

# District 07 Mobility Performance Report

2022 First Quarter

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

April 22, 2022  
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## District 07 Mobility Performance Report

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2022 First Quarter

### 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 First quarter (January – March of 2022), Vehicle miles travelled (VMT) and congestion on the freeways dropped less than the previous quarter mostly due to the Omicron surge and in part due to surge in gas prices.

➤ Having said that, VMT across all district 7 freeways in this first quarter was 8.5 billion miles, a decrease of 4.6 percent from previous quarter.

➤ Delays also decreased in this quarter:

- ❖ There was 23 million Vehicle Hours of Delay (VHD) at the 60-mph speed threshold – a decrease of 16.4 percent over previous quarter and 24 percent increase from a year ago.
- ❖ Only 1.8 percent of the 23 million VHD were generated in Ventura County, and 98.2 percent were generated in Los Angeles County.
- ❖ About 60 percent of VHD in Los Angeles County were generated from I-405, I-5, I-10, and US-101 freeways.
- ❖ Similarly, a total of 8.8 million VHD occurred at the 35-mph speed threshold, a decrease of 20.4 percent over the previous quarter and an increase of 32 percent from a year ago.

➤ These delays were equivalent to 286 Lost Lane Miles Hours (LLM)<sup>\*</sup> from the freeway network in the PM Peak Period, compared to the 355 LLM from previous quarter.

➤ The average weekday daily delay in this quarter was approximately 127,000 VHD at 35-mph speed threshold, and 320,000 VHD at 60-mph speed thresholds (14.4 percent and 9.8 Percent decrease 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 5:00 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.

\* **Lost Lane Miles (Lost Productivity):** This is the number of lane-mile-hours that are lost due to the freeway operating under congested conditions. When the freeway is in congestion - speed is below 35 mph - PeMS find the ratio between the measured flow and the capacity for this location. This drop in capacity is due to the fact that the freeway is operating in congested conditions instead of in free flow)



- By the end of the first quarter, good loop detectors were only 39.5 percent of the total loops, while 60.5 percent were nonoperational. Almost 25 percent of the total loops are out due to construction projects.

County	Detectors	% Good	% Bad	% Construction
Los Angeles	10,644	39.8	60.2	25
Ventura	616	34.9	65.1	23.7
<b>Totals</b>	<b>11,260</b>	<b>39.5</b>	<b>60.5</b>	<b>24.9</b>

➤ Top Ten Bottlenecks for the 2022 First 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	Nordhoff St.	PM	I405-N	68.64	44.87	34.23737	-118.47293	51	11.61	264,809	166
2	Los Angeles	Howard Hughes Pkwy	PM	I405-S	48.67	24.9	33.97654	-118.38727	62	5.84	255,483	232
3	Los Angeles	Greenwood Ave.	PM	I5-S	126.90	10.33	33.98172	-118.13085	61	5.71	251,791	232
4	Los Angeles	National Blvd	AM	I405-N	52.93	29.16	34.02673	-118.42981	62	6.11	193,124	200
5	Los Angeles	Garfield Ave.	PM	SR60-E	5.59	R5.42	34.03303	-118.13361	62	3.36	182,697	289
6	Los Angeles	Florence Ave.	PM	I605-S	11.22	R9.164	33.93521	-118.09989	62	5.67	173,900	250
7	Los Angeles	Robertson Blvd.	AM	I10-W	5.66	R7.81	34.02995	-118.39293	62	4.77	164,405	223
8	Los Angeles	Adams Blvd.	AM	I110-N	20.53	20.6	34.02609	-118.27516	62	4.20	154,915	223
9	Los Angeles	Gage Ave	PM	I110-S	17.29	17.36	33.98018	-118.28104	60	4.70	142,990	162
10	Los Angeles	NB 605 To EB 210 Conn.	PM	I210-E	36.89	R36.6	34.13340	-117.95441	57	5.59	136,884	163

**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.

**TRANSPORTATION MANAGEMENT SYSTEM PROJECTS TO UPGRADE THE EXISTING COMMUNICATION SYSTEMS.**

- 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.
- LA 60: Upgrade transportation management system. EA 32710

**ROADSIDE SAFETY IMPROVEMENT PROJECTS**

- LA 005: In Los Angeles County from rout 5/118 separation to Balboa Blvd. EA 31990.
- LA 005: In the city of Los Angeles, upgrade traffic signals and curb ramps. EA 35180
- LA 105: Install safety lighting At I-105/I-110 Interchange, EA 29740

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/Quarter</th><th>Value</th></tr> <tr><td>2021 Q1</td><td>8.23</td></tr> <tr><td>2021 Q4</td><td>8.94</td></tr> <tr><td>2022 Q1</td><td>8.53</td></tr> </table>	Year/Quarter	Value	2021 Q1	8.23	2021 Q4	8.94	2022 Q1	8.53	Over one year ago	Over last quarter
		Year/Quarter	Value								
		2021 Q1	8.23								
2021 Q4	8.94										
2022 Q1	8.53										
3.6%	-4.6%										
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Year/Quarter</th><th>Value</th></tr> <tr><td>2021 Q1</td><td>6.7</td></tr> <tr><td>2021 Q4</td><td>11.1</td></tr> <tr><td>2022 Q1</td><td>8.8</td></tr> </table>	Year/Quarter	Value	2021 Q1	6.7	2021 Q4	11.1	2022 Q1	8.8	Over one year ago	Over last quarter
		Year/Quarter	Value								
		2021 Q1	6.7								
2021 Q4	11.1										
2022 Q1	8.8										
32.2%	-20.4%										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year/Quarter</th><th>Value</th></tr> <tr><td>2021 Q1</td><td>96</td></tr> <tr><td>2021 Q4</td><td>149</td></tr> <tr><td>2022 Q1</td><td>127</td></tr> </table>	Year/Quarter	Value	2021 Q1	96	2021 Q4	149	2022 Q1	127	Over one year ago	Over last quarter
		Year/Quarter	Value								
		2021 Q1	96								
2021 Q4	149										
2022 Q1	127										
32.8%	-14.4%										
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Year/Quarter</th><th>Value</th></tr> <tr><td>2021 Q1</td><td>18.5</td></tr> <tr><td>2021 Q4</td><td>27.6</td></tr> <tr><td>2022 Q1</td><td>23</td></tr> </table>	Year/Quarter	Value	2021 Q1	18.5	2021 Q4	27.6	2022 Q1	23	Over one year ago	Over last quarter
		Year/Quarter	Value								
		2021 Q1	18.5								
2021 Q4	27.6										
2022 Q1	23										
24.2%	-16.4%										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year/Quarter</th><th>Value</th></tr> <tr><td>2021 Q1</td><td>261</td></tr> <tr><td>2021 Q4</td><td>354</td></tr> <tr><td>2022 Q1</td><td>320</td></tr> </table>	Year/Quarter	Value	2021 Q1	261	2021 Q4	354	2022 Q1	320	Over one year ago	Over last quarter
		Year/Quarter	Value								
		2021 Q1	261								
2021 Q4	354										
2022 Q1	320										
22.5%	-9.8%										

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
		-	Sun/Hol -44.5%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Thursday 36.9%	Friday 0.5%
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
		9 PM -31.5%	5 PM -16.1%
		Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
		8 AM 141.1%	9 AM 7.5%
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
		9 PM -21%	5 PM -48.3%
		Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
		5 PM 38.4%	7 AM 68%
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
		10 PM -53.5%	5 PM -69.5%
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		1 PM 37.9%	-

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
		Ventura -77.8% ↓	Los Angeles -19.9% ↓
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 -19.4% ↓
Average Number of Good and Bad Detectors		Change in Good over one year ago	Change in Good over last quarter
		-18% ↓	-7% ↓
		Change in Bad over one year ago	Change in Bad over last quarter
		30% ↑	5% ↑



**Congestion by Route**

Route	County	Vehicle Hours of Delay at 35 mph			Difference 2022 Q1-2021 Q1		Difference 2022 Q1-2021 Q4		Rank		
		2021 Q1	2021 Q4	2022 Q1	Absolute	Percentage	Absolute	Percentage	2021 Q1	2021 Q4	2022 Q1
I405	Los Angeles	1,069,223	2,400,401	1,921,300	852,077	79.7%	-479,100	-20.0%	1	1	1
I5	Los Angeles	789,100	1,636,057	1,248,636	459,537	58.2%	-387,421	-23.7%	4	2	2
I10	Los Angeles	936,633	1,263,190	1,121,749	185,116	19.8%	-141,441	-11.2%	2	3	3
US101	Los Angeles	820,058	1,086,726	935,554	115,496	14.1%	-151,172	-13.9%	3	4	4
I210	Los Angeles	485,265	988,181	889,507	404,242	83.3%	-98,674	-10.0%	5	5	5
I605	Los Angeles	392,099	580,749	493,900	101,801	26.0%	-86,850	-15.0%	8	7	6
I110	Los Angeles	410,246	512,401	461,520	51,274	12.5%	-50,881	-9.9%	6	8	7
SR91	Los Angeles	149,611	503,421	455,733	306,122	204.6%	-47,688	-9.5%	12	9	8
I710	Los Angeles	353,834	449,176	419,334	65,500	18.5%	-29,842	-6.6%	9	10	9
SR60	Los Angeles	399,210	756,631	380,363	-18,847	-4.7%	-376,267	-49.7%	7	6	10
I105	Los Angeles	259,700	235,897	197,817	-61,884	-23.8%	-38,080	-16.1%	10	12	11
SR134	Los Angeles	104,749	119,972	105,044	295	0.3%	-14,928	-12.4%	14	13	12
SR118	Los Angeles	30,296	102,571	89,908	59,612	196.8%	-12,664	-12.3%	17	14	13
SR57	Los Angeles	127,468	242,194	74,569	-52,899	-41.5%	-167,625	-69.2%	13	11	14
SR118	Ventura	10,999	31,010	12,947	1,949	17.7%	-18,063	-58.2%	19	17	15
SR2	Los Angeles	13,517	18,361	11,443	-2,074	-15.3%	-6,918	-37.7%	18	18	16
SR71	Los Angeles	75,621	16,951	9,362	-66,259	-87.6%	-7,589	-44.8%	16	19	17
US101	Ventura	96,162	72,453	8,926	-87,236	-90.7%	-63,527	-87.7%	15	16	18
SR14	Los Angeles	161,332	90,896	4,958	-156,374	-96.9%	-85,938	-94.5%	11	15	19
SR33	Ventura	3,222	3,422	3,195	-26	-0.8%	-226	-6.6%	20	21	20
SR47	Los Angeles	1,159	4,692	1,669	509	43.9%	-3,024	-64.4%	22	20	21
SR126	Los Angeles	49	5	3	-46	-93.9%	-2	-33.3%	24	23	22
SR90	Los Angeles	196	20	0	-195	-99.8%	-19	-98.5%	23	22	23
SR170	Los Angeles	0	0	0	0		0				
SR23	Ventura	2,389	0	0	-2,389	-100.0%	0	-100.0%	21	24	
<b>TOTALS</b>		<b>6,692,138</b>	<b>11,115,376</b>	<b>8,847,437</b>	<b>2,155,299</b>	<b>32.2%</b>	<b>-2,267,939</b>	<b>-20.4%</b>			

SR-170 ALL Loops are down from Mid December 2018