

District 07 Mobility Performance Report

2020 Second Quarter

**DEPARTMENT OF TRANSPORTATION
OFFICE OF SYSTEM PERFORMANCE
DIVISION OF OPERATIONS**

July 19, 2020
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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.

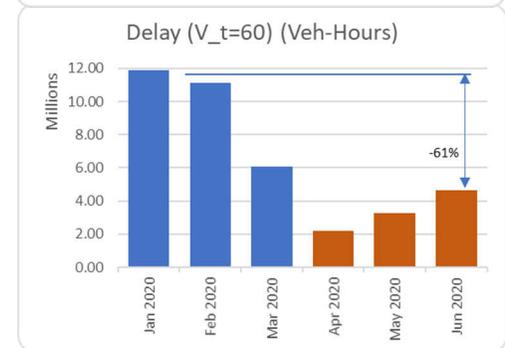
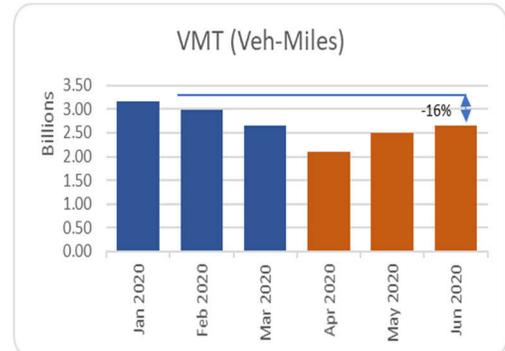
The Quarterly Mobility Performance Report (MPR) compares information with over a year ago and over previous quarter in the following performance measures:

- 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 Second quarter (April – June of 2020), the COVID-19 virus pandemic lockout continues. Unfortunately, the virus is still spreading, and California is now one of the highest infected states regarding virus count. Most businesses are either closed or working with very strict conditions. However, after three months of lockdown, people have begun going out to enjoy their lives and do their business while staying vigilant of their surroundings.
- Knowing that, the Vehicle Miles Travelled (VMT) across all district 7 freeways have started to rise gradually, and at the end of June 2020 it was almost 16% short of the normal 3.1 billion monthly VMT, however it was not enough to trigger the normal congestion and delays.
- Delays in the second quarter started to build up month by month but are still down by 61% from January 2020.
April 2020 showed the least in delays. (2.2 million VHD)
- In summary, VMT in the second quarter was 7.2 billion miles - a decrease of 1.04 billion miles (12.5 percent) over the previous quarter.
- There were 2.9 million VHD at the 35 mph speed threshold - a decrease of 78 percent over previous quarter and 82 percent from one year ago. 2 percent of the 2.9 million VHD were generated in Ventura County and 98 percent were generated in Los Angeles County. About 50 percent of VHD in Los Angeles County were generated from I-5, I-405, 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 100 Lost Lane Miles Hours (LLM) from the freeway network in the PM Peak Period.



- The average weekday daily delay in this quarter was approximately 40,000 VHD at 35 mph and 140,000 VHD at 60 mph speed thresholds (78.6 percent and 65.3 Percent decrease respectively over the previous quarter.)
- Good Loop Detectors in this second quarter were 51.5 percent of the total loops- a decrease of 13.0 percent over the previous quarter.

Top Ten Bottlenecks for the 2020 Second Quarter:

Rank	Fwy	Location	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Daily Duration (hrs)
1	I-5-N	Pasadena Ave.	PM	136.63	20	64	3.2	149,321	3.9
2	I-710-S	S. Atlantic Blvd.	PM	16.69	21.68	64	3.5	113,327	1.8
3	US-101-S	N Of 110	PM	3.18	1.83	43	2.8	84,125	4.4
4	I-10-E	Los Angeles St.	PM	13.63	15.78	39	4.3	71,767	3.3
5	I-605-S	Florence Ave.	PM	11.22	R9.164	63	2.2	70,110	3.9
6	I-10-E	La Brea Ave.	PM	8.08	R10.23	51	3.4	58,864	1.0
7	I-5-S	Knott Ave.	PM	116.77	0.2	64	3.2	49,694	2.7
8	I-5-N	Marengo St.	AM	135.34	18.71	64	1.9	47,182	2.4
9	I-405-S	Howard Hughes Pkwy	PM	48.67	24.9	39	3.5	47,028	1.8
10	SR-60-E	Garfield Ave.	PM	5.59	R5.42	59	1.7	46,406	3.2

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									
Vehicle Miles of Travel (VMT)	<p>Miles (Billions)</p> <table border="1"> <tr><th>Quarter</th><th>VMT (Billions)</th></tr> <tr><td>2019 Q2</td><td>9.45</td></tr> <tr><td>2020 Q1</td><td>8.27</td></tr> <tr><td>2020 Q2</td><td>7.23</td></tr> </table>	Quarter	VMT (Billions)	2019 Q2	9.45	2020 Q1	8.27	2020 Q2	7.23	Over one year ago	Over last quarter
		Quarter	VMT (Billions)								
		2019 Q2	9.45								
2020 Q1	8.27										
2020 Q2	7.23										
-23.5%	-12.5%										
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Quarter</th><th>VHD (Millions)</th></tr> <tr><td>2019 Q2</td><td>16.4</td></tr> <tr><td>2020 Q1</td><td>13.2</td></tr> <tr><td>2020 Q2</td><td>2.9</td></tr> </table>	Quarter	VHD (Millions)	2019 Q2	16.4	2020 Q1	13.2	2020 Q2	2.9	Over one year ago	Over last quarter
		Quarter	VHD (Millions)								
		2019 Q2	16.4								
2020 Q1	13.2										
2020 Q2	2.9										
-82.1%	-77.9%										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Quarter</th><th>VHD (Thousands)</th></tr> <tr><td>2019 Q2</td><td>225</td></tr> <tr><td>2020 Q1</td><td>189</td></tr> <tr><td>2020 Q2</td><td>40</td></tr> </table>	Quarter	VHD (Thousands)	2019 Q2	225	2020 Q1	189	2020 Q2	40	Over one year ago	Over last quarter
		Quarter	VHD (Thousands)								
		2019 Q2	225								
2020 Q1	189										
2020 Q2	40										
-82.1%	-78.6%										
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Quarter</th><th>VHD (Millions)</th></tr> <tr><td>2019 Q2</td><td>35.2</td></tr> <tr><td>2020 Q1</td><td>29.1</td></tr> <tr><td>2020 Q2</td><td>10.1</td></tr> </table>	Quarter	VHD (Millions)	2019 Q2	35.2	2020 Q1	29.1	2020 Q2	10.1	Over one year ago	Over last quarter
		Quarter	VHD (Millions)								
		2019 Q2	35.2								
2020 Q1	29.1										
2020 Q2	10.1										
-71.3%	-65.3%										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Quarter</th><th>VHD (Thousands)</th></tr> <tr><td>2019 Q2</td><td>471</td></tr> <tr><td>2020 Q1</td><td>403</td></tr> <tr><td>2020 Q2</td><td>140</td></tr> </table>	Quarter	VHD (Thousands)	2019 Q2	471	2020 Q1	403	2020 Q2	140	Over one year ago	Over last quarter
		Quarter	VHD (Thousands)								
		2019 Q2	471								
2020 Q1	403										
2020 Q2	140										
-70.4%	-65.4%										

Measure	Graph	Percentage Change	
<p>Average Vehicle Hours of Delay by Day of Week at 60 mph</p>		<p>Largest Magnitude Decrease over one year ago</p>	<p>Largest Magnitude Decrease over last quarter</p>
		<p>Thursday -72.4% ↓</p>	<p>Thursday -68.5% ↓</p>
		<p>Largest Magnitude Increase over one year ago</p>	<p>Largest Magnitude Increase over last quarter</p>
		<p>-</p>	<p>-</p>
<p>Average Vehicle Hours of Delay by Hour of Day at 35 mph, Week days</p>		<p>Largest Magnitude Weekday Decrease over one year ago</p>	<p>Largest Magnitude Weekday Decrease over last quarter</p>
		<p>5 PM -81% ↓</p>	<p>5 PM -78.2% ↓</p>
		<p>Largest Magnitude Weekday Increase over one year ago</p>	<p>Largest Magnitude Weekday Increase over last quarter</p>
		<p>3 AM 36.5% ↑</p>	<p>-</p>
<p>Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays</p>		<p>Largest Magnitude Saturday Decrease over one year ago</p>	<p>Largest Magnitude Saturday Decrease over last quarter</p>
		<p>3 PM -82.7% ↓</p>	<p>5 PM -82.4% ↓</p>
		<p>Largest Magnitude Saturday Increase over one year ago</p>	<p>Largest Magnitude Saturday Increase over last quarter</p>
		<p>6 AM 38.5%</p>	<p>-</p>
<p>Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/Holidays</p>		<p>Largest Magnitude Sun./Holiday Decrease over one year ago</p>	<p>Largest Magnitude Sun./Holiday Decrease over last quarter</p>
		<p>2 PM -85.7% ↓</p>	<p>4 PM -82.9% ↓</p>
		<p>Largest Magnitude Sun./Holiday Increase over one year ago</p>	<p>Largest Magnitude Sun./Holiday Increase over last quarter</p>
		<p>-</p>	<p>2 AM 13% ↑</p>

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
		Los Angeles -82.1% ↓	Los Angeles -78% ↓
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 -76.5% ↓	PM Peak -71.3% ↓
Average Number of Good and Bad Detectors		Change in Good over one year ago	Change in Good over last quarter
		-17% ↓	-13% ↓
		Change in Bad over one year ago	Change in Bad over last quarter
		11% ↑	2% ↑

Congestion by Route

Route	County	Vehicle Hours of Delay at 35 mph			Difference 2020 Q2-2019 Q2		Difference 2020 Q2-2020 Q1		Rank		
		2019 Q2	2020 Q1	2020 Q2	Absolute	Percentage	Absolute	Percentage	2019 Q2	2020 Q1	2020 Q2
		I-5	Los Angeles	1,520,618	1,084,383	490,435	-1,030,183	-67.7%	-593,949	-54.8%	4
I-405	Los Angeles	3,166,039	2,826,647	384,658	-2,781,382	-87.9%	-2,441,989	-86.4%	1	1	2
I-10	Los Angeles	1,642,985	1,603,143	354,655	-1,288,330	-78.4%	-1,248,488	-77.9%	3	3	3
US-101	Los Angeles	2,630,223	2,055,596	294,339	-2,335,884	-88.8%	-1,761,257	-85.7%	2	2	4
SR-60	Los Angeles	791,889	659,532	237,152	-554,737	-70.1%	-422,379	-64.0%	8	7	5
I-605	Los Angeles	953,847	575,585	215,572	-738,275	-77.4%	-360,013	-62.5%	7	8	6
I-210	Los Angeles	1,371,041	966,840	189,985	-1,181,056	-86.1%	-776,855	-80.3%	5	5	7
I-110	Los Angeles	981,127	787,732	188,977	-792,150	-80.7%	-598,756	-76.0%	6	6	8
I-710	Los Angeles	575,745	513,399	177,119	-398,626	-69.2%	-336,279	-65.5%	11	9	9
I-105	Los Angeles	693,138	497,711	93,729	-599,409	-86.5%	-403,982	-81.2%	9	10	10
SR14	Los Angeles	131,978	153,068	89,214	-42,764	-32.4%	-63,853	-41.7%	15	14	11
SR57	Los Angeles	315,014	188,753	49,384	-265,630	-84.3%	-139,369	-73.8%	13	13	12
US-101	Ventura	271,453	142,672	47,754	-223,699	-82.4%	-94,918	-66.5%	14	15	13
SR-91	Los Angeles	625,572	407,671	43,560	-582,011	-93.0%	-364,110	-89.3%	10	11	14
SR-134	Los Angeles	331,218	376,435	22,498	-308,720	-93.2%	-353,937	-94.0%	12	12	15
SR-118	Los Angeles	93,970	132,552	20,421	-73,549	-78.3%	-112,131	-84.6%	17	16	16
SR-71	Los Angeles	105,171	111,965	13,214	-91,958	-87.4%	-98,752	-88.2%	16	17	17
SR-118	Ventura	29,393	23,049	4,421	-24,972	-85.0%	-18,628	-80.8%	20	19	18
SR-2	Los Angeles	90,475	85,969	3,607	-86,868	-96.0%	-82,362	-95.8%	18	18	19
SR-33	Ventura	0	3,309	3,309	3,309		0	0.0%		21	20
SR-90	Los Angeles	545	1,901	748	202	37.1%	-1,153	-60.7%	22	22	21
SR-47	Los Angeles	4,279	1,119	730	-3,549	-82.9%	-390	-34.8%	21	23	22
SR-23	Ventura	63,085	20,268	377	-62,707	-99.4%	-19,891	-98.1%	19	20	23
SR-126	Los Angeles	60	478	0	-60	-99.7%	-478	-100.0%	23	24	24
SR-170	Los Angeles	0	0	0	0		0				
TOTALS		16,388,864	13,219,775	2,925,856	-13,463,008	-82.1%	-10,293,919	-77.9%			

SR-170 ALL Loops are down from Mid December 2018
 All freeways sharp decrease in delays, are dew to COVID-19 Pandemic.