

District 07 Mobility Performance Report

2021 Second Quarter

DEPARTMENT OF TRANSPORTATION
OFFICE OF SYSTEM PERFORMANCE
DIVISION OF OPERATIONS

July 6, 2021
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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.

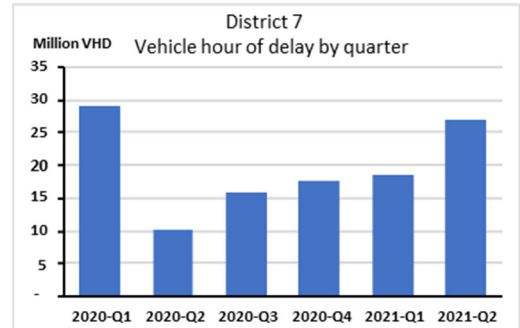
The Quarterly Mobility Performance Report (MPR) compares information with over a year ago and over previous quarter in the following performance measures:

- 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 second quarter (April – June of 2021), with almost 70 percent of California population got the COVID-19 virus vaccine, and the restrictions for wearing the mask and social distancing were almost lifted, normal way of life was restored. Vehicle miles travelled (VMT) and congestion on the freeways started to show pre-pandemic values (as shown in this time graph.)



➤ Having said that, VMT across all district 7 freeways in this second quarter was 9 billion miles, an increase of 9.7 percent from previous quarter.

➤ Delays increased significantly in this quarter. There were 26.8 million Vehicle Hours of Delay (VHD) at the 60-mph speed threshold – an increase of 44.7 percent over previous quarter and 166 percent increase from a year ago.

Three percent of the 26.8 million VHD were generated in Ventura County and 97 percent were generated in Los Angeles County. About 52 percent of VHD in Los Angeles County were generated from I-405, US-101, I-5 and I-10 freeways.

Similarly, a total of 10.8 million VHD occurred at the 35-mph speed threshold, an increase of 62 percent over the previous quarter and 270 percent from a year ago.

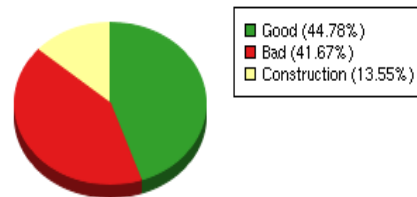
➤ These delays were equivalent to 340 Lost Lane Miles Hours (LLM) from the freeway network in the PM Peak Period, compared to the 252 LLM from previous quarter.

➤ The average weekday daily delay in this quarter was approximately 144,000 VHD at 35-mph speed threshold, and 351,000 VHD at 60-mph speed thresholds (50.4 percent and 34.5 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 8:00 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.

- Good loop detectors in this second quarter were 44.8 percent of the total loops, and 41.6 percent of the loops were nonoperational. Almost 13.5 percent of the total loops are out due to construction projects.



Top Ten Bottlenecks for the 2021 Second 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	33.976541	-118.387273	61	6.3	265,155	219
2	Los Angeles	Nordhoff St.	PM	I405-N	68.64	44.87	34.237367	-118.472933	62	7.8	234,562	234
3	Los Angeles	Hauser Blvd.	PM	I10-E	7.65	R9.8	34.033741	-118.361383	64	5.4	234,337	309
4	Los Angeles	Greenwood Ave.	PM	I5-S	126.90	10.33	33.981723	-118.130845	61	4.9	206,448	219
5	Los Angeles	Palms Blvd.	AM	I405-N	52.31	28.54	34.019206	-118.423854	64	5.9	202,421	219
6	Los Angeles	White Oak Ave.	PM	US101-N	21.70	20.34	34.171285	-118.520359	63	6.1	158,143	185
7	Los Angeles	N Of 110	PM	I405-S	36.95	13.18	33.858342	-118.287867	61	6.3	134,781	153
8	Los Angeles	Florence Ave.	PM	I710-S	14.51	19.5	33.964963	-118.169033	61	6.0	125,817	164
9	Los Angeles	Adams Blvd.	AM	I110-N	20.53	20.6	34.026085	-118.275163	62	3.3	108,284	217
10	Los Angeles	Osmond Ave.	PM	I5-S	116.77	0.2	33.876316	-118.014605	64	6.5	105,654	171

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 2159S

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

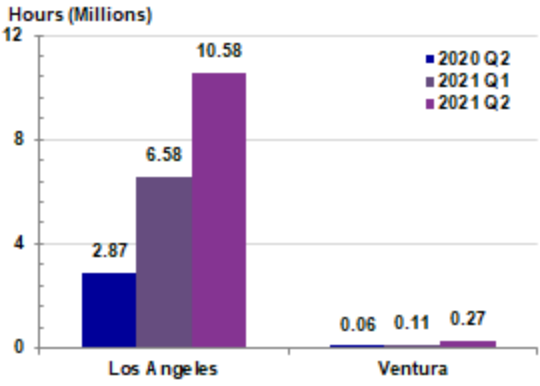
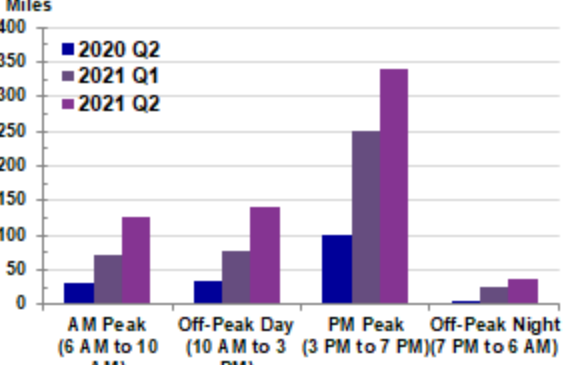
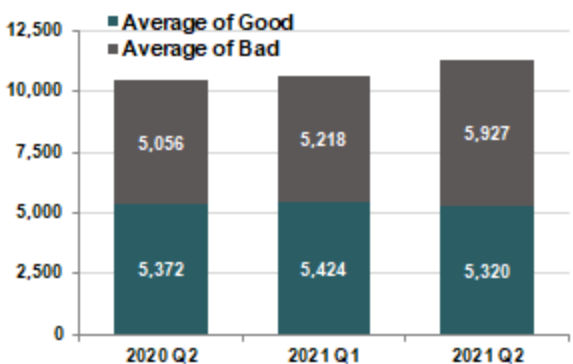
- LA 210: In Los Angeles County, in Pasadena and Arcadia from Fair Oaks to Huntington Dr. EA 30360
- LA 405: In Los Angeles County, Inglewood and Culver City, from I-105 to Port Road Undercrossing. EA 29630.
- LA 060: In the cities of Los Angeles, Monterey Park, Montebello, from Mednik Ave to Markland 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							
Vehicle Miles of Travel (VMT)	<p>Miles (Billions)</p> <table border="1"> <tr><th>Year</th><th>Q2</th></tr> <tr><td>2020</td><td>7.23</td></tr> <tr><td>2021</td><td>9.04</td></tr> </table>	Year	Q2	2020	7.23	2021	9.04	Over one year ago	Over last quarter
		Year	Q2						
		2020	7.23						
2021	9.04								
24.9%	9.7%								
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Year</th><th>Q2</th></tr> <tr><td>2020</td><td>2.9</td></tr> <tr><td>2021</td><td>10.8</td></tr> </table>	Year	Q2	2020	2.9	2021	10.8	Over one year ago	Over last quarter
		Year	Q2						
		2020	2.9						
2021	10.8								
270.7%	62.1%								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year</th><th>Q2</th></tr> <tr><td>2020</td><td>40</td></tr> <tr><td>2021</td><td>144</td></tr> </table>	Year	Q2	2020	40	2021	144	Over one year ago	Over last quarter
		Year	Q2						
		2020	40						
2021	144								
256.2%	50.4%								
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Year</th><th>Q2</th></tr> <tr><td>2020</td><td>10.1</td></tr> <tr><td>2021</td><td>26.8</td></tr> </table>	Year	Q2	2020	10.1	2021	26.8	Over one year ago	Over last quarter
		Year	Q2						
		2020	10.1						
2021	26.8								
165.9%	44.7%								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year</th><th>Q2</th></tr> <tr><td>2020</td><td>140</td></tr> <tr><td>2021</td><td>351</td></tr> </table>	Year	Q2	2020	140	2021	351	Over one year ago	Over last quarter
		Year	Q2						
		2020	140						
2021	351								
151.3%	34.5%								

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
		-	-
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
		-	-
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
		-	-
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
		-	7 AM -24.6% ↓
		Friday 158.3% ↑	Thursday 40.5% ↑
		4 PM 208.2% ↑	4 PM 33.6% ↑
		3 PM 417% ↑	3 PM 76.5% ↑
		1 PM 539.6% ↑	1 PM 139% ↑

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 -	Largest Magnitude Increase over last quarter -
		Los Angeles ↑ 268.6%	Los Angeles ↑ 60.8%
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 -
		Largest Magnitude Increase over one year ago -	Largest Magnitude Increase over last quarter -
		PM Peak ↑ 239.9%	PM Peak ↑ 35.3%
Average Number of Good and Bad Detectors		Change in Good over one year ago -1%	Change in Good over last quarter -2%
		Change in Bad over one year ago 17%	Change in Bad over last quarter 14%

Congestion by Route

Route	County	Vehicle Hours of Delay at 35 mph			Difference 2021 Q2-2020 Q2		Difference 2021 Q2-2021 Q1		Rank		
		2020 Q2	2021 Q1	2021 Q2	Absolute	Percentage	Absolute	Percentage	2020 Q2	2021 Q1	2021 Q2
		I-405	Los Angeles	384,658	1,069,223	2,085,138	1,700,481	442.1%	1,015,915	95.0%	2
US-101	Los Angeles	294,339	820,058	1,609,012	1,314,673	446.7%	788,953	96.2%	4	3	2
I-5	Los Angeles	490,435	789,100	1,254,274	763,839	155.7%	465,174	59.0%	1	4	3
I-10	Los Angeles	354,655	936,633	1,171,895	817,240	230.4%	235,262	25.1%	3	2	4
I-210	Los Angeles	189,985	485,265	746,358	556,373	292.9%	261,092	53.8%	7	5	5
I-110	Los Angeles	188,977	410,246	644,351	455,375	241.0%	234,105	57.1%	8	6	6
SR-60	Los Angeles	237,152	399,210	628,600	391,448	165.1%	229,390	57.5%	5	7	7
I-605	Los Angeles	215,572	392,099	526,191	310,619	144.1%	134,092	34.2%	6	8	8
I-710	Los Angeles	177,119	353,834	368,155	191,036	107.9%	14,321	4.0%	9	9	9
I-105	Los Angeles	93,729	259,700	326,538	232,810	248.4%	66,838	25.7%	10	10	10
SR-14	Los Angeles	89,214	161,332	306,559	217,345	243.6%	145,227	90.0%	11	11	11
SR-91	Los Angeles	43,560	149,611	273,769	230,209	528.5%	124,158	83.0%	14	12	12
US-101	Ventura	47,754	96,162	247,518	199,764	418.3%	151,356	157.4%	13	15	13
SR-57	Los Angeles	49,384	127,468	236,982	187,598	379.9%	109,514	85.9%	12	13	14
SR-134	Los Angeles	22,498	104,749	231,717	209,219	930.0%	126,968	121.2%	15	14	15
SR-71	Los Angeles	13,214	75,621	101,332	88,118	666.9%	25,711	34.0%	17	16	16
SR-118	Los Angeles	20,421	30,296	50,764	30,343	148.6%	20,468	67.6%	16	17	17
SR-118	Ventura	4,421	10,999	15,721	11,300	255.6%	4,722	42.9%	18	19	18
SR-2	Los Angeles	3,607	13,517	11,811	8,204	227.5%	-1,705	-12.6%	19	18	19
SR-47	Los Angeles	730	1,159	3,906	3,176	435.2%	2,746	236.9%	22	22	20
SR-33	Ventura	3,309	3,222	3,309	0	0.0%	87	2.7%	20	20	21
SR-23	Ventura	377	2,389	2,236	1,859	492.7%	-153	-6.4%	23	21	22
SR-90	Los Angeles	748	196	266	-482	-64.5%	70	35.8%	21	23	23
SR-126	Los Angeles	0	49	1	0	150.0%	-49	-99.0%	24	24	24
SR-170	Los Angeles	0	0	0	0		0				
TOTALS		2,925,856	6,692,138	10,846,401	7,920,545	270.7%	4,154,264	62.1%			

SR-170 ALL Loops are down from Mid December 2018