District 12
Mobility Performance Report

2025 Q2

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.

2025 Q2

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 second quarter (April to June of 2025), Vehicle Miles Travel (VMT) across all district 12 freeways were 3.43 billion miles, an increase of 5.4 percent from previous quarter.
- There was 5.4 million Vehicle Hours of Delay (VHD) at the 60-mph speed threshold, an increase of 6.2 percent over previous quarter and an/a increase/decrease of 8.9 percent from a year ago.
- In this quarter about 94 percent of the total delay in District 12 at the 35-mph speed threshold were generated from five freeways, I5 (27%), I405 (22%), SR91 (20%), SR55 (15%) and SR57 (10%).
- These delays were equivalent to 61.1 Lost Lane Miles Hours (LLM)* from the freeway network during the PM Peak Period, compared to 54.4 LLM from previous quarter.
- The average weekday daily delay in this quarter was approximately 23 thousand VHD at 35-mph speed threshold, and 71 thousand VHD at 60-mph speed thresholds (5.2 percent increase and 0.5 Percent increase respectively over the previous quarter.)
- Tuesday - Thursday are the most congested days of the week in this quarter than Monday or Friday. Morning peak hour was at 8 AM. Afternoon peak hour was at 5 PM. The peak periods extended from 6:30 AM to 9 AM and from 2 PM to 6:30 PM.
- Weekend's peak hour (Saturday and Sunday) was at 4 PM, and peak period extended between 2 PM and 5:30 PM.
- By the end of the second quarter, loop detectors in good service condition account for 66 percent of the total loops, while 34 percent of total loop detectors are 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	ORA	SR55-N	TAFT	PM	15.78	15.8	244	3.12	188,087.8	53,640
2	ORA	I5-S	MAIN 1	AM	105.19	33	246	1.08	129,656.8	40,755
3	ORA	I405-N	BROOKHUR2	PM	13.74	13.97	247	1.61	126,720.5	47,660
4	ORA	I405-S	HARBOR 1	AM	10.97	11.2	191	1.94	101,884.7	17,970
5	ORA	SR57-N	TONNER	PM	11.27	22	207	1.26	92,356.8	35,220
6	ORA	I5-N	CULVER 1	PM	98.82	R26.56	201	2.21	88,159.0	43,080
7	ORA	I5-S	RED ROBIN	PM	91.53	19.33	226	1.02	80,333.9	34,310
8	ORA	SR55-N	DYER 2	PM	8.12	R8.12	241	1.90	79,861.8	19,150
9	ORA	SR55-N	N-O E WARNER MVDS	PM	8.56	R8.563	237	2.06	76,550.0	16,985
10	ORA	I405-S	WARNER	AM	14.49	14.72	228	1.06	75,956.3	30,220
11	ORA	SR55-N	NEWPORT AVE OR MVDS	PM	9.76	R9.755	232	0.88	74,011.9	34,325
12	ORA	I405-S	YALE	PM	4.78	5.01	239	1.48	72,582.4	32,345
13	ORA	I5-S	LA PALMA	AM	113.17	40.98	232	1.07	71,964.5	16,425
14	ORA	I405-N	OLD RANCH PKWY	PM	22.43	22.659	234	0.86	66,782.1	27,845
15	ORA	I5-S	CRESCENT	AM	112.23	40.04	196	1.67	66,398.8	17,080
16	ORA	I5-N	1ST	PM	103.05	30.8	244	0.68	64,940.9	35,665
17	ORA	SR55-S	FOURTH 1	AM	10.82	10.84	240	2.04	64,370.3	31,955
18	ORA	I5-N	ALICIA 1	AM	89.69	17.43	113	2.16	60,722.2	15,395
19	ORA	I5-N	RED HILL	PM	101.49	29.24	247	1.72	58,763.5	57,170
20	ORA	SR91-E	LAKEVIEW1	PM	28.45	R10.08	224	2.54	58,725.1	49,435

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	ORA	SR55-N	TAFT	PM	15.78	15.8	63	3.63	45,102.1	13,010
2	ORA	I405-N	BROOKHUR2	PM	13.74	13.97	63	1.81	41,269.8	13,665
3	ORA	I5-S	LA PALMA	AM	113.17	40.98	62	1.35	37,736.9	8,535
4	ORA	I5-S	MAIN 1	AM	105.19	33	63	1.03	36,593.7	11,160
5	ORA	I5-N	JAMBOREE 1	PM	99.80	27.55	55	2.40	35,508.5	14,300
6	ORA	I405-S	WARNER	AM	14.49	14.72	55	1.65	29,223.6	7,890
7	ORA	I5-N	YALE	PM	98.06	R25.8	63	0.83	26,612.9	10,710
8	ORA	I405-S	HARBOR 1	AM	10.97	11.2	49	1.98	25,811.9	4,725
9	ORA	SR55-N	MACARTHU1	PM	6.94	R6.94	63	0.60	21,960.4	14,030
10	ORA	SR91-E	MIDPOINT	PM	31.14	R12.762	53	3.23	21,469.9	5,295

Bottleneck Mitigation Projects:

Location 1:

Project EA 12-0R32U, Feb 8, 2028

- Multi-Asset project on SR55 N between Routes 1 and 91.
- Scope includes pavement rehabilitation, drainage, bridge rail and landscaping, upgrading lighting and TMS elements, add bike and pedestrian improvements, improve worker safety, and install safety lighting.

Locations 2, 6 and 8:

Project EA 0H1004, Feb 2027

- OCTA I-405 Express Lanes Project.
- In Close Out Process, target CCA date Feb 2027.
- Add one GP Lane in each direction on the I-405 from Euclid St to the I-605 I/C.
- Add a tolled express lane in each direction to what was the HOV Lane on the I-405 from the SR-73 to the I-605. The Express Lanes were opened in December of 2023. The new tolled lanes are being managed jointly as the Express Lane Facility with two lanes in each direction.
- Improve ramps, ramp intersections, and add auxiliary lanes at various locations
- Improve most interchanges and reconstruct 18 bridges.
- Add capacity, reduce congestion, improve trip reliability, enhance interchange operations, optimize operations and maximize throughput throughout the subject corridor.

Locations 3 and 4:

EA 0Q9500

- The I-5 Managed Lanes Project
- In PA&ED Phase.

- Improve Managed lanes improvements in each direction between Red Hill Ave and the OC/LA County Line. The project proposes to improve mobility, trip reliability, and maximize person throughput by facilitating efficient movement of bus and rideshare users, and apply technology to help manage the demand with the I-5.

Location 5:

EA 12-0K61U/1224000096, Nov 2029

- Combined project 12-0K671 (OCTA project) and 12-0S051 (Multi-Asset project)
- Projects to be combined in Construction (next phase)
- Construction begins 12/2025, Contract Acceptance 11/2029
- Between I-5/I-405 Separation and Yale Avenue OC (PM 21.3 – R25.8)
- 12-0K671 is an OCTA project to add one general purpose lane from I-5/I-405 Separation to Yale Ave OC
- 12-0S051 is a multi-assets SHOPP project from I-5/I-405 Separation to Yale Ave OC

Location 7:

EA 12-0K62U/1224000090, Mar 2029

- Combined project 12-0K672 (OCTA project) and 12-0S052 (Multi-Asset project)
- Projects to be combined in Construction (next phase)
- Construction begins 12/2025, Contract Acceptance 03/2029
- Between Yale Avenue OC and I-5/SR 55 Separation (PM R25.8 – 30.3)
- 12-0K672 is an OCTA project to add one general purpose lane from Yale Ave OC to I-5/SR 55 Separation
- 12-0S052 is a multi-asset SHOPP project from Yale Ave OC to I-5/SR 55 Separation

Locations 5 & 7:

EA 12-0T950/1223000008, Dec 2031

- In PA&ED
- Construction begins 12/28 and Contract Acceptance is 12/31
- Between I-5/I-405 Interchange and I-5/SR 55 Interchange (PM 21.1 – R29.1)
- Convert existing HOV lane from 2+ to 3+ during peak hour to address HOV Degradation

Location 9:

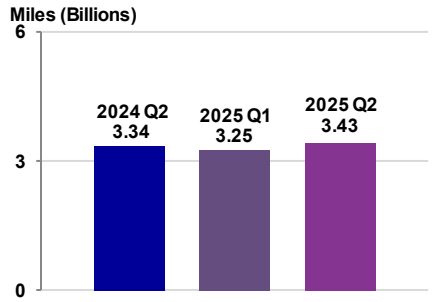
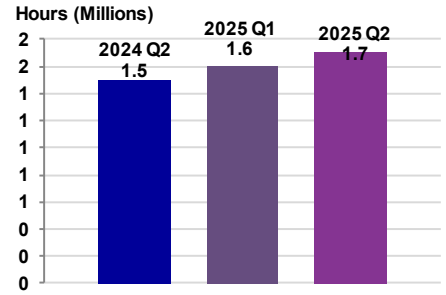
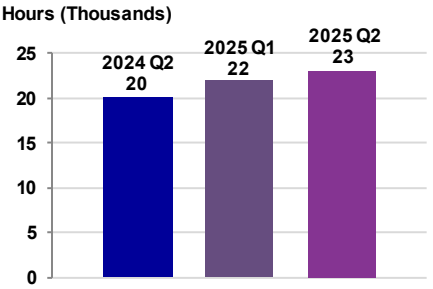
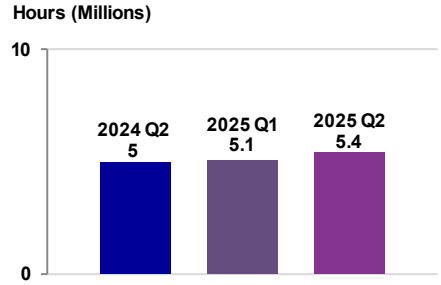
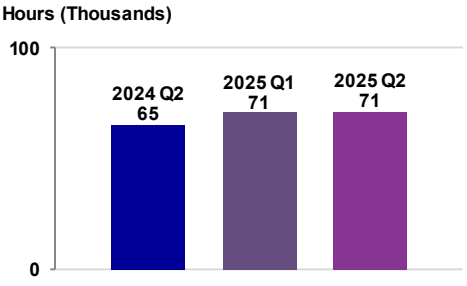
Project EA 12-0J34U, 02/08/2028

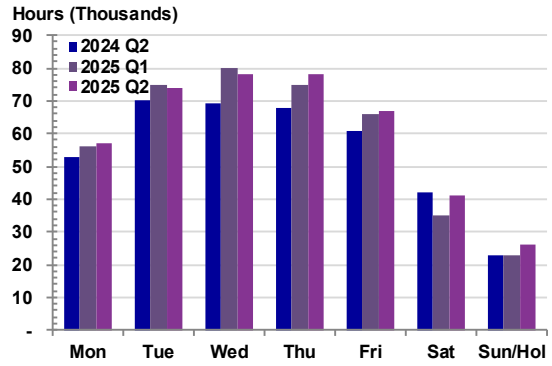
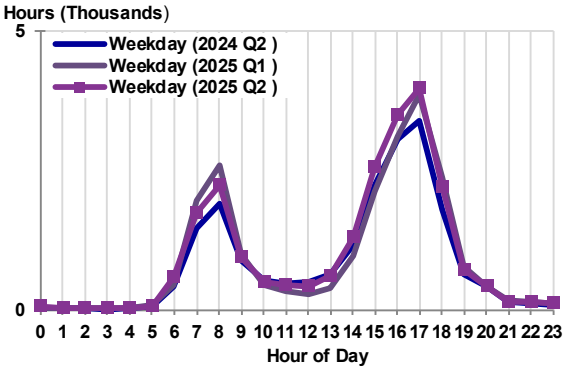
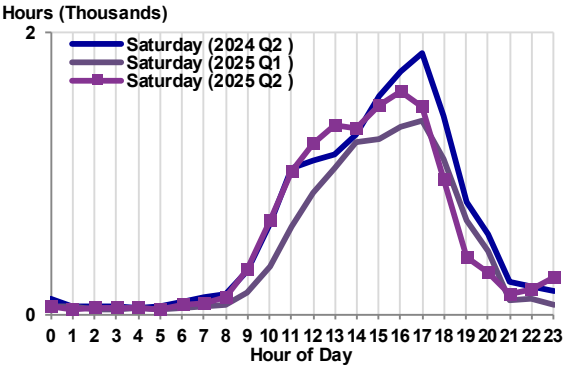
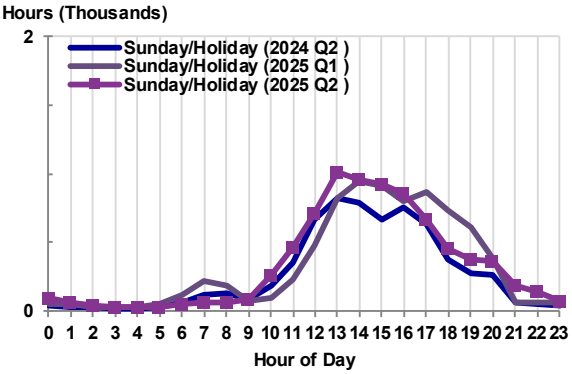
- OCTA widening project on SR55 between I-405 and I-5.

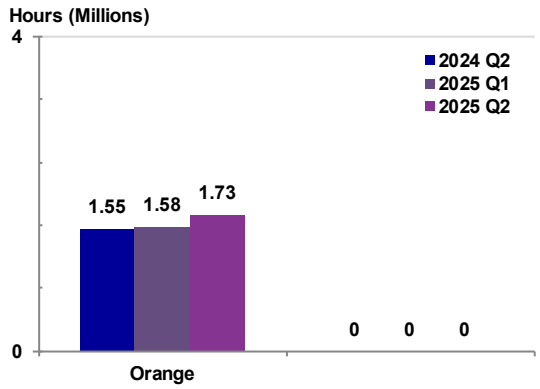
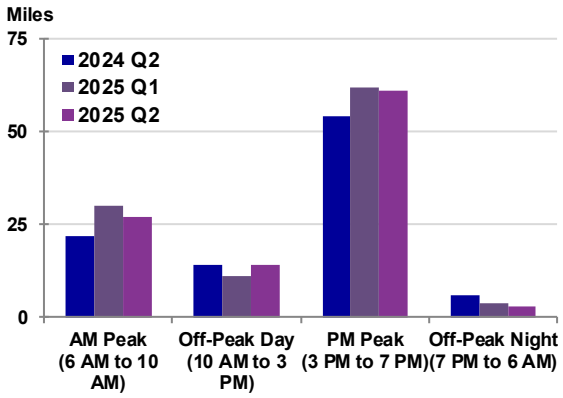
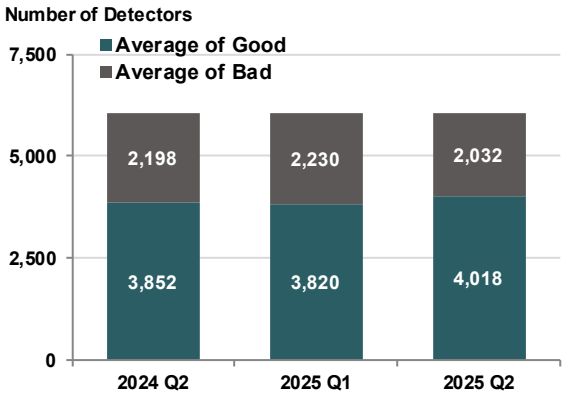
- Scope includes constructing a northbound auxiliary lane on Route 55 between Dyer Rd and Edinger Ave, as well as, add a HOV lane and a general-purpose lane in each direction.

Quarterly Mobility Statistics

The following figures show a summary of the performance across all state routes in the districts.

Measure	Graph	Percentage Change	
		Over one year ago	Over last quarter
Vehicle Miles of Travel (VMT)		2.7%	5.4%
Total Vehicle Hours of Delay (VHD) at 35 mph		11.9%	9.4%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph		14.5%	5.2%
Total Vehicle Hours of Delay (VHD) at 60 mph		8.9%	6.2%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph		9.9%	0.5%

Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph		Largest Magnitude Decrease over one year ago Saturday -1.5%	Largest Magnitude Decrease over last quarter Wednesday -2.4%
		Largest Magnitude Increase over one year ago Thursday 14%	Largest Magnitude Increase over last quarter Saturday 18.4%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		Largest Magnitude Weekday Decrease over one year ago 12 PM -11%	Largest Magnitude Weekday Decrease over last quarter 8 AM -14.5%
		Largest Magnitude Weekday Increase over one year ago 5 PM 17.9%	Largest Magnitude Weekday Increase over last quarter 3 PM 21.4%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		Largest Magnitude Saturday Decrease over one year ago 6 PM -32.2%	Largest Magnitude Saturday Decrease over last quarter 7 PM -41%
		Largest Magnitude Saturday Increase over one year ago 1 PM 19%	Largest Magnitude Saturday Increase over last quarter 11 AM 64.8%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/ Holidays		Largest Magnitude Sun./Holiday Decrease over one year ago 8 AM -54.9%	Largest Magnitude Sun./Holiday Decrease over last quarter 6 PM -38.1%
		Largest Magnitude Sun./Holiday Increase over one year ago 3 PM 36.2%	Largest Magnitude Sun./Holiday Increase over last quarter 11 AM 101.5%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph		Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		–	–
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Orange 11.9%	Orange 9.4%
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph		Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		Off-Peak Night -45%	AM Peak -10.6%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		PM Peak 12.2%	Off-Peak Day 35%
Average Number of Good and Bad Detectors		Change in Good over one year ago	Change in Good over last quarter
		4%	5%
		Change in Bad over one year ago	Change in Bad over last quarter
		-8%	-9%

Congestion 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
I5	Orange	393,874	368,277	463,435	69,561	17.7%	95,158	25.8%	1	2	1
I405	Orange	316,926	393,993	384,691	67,765	21.4%	-9,302	-2.4%	2	1	2
SR91	Orange	213,216	278,663	341,889	128,673	60.3%	63,226	22.7%	5	4	3
SR55	Orange	257,785	281,089	266,952	9,167	3.6%	-14,137	-5.0%	3	3	4
SR57	Orange	235,279	153,339	176,569	-58,710	-25.0%	23,230	15.1%	4	5	5
SR22	Orange	84,025	49,711	27,181	-56,844	-67.7%	-22,531	-45.3%	6	6	6
SR73	Orange	13,952	28,700	27,016	13,064	93.6%	-1,684	-5.9%	8	7	7
I605	Orange	20,236	17,001	21,832	1,596	7.9%	4,831	28.4%	7	8	8
SR241	Orange	9,474	6,186	15,863	6,389	67.4%	9,677	156.4%	9	9	9
SR133	Orange	486	5,232	4,830	4,345	894.9%	-402	-7.7%	11	10	10
SR261	Orange	800	61	44	-756	-94.6%	-17	-28.6%	10	11	11
SR74	Orange	5	5	5	0	0.0%	0	0.0%	12	12	12
SR142	Orange	3	3	3	0	0.0%	0	0.0%	13	13	13
SR1	Orange	0	0	0	0		0				
TOTALS		**1,546,059**	**1,582,260**	**1,730,308**	**184,249**	**11.9%**	**148,048**	**-0.03%**			