District 07 Mobility Performance Report

2021 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. These two counties have a large amount of sparsely populated national forests and national recreation areas.

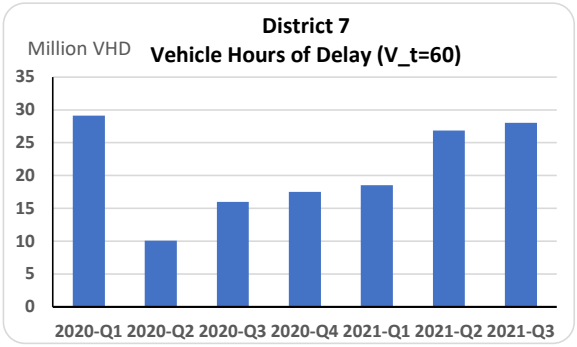
The Quarterly Mobility Performance Report (MPR) compares information with over a year ago and over previous quarter in the following performance measures:

- 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 2021), Vehicle miles travelled (VMT) and congestion on the freeways is back to pre-pandemic values (as shown in this time graph.)



- Having said that, VMT across all district 7 freeways in this third quarter was 9.2 billion miles, an increase of 2.3 percent from previous quarter.
- Delays also increased in this quarter. There were 28 million Vehicle Hours of Delay (VHD) at the 60-mph speed threshold – an increase of 4.4 percent over previous quarter and 75.4 percent increase from a year ago.

  Three percent of the 28 million VHD were generated in Ventura County, and 97 percent were generated in Los Angeles County. About 56 percent of VHD in Los Angeles County were generated from I-405, I-5, US-101, and I-10 freeways.

  Similarly, a total of 11.2 million VHD occurred at the 35-mph speed threshold, an increase of 3 percent over the previous quarter and 106 percent from a year ago.
- These delays were equivalent to 332 Lost Lane Miles Hours (LLM) from the freeway network in the PM Peak Period, compared to the 340 LLM from previous quarter.
- The average weekday daily delay in this quarter was approximately 149,000 VHD at 35-mph speed threshold, and 368,000 VHD at 60-mph speed thresholds (3.8 percent and 4.8 Percent increase respectively over the previous quarter.)
- Fridays were the most congested days of the week, followed by Thursdays. Morning peak hour was at 8:00 AM. Afternoon peak hour was at 4:00 PM. The peak periods extended from 7:00 AM to 9:00 AM and from 3:00 PM to 6:00 PM.
- The weekend's peak hour (Saturday and Sunday) was at 3:00 PM, and peak period extended between 1:00 PM and 4:00 PM.

- By the end of the third quarter, good loop detectors were 47.6 percent of the total loops, and 52.4 percent were nonoperational. Almost 11 percent of the total loops are out due to construction projects.

	Detectors	% Good	% Bad	% Construction
Los Angeles	10631	46.5	53.5	11.1
Ventura	616	66.9	33.1	0
Totals	**11,247**	**47.6**	**52.4**	**10.5**

- Top Ten Bottlenecks for the 2021 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	Howard Hughes Pkwy	PM	I405-S	48.67	24.9	33.97654	-118.38727	62	6.0	255,370	220
2	Los Angeles	Greenwood Ave	PM	I5-S	126.90	10.33	33.98172	-118.13085	56	5.3	229,318	216
3	Los Angeles	Palms Blvd	AM	I405-N	52.31	28.54	34.01921	-118.42385	64	5.7	204,644	219
4	Los Angeles	Nordhoff St.	PM	I405-N	68.64	44.87	34.23737	-118.47293	61	5.9	184,664	256
5	Los Angeles	Garfield Ave.	PM	SR60-E	5.59	R5.42	34.03303	-118.13361	61	3.3	177,274	276
6	Los Angeles	Nb 605 To Eb 210 Con	PM	I210-E	36.89	R36.6	34.13340	-117.95441	64	5.8	147,104	202
7	Los Angeles	N Of 110	PM	I405-S	36.95	13.18	33.85834	-118.28787	62	6.5	141,953	148
8	Los Angeles	Solano Ave	PM	I110-N	25.01	25.08	34.07509	-118.23206	53	3.7	139,195	211
9	Los Angeles	Gage Ave.	PM	I110-S	17.29	17.36	33.98018	-118.28104	60	4.7	129,438	147
10	Los Angeles	White Oak Ave.	PM	US101-N	21.70	20.34	34.17129	-118.52036	64	5.4	121,965	162

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.

LA 10: WIDEN FREEWAY, CONSTRUCT HOV LANES; EA 1170U (Segment 2)

Construct one HOV lane in each direction along I-10 from Puente Avenue in city of Baldwin Park to Citrus Avenue in West Covina to reduce traffic congestion.

LA 101: IN LOS ANGELES COUNTY, ON SOUTHBOUND US-101, BETWEEN LANKERSHIM BLVD OFF-RAMP AND BARHAM BLVD OFF-RAMP; EA 29920

Modify interchange and improve both freeway systems access and safety on southbound US-101 between Lankershim Blvd. off-ramp and Barham Blvd. off-ramp in Los Angeles.

TRANSPORTATION MANAGEMENT SYSTEM PROJECTS TO UPGRADE THE EXISTING COMMUNICATION SYSTEMS.

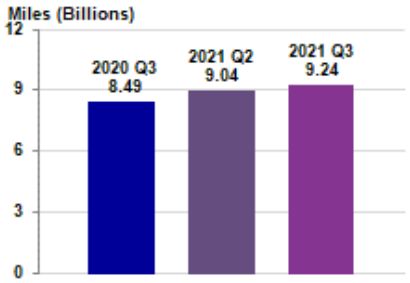
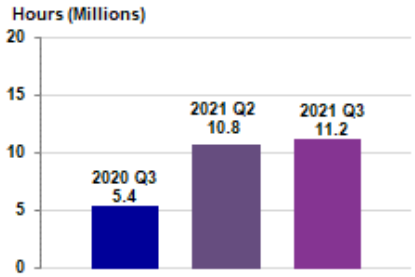
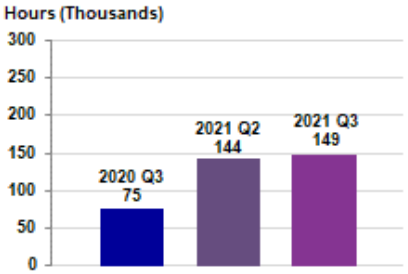
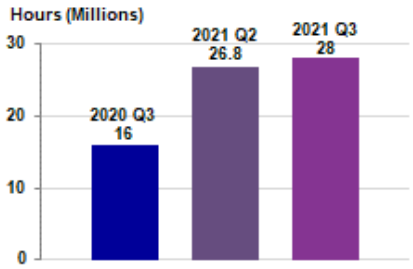
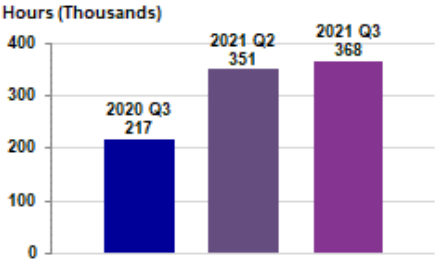
- LA 002: Repair/Restoration of the Intelligent Transportation System (ITS) in Los Angeles County and Ventura County. EA 34060.
- LA 10: Repair Ramp Metering and Vehicle Detection System on various routes. EA 34050.
- LA 405: Upgrade existing Traffic Management Communication System from Ventura Blvd. Undercrossing to I-5/I-405 Separation. EA 25710.

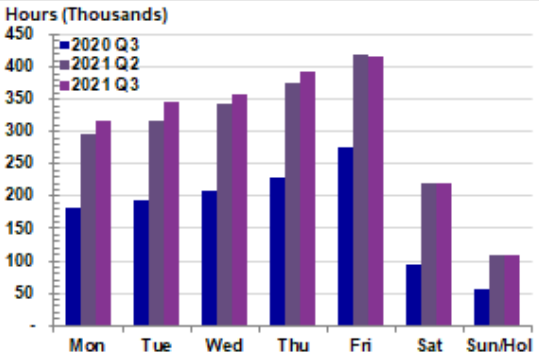
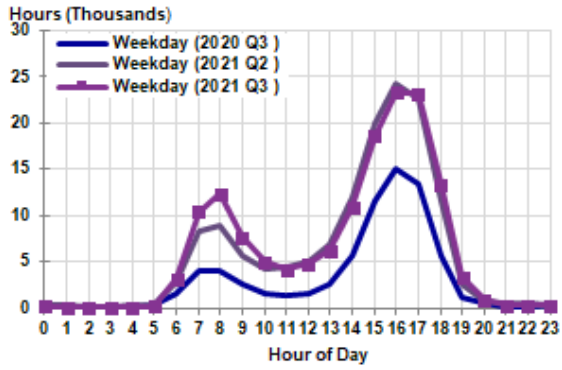
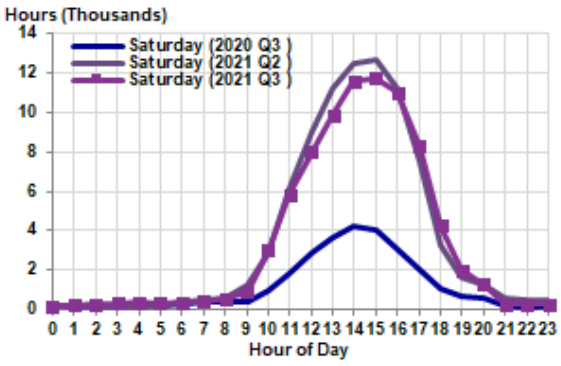
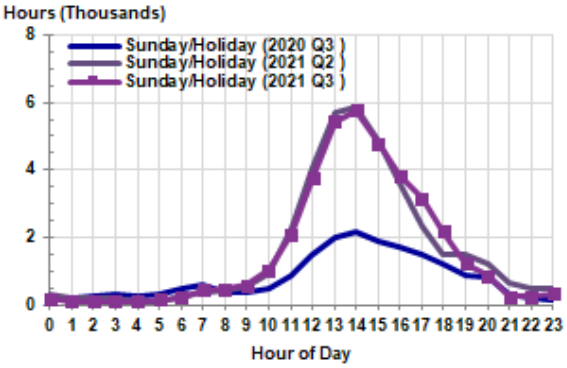
ROADSIDE SAFETY IMPROVEMENT PROJECTS

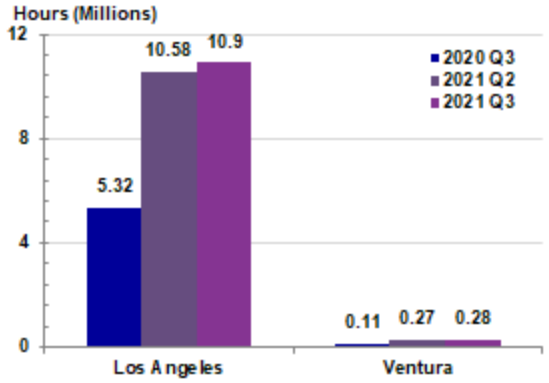
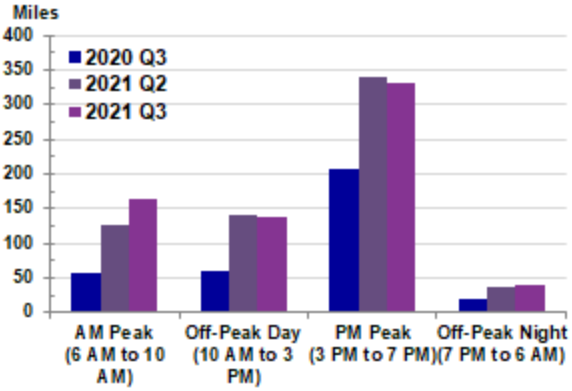
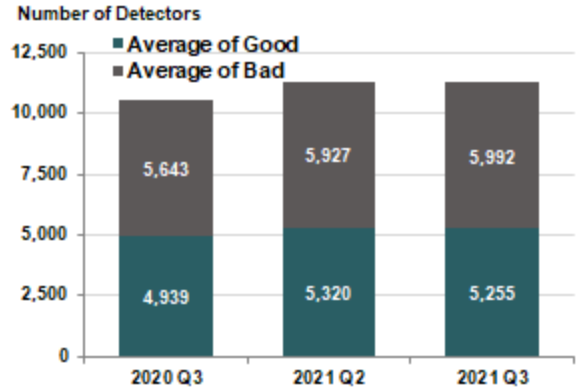
- LA 210: In Los Angeles County, in Pasadena and Arcadia from Fair Oaks to Huntington Dr. EA 30360
- LA 405: In Los Angeles County, Inglewood and Culver City, from I-105 to Port Road Undercrossing. EA 29630.
- LA 060: In the cities of Los Angeles, Monterey Park, Montebello, from Mednik Ave to Markland Drive. EA 29580.
- LA 005: In Los Angeles County at various locations. EA 29510.

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)		8.9%	2.3%
Total Vehicle Hours of Delay (VHD) at 35 mph		106%	3.1%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph		100.2%	3.8%
Total Vehicle Hours of Delay (VHD) at 60 mph		75.4%	4.4%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph		69.2%	4.8%

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 Friday -0.8%
		Largest Magnitude Increase over one year ago Thursday 71.6%	Largest Magnitude Increase over last quarter Tuesday 9.5%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		Largest Magnitude Weekday Decrease over one year ago 1 AM -47.2%	Largest Magnitude Weekday Decrease over last quarter 3 PM -7.1%
		Largest Magnitude Weekday Increase over one year ago 5 PM 73.8%	Largest Magnitude Weekday Increase over last quarter 8 AM 36.7%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		Largest Magnitude Saturday Decrease over one year ago 12 AM -13.1%	Largest Magnitude Saturday Decrease over last quarter 1 PM -12.4%
		Largest Magnitude Saturday Increase over one year ago 4 PM 256.3%	Largest Magnitude Saturday Increase over last quarter 6 PM 31.6%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/ Holidays		Largest Magnitude Sun./Holiday Decrease over one year ago 6 AM -57.3%	Largest Magnitude Sun./Holiday Decrease over last quarter 9 PM -62.9%
		Largest Magnitude Sun./Holiday Increase over one year ago 2 PM 166.9%	Largest Magnitude Sun./Holiday Increase over last quarter 5 PM 34.2%

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 Los Angeles 104.8%	Largest Magnitude Increase over last quarter Los Angeles 3.1%
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 PM Peak -2.5%
		Largest Magnitude Increase over one year ago PM Peak 61.1%	Largest Magnitude Increase over last quarter AM Peak 29.2%
Average Number of Good and Bad Detectors		Change in Good over one year ago 6%	Change in Good over last quarter -1%
		Change in Bad over one year ago 6%	Change in Bad over last quarter 1%

Congestion by Route											
		Vehicle Hours of Delay at 35 mph			Difference 2021 Q3-2020 Q3		Difference 2021 Q3-2021 Q2		Rank		
Route	County	2020 Q3	2021 Q2	2021 Q3	Absolute	Percentage	Absolute	Percentage	2020 Q3	2021 Q2	2021 Q3
I–405	Los Angeles	872,122	2,085,138	2,230,509	1,358,387	155.8%	145,371	7.0%	1	1	1
I–5	Los Angeles	774,122	1,254,274	1,528,068	753,946	97.4%	273,794	21.8%	2	3	2
US–101	Los Angeles	582,557	1,609,012	1,259,438	676,880	116.2%	-349,574	-21.7%	4	2	3
I–10	Los Angeles	677,846	1,171,895	1,212,091	534,245	78.8%	40,196	3.4%	3	4	4
I–210	Los Angeles	406,300	746,358	827,203	420,903	103.6%	80,845	10.8%	6	5	5
SR–60	Los Angeles	319,348	628,600	718,119	398,771	124.9%	89,518	14.2%	7	7	6
I–110	Los Angeles	468,758	644,351	568,662	99,904	21.3%	-75,689	-11.7%	5	6	7
I–605	Los Angeles	306,209	526,191	486,994	180,785	59.0%	-39,197	-7.4%	8	8	8
I–710	Los Angeles	193,070	368,155	424,940	231,870	120.1%	56,785	15.4%	10	9	9
SR–91	Los Angeles	114,826	273,769	420,718	305,892	266.4%	146,949	53.7%	13	12	10
I–105	Los Angeles	133,888	326,538	303,321	169,434	126.5%	-23,217	-7.1%	12	10	11
SR–57	Los Angeles	135,729	236,982	284,722	148,993	109.8%	47,740	20.1%	11	14	12
US–101	Ventura	93,172	247,518	250,457	157,285	168.8%	2,939	1.2%	14	13	13
SR–14	Los Angeles	245,031	306,559	245,725	694	0.3%	-60,834	-19.8%	9	11	14
SR–134	Los Angeles	30,821	231,717	214,902	184,081	597.3%	-16,815	-7.3%	15	15	15
SR–118	Los Angeles	29,482	50,764	87,240	57,758	195.9%	36,476	71.9%	16	17	16
SR–71	Los Angeles	24,529	101,332	53,080	28,551	116.4%	-48,252	-47.6%	17	16	17
SR–118	Ventura	8,521	15,721	25,521	17,000	199.5%	9,800	62.3%	18	18	18
SR–2	Los Angeles	3,621	11,811	20,713	17,092	472.0%	8,902	75.4%	20	19	19
SR–47	Los Angeles	6,086	3,906	17,489	11,403	187.4%	13,583	347.8%	19	20	20
SR–33	Ventura	3,350	3,309	3,395	45	1.3%	87	2.6%	21	21	21
SR–23	Ventura	825	2,236	1,001	176	21.4%	-1,234	-55.2%	22	22	22
SR–90	Los Angeles	43	266	374	331	772.9%	108	40.7%	23	23	23
SR–126	Los Angeles	24	1	3	-21	-85.9%	3	580.0%	24	24	24
SR–170	Los Angeles	0	0	0	0		0				
TOTALS		**5,430,280**	**10,846,401**	**11,184,684**	**5,754,404**	**106.0%**	**338,283**	**3.1%**			
SR-170 ALL Loops are down from Mid December 2018											