District 07 Mobility Performance Report

2020 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 2019. Ventura County has a population of 0.85 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 2020), the COVID-19 virus restrictions in California continue. Despite the virus continuing to spread, cases have dropped in numbers in much of the state. California still remains one of the highest infected states, and most businesses continue to operate under strict health conditions. Many residents have begun to return to their jobs, however, refrain from using public transportation due to health concern and rely on their own vehicles to commute.
- Having said that, the Vehicle Miles Travelled (VMT) across all district 7 freeways have increased from the second quarter. In summary, VMT in the third quarter was 8.5 billion miles - an increase of 1.27 billion miles (17.3 percent) - over the previous quarter. And at the end of September 2020 it was almost 11.3 percent short from a year ago. However, it was not enough to trigger the normal congestion and delays.
- There were 5.4 million Vehicle Hours of Delay (VHD) at the 35 mph speed threshold – an increase of 85.6 percent over previous quarter and still a decrease of 67.4 percent from the 16.8 million VHD of a year ago. 2 percent of the 5.4 million VHD were generated in Ventura County and 98 percent were generated in Los Angeles County. About 55 percent of VHD in Los Angeles County were generated from I-405, I-5, I-10 and US-101 freeways. Similarly, a total of 10.1 million VHD occurred at the 60 mph speed threshold, a decrease of 65.3 percent over the previous quarter.
- These delays were equivalent to 206 Lost Lane Miles Hours (LLM) from the freeway network in the PM Peak Period, compared to the 428 LLM from previous year.
- The average weekday daily delay in this quarter was approximately 75,000 VHD at 35 mph and 217,000 VHD at 60 mph speed thresholds (84.6 percent and 55.6 Percent increase respectively over the previous quarter.)
- Fridays were the most congested days of the week, followed by Thursdays. Morning peak hour was at 7:00 AM. Afternoon peak hour was at 4:00 PM. The peak periods extended from 7:00 AM to 8:00 AM and from 3:00 PM to 5:00 PM.
- The weekend's peak hour (Saturday and Sunday) was at 2:00 PM, and peak period extended between 1:00 PM and 3:00 PM.

- Good Loop Detectors in this third quarter were 46.6 percent of the total loops- a decrease of 8.0 percent over the previous quarter.

Top Ten Bottlenecks for the 2020 Third Quarter:

Rank	County	Location	Shift	Fwy	Abs PM	CA PM	Latitude	Longitude	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (Hours)
1	Los Angeles	Los Angeles St.	PM	I10-E	13.63	15.78	34.031145	-118.260012	63	6.5	198461	235.1
2	Los Angeles	Pasadena Ave.	PM	I5-N	136.63	20	34.076978	-118.219273	65	3.3	149835	244.3
3	Los Angeles	Howard Hughes Pkwy	PM	I405-S	48.67	24.9	33.976541	-118.387273	59	5.5	147341	148.3
4	Los Angeles	Nordhoff St.	PM	I405-N	68.64	44.87	34.237367	-118.472933	64	4.5	135217	202.3
5	Los Angeles	Vernon Ave.	PM	I110-S	18.82	18.89	34.002226	-118.28122	64	4.1	108779	178.6
6	Los Angeles	Robertson Blvd.	AM	I10-W	6.21	R8.36	34.034476	-118.38503	48	3.8	95770	164.8
7	Los Angeles	N-O Pathfinder Rd.	PM	SR57-N	15.80	R3.98	33.998678	-117.837798	65	2.8	82736	243.6
8	Los Angeles	Solano Ave	PM	I110-N	25.01	25.08	34.075092	-118.232059	31	3.9	78672	111.0
9	Los Angeles	Palms Blvd	AM	I405-N	52.31	28.54	34.019206	-118.423854	64	2.8	78250	183.8
10	Los Angeles	Grand Ave	PM	SR60-E	24.65	R24.512	34.010718	-117.82259	54	3.6	74416	167.9

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 4); EA 21594

Widen Interstate 5 by adding one HOV lane and one or two mixed-flow lanes in each direction and upgrade the inside and outside shoulders to standard width; remove and replace San Antonio Avenue Undercrossing, Imperial Highway Undercrossing, and Pioneer Boulevard Undercrossing; construct new

southbound Imperial Highway off-ramp (over Pioneer Boulevard) structure in Los Angeles County from 0.4 mile south of San Antonio Drive Undercrossing to 0.7 mile north of Pioneer Boulevard Undercrossing.

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 FREEWAY & CONSTRUCT HOV LANES (SEGMENT 4); EA 12184

Add one HOV lane in each direction along I-5 in Los Angeles, Glendale, and Burbank from I-5/SR-134 separation to Magnolia Boulevard Overcrossing Bridge in Los Angeles County.

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.

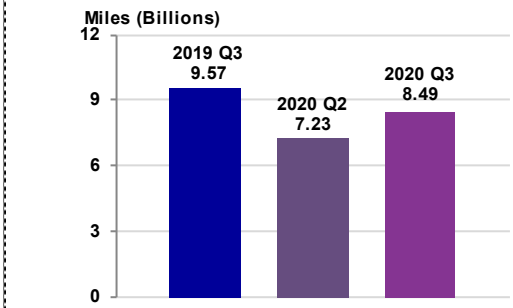
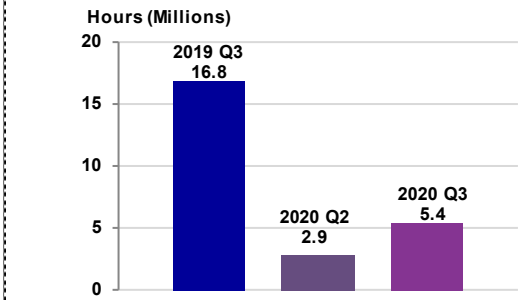
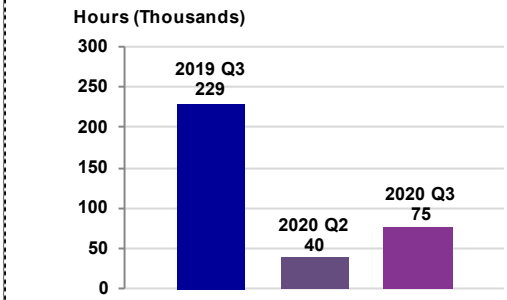
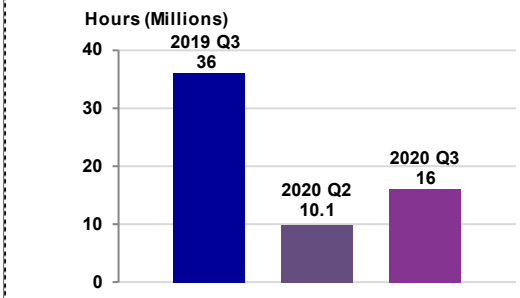
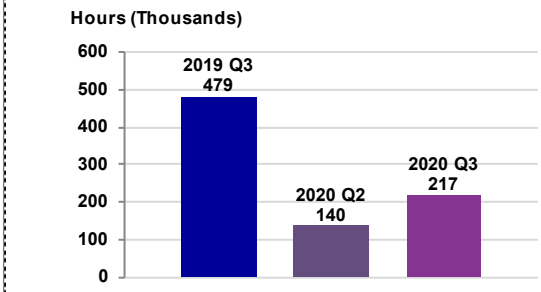
- LA 002: Repair/Restoration of the Intelligent Transportation System (ITS) in Los Angeles County and Ventura County. EA 34060.
- LA 10: Repair Ramp Metering and Vehicle Detection System on various routes. EA 34050.
- LA 405: Upgrade existing Traffic Management Communication System from Ventura Blvd.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

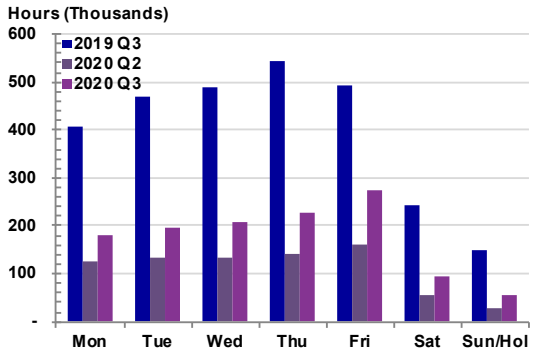
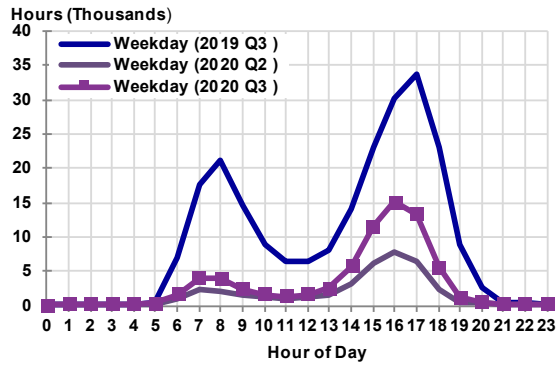
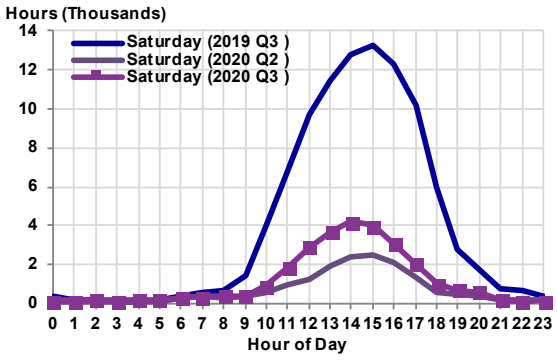
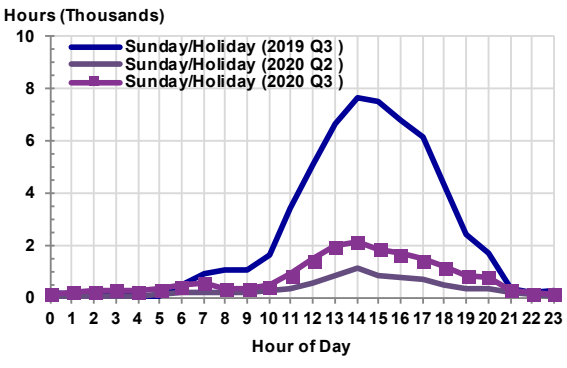
ROADSIDE SAFETY IMPROVEMENT PROJECTS

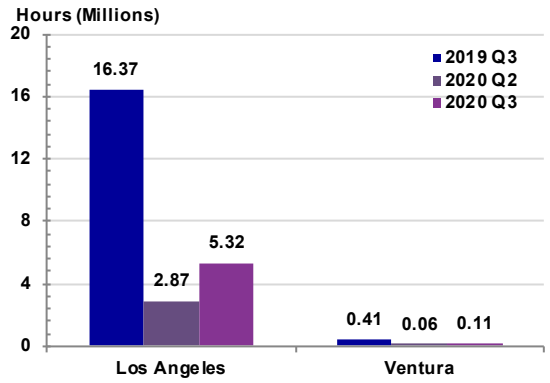
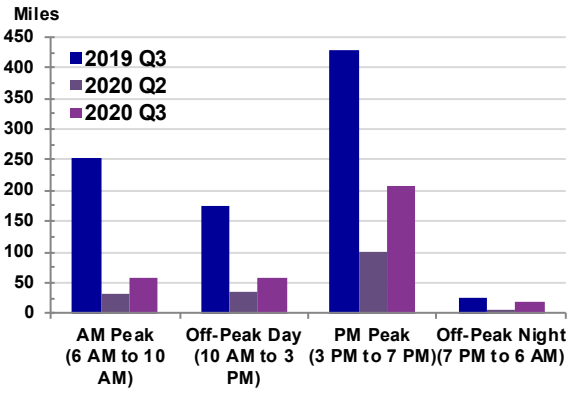
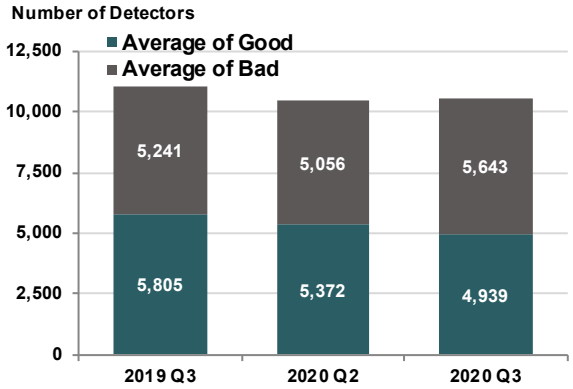
- LA 210: In Los Angeles County, in Pasadena and Arcadia from Fair Oaks to Huntington Dr. EA 30360
- LA 405: In Los Angeles County, Inglewood and Culver City, from I-105 to Port Road Undercrossing. EA 29630.
- LA 060: In the cities of Los Angeles, Monterey Park, Montebello, from Mednik Ave to Markland 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)		-11.3%	17.3%
Total Vehicle Hours of Delay (VHD) at 35 mph		-67.6%	85.6%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph		-67.4%	84.6%
Total Vehicle Hours of Delay (VHD) at 60 mph		-55.7%	58.2%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph		-54.6%	55.6%

Measure	Graph	Percentage Change	
		Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
Average Vehicle Hours of Delay by Day of Week at 60 mph		Thursday -57.9%	–
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		–	Friday 69.2%
		Largest Magnitude Weekday Decrease over one year ago	Largest Magnitude Weekday Decrease over last quarter
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		5 PM -60.3%	10 PM -3.2%
		Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
		2 AM 119%	4 PM 91.1%
		Largest Magnitude Saturday Decrease over one year ago	Largest Magnitude Saturday Decrease over last quarter
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		3 PM -69.7%	10 PM -19.2%
		Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
		4 AM 76%	2 PM 76.6%
		Largest Magnitude Sun./Holiday Decrease over one year ago	Largest Magnitude Sun./Holiday Decrease over last quarter
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/ Holidays		3 PM -75.1%	–
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		5 AM 258.4%	1 PM 121.7%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph		Largest Magnitude Decrease over one year ago Los Angeles -67.5%	Largest Magnitude Decrease over last quarter –
		Largest Magnitude Increase over one year ago –	Largest Magnitude Increase over last quarter Los Angeles 85.5%
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph		Largest Magnitude Decrease over one year ago PM Peak -51.8%	Largest Magnitude Decrease over last quarter –
		Largest Magnitude Increase over one year ago –	Largest Magnitude Increase over last quarter PM Peak 105.7%
Average Number of Good and Bad Detectors		Change in Good over one year ago -15%	Change in Good over last quarter -8%
		Change in Bad over one year ago 8%	Change in Bad over last quarter 12%

Congestion by Route

Route	County	Vehicle Hours of Delay at 35 mph			Difference 2020 Q3-2019 Q3		Difference 2020 Q3-2020 Q2		Rank		
		2019 Q3	2020 Q2	2020 Q3	Absolute	Percentage	Absolute	Percentage	2019 Q3	2020 Q2	2020 Q3
I–405	Los Angeles	3,323,814	384,658	872,122	-2,451,693	-73.8%	487,464	126.7%	1	2	1
I–5	Los Angeles	1,538,807	490,435	774,122	-764,685	-49.7%	283,687	57.8%	4	1	2
I–10	Los Angeles	1,661,886	354,655	677,846	-984,040	-59.2%	323,191	91.1%	3	3	3
US–101	Los Angeles	2,637,359	294,339	582,557	-2,054,802	-77.9%	288,218	97.9%	2	4	4
I–110	Los Angeles	904,931	188,977	468,758	-436,173	-48.2%	279,782	148.1%	7	8	5
I–210	Los Angeles	1,301,665	189,985	406,300	-895,365	-68.8%	216,315	113.9%	5	7	6
SR–60	Los Angeles	834,948	237,152	319,348	-515,600	-61.8%	82,196	34.7%	8	5	7
I–605	Los Angeles	928,220	215,572	306,209	-622,011	-67.0%	90,637	42.0%	6	6	8
SR–14	Los Angeles	212,882	89,214	245,031	32,149	15.1%	155,817	174.7%	15	11	9
I–710	Los Angeles	563,896	177,119	193,070	-370,826	-65.8%	15,951	9.0%	11	9	10
SR–57	Los Angeles	334,524	49,384	135,729	-198,794	-59.4%	86,345	174.8%	13	12	11
I–105	Los Angeles	704,795	93,729	133,888	-570,908	-81.0%	40,159	42.8%	10	10	12
SR–91	Los Angeles	706,241	43,560	114,826	-591,415	-83.7%	71,265	163.6%	9	14	13
US–101	Ventura	332,877	47,754	93,172	-239,705	-72.0%	45,418	95.1%	14	13	14
SR–134	Los Angeles	415,776	22,498	30,821	-384,955	-92.6%	8,324	37.0%	12	15	15
SR–118	Los Angeles	91,084	20,421	29,482	-61,602	-67.6%	9,061	44.4%	17	16	16
SR–71	Los Angeles	88,575	13,214	24,529	-64,046	-72.3%	11,315	85.6%	18	17	17
SR–118	Ventura	33,933	4,421	8,521	-25,412	-74.9%	4,100	92.7%	20	18	18
SR–47	Los Angeles	14,763	730	6,086	-8,677	-58.8%	5,356	734.1%	21	22	19
SR–2	Los Angeles	100,386	3,607	3,621	-96,764	-96.4%	14	0.4%	16	19	20
SR–33	Ventura	0	3,309	3,350	3,350		42	1.3%		20	21
SR–23	Ventura	38,600	377	825	-37,775	-97.9%	448	118.7%	19	23	22
SR–90	Los Angeles	1,467	748	43	-1,425	-97.1%	-705	-94.3%	23	21	23
SR–126	Los Angeles	3,056	0	24	-3,032	-99.2%	24	11950.0%	22	24	24
SR–170	Los Angeles	0	0	0	0		0				
TOTALS		**16,774,484**	**2,925,856**	**5,430,280**	**-11,344,204**	**-67.6%**	**2,504,424**	**85.6%**			

SR-170 ALL Loops are down from Mid December 2018

All freeways sharp decrease in delays, are dew to COVID-19 Pandamic.