District 05 **Mobility Performance Report** 2025 Second Quarter **DEPARTMENT OF TRANSPORTATION**

Definitions

- Vehicle Miles of Travel (VMT): Total miles driven by all the vehicles over a freeway segment during a specified time period. When plotted over a spatial segment, this quantity is simply the sum of VMT from the individual detectors. Users can query VMT reports for any freeway (or segment) available in PeMS. At a freeway segment page in PeMS, users can select the VMT reports by using the Performance pull-down menu and selecting Aggregates. There are three types of Aggregates reports: Time Series, Time of Day, and Day of Week.
- Vehicle Hours of Delay (VHD): Amount of extra time spent by all the vehicles beyond the time it takes to traverse a freeway segment at a threshold speed. In other words, it is the amount of additional time that vehicles spend on the roadway due to congestion. PeMS can compute the amount of delay using different threshold speeds (i.e., 35, 40, 45, 50, 55, 60, and 65 miles per hour)
- Lost Lane Miles Hours (equivalent lost productivity): Number of lane-mile-hours that are lost due to the freeway operating under congested conditions. When the freeway is in congestion speed is below 35 mph PeMS find the ratio between the measured flow and the capacity for this location. This drop in capacity is caused by the freeway is operating in congested conditions instead of in free flow)
- Detection Health: Detectors can malfunction for many reasons. For some detectors, this is an intermittent problem. For other detectors, the problem is recurrent. PeMS devotes a large amount of its computing resources to identifying bad detectors and calculating health diagnostics to help users evaluate data quality and to help those responsible for detector maintenance.
- Bottleneck: Location where the traffic demand exceeds the available capacity of the roadway facility. Characteristics include reduction in speeds, congestion, queuing, and delay. PeMS can identify a bottleneck at a particular detector where there is a persistent drop in speed from the detector immediately upstream.

District 05 Mobility Performance Report

2025 Second Quarter

EXECUTIVE SUMMARY

Overview

The Quarterly Mobility Performance Report (MPR) evaluates key traffic performance metrics by comparing current conditions with both the previous quarter and the same period from the prior year. This report provides information on the following performance measures:

- Vehicle Miles Traveled (VMT)
- Vehicle Hours of Delay (VHD)
- Lost Lane Mile Hours
- Detection Health

The information in this report is based on daily data collected 24 hours a day by automated vehicle detector stations across the State Highway System.

Vehicular delay is assessed using two speed thresholds:

- Below 60 mph: Indicates both light and heavy congestion
- Below 35 mph: Indicates severe congestion

Through engineering judgment, Caltrans uses these thresholds and performance measures to identify bottleneck locations and assess congestion severity.

FINDINGS

Summary

- ➤ In this 2nd quarter (April to June of 2025), Vehicle Miles Travel (VMT) across all District 5 freeways were 1.08 billion miles, an increase of 11.5 percent from the previous quarter.
- There were 1.1 million Vehicle Hours of Delay (VHD) at the 60-mph speed threshold, an increase of 47.7 percent over previous quarter and a decrease of 3.4 percent from a year ago.
- ➤ 406 thousand of the 1.1 million VHD were generated in Monterey County, 19 thousand VHD were generated in San Benito County, 124 thousand VHD were generated in San Luis Obispo County, 301 thousand VHD were generated in Santa Barbara County, and 269 thousand VHD were generated in XX County.
- ➤ In this quarter approximately 88.3 percent of the total delay in District 5 at the 35-mph speed threshold were generated from 2 freeways, Highway 1 (44.5%) and US-101 (43.8%).
- These delays were equivalent to 24 Lost Lane Miles Hours (LLM) from the freeway network during the PM Peak Period, compared to 15 LLM from previous quarter.
- The average weekday daily delay in this quarter was approximately 0.29 thousand VHD at 35-mph speed threshold, and 0.6 thousand VHD at 60-mph speed thresholds (138.1 percent increase and 133.3 percent increase respectively over the previous quarter.)
- Friday was the most congested day of the week in this quarter then followed by Thursday. Morning peak hour was at 7:00 AM. Afternoon peak hour was at 4:00 PM. The peak periods extended from 6:00 AM to 10:00 AM and from 2:00 PM to 6:00 PM.
- > Weekend's peak hour (Saturday and Sunday) was at 11:00 AM, and peak period extended between 10:00 AM and 4:00 PM.

➤ By the end of the 2nd quarter, loop detectors in good service condition accounted for 96.1 percent of the total loops, while 3.9 percent of total loop detectors were nonoperational.

Bottleneck Locations

Table 1: Top 20 Bottlenecks for the 2024 Calendar Year:

Location	County	Route	Name	Peak Period (AM/PM)	Abs Postmile (Miles)	CA Postmile (Miles)	Days Observed (Days)	Avg Extent (Miles)	Total Delay (vehicle- hours)	Total Duration (Minutes)
1	MON	SR1-N	CANYON DEL REY BLVD AT HWY 1 NB	PM	330.08	R79.54	248	3.22	176,750.40	37,655.00
2	SCR	SR1-S	STATE PARK DR AT HWY 1 NB VDS ML	PM	361.62	10.319	232	3.95	118,487.20	23,070.00
3	MON	SR1-S	SOUTH OF FREMONT BLVD AT HWY 1 N	AM	330.93	R80.46	228	4.03	107,539.00	20,230.00
4	SCR	SR1-S	RIO DEL MAR BLVD AT HWY 1 NB VDS	PM	360.31	9.0141	158	3.82	104,962.40	18,295.00
5	SCR	SR1-S	BAY AVE - PORTER ST AT HWY 1 SB	PM	364.58	13.279	222	2.44	95,790.50	24,535.00
6	SCR	SR1-N	41ST ST EXIT AT HWY 1 SB VDS MLN	AM	365.27	13.929	209	3.13	81,288.50	20,795.00
7	SB	US101- N	SHEFFIELD DR MLNB	AM	91.78	8.861	191	3.21	69,862.50	19,325.00
8	SB	US101- S	FAIRVIEW AVE 101 NB PM 105.039 V	PM	104.99	22.13	211	1.36	51,695.50	33,030.00
9	SB	US101- S	SOUTH PADARO LANE VDS MLSB	PM	88.37	5.469	124	3.81	51,561.40	12,070.00
10	SLO	US101- S	SPYGLASS DR 101 SB VDS MLSB SB	PM	193.32	R19.797	225	1.95	50,559.10	22,830.00
11	MON	SR68-E	LAGUNA SECA MAIN ENTRANCE HWY 68	PM	11.24	11.034	250	2.50	46,711.40	47,085.00
12	SB	US101- S	HERMOSILLO RD 101 NB VDS MLSB SB	PM	93.97	11.08	207	1.50	42,201.60	15,205.00
13	SB	US101- S	NORTH PADARO LANE 101 NB VDS MLS	PM	90.20	7.303	187	3.14	38,940.30	10,495.00
14	SCR	SR1-N	PARK AVE AT HWY 1 SB VDS MLNB NB	AM	363.68	12.338	203	2.10	37,795.10	10,230.00
15	SB	US101- S	TORO CANYON 101 NB VDS MLSB SB	PM	89.35	6.453	150	3.81	34,094.30	8,390.00
16	MON	SR68-E	PORTOLA DR EB ON RAMP MLWB	AM	15.83	15.630	233	0.50	32,814.90	27,755.00
17	SB	US101- S	OLIVE MILL RD 101 NB VDS MLSB SB	PM	93.30	10.407	135	2.11	32,496.60	10,300.00
18	MON	SR1-N	CARPENTER RD HWY 1 NB VDS MLNB N	PM	324.95	74.419	247	1.45	31,712.70	33,075.00

19	SBT	SR156- W	BUSINESS RTE 156 ON HWY 156 WB V	AM	13.93	R7.564	170	2.60	31,400.30	23,635.00
20	SCR	SR1-N	RIO DEL MAR BLVD AT HWY 1 SB VDS	AM	360.89	9.553	193	2.85	28,470.00	9,540.00

Table 2: Top 10 Bottlenecks for the 2025 2nd Quarter:

Location	County	Route	Name	Peak Period (AM/PM)	Abs Postmile (Miles)	CA Postmile (Miles)	Days Observed (Days)	Avg Extent (Miles)	Total Delay (vehicle- hours)	Total Duration (Minutes)
1	MON	SR1-N	CANYON DEL REY BLVD AT HWY 1 NB	PM	330.08	R79.54	63	3.52	55,931.90	10,505.00
2	SB	US101- N	SAN YSIDRO RD 101 NB VDS MLNB NB	AM	92.95	10.039	63	3.83	41,036.50	9,385.00
3	SB	US101- S	HERMOSILLO RD 101 NB VDS MLSB SB	PM	93.97	11.08	62	2.16	30,885.20	9,550.00
4	MON	SR1-S	SOUTH OF FREMONT BLVD AT HWY 1 N	AM	330.93	R80.46	58	3.75	28,453.60	5,735.00
5	SCR	SR1-S	STATE PARK DR AT HWY 1 NB VDS ML	PM	361.62	10.319	61	2.76	23,960.40	8,130.00
6	SCR	SR1-S	BAY AVE - PORTER ST AT HWY 1 NB	PM	364.33	13.033	55	2.83	21,828.50	7,635.00
7	SB	US101- S	FAIRVIEW AVE 101 NB PM 105.039 V	PM	104.99	22.13	62	1.56	17,063.30	10,645.00
8	SLO	US101- S	SPYGLASS DR 101 SB VDS MLSB SB	PM	193.32	R19.797	61	2.07	15,703.30	6,415.00
9	MON	SR68-E	LAGUNA SECA MAIN ENTRANCE HWY 68	PM	11.24	11.034	63	2.50	12,184.20	12,050.00
10	MON	SR68-E	PORTOLA DR EB ON RAMP MLWB	AM	15.83	15.630	63	0.50	11,199.20	8,510.00

Bottleneck Mitigation Projects:

Location 1:

No current or planned projects to address bottleneck

Northbound onramp from MON-218 included on list for Minor B ramp metering projects to await future funding.

Location 2:

05-0N704, 8/11/2027

Project is to construct HOV lanes. Project limits are SB-101-9.2/10.7. Target date is 8/11/2027.

Location 3:

05-0N704, 8/11/2027

Project is to construct HOV lanes. Project limits are SB-101-9.2/10.7. Target date is 8/11/2027.

Location 4:

No current or planned projects to address bottleneck

Southbound onramp from MON-218 to be included on list for Minor B ramp metering projects to await future funding.

Location 5:

05-0C733, 9/25/2028

Project to construct auxiliary lanes between interchanges. Target date is 9/25/2028.

Location 6:

05-0C733, 9/25/2028

Project to construct auxiliary lanes between interchanges. Target date is 9/25/2028.

Location 7:

Southbound onramp from Fairview Ave to be included on list for Minor B ramp metering projects to await future funding.

Location 8:

05-1G680, 2/15/2030

Project to construct part-time shoulder lane to mitigate the bottleneck. Target date is 2/15/2030.

Location 9:

05-1J790, 10/24/2030

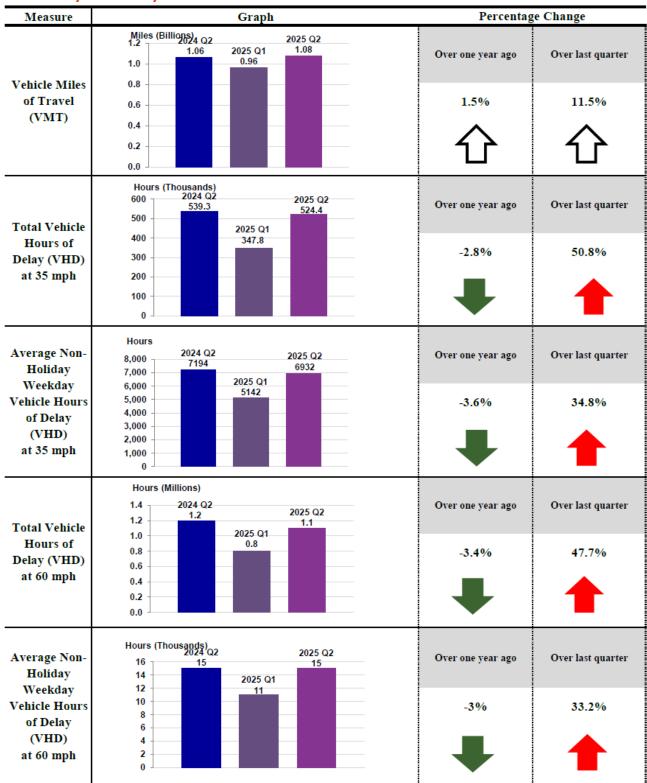
Project to construct a hybrid roundabout. Target date is 10/24/2030.

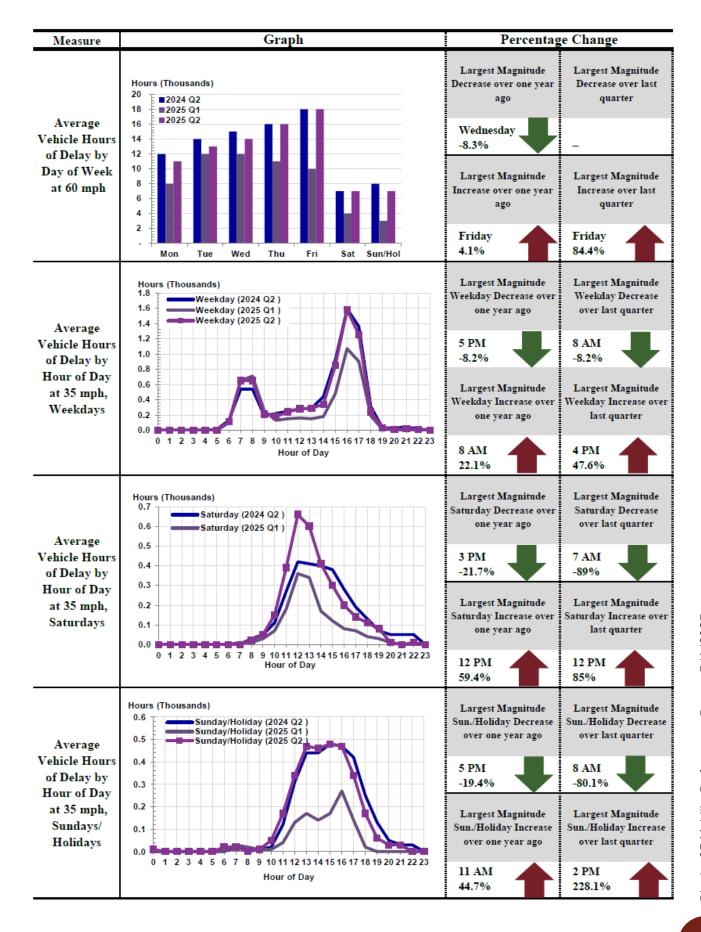
Location 10:

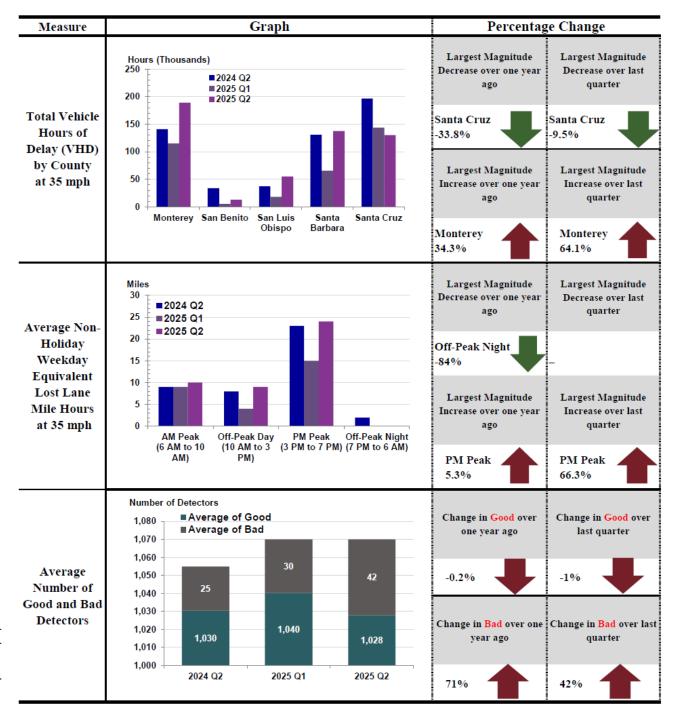
Pilot Project & 05-1J790, Late 2025 & 10/24/2030

There is an interim Adaptive Traffic Signal Control project planned for the corridor downstream of the bottleneck to address congestion. Project 05-1J790 is expected to improve traffic flow in the long term by constructing hybrid roundabouts which may also address this bottleneck. Investigations into moving the merge location proved inconclusive in reducing the bottleneck.

Quarterly Mobility Statistics







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				Con	gestion by	Route					
		Vehicle Hours of Delay at 35 mph			Difference 2025 Q2-2024 Q2		Difference 2025 Q2-2025 Q1		Rank		
Route	County	2024 Q2	2025 Q1	2025 Q2	Absolute	Percentage	Absolute	Percentage	2024 Q2	2025 Q1	2025 Q2
US101	Santa Barbara	130,637	65,491	137,415	6,778	5.2%	71,923	109.8%	2	3	1
SR1	Monterey	90,881	79,750	123,883	33,003	36.3%	44,133	55.3%	3	2	2
SR1	Santa Cruz	172,016	115,141	109,480	-62,536	-36.4%	-5,662	-4.9%	1	1	3
US101	San Luis Obispo	36,882	18,081	54,803	17,921	48.6%	36,722	203.1%	4	6	4
SR68	Monterey	32,549	28,465	36,558	4,009	12.3%	8,093	28.4%	6	5	5
US101	Monterey	17,358	7,052	28,665	11,306	65.1%	21,613	306.5%	8	7	6
SR17	Santa Cruz	24,582	28,652	20,600	-3,981	-16.2%	-8,052	-28.1%	7	4	7
US101	San Benito	0	2,590	8,769	8,769		6,179	238.6%		9	8
SR156	San Benito	33,887	2,596	3,909	-29,977	-88.5%	1,314	50.6%	5	8	9
SR46	San Luis Obispo	519	7	301	-218	-42.0%	294	4391.0%	9	10	10
SR246	Santa Barbara	0	0	0	0		0				11
SR25	San Benito	0	0	0	0		0				
TOTALS		539,309	347,823	524,382	-14,928	-2.8%	176,559	-0.03%			