District 07 Mobility Performance Report

2020 First 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 first quarter (January – March of 2020), the COVID-19 virus pandemic started, and the governor ordered all of the non-essential businesses to close. He issued a "Safer at Home" order for everybody to stay home, and all employees to telework if they can. These actions which was taken to minimize the impact of the virus on human lives had relieved all the traffic congestion and delays on our freeways.
- Although the delays for the last two weeks of March 2020 along all the freeways almost vanished, and the average speeds across the 24 hours period reverted to free flow, this MPR report shows congestion and delays because it averages the delays for all three month, where two and half month out of the three month have normal traffic.
- There were 13.2 million VHD at the 35 mph speed threshold - a decrease of 23.7 percent over previous quarter. 1.4 percent of 13.2 million VHD were generated in Ventura County and 98.6 percent were generated in Los Angeles County. About 50 percent of VHD in Los Angeles County were generated from I–405, US–101 and I–10 freeways. Similarly, a total of 29.1 million VHD occurred at the 60 mph speed threshold - a decrease of 19.4 percent over the previous quarter.
- This delay was equivalent to 349 Lost Lane Miles Hours (LLM) from the freeway network in the PM Peak Period.
- Total Vehicle Miles Traveled (VMT) in District 7 in this quarter was 8.27 billion miles - a decrease of 1.08 billion miles (11.6 percent) over the previous quarter.
- The average weekday daily delay in this quarter were approximately 189,000 VHD at 35 mph and 403,000 VHD at 60 mph speed thresholds a (24 percent and 20 Percent decrease respectively over the previous quarter.)
- Thursdays were the most congested days of the week followed by Wednesdays. Morning peak hour was at 8:00 AM. Afternoon peak hour was at 5:00 PM. The peak periods extended from 6:00 AM to 9:30 AM and from 2:30 PM to 7:00 PM.
- The weekend's peak hour (Saturday and Sunday) was at 4:00 PM and peak period extended between 2:00 PM and 5:00 PM.

- Good Loop Detectors in this first quarter were 55.3 percent of the total loops- a decrease of 8.0 percent over the previous quarter.

Top Ten Bottlenecks for the 2020 First Quarter:

Rnak	Fwy	Location	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Daily Duration (hrs)
1	I-5-S	Osmond Ave.	PM	116.77	0.2	62	13.8	305,228	2.7
2	I-405-N	Valley Vista Blvd.	PM	62.19	38.42	46	6.4	241,604	4.3
3	I-405-S	Howard Hughes Pkwy.	PM	48.67	24.9	51	6.1	239,050	3.4
4	I-405-N	Waterford St.	PM	55.88	32.11	52	4.1	234,711	4.5
5	I-405-N	Palms Blvd	AM	52.31	28.54	53	5.8	197,307	3.4
6	US-101-S	N Broadway	PM	2.43	1.08	44	4.6	185,653	4.1
7	I-405-N	Nordhoff St.	PM	68.64	44.87	56	4.7	172,299	4.5
8	I-10-E	Los Angeles St.	PM	13.63	15.78	43	7.7	169,323	2.4
9	I-710-S	Florence Ave.	PM	14.51	19.5	50	7.7	159,243	3.3
10	I-210-E	Mountain Ave.	PM	35.41	R35.12	50	5.6	151,315	3.5

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 FREEWAY, CONSTRUCT HOV LANES; EA 21593 (Segment 3)

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 in Los Angeles County, in Santa Fe Springs and Norwalk, from 0.1 mile north of Carmenita Road Overcrossing to 0.1 mile north of Silverbow Ave Pedestrian Overcrossing.

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 405: IN LOS ANGELES COUNTY, FROM I-10 TO US-101 WIDEN FOR HOV LANE; EA 12030

Widen the existing northbound I-405. This project will provide continuous carpool lanes on I-405 by closing the last gap.

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.

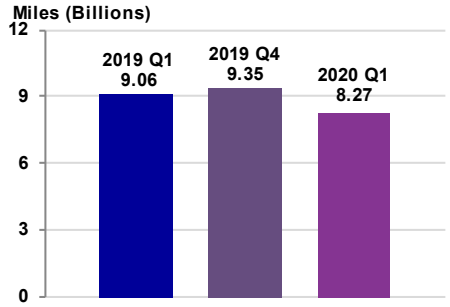
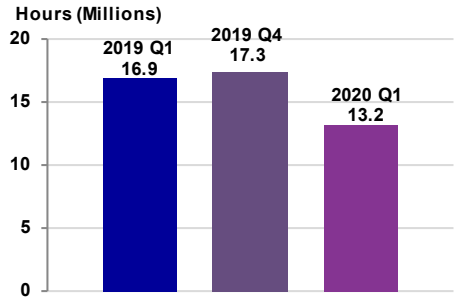
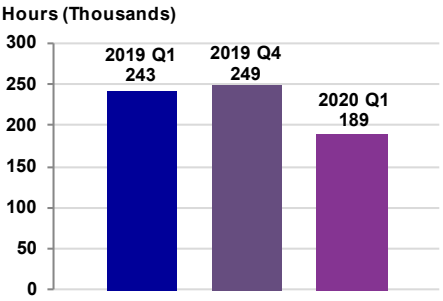
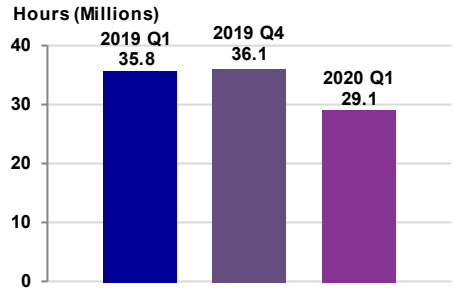
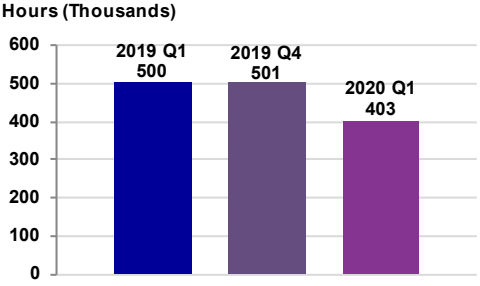
- LA 002: Repair/Restoration of the Intelligent Transportation System (ITS) in Los Angeles County and Ventura County. EA 34060.
- LA 10: Repair Ramp Metering and Vehicle Detection System on various routes. EA 34050.
- LA 405: Upgrade existing Traffic Management Communication System from Ventura Blvd.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

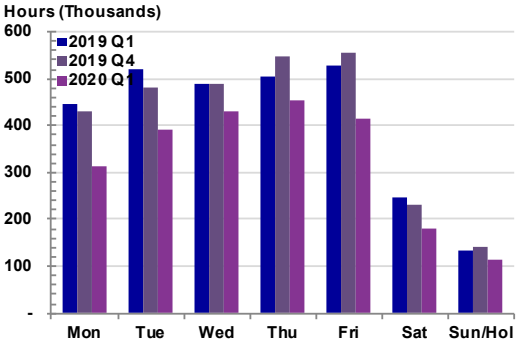
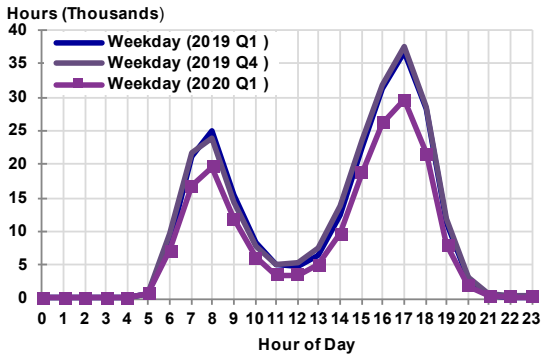
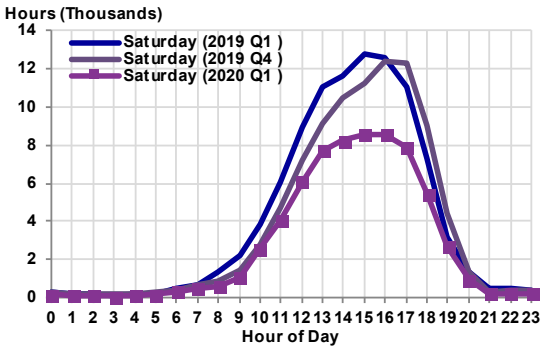
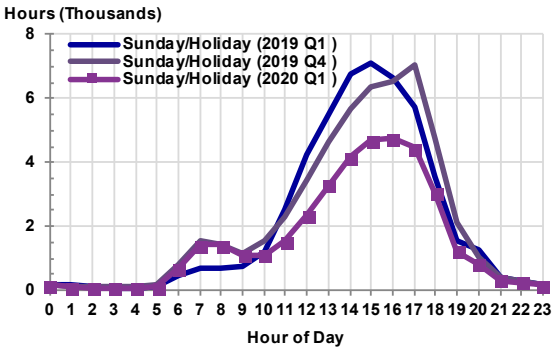
ROADSIDE SAFETY IMPROVEMENT PROJECTS

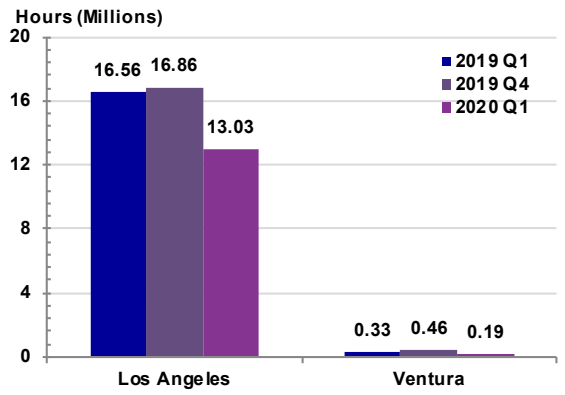
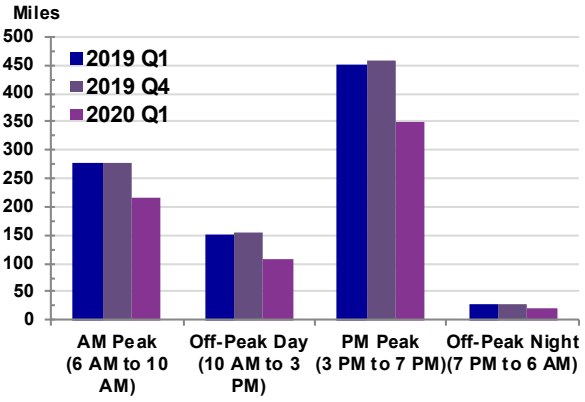
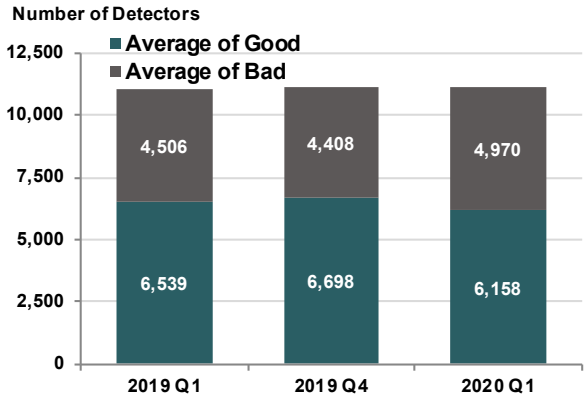
- LA 210: In Los Angeles County, in Pasadena and Arcadia from Fair Oaks to Huntington Dr. EA 30360
- LA 405: In Los Angeles County, Inglewood and Culver City, from I-105 to Port Road Undercrossing. EA 29630.
- LA 060: In the cities of Los Angeles, Monterey Park, Montebello, from Mednik Ave to Markland 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)		-8.8%	-11.6%
Total Vehicle Hours of Delay (VHD) at 35 mph		-21.7%	-23.7%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph		-22.3%	-24.2%
Total Vehicle Hours of Delay (VHD) at 60 mph		-18.7%	-19.4%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph		-19.3%	-19.6%

Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph		Largest Magnitude Decrease over one year ago Monday -29.6% Largest Magnitude Increase over one year ago –	Largest Magnitude Decrease over last quarter Friday -25.1% 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 5 PM -19.7% Largest Magnitude Weekday Increase over one year ago 5 AM 16.1%	Largest Magnitude Weekday Decrease over last quarter 5 PM -21.3% Largest Magnitude Weekday Increase over last quarter 2 AM 35%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		Largest Magnitude Saturday Decrease over one year ago 3 PM -32.6% Largest Magnitude Saturday Increase over one year ago –	Largest Magnitude Saturday Decrease over last quarter 5 PM -35.8% Largest Magnitude Saturday Increase over last quarter –
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 -38.3% Largest Magnitude Sun./Holiday Increase over one year ago 7 AM 118.1%	Largest Magnitude Sun./Holiday Decrease over last quarter 5 PM -36.9% Largest Magnitude Sun./Holiday Increase over last quarter 8 AM 1.6%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph		Largest Magnitude Decrease over one year ago Los Angeles -21.3% Largest Magnitude Increase over one year ago –	Largest Magnitude Decrease over last quarter Los Angeles -22.7% Largest Magnitude Increase over last quarter –
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph		Largest Magnitude Decrease over one year ago PM Peak -22.5% Largest Magnitude Increase over one year ago –	Largest Magnitude Decrease over last quarter PM Peak -24.1% Largest Magnitude Increase over last quarter –
Average Number of Good and Bad Detectors		Change in Good over one year ago -6% Change in Bad over one year ago 10%	Change in Good over last quarter -8% Change in Bad over last quarter 13%

Congestion by Route											
		Vehicle Hours of Delay at 35 mph			Difference 2020 Q1-2019 Q1		Difference 2020 Q1-2019 Q4		Rank		
Route	County	2019 Q1	2019 Q4	2020 Q1	Absolute	Percentage	Absolute	Percentage	2019 Q1	2019 Q4	2020 Q1
I–405	Los Angeles	3,251,147	3,527,826	2,826,647	-424,500	-13.1%	-701,179	-19.9%	1	1	1
US–101	Los Angeles	2,534,788	2,590,936	2,055,596	-479,192	-18.9%	-535,340	-20.7%	2	2	2
I–10	Los Angeles	1,775,737	1,909,378	1,603,143	-172,594	-9.7%	-306,235	-16.0%	3	3	3
I–5	Los Angeles	1,495,454	1,618,496	1,084,383	-411,071	-27.5%	-534,113	-33.0%	4	4	4
I–210	Los Angeles	1,200,212	1,421,029	966,840	-233,372	-19.4%	-454,189	-32.0%	5	5	5
I–110	Los Angeles	1,178,857	899,581	787,732	-391,124	-33.2%	-111,849	-12.4%	6	7	6
SR–60	Los Angeles	746,331	935,292	659,532	-86,799	-11.6%	-275,760	-29.5%	8	6	7
I–605	Los Angeles	923,682	830,380	575,585	-348,097	-37.7%	-254,795	-30.7%	7	8	8
I–710	Los Angeles	581,168	548,899	513,399	-67,769	-11.7%	-35,500	-6.5%	11	11	9
I–105	Los Angeles	713,148	631,563	497,711	-215,438	-30.2%	-133,853	-21.2%	9	9	10
SR–91	Los Angeles	633,259	624,028	407,671	-225,589	-35.6%	-216,358	-34.7%	10	10	11
SR–134	Los Angeles	420,962	434,314	376,435	-44,527	-10.6%	-57,879	-13.3%	12	12	12
SR–57	Los Angeles	358,943	305,714	188,753	-170,190	-47.4%	-116,961	-38.3%	13	14	13
SR–14	Los Angeles	249,110	197,768	153,068	-96,043	-38.6%	-44,701	-22.6%	14	15	14
US–101	Ventura	213,870	368,596	142,672	-71,198	-33.3%	-225,924	-61.3%	15	13	15
SR–118	Los Angeles	193,535	135,009	132,552	-60,983	-31.5%	-2,457	-1.8%	16	17	16
SR–71	Los Angeles	156,832	135,513	111,965	-44,867	-28.6%	-23,547	-17.4%	17	16	17
SR–2	Los Angeles	112,553	107,097	85,969	-26,584	-23.6%	-21,128	-19.7%	18	18	18
SR–118	Ventura	36,142	45,459	23,049	-13,093	-36.2%	-22,410	-49.3%	20	19	19
SR–23	Ventura	75,404	40,284	20,268	-55,136	-73.1%	-20,016	-49.7%	19	20	20
SR–33	Ventura	0	1,794	3,309	3,309		1,514	84.4%		23	21
SR–90	Los Angeles	2,377	1,508	1,901	-476	-20.0%	392	26.0%	23	24	22
SR–47	Los Angeles	3,828	2,799	1,119	-2,708	-70.8%	-1,680	-60.0%	22	22	23
SR–126	Los Angeles	3	5,362	478	475	14390.9%	-4,884	-91.1%	24	21	24
SR–170	Los Angeles	32,425	0	0	-32,425	-100.0%	0		21		
TOTALS		**16,889,764**	**17,318,624**	**13,219,775**	**-3,669,989**	**-21.7%**	**-4,098,849**	**-23.7%**			
SR-170 ALL Loops are down from Mid December 2018											