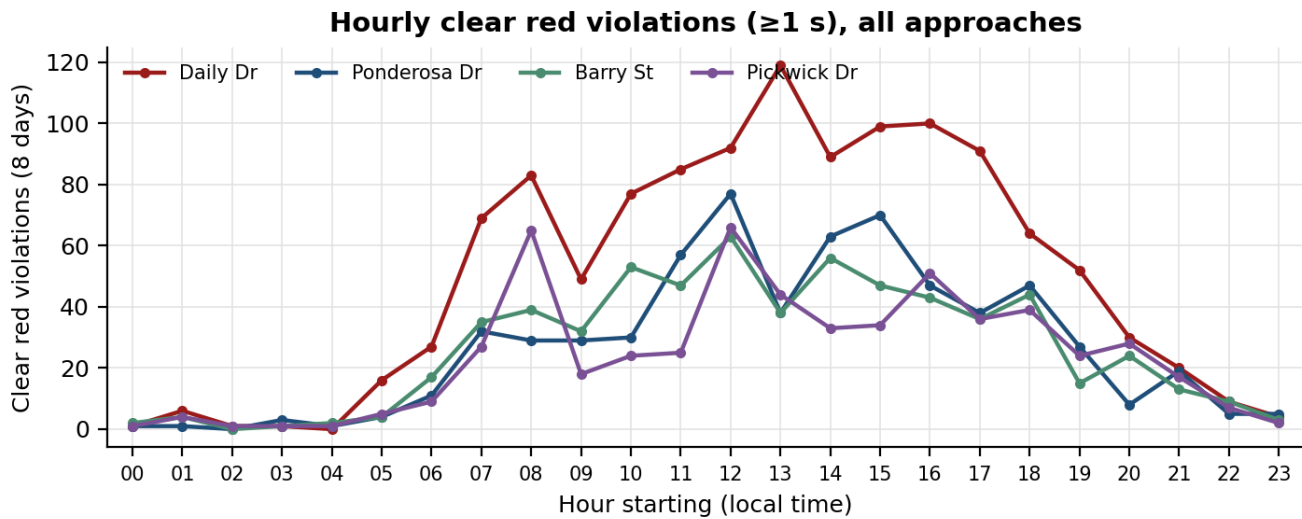


Figure 4. Clear red violations by hour, all approaches, 8 day totals.

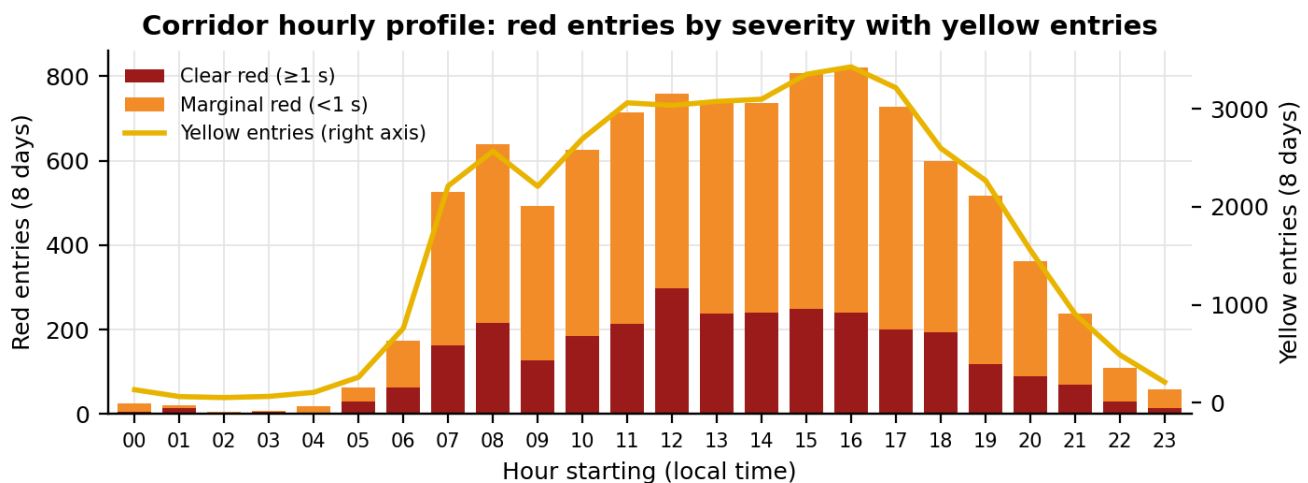


Figure 5. Corridor red entries by hour (bars, left axis) with yellow entries (line, right axis).

Daily Dr stays above the other three intersections from 7 AM to 7 PM and peaks at 1 PM (119). The other three intersections all peak in the noon hour (Ponderosa Dr 77, Pickwick Dr 66, Barry St 63), with secondary peaks in the afternoon; Pickwick Dr also has a sharp 8 AM peak (65). The corridor peak for clear red violations is the noon hour (298). Red activity broadly follows yellow entries, which track traffic volume.

Hourly detail by intersection

Hour	Daily Dr	Ponderosa Dr	Barry St	Pickwick Dr	Corridor
	Yel / Red / ≥1 s	Yel / Red / ≥1 s	Yel / Red / ≥1 s	Yel / Red / ≥1 s	Yel / Red / ≥1 s
00:00	37 / 6 / 1	51 / 9 / 1	20 / 4 / 2	25 / 6 / 1	133 / 25 / 5
01:00	20 / 8 / 6	18 / 2 / 1	10 / 5 / 4	15 / 5 / 4	63 / 20 / 15
02:00	11 / 1 / 1	15 / 1 / 0	11 / 1 / 0	16 / 3 / 1	53 / 6 / 2
03:00	22 / 2 / 1	15 / 4 / 3	20 / 1 / 1	8 / 1 / 1	65 / 8 / 6
04:00	30 / 4 / 0	23 / 7 / 1	31 / 3 / 2	22 / 4 / 1	106 / 18 / 4
05:00	87 / 30 / 16	80 / 15 / 4	57 / 7 / 4	37 / 11 / 5	261 / 63 / 29
06:00	241 / 63 / 27	236 / 45 / 11	158 / 40 / 17	125 / 26 / 9	760 / 174 / 64
07:00	712 / 190 / 69	695 / 127 / 32	392 / 100 / 35	413 / 108 / 27	2,212 / 525 / 163
08:00	800 / 238 / 83	774 / 115 / 29	514 / 125 / 39	478 / 161 / 65	2,566 / 639 / 216
09:00	695 / 178 / 49	594 / 108 / 29	475 / 107 / 32	444 / 99 / 18	2,208 / 492 / 128
10:00	857 / 241 / 77	809 / 130 / 30	564 / 157 / 53	464 / 98 / 24	2,694 / 626 / 184
11:00	967 / 262 / 85	949 / 176 / 57	666 / 170 / 47	478 / 105 / 25	3,060 / 713 / 214
12:00	939 / 261 / 92	906 / 181 / 77	742 / 177 / 63	447 / 139 / 66	3,034 / 758 / 298
13:00	956 / 283 / 119	902 / 152 / 38	658 / 161 / 38	558 / 146 / 44	3,074 / 742 / 239
14:00	859 / 239 / 89	1,069 / 198 / 63	685 / 172 / 56	484 / 127 / 33	3,097 / 736 / 241
15:00	977 / 290 / 99	1,076 / 217 / 70	684 / 176 / 47	614 / 125 / 34	3,351 / 808 / 250
16:00	1,084 / 316 / 100	1,004 / 179 / 47	749 / 170 / 43	590 / 155 / 51	3,427 / 820 / 241
17:00	1,051 / 297 / 91	911 / 155 / 38	670 / 159 / 36	581 / 116 / 36	3,213 / 727 / 201
18:00	826 / 213 / 64	740 / 122 / 47	551 / 146 / 44	480 / 119 / 39	2,597 / 600 / 194
19:00	762 / 180 / 52	582 / 118 / 27	449 / 82 / 15	475 / 137 / 24	2,268 / 517 / 118
20:00	472 / 122 / 30	412 / 66 / 8	308 / 83 / 24	367 / 91 / 28	1,559 / 362 / 90
21:00	242 / 78 / 20	227 / 60 / 19	204 / 48 / 13	232 / 53 / 17	905 / 239 / 69
22:00	129 / 37 / 9	156 / 29 / 5	83 / 20 / 9	121 / 23 / 7	489 / 109 / 30
23:00	55 / 21 / 4	60 / 16 / 5	49 / 9 / 3	47 / 12 / 2	211 / 58 / 14
Total	12,831 / 3,560 / 1,184	12,304 / 2,232 / 642	8,750 / 2,123 / 627	7,521 / 1,870 / 562	41,406 / 9,785 / 3,015

Table 4. Yellow entries / red entries / clear red violations by hour starting, all approaches, 8 day totals. Shaded cells have 60 or more clear red violations.

6. Day of Week

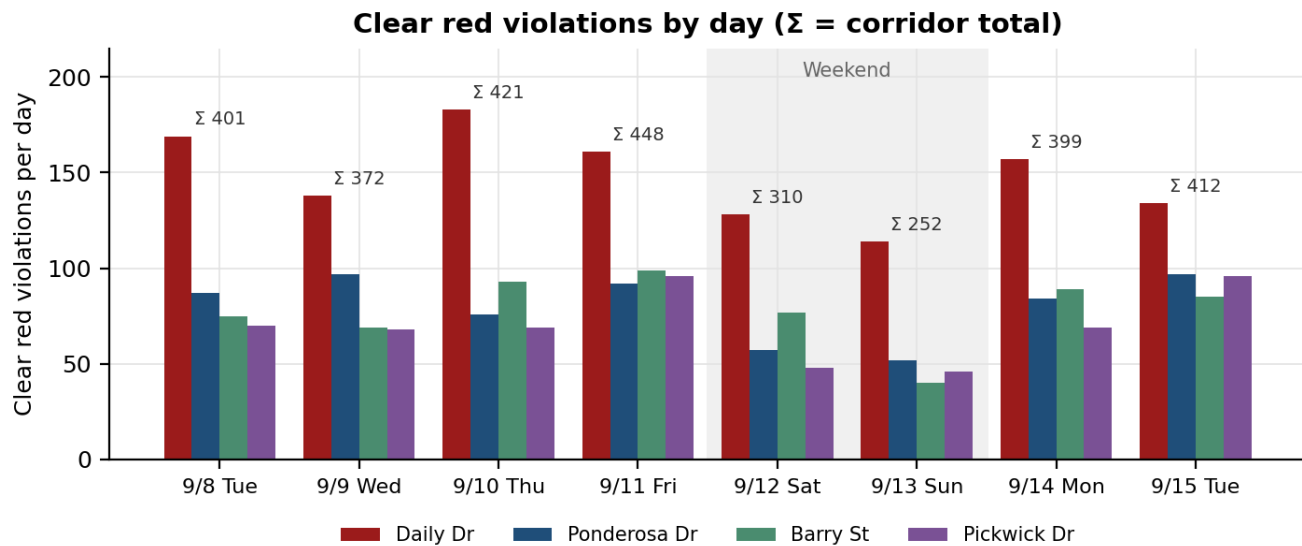


Figure 6. Clear red violations per day by intersection. Shaded band is the weekend.

Date	Daily Dr	Ponderosa Dr	Barry St	Pickwick Dr	Corridor
	Yel / Red / ≥ 1 s	Yel / Red / ≥ 1 s	Yel / Red / ≥ 1 s	Yel / Red / ≥ 1 s	Yel / Red / ≥ 1 s
9/8 Tue	1,750 / 465 / 169	1,530 / 299 / 87	1,119 / 270 / 75	1,057 / 220 / 70	5,456 / 1,254 / 401
9/9 Wed	1,689 / 454 / 138	1,767 / 297 / 97	1,153 / 246 / 69	925 / 248 / 68	5,534 / 1,245 / 372
9/10 Thu	1,648 / 483 / 183	1,566 / 272 / 76	1,115 / 295 / 93	936 / 247 / 69	5,265 / 1,297 / 421
9/11 Fri	1,696 / 511 / 161	1,621 / 310 / 92	1,213 / 339 / 99	1,004 / 271 / 96	5,534 / 1,431 / 448
9/12 Sat	1,567 / 403 / 128	1,369 / 222 / 57	1,018 / 225 / 77	918 / 193 / 48	4,872 / 1,043 / 310
9/13 Sun	1,371 / 361 / 114	1,128 / 211 / 52	769 / 173 / 40	819 / 194 / 46	4,087 / 939 / 252
9/14 Mon	1,522 / 453 / 157	1,690 / 300 / 84	1,198 / 279 / 89	933 / 236 / 69	5,343 / 1,268 / 399
9/15 Tue	1,588 / 430 / 134	1,633 / 321 / 97	1,165 / 296 / 85	929 / 261 / 96	5,315 / 1,308 / 412
Weekday avg ≥ 1 s	157	89	85	78	409
Weekend avg ≥ 1 s	121	55	59	47	281
Weekday increase	30%	63%	45%	66%	45%

Table 5. Daily yellow entries / red entries / clear red violations. Weekday average covers the six weekdays (Mon to Fri, two Tuesdays); weekend average covers Sat 9/12 and Sun 9/13. Corridor averages and percentage increases are computed from the daily figures above.

Weekday clear red activity runs about 45% above the weekend for the corridor as a whole. The difference is smallest at Daily Dr (30%), which stays high on weekends, and largest at Ponderosa Dr and Pickwick Dr (63% and 66%). Friday 9/11 was the busiest day (448), followed by Thursday 9/10 (421) and Tuesday 9/15 (412). Sunday 9/13 was the lowest (252). With only one weekend in the sample, day-of-week patterns should be treated as indicative.

7. Top Enforcement Windows

The 25 approach and hour combinations with the most clear red violations over the 8 day study. Each figure is the 8 day total for that one hour (for example, Daily SB at 08 = 53 clear violations between 8:00 and 8:59 AM across all 8 days, about 6.6 per day).

Rank	Intersection	Dir	Hour	Yellow	Red total	Red ≥1 s	≥1 s per day (avg)
1	Arneill Rd & Daily Dr	SB	08:00 (8AM–9AM)	417	139	53	6.6
2	Arneill Rd & Daily Dr	SB	13:00 (1PM–2PM)	385	118	53	6.6
3	Arneill Rd & Daily Dr	SB	16:00 (4PM–5PM)	411	140	49	6.1
4	Arneill Rd & Daily Dr	SB	15:00 (3PM–4PM)	367	118	45	5.6
5	Arneill Rd & Daily Dr	SB	11:00 (11AM–12PM)	389	122	42	5.2
6	Arneill Rd & Daily Dr	SB	17:00 (5PM–6PM)	384	119	42	5.2
7	Arneill Rd & Daily Dr	SB	14:00 (2PM–3PM)	323	101	40	5.0
8	Arneill Rd & Barry St	NB	12:00 (12PM–1PM)	394	112	40	5.0
9	Arneill Rd & Daily Dr	NB	13:00 (1PM–2PM)	245	85	38	4.8
10	Arneill Rd & Daily Dr	NB	12:00 (12PM–1PM)	238	80	37	4.6
11	Arneill Rd & Daily Dr	NB	15:00 (3PM–4PM)	259	92	37	4.6
12	Arneill Rd & Ponderosa Dr	NB	12:00 (12PM–1PM)	440	107	36	4.5
13	Arneill Rd & Daily Dr	SB	10:00 (10AM–11AM)	351	104	35	4.4
14	Arneill Rd & Daily Dr	SB	12:00 (12PM–1PM)	365	110	35	4.4
15	Arneill Rd & Daily Dr	NB	14:00 (2PM–3PM)	236	75	33	4.1
16	Arneill Rd & Daily Dr	NB	16:00 (4PM–5PM)	308	99	33	4.1
17	Arneill Rd & Daily Dr	SB	07:00 (7AM–8AM)	309	87	31	3.9
18	Arneill Rd & Pickwick Dr	NB	12:00 (12PM–1PM)	231	68	30	3.8
19	Arneill Rd & Pickwick Dr	SB	08:00 (8AM–9AM)	184	77	30	3.8
20	Arneill Rd & Ponderosa Dr	NB	15:00 (3PM–4PM)	509	121	30	3.8
21	Arneill Rd & Barry St	NB	14:00 (2PM–3PM)	349	98	30	3.8
22	Arneill Rd & Barry St	NB	10:00 (10AM–11AM)	292	89	28	3.5
23	Arneill Rd & Pickwick Dr	NB	08:00 (8AM–9AM)	193	64	27	3.4
24	Arneill Rd & Pickwick Dr	NB	16:00 (4PM–5PM)	357	86	27	3.4
25	Arneill Rd & Pickwick Dr	SB	12:00 (12PM–1PM)	146	50	26	3.2

Table 6. Top 25 enforcement windows, ranked by clear red violations (8 day totals). Daily Dr rows in red.

Daily Dr accounts for 15 of the top 17 windows. Southbound Daily Dr is elevated across the whole day, from the 7 AM hour through the 5 PM hour, with its highest hours at 8 AM, 1 PM and 4 PM.

8. Vehicle Class

Red entries by vehicle class as classified by the detection system. Counts are red total / clear red violations (≥ 1 s).

Vehicle class	Daily Dr	Ponderosa Dr	Barry St	Pickwick Dr	Corridor	Share of ≥ 1 s
Car	2,888 / 906	1,722 / 429	1,693 / 453	1,545 / 437	7,848 / 2,225	73.8%
Pickup	477 / 160	315 / 70	296 / 92	222 / 63	1,310 / 385	12.8%
Bicycle	66 / 60	108 / 101	39 / 33	35 / 32	248 / 226	7.5%
SU Truck	44 / 27	45 / 27	35 / 19	24 / 11	148 / 84	2.8%
Work Van	63 / 18	27 / 8	33 / 11	27 / 8	150 / 45	1.5%
Artic Truck	13 / 8	7 / 5	18 / 16	12 / 8	50 / 37	1.2%
Bus	7 / 3	5 / 1	2 / 1	5 / 3	19 / 8	0.3%
Motorcycle	2 / 2	3 / 1	7 / 2	–	12 / 5	0.2%
Total	3,560 / 1,184	2,232 / 642	2,123 / 627	1,870 / 562	9,785 / 3,015	100%

Table 7. Red entries / clear red violations by vehicle class. A dash means no red entries were recorded for that class.

- Passenger cars (2,225 clear violations, 74%) and pickups (385, 13%) make up 87% of clear red violations.
- **Bicycles** account for 248 red entries, 226 of them clear violations (91%), a much higher share than for motor vehicles. Ponderosa Dr has the most (101). Cyclists may be clearing the intersection slowly or crossing against the signal, and should be reviewed on video before being counted toward enforcement targets.
- Heavy vehicles (single unit trucks, articulated trucks and buses) account for 129 clear violations corridor wide (4.3%).

9. Recommendations

Enforcement (Camarillo Police / Ventura County Sheriff)

- **Make Daily Dr the primary enforcement location.** Its clear violation rate is about twice that of the other three intersections, and southbound Daily Dr alone accounts for 544 clear violations (18% of the corridor).
- **Schedule deployments on weekdays, prioritizing Tuesday, Thursday and Friday:**

Location and approach	Window	Supporting hours (clear red, 8 days)
Daily Dr SB	7–9 AM and 1–6 PM	07: 31, 08: 53, 13: 53, 14: 40, 15: 45, 16: 49, 17: 42
Daily Dr NB	12–5 PM	12: 37, 13: 38, 14: 33, 15: 37, 16: 33
Barry St NB	10 AM–3 PM	10: 28, 12: 40, 14: 30
Ponderosa Dr NB	12–1 PM and 3–4 PM	12: 36, 15: 30
Pickwick Dr SB / NB	SB 8–9 AM; NB 12–1 PM	SB 08: 30; NB 12: 30 (NB 08: 27, NB 16: 27)

- **Daily Dr SB also stays elevated from 10 AM to 1 PM** (35, 42 and 35 in the 10, 11 and 12 hours), so a continuous Daily Dr SB detail is justified whenever staffing allows.
- **Do not schedule overnight details.** Night (22–06) produced 105 clear violations across all four intersections in 8 days.
- **Use spot checks only on low volume side streets.** Barry St EB (29.3 per 1,000), Barry St WB (15.6) and Pickwick Dr EB (11.7) have high rates but produced 55, 43 and 65 clear violations respectively over 8 days.

Engineering (Traffic Division)

- **Review clearance timing.** About 69% of red entries (6,770 of 9,785) occur less than one second into red, which points to clearance timing rather than driver behavior that enforcement can address. Confirm yellow change intervals (4.1 to 4.8 s observed) and all-red intervals against the CA MUTCD for posted speeds and approach grades.
- **Start with Daily Dr.** It has the highest marginal entry count (2,376) as well as the highest clear violation rate, and its approaches have observed yellows of 4.1 s (NB, SB) and 4.4 s (EB, WB).
- **Re-run this analysis after any timing change or enforcement campaign** using the same 8 day window and definitions, so results are directly comparable.

10. Caveats

- **Through movements only.** Left and right turn red light running is not captured.
- **Rates are approximate.** The red light crossing data omits some vehicles that could not be matched to a signal phase, while the through volume used as the denominator does not.
- **Bicycles:** 248 red entries, 226 of them clear violations. These are included in all totals above.
- **Very late entries:** 514 red entries were 10 or more seconds into red. These may include cyclists, slow moving vehicles or tracking errors; verify with video before using them to support enforcement.
- **Short sample:** 8 days with one weekend. Day of week and hourly patterns are indicative; a longer sample would firm them up.
- **Data:** Miovision One, Sept 8–15, 2026. Times are local intersection time.