District 07
Mobility Performance Report

2022 Third Quarter

DEPARTMENT OF TRANSPORTATION
OFFICE OF SYSTEM PERFORMANCE
DIVISION OF OPERATIONS

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EXECUTIVE SUMMARY

Overview

Caltrans District 7, consisting of Los Angeles and Ventura counties, is part of the second-largest urban region in the United States. Los Angeles County is the most populous county in the United States with more than 10.2 million residents as of 2020. Ventura County has a population of 0.84 million.

The Quarterly Mobility Performance Report (MPR) compares information from previous year and previous quarter in the following performance measures:

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

This information is based on daily data collected, 24 hours a day, by automated vehicle detector stations deployed along the State Highway System. The Mobility Performance Report presents congestion information at two speed thresholds: delay from vehicles traveling below 60 miles per hour (mph), and delay from vehicles traveling below 35 mph. The delay at the 35 mph speed threshold represents severe congestion while delay at 60 mph speed threshold represents both light and heavy congestions. These two speed thresholds are set by Caltrans based on engineering judgement.

FINDINGS

- In this Third quarter (July – September of 2022), VMT across all district 7 freeways was 9.07 billion miles, an increase of 1.5 percent from previous quarter.
- On the contrary, delays decreased in this quarter:
  - There were 23.4 million Vehicle Hours of Delay (VHD) at the 60-mph speed threshold, a decrease of 8.3 percent over previous quarter and a decrease of 16.5 percent from a year ago.
  - Only 2.2 percent of the 23.4 million VHD were generated in Ventura County, and 97.8 percent were generated in Los Angeles County.
  - Similarly, a total of 9 million VHD occurred at the 35-mph speed threshold, a decrease of 11 percent over the previous quarter and a decrease of 20 percent from a year ago.
  - About 47 percent (4.2 million VHD) in Los Angeles County were generated from 3 freeways only, I-405, I-5, and US-101.
- These delays were equivalent to 269 Lost Lane Miles Hours (LLM)* from the freeway network during the PM Peak Period, compared to 294 LLM from previous quarter.
- The average weekday daily delay in this quarter was approximately 124,000 VHD at 35-mph speed threshold, and 313,000 VHD at 60-mph speed thresholds (9.2 percent and 7 Percent decrease respectively over the previous quarter.)
- Thursdays were the most congested days of the week, followed by Fridays. Morning peak hour was at 8:00 AM. Afternoon peak hour was at 5:00 PM. The peak periods extended from 7:00 AM to 9:00 AM and from 3:00 PM to 6:00 PM.
- Weekend's peak hour (Saturday and Sunday) was at 3:00 PM, and peak period extended between 1:00 PM and 4:00 PM.

* **Lost Lane Miles Hours (Lost Productivity):** This is the 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 due to the fact that the freeway is operating in congested conditions instead of in free flow)

- By the end of the third quarter, loop detectors in good service condition account for only 35.6 percent of total loops, while 64.4 percent of total loop detectors were nonoperational. Almost 19 percent of the loops were out due to construction projects.

County	# Det	% Good	% Bad	% Construction
Los Angeles	10625	35.3	64.7	18.6
Ventura	616	42.0	58.0	23.7
Totals	**11,241**	**35.6**	**64.4**	**18.9**

- Top Ten Bottlenecks for the 2022 Third Quarter:

RANK	County	Location	Shift	Fwy	Abs PM	CA PM	Latitude	Longitude	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (hrs)
1	Los Angeles	Greenwood Ave	PM	I5-S	126.90	10.33	33.981723	-118.130845	48	5.6	176,448	176.6
2	Los Angeles	Palms Blvd	AM	I405-N	52.31	28.54	34.019206	-118.423854	62	5.7	170,220	183.7
3	Los Angeles	Adams Blvd	AM	I110-N	20.53	20.6	34.026085	-118.275163	63	4.2	156,991	226.8
4	Los Angeles	Solano Ave	PM	I110-N	25.01	25.08	34.075092	-118.232059	63	3.5	152,141	263.3
5	Los Angeles	Garfield Ave	PM	SR60-E	5.59	R5.42	34.033031	-118.133612	62	3.2	141,474	229.6
6	Los Angeles	Pasadena Ave	PM	I5-N	136.63	20	34.076978	-118.219273	63	3.3	140,267	249.8
7	Los Angeles	Robertson Blvd	AM	I10-W	5.66	R7.81	34.029948	-118.392928	63	3.9	139,208	226.8
8	Los Angeles	Osmond Ave.	PM	I5-S	116.77	0.2	33.876316	-118.014605	63	8.4	137,917	170.6
9	Los Angeles	Firestone Blvd.	PM	I605-S	10.39	R8.34	33.923989	-118.104406	41	5.5	137,190	163.8
10	Los Angeles	Howard Hughes Pkwy	PM	I405-S	48.67	24.9	33.976541	-118.387273	39	5.1	124,791	118.9

Project Status:

The following projects are currently being constructed or are scheduled for construction in District 7. These projects are expected to relieve traffic congestion in Los Angeles and Ventura counties.

LA 5: WIDEN AND REALIGN FREEWAY (SEGMENT 2); EA 2159U

Widen Interstate 5 by adding one High Occupancy Vehicle (HOV) lane and one or two mixed-flow lanes in each direction, reconstruction of Valley View Avenue interchange, and adjacent frontage roads in Los Angeles County, in La Mirada and Santa Fe Springs, from Artesia Blvd to North Fork Coyote Creek.

LA 5: WIDEN AND REALIGN FREEWAY, CONSTRUCT HOV LANES (SEGMENT 5); EA 21595

Widen Interstate 5 by adding one HOV lane, one or two mixed-flow lanes in each direction and upgrade the inside and outside shoulders to standard width; remove and replace Florence Avenue Overcrossing, northbound on-ramp bridge from Florence Avenue, and Orr and Day Overhead railroad bridge in Los Angeles County from north of Orr and Day Overhead to I-605/I-5 Interchange.

LA 5: WIDEN & REALIGN FREEWAY FOR HOV LANES; REALIGN METROLINK RAILROAD TRACKS; EA 1218W

Add one HOV lane in each direction in Burbank from West Magnolia Boulevard Overcrossing to 0.3 mile north of Buena Vista Street/Winona Avenue Undercrossing in Los Angeles County.

LA 10: WIDEN FREEWAY, CONSTRUCT HOV LANES; EA 1193U (Segment 3)

Construct one HOV lane in each direction along I-10 in LA County from Citrus Avenue in West Covina to SR-57 in Pomona.

TRANSPORTATION MANAGEMENT SYSTEM PROJECTS TO UPGRADE THE EXISTING COMMUNICATION SYSTEMS.

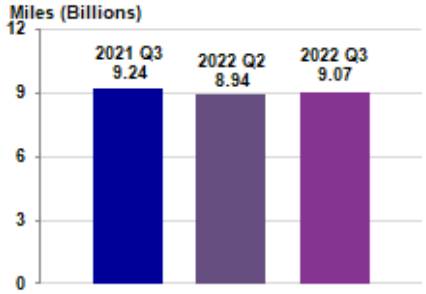
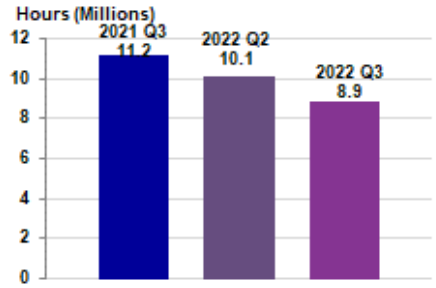
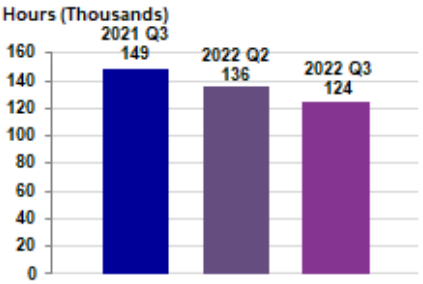
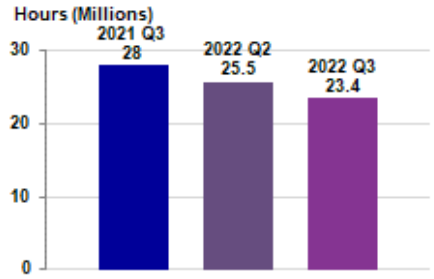
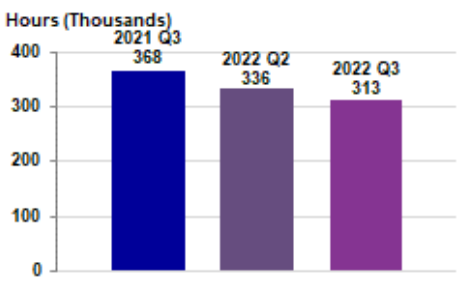
- LA 10: Repair Ramp Metering and Vehicle Detection System on various routes. EA 34050.
- LA 405: Upgrade existing Traffic Management Communication System from Ventura Blvd. Undercrossing to I-5/I-405 Separation. EA 25710.
- LA 60: Upgrade transportation management system. EA 32710

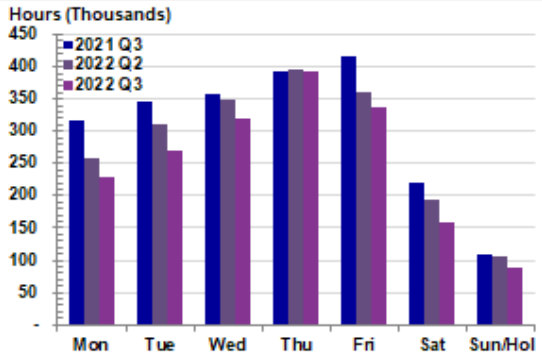
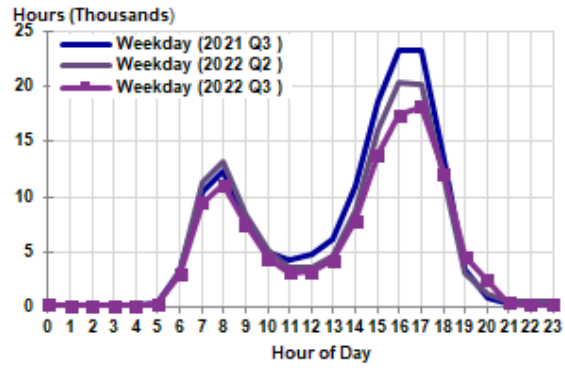
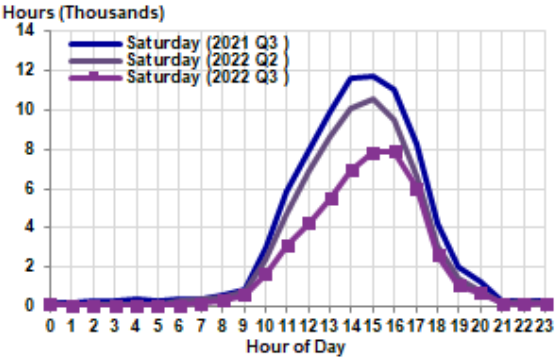
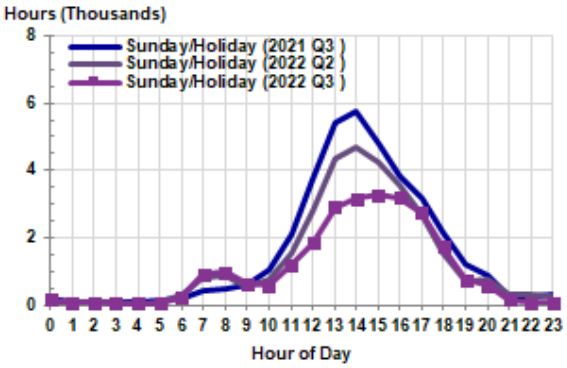
ROADSIDE SAFETY IMPROVEMENT PROJECTS

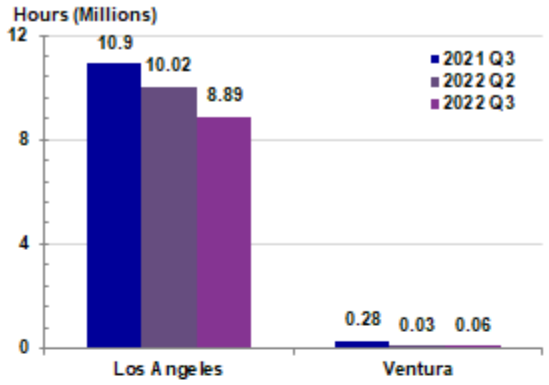
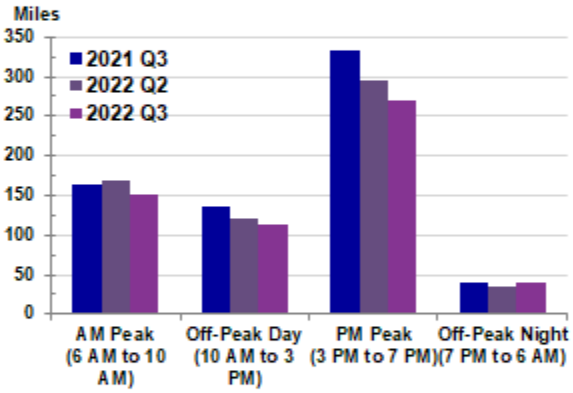
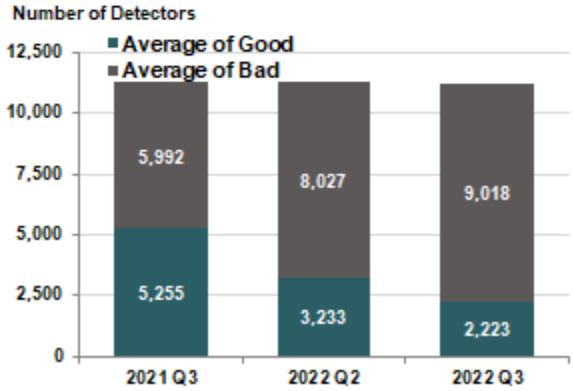
- LA 005: In Los Angeles County from rout 5/118 separation to Balboa Blvd. EA 31990.
- LA 005: In the city of Los Angeles, upgrade traffic signals and curb ramps. EA 35180
- LA 105: Install safety lighting At I-105/I-110 Interchange, EA 29740

This list of ongoing or planned projects is only a partial list, please contact CALTRANS District 7 for more details.

Quarterly Mobility Statistics

Measure	Graph	Percentage Change	
		Over one year ago	Over last quarter
Vehicle Miles of Travel (VMT)		-1.9%	1.5%
Total Vehicle Hours of Delay (VHD) at 35 mph		-20%	-11%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph		-17.2%	-9.2%
Total Vehicle Hours of Delay (VHD) at 60 mph		-16.5%	-8.3%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph		-15%	-7%

Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph		Largest Magnitude Decrease over one year ago Monday -27.4%	Largest Magnitude Decrease over last quarter Tuesday -13.1%
		Largest Magnitude Increase over one year ago Thursday 0.3%	Largest Magnitude Increase over last quarter –
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		Largest Magnitude Weekday Decrease over one year ago 4 PM -25.2%	Largest Magnitude Weekday Decrease over last quarter 4 PM -14%
		Largest Magnitude Weekday Increase over one year ago 8 PM 163.7%	Largest Magnitude Weekday Increase over last quarter 7 PM 52.2%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		Largest Magnitude Saturday Decrease over one year ago 2 PM -40.1%	Largest Magnitude Saturday Decrease over last quarter 2 PM -31.5%
		Largest Magnitude Saturday Increase over one year ago –	Largest Magnitude Saturday Increase over last quarter 9 PM 1.2%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/ Holidays		Largest Magnitude Sun./Holiday Decrease over one year ago 2 PM -45.2%	Largest Magnitude Sun./Holiday Decrease over last quarter 2 PM -32.8%
		Largest Magnitude Sun./Holiday Increase over one year ago 8 AM 111.5%	Largest Magnitude Sun./Holiday Increase over last quarter 6 PM 12.2%

Measure	Graph	Percentage Change	
		Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
Total Vehicle Hours of Delay (VHD) by County at 35 mph		Los Angeles -18.5%	Los Angeles -11.3%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		–	Ventura 78%
		Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph		PM Peak -19%	PM Peak -8.5%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Off-Peak Night 2.9%	Off-Peak Night 9.4%
		Change in Good over one year ago	Change in Good over last quarter
Average Number of Good and Bad Detectors		-58%	-31%
		Change in Bad over one year ago	Change in Bad over last quarter
		51%	12%

Congestion by Route											
		Vehicle Hours of Delay at 35 mph			Difference 2022 Q3-2021 Q3		Difference 2022 Q3-2022 Q2		Rank		
Route	County	2021 Q3	2022 Q2	2022 Q3	Absolute	Percentage	Absolute	Percentage	2021 Q3	2022 Q2	2022 Q3
I–405	Los Angeles	2,230,509	2,213,010	1,861,532	-368,977	-16.5%	-351,478	-15.9%	1	1	1
I–5	Los Angeles	1,528,068	1,432,880	1,300,743	-227,325	-14.9%	-132,138	-9.2%	2	2	2
US–101	Los Angeles	1,259,438	1,179,848	1,033,788	-225,650	-17.9%	-146,061	-12.4%	3	3	3
I–10	Los Angeles	1,212,091	1,051,567	889,892	-322,198	-26.6%	-161,675	-15.4%	4	4	4
I–210	Los Angeles	827,203	958,380	827,402	199	0.0%	-130,978	-13.7%	5	5	5
SR–60	Los Angeles	718,119	541,698	641,834	-76,285	-10.6%	100,136	18.5%	6	7	6
I–110	Los Angeles	568,662	490,617	531,049	-37,613	-6.6%	40,432	8.2%	7	8	7
I–605	Los Angeles	486,994	561,339	511,648	24,654	5.1%	-49,691	-8.9%	8	6	8
I–710	Los Angeles	424,940	457,519	448,807	23,866	5.6%	-8,713	-1.9%	9	10	9
SR–91	Los Angeles	420,718	465,280	279,002	-141,716	-33.7%	-186,278	-40.0%	10	9	10
I–105	Los Angeles	303,321	195,667	191,563	-111,758	-36.8%	-4,104	-2.1%	11	11	11
SR–14	Los Angeles	245,725	96,684	115,019	-130,707	-53.2%	18,334	19.0%	14	13	12
SR–134	Los Angeles	214,902	142,517	98,163	-116,739	-54.3%	-44,354	-31.1%	15	12	13
SR–57	Los Angeles	284,722	81,560	60,583	-224,139	-78.7%	-20,978	-25.7%	12	14	14
SR–118	Los Angeles	87,240	73,681	47,130	-40,110	-46.0%	-26,552	-36.0%	16	15	15
US–101	Ventura	250,457	11,377	42,911	-207,545	-82.9%	31,534	277.2%	13	19	16
SR–71	Los Angeles	53,080	58,586	18,181	-34,899	-65.7%	-40,405	-69.0%	17	16	17
SR–170	Los Angeles	0	0	15,554	15,554		15,554				18
SRv2	Los Angeles	20,713	16,777	13,347	-7,366	-35.6%	-3,430	-20.4%	19	18	19
SR–118	Ventura	25,521	19,267	11,657	-13,864	-54.3%	-7,610	-39.5%	18	17	20
SR–33	Ventura	3,395	3,309	3,422	26	0.8%	113	3.4%	21	20	21
SR–23	Ventura	1,001	0	2,454	1,452	145.0%	2,454		22		22
SR–47	Los Angeles	17,489	1,748	2,053	-15,436	-88.3%	304	17.4%	20	21	23
SR–126	Los Angeles	3	111	1,282	1,279	37617.6%	1,171	1052.2%	24	22	24
SR–90	Los Angeles	374	28	27	-347	-92.9%	-1	-3.6%	23	23	25
TOTALS		**11,184,684**	**10,053,452**	**8,949,042**	**-2,235,642**	**-20.0%**	**-1,104,411**	**-11.0%**			
SR-170 ALL Loops are down from Mid December 2018											