District 03
Mobility Performance Report

2024 Third Quarter

DEPARTMENT OF TRANSPORTATION

October 31, 2024
Office of Freeway Operations

2024 Third Quarter

EXECUTIVE SUMMARY

Overview

Caltrans District 3 is comprised of eleven counties located in Northern California. Most of the congestion and delay on the state highway system occurs in the urbanized areas of Sacramento, Yolo, and Placer counties.

The Mobility Performance Report (MPR) quarterly analysis compares information from the current quarter, the previous quarter, and the prior year. The following performance measures were used to quantify freeway congestion in District 3 as well as to compare the different quarters:

- Bottleneck Locations
- Vehicle Miles of Travel (VMT)
- Vehicle Hours of Delay (VHD)
- Lost Lane Miles (equivalent lost productivity)
- Detector Health

This information is based on data collected by automated vehicle detector stations deployed on urban freeways through the Caltrans Performance Measurement System (PeMS). Where congestion is regularly experienced, PeMS continuously gathers data 24 hours a day, every day of the quarter. The MPR presents congestion information for two speed thresholds: delay from vehicles traveling below 35 miles per hour (mph), and delay from vehicles traveling below 60 mph. The delay at the 35 mph threshold represents severe congestion while the delay at 60 mph represents all congestion (both light and heavy). These thresholds are set by Caltrans District 3 Office of Freeway Operations and prior traffic engineering experience.

FINDINGS

In the third quarter of 2024, there was an increase in delay that may have been caused by the seasonal transition from Summer to Fall. Weekday delay data supported this analysis, showing that delay had increased from Monday to Friday during daytime when compared with the previous quarter and third quarter of 2023. Compared with the same periods, weekday Peak Hour delay had increased at PM peak hours (4:00 to 6:00 pm). See the graphs on page 5 for reference. The total delay on District 3 freeways equaled *1.60* million Vehicle Hours of Delay (VHD) below the 35 mph speed threshold and *3.6* million VHD below the 60 mph threshold. The average delay experienced on weekdays in this quarter was approximately *19* thousand VHD below 35 mph, and *47* thousand VHD below 60 mph. VHD at 35 and 60 mph thresholds have increased when compared with the previous quarter and third quarter of 2023.

Vehicle Miles of Travel (VMT) was higher than the previous quarter with a total of *2.88* billion miles, a 1.8% increase. At the 60 mph threshold, District 3 Average Weekday Delay was 46,548 vehicles per hour (vph). When using Average Vehicle Occupancy (AVO) of 1.73 as directed by guidelines, the Daily Person Hours of Delay (DPHD) for District 3 was 80,529 hours for this quarter.

Delay is more concentrated in the AM and PM commute hours on weekdays and in the midday on weekends.

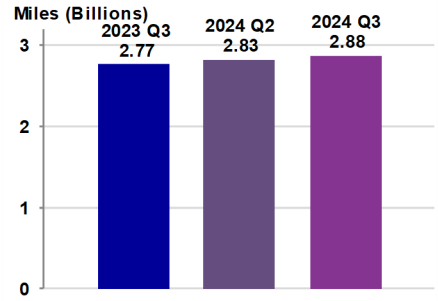
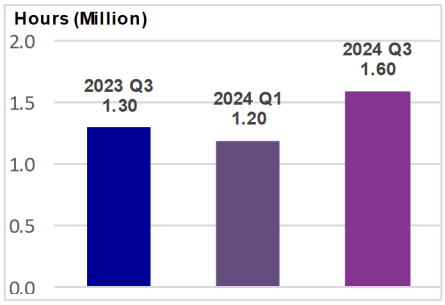
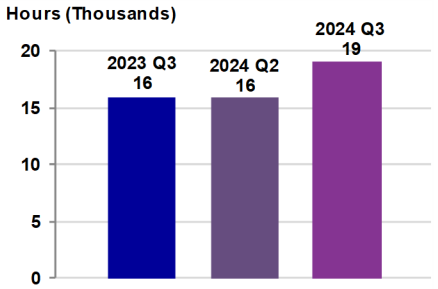
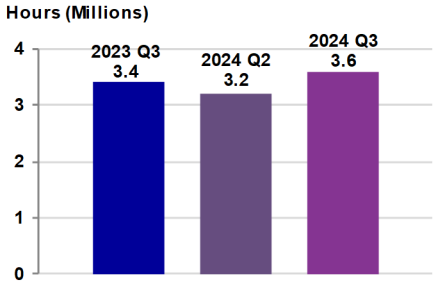
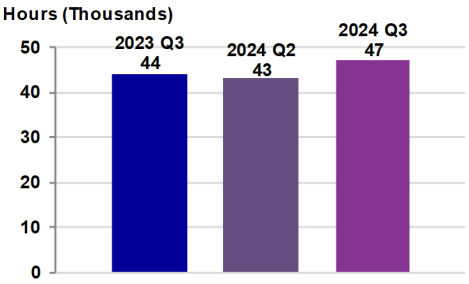
Top Ten Bottlenecks for Quarter 3

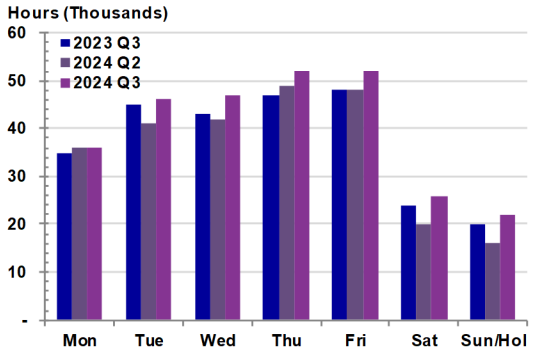
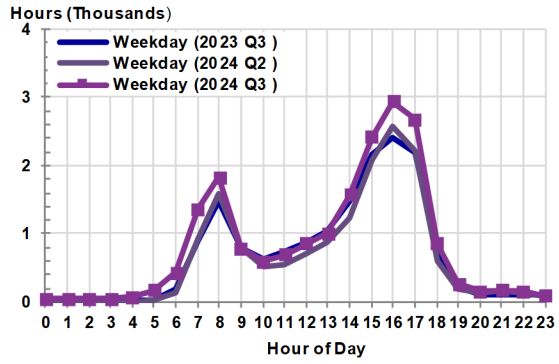
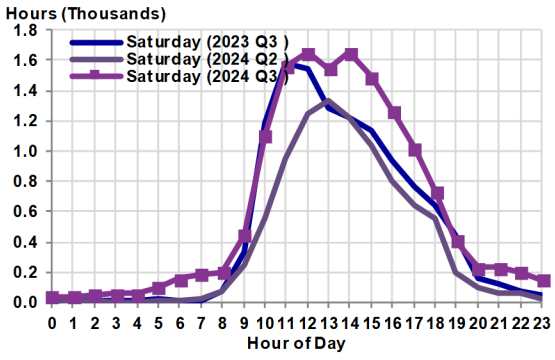
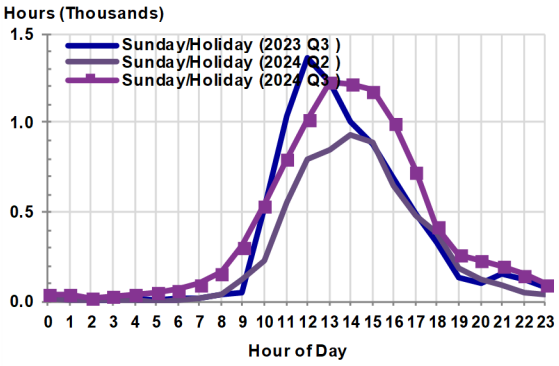
County	Fwy	Name	Type	Shift	Abs PM	CA PM	Latitude	Longitude	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (mins)
YUBE	SR70-E	70EB Yuba River Br	ML	PM	20.15	13.524	39.12908	-121.58458	64	2.53	67,000	12,485
SAC	SR51-S	EB Exposition Bl	ML	PM	3.33	3.326	38.59656	-121.44377	64	1.79	49,055	14,045
ED	US50-E	Midway Rd	ML	PM	107.96	79.801	38.95213	-119.94936	64	4.83	37,182	19,170
YOLO	I80-E	E. of Mace Blvd	ML	PM	75.70	3.508	38.55624	-121.67973	54	3.30	30,703	5,820
SAC	SR51-N	51NB Elvas Underpass	ML	PM	2.09	2.089	38.58472	-121.45696	64	1.44	30,527	9,340
YUBE	SR70-E	70EB Yuba River Br	ML	AM	20.15	13.524	39.12908	-121.58458	61	2.27	26,279	6,505
YOLO	I80-E	80EB at Mace Blvd	ML	PM	74.90	2.714	38.55267	-121.69366	59	2.69	24,715	5,700
SAC	I80-W	Myrtle Ave	ML	AM	95.36	11.864	38.65438	-121.36763	63	0.56	23,824	16,970
SAC	SR51-N	NB Fulton Ave	ML	PM	6.87	6.869	38.63114	-121.39994	63	1.96	21,961	7,095
SAC	SR51-S	EB Exposition Bl	ML	AM	3.33	3.326	38.59656	-121.44377	61	0.77	21,043	6,665

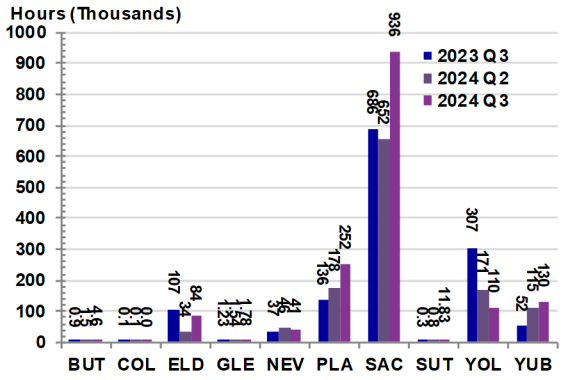
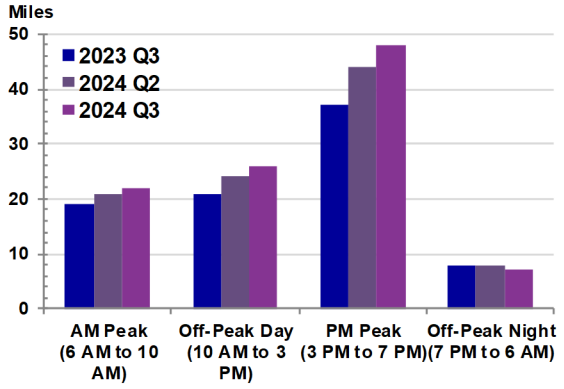
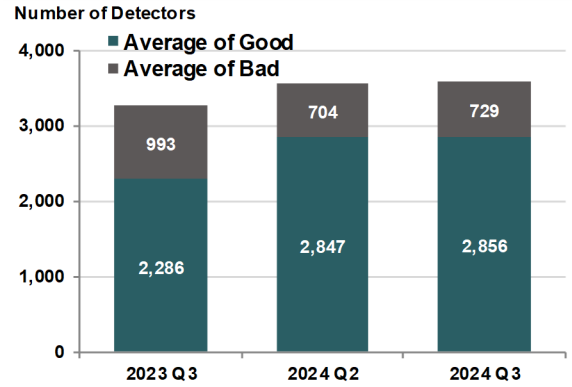
Notes:

- For the table above, the quarterly delay calculation was based upon a 60 mph threshold for the AM/PM weekday peak period.

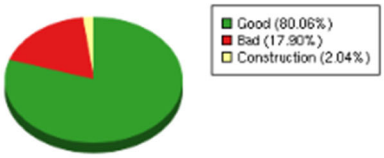
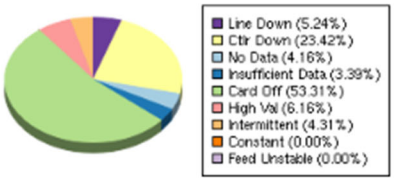
- As shown in the table above, Route 51 has three of the top 10 bottlenecks instead of two when compared with the previous quarter, and it is the most congested highway in the Sacramento region. Some of these delays may be caused by the implementation of Return to Office (RTO) for California State Department employees.
- In continued efforts to help relieve congestion and allow safe merging during high traffic demand periods, the California Department of Transportation (Caltrans) has updated the ramp metering operating hours on all major freeways in the Sacramento region. The metering hours will be based on traffic demand and will be activated 24/7, including holidays, when minimum traffic thresholds are met. The ramp meters will be active every day including weekends and holidays.
- Caltrans District 3 has plans to construct High Occupancy Vehicle (HOV) lanes on SR-51 in Sacramento County, I-80 in Yolo County, and SR-65 in Placer County. These projects are expected to reduce delay at some of the nearby bottlenecks identified above.
- The HOV lanes on US-50 are currently under construction, and the HOV lanes on I-5 have been completed and are operational.
- Phase 1 of improvements at the SR-65/I-80 interchange have been completed. This phase included reconstructing the WB I-80 connector to NB SR-65 to increase capacity and included reconstructing the Stanford Ranch/Galleria interchange. The remainder of the SR-65 project is not currently funded. The planned HOV project on SR-51 is currently funding for PA&ED.
- District 3 is preparing to use the information in this report to prioritize funding for projects in the SHOPP mobility programs.

Measure	Graph	Percentage Change	
Vehicle Miles of Travel (VMT)		Over one year ago	Over last quarter
		3.8%	1.8%
		↑	↑
Total Vehicle Hours of Delay (VHD) at 35 mph		Over one year ago	Over last quarter
		18.4%	30.9%
		↑	↑
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph		Over one year ago	Over last quarter
		16.8%	23.4%
		↑	↑
Total Vehicle Hours of Delay (VHD) at 60 mph		Over one year ago	Over last quarter
		7.6%	12.9%
		↑	↑
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph		Over one year ago	Over last quarter
		6.2%	7.3%
		↑	↑

Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph		Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		–	Monday -1.8%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Thursday 11.1%	Saturday 32.3%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		Largest Magnitude Weekday Decrease over one year ago	Largest Magnitude Weekday Decrease over last quarter
		11 AM -5.8%	9 AM -1.5%
		Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
		4 PM 21.4%	5 PM 20.3%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		Largest Magnitude Saturday Decrease over one year ago	Largest Magnitude Saturday Decrease over last quarter
		10 AM -7.7%	–
		Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
		2 PM 35.6%	11 AM 63.5%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/ Holidays		Largest Magnitude Sun./Holiday Decrease over one year ago	Largest Magnitude Sun./Holiday Decrease over last quarter
		12 PM -24.9%	–
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		4 PM 44.9%	1 PM 44.3%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph		Largest Magnitude Decrease over one year ago YOL -64.1%	Largest Magnitude Decrease over last quarter YOL -35.7%
		Largest Magnitude Increase over one year ago SAC 36.5%	Largest Magnitude Increase over last quarter SAC 43.5%
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph		Largest Magnitude Decrease over one year ago Off-Peak Night -15.7%	Largest Magnitude Decrease over last quarter Off-Peak Night -22.8%
		Largest Magnitude Increase over one year ago PM Peak 30%	Largest Magnitude Increase over last quarter PM Peak 7.5%
Average Number of Good and Bad Detectors		Change in Good over one year ago 25%	Change in Good over last quarter 0%
		Change in Bad over one year ago -27%	Change in Bad over last quarter 4%

The figure below displays detector health data taken on July 1st, 2024. This figure illustrates the percentage of detector health per route to indicate which detectors are measuring the performance of state highways in District 3. About 20% of detectors are out of service. The number of good detectors did not change when compared with Q2/2024.

% Working	Suspected Errors
	

Status by Freeway

Freeway	# Det	% Good	% Bad	% Construction	Suspected Error								
					Line Down	Ctlr Down	No Data	Insufficient Data	Card Off	High Val	Intermittent	Constant	Feed Unstable
I5-N	243	85.6	14.4	1.2	0.0	3.3	1.2	0.8	8.2	0.0	0.8	0.0	0.0
I5-S	251	80.5	19.5	1.2	0.0	4.0	0.0	0.0	8.0	4.0	3.6	0.0	0.0
SR12-E	2	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SR12-W	2	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SR16-E	1	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0
SR16-W	2	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0
SR20-E	17	82.4	17.6	0.0	0.0	5.9	0.0	0.0	11.8	0.0	0.0	0.0	0.0
SR20-W	20	80.0	20.0	0.0	0.0	5.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0
SR28-E	3	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SR28-W	3	66.7	33.3	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0
SR45-N	3	66.7	33.3	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0
SR45-S	3	33.3	66.7	0.0	0.0	0.0	0.0	0.0	66.7	0.0	0.0	0.0	0.0
SR49-N	4	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SR49-S	4	75.0	25.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0
US50-E	494	75.1	24.9	4.9	3.2	10.3	0.0	0.0	10.3	1.0	0.0	0.0	0.0
US50-W	466	76.4	23.6	2.6	3.9	8.8	0.0	0.0	9.0	1.9	0.0	0.0	0.0
SR51-N	108	75.9	24.1	2.8	0.0	2.8	0.0	0.0	19.4	0.9	0.9	0.0	0.0
SR51-S	93	71.0	29.0	3.2	0.0	10.8	0.0	0.0	9.7	1.1	7.5	0.0	0.0
SR65-N	57	87.7	12.3	0.0	0.0	0.0	5.3	3.5	3.5	0.0	0.0	0.0	0.0
SR65-S	69	94.2	5.8	0.0	0.0	0.0	1.4	2.9	0.0	0.0	1.4	0.0	0.0
SR70-E	24	50.0	50.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0
SR70-W	20	70.0	30.0	0.0	0.0	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0
I80-E	487	86.0	14.0	1.4	0.0	2.1	1.0	0.6	8.8	1.2	0.2	0.0	0.0
I80-W	470	83.4	16.6	2.8	0.0	3.0	0.9	0.9	10.2	1.3	0.4	0.0	0.0
SR89-N	12	83.3	16.7	0.0	0.0	0.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0
SR89-S	12	83.3	16.7	0.0	0.0	0.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0
SR99-N	284	91.9	8.1	0.0	0.0	0.0	1.1	1.8	3.5	0.4	1.4	0.0	0.0
SR99-S	308	86.0	14.0	1.9	0.0	0.0	2.6	1.3	9.4	0.3	0.3	0.0	0.0
SR113-N	13	84.6	15.4	0.0	0.0	0.0	0.0	0.0	15.4	0.0	0.0	0.0	0.0
SR113-S	15	93.3	6.7	0.0	0.0	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.0
SR149-N	2	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0
SR149-S	3	66.7	33.3	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0
SR160-N	8	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SR160-S	7	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SR162-E	6	83.3	16.7	0.0	0.0	0.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0
SR162-W	4	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SR193-E	2	50.0	50.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0
SR193-W	1	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0
SR244-E	3	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0
SR244-W	6	83.3	16.7	0.0	0.0	0.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0
SR267-E	2	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SR267-W	2	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SR275-W	3	0.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I505-N	7	85.7	14.3	0.0	0.0	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0
I505-S	5	60.0	40.0	0.0	0.0	0.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0
Totals	**3,551**	**81.7**	**18.3**	**2.1**	**1.0**	**4.3**	**0.8**	**0.6**	**9.7**	**1.1**	**0.8**	**0.0**	**0.0**

Based on the Congestion by Route table below, I-80 in Sacramento County was the worst performing freeway in District 3, followed by I-5 in Sacramento County. I-80 in Placer County also had a significant increase in delay when compared with the previous quarter.

Congestion by Route											
		Vehicle Hours of Delay at 35 mph			Difference 2024 Q3-2023 Q3		Difference 2024 Q3-2024 Q2		Rank		
Route	County	2023 Q3	2024 Q2	2024 Q3	Absolute	Percentage	Absolute	Percentage	2023 Q3	2024 Q2	2024 Q3
I80	Sacramento	70,565	70,434	333,608	263,043	372.8%	263,174	373.6%	7	8	1
I5	Sacramento	349,579	189,725	226,079	-123,500	-35.3%	36,354	19.2%	1	2	2
SR51	Sacramento	153,077	218,208	215,982	62,905	41.1%	-2,226	-1.0%	3	1	3
SR70	Yuba	51,986	114,677	129,814	77,827	149.7%	15,137	13.2%	9	5	4
I80	Placer	71,492	84,569	120,565	49,074	68.6%	35,996	42.6%	6	6	5
SR99	Sacramento	76,208	124,024	110,749	34,541	45.3%	-13,276	-10.7%	5	4	6
SR65	Placer	58,462	80,641	87,194	28,731	49.1%	6,553	8.1%	8	7	7
US50	El Dorado	106,726	32,926	81,317	-25,408	-23.8%	48,392	147.0%	4	11	8
I80	Yolo	254,815	134,456	79,667	-175,149	-68.7%	-54,789	-40.7%	2	3	9
US50	Sacramento	32,647	46,209	46,689	14,041	43.0%	480	1.0%	12	9	10
I80	Nevada	33,113	43,928	38,893	5,780	17.5%	-5,034	-11.5%	11	10	11
SR89	Placer	3,155	7,448	27,159	24,004	760.8%	19,711	264.7%	14	13	12
US50	Yolo	47,490	31,204	17,048	286,802	603.9%	-14,156	-45.4%	10	12	13
SR267	Placer	84	4,525	13,318	13,234	15716.9%	8,793	194.3%	26	15	14
I5	Yolo	4,134	5,624	13,136	9,002	217.8%	7,512	133.6%	13	14	15
SR99	Sutter	260	749	11,818	11,558	4448.8%	11,069	1477.8%	24	21	16
SR28	Placer	2,602	667	3,425	823	31.6%	2,758	413.7%	16	23	17
SR89	El Dorado	383	654	3,070	2,687	702.0%	2,416	369.3%	22	24	18
SR149	Butte	0	151	2,862	2,862		2,711	1797.9%		27	19
SR12	Sacramento	817	494	1,850	1,033	126.4%	1,357	274.8%	21	26	20
SR99	Butte	854	1,314	1,659	805	94.3%	345	26.2%	20	17	21
SR162	Glenn	1,205	990	1,527	322	26.7%	537	54.2%	18	19	22
SR244	Sacramento	0	741	1,066	1,066		325	43.9%		22	23
SR20	Nevada	901	1,264	865	-36	-4.0%	-399	-31.6%	19	18	24
SR89	Nevada	241	809	658	417	173.5%	-151	-18.6%	25	20	25
SR160	Sacramento	3,107	2,902	615	-2,492	-80.2%	-2,288	-78.8%	15	16	26
SR49	Nevada	2,412	0	409	-2,003	-83.0%	409		17		27
SR113	Yolo	353	18	340	-13	-3.6%	322	1810.1%	23	34	28
I5	Glenn	18	536	253	235	1304.4%	-284	-52.9%	31	25	29
SR16	Yolo	0	57	77	77		19	33.7%		30	30
SR20	Colusa	19	26	34	15	81.3%	8	28.4%	29	32	31
SR70	Butte	0	36	31	31		-5	-13.7%		31	32
SR70	Sutter	9	2	9	0	2.3%	7	300.0%	33	37	33
SR45	Colusa	19	2	7	-12	-62.0%	5	273.7%	30	38	34
SR20	Yuba	0	1	5	5		4	372.7%		39	35
SR162	Butte	1	6	4	4	616.7%	-2	-28.3%	37	36	36
I5	Colusa	24	88	4	-21	-84.8%	-84	-95.8%	28	28	37
SR45	Glenn	11	14	3	-8	-75.7%	-11	-80.6%	32	35	38
SR20	Sutter	4	24	2	-2	-44.2%	-22	-90.0%	34	33	39
SR113	Sutter	2	1	1	0	-25.0%	0	33.3%	36	40	40
I505	Yolo	39	0	0	-39	-100.0%	0		27		
SR275	Yolo	4	81	0	-4	-100.0%	-81	-100.0%	35	29	
TOTALS		**1,326,817**	**1,200,222**	**1,571,809**	**244,992**	**18.5%**	**371,587**	**31.0%**			

As indicated by the table above, the Total Delay for all monitored routes has increased to *1,571,809* hours, an increase of *31%* when compared with the previous quarter. Overall, congestion and delay have increased, and travel demand (VMT) was about the same when compared to the previous quarter.

Most of the congested routes in the Sacramento region are serving traffic to Downtown Sacramento, which is due to its travel demand associated with the Sacramento region's high population, employment, and educational centers. As identified on pages 2 and 3 of this report, Caltrans is continuing the process of implementing HOV lanes and 24/7 ramp metering operations for Sacramento's freeway system. HOV lane projects on SR-51, I-5, I-80, and US-50 are planned or under construction to mitigate congestion on these routes. Further congestion mitigation can be achieved by allowing more employees to ***Work from Home*** and encouraging a modal shift away from single-occupancy vehicles to higher-occupancy vehicles such as carpooling, vanpooling, and a higher utilization of mass transit options. District 3 will continue to explore the best possible ways to reduce delay in the impacted freeways and highways.