

District 07 Mobility Performance Report

2019 Second Quarter

DEPARTMENT OF TRANSPORTATION
OFFICE OF SYSTEM MODELING, DATA COLLECTION AND ANALYSIS
DIVISION OF OPERATIONS

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EXECUTIVE SUMMARY

Overview

Caltrans District 7 contains two counties located in coastal southern California: Los Angeles and Ventura Counties. Both counties are urban, with Los Angeles being the most populous county in the United States with almost 10.2 million residents. Ventura County has a population of 859,000. Although these are urban counties, they do contain a large amount of sparsely populated National Forests and National Recreation Areas.

The Mobility Performance quarterly analysis compares information with over a year ago and over last quarter in the following performance measures:

- Vehicle Miles of Travel (VMT)
- Vehicle Hours of Delay (VHD), Bottleneck Locations
- Lost Lane Miles (equivalent lost productivity)
- Detection Health

This report is based on daily data collected, 24 hours a day, by automated vehicle detector stations deployed on urban-area freeways where congestion is regularly experienced. The Mobility Performance Report (MPR) 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 threshold represents severe congestion while delay at 60 mph represents all congestion, both light and heavy. These thresholds are set by Caltrans and are based on engineering experience and District input.

FINDINGS

In this 2019 Second quarter, the total delay at the 35mph speed threshold equaled 16.4 million vehicle hours of delay (VHD), a decrease of 3.0 percent over previous quarter. Where only 2.0 percent of VHD were generated in Ventura County and 98.0 percent were generated in Los Angeles County. Whereas about 45 percent of VHD in Los Angeles county were generated from I-405, US-101 and I-10 freeways. Similarly, total delay at the 60mph speed threshold equaled 35.2 million VHD, a decrease of 2.0 percent over previous quarter.

Vehicle Miles Traveled within District 7 in this quarter was 9.5 billion miles, an increase of 388 million miles (4.3 percent) over previous quarter.

The average weekday daily delay in this quarter was approximately 225 thousand VHD at 35 mph and 471 thousand VHD at 60 mph threshold.

Thursdays was the most congested days of the week followed by Friday, AM Peak hour was at 8:00 am and PM 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 peak hour in the weekend (Saturday and Sunday) was at 3:00 pm and delays extends between 1:00 pm and 6:00 pm

Top Ten Bottlenecks for the 2019 Second Quarter:

Rank	Fwy	Location	Type	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Average Duration (Hrs)
1	I405-S	HOWARD HUGHES PKWY	ML	PM	48.67	24.9	64	6.5	347,611	3.8
2	I405-N	NORDHOFF St.	ML	PM	68.642	44.87	64	8.2	346,777	4.4
3	I405-N	PALMS BLVD	ML	AM	52.31	28.54	61	6.7	249,048	2.8
4	I5-S	PARAMOUNT Blvd.	ML	PM	125.5	8.93	60	7.4	236,273	2.8
5	US101-S	GAREY St.	ML	PM	1.80	0.45	63	6.0	213,466	3.9
6	I405-N	N of Wilshire Blvd.	ML	PM	55.882	32.11	57	3.8	195,867	4.0
7	I105-E	LONG BEACH Blvd.	ML	PM	11.90	R11.9	64	4.9	181,654	4.7
8	I10-E	Los Angeles St.	ML	PM	13.625	15.78	62	7.4	178,724	2.1
9	I5-N	S OF SR-2	ML	AM	139.03	22.4	61	6.7	173,302	3.3
10	I710-S	FLORENCE Ave.	ML	PM	14.507	19.5	64	5.2	172,496	3.9

Project Status:

The Following D7 Projects are currently being constructed or are scheduled for construction. These current or future (planned) projects will relieve congestion in D7.

LA 5: WIDEN FREEWAY, CONSTRUCT HIGH OCCUPANCY VEHICLE (HOV) LANES; EA 21593 (Segment 3)

In Los Angeles county, in Santa Fe springs and Norwalk, from 0.1 mile north of Carmelita road overcrossing to 0.1 mile north of Silverbow avenue pedestrian overcrossing 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

LA 5: CONSTRUCT HIGH OCCUPANCY VEHICLE (HOV) LANES; EA 121844 (SEGMENT 4)

In Los Angeles county, Glendale and Burbank from I-5/SR-134 separation to magnolia boulevard overcrossing bridge Add one HOV lane in each direction along I-5 between SR-134 to Magnolia Blvd.

LA 10: WIDEN FREEWAY, CONSTRUCT HIGH OCCUPANCY VEHICLE (HOV) LANES; EA 1193U (Segment 3)

In LA County from Citrus Ave. in West Covina to SR-57 in Pomona. Constructing one HOV lane in each direction. The proposed typical half section consists of an 8-foot inside shoulder, 12-foot HOV lane, 12-foot inside mixed-flow lane, three 12-foot mixed-flow lanes and a 10-foot outside

LA 10: WIDEN FREEWAY, CONSTRUCT HIGH OCCUPANCY VEHICLE (HOV) LANES; EA 1170U (Segment 2)

In LA County from Puente Ave in city of Baldwin Park to Citrus St. in West Covina. This project proposes to reduce traffic congestion on the I-10 by constructing one HOV lane in each direction from Puente Avenue to Citrus Avenue. The proposed typical half section consists of an 8-foot inside shoulder, 12-foot HOV lane, 12-foot inside mixed-flow lane, three 12-foot mixed-flow lanes and a 10-foot outside shoulder.

LA 405: IN LOS ANGELES COUNTY, FROM I-10 TO US101 WIDEN FOR HOV LANE; EA 12030

Widen the existing northbound 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

- Construct a new southbound (SB) on-ramp from Universal Studios Boulevard (USB).
- Improve freeway operation by shifting and widening SB US-101 to extend the existing two-lane portion of the Lankershim/Regal on-ramp.
- Modify freeway geometric designs to improve stopping sight distance in the area of the new USB SB on-ramp.
- Eliminate undesirable weaving situation by closing the existing SB Barham/Bennett off-ramp while retaining the existing SB Barham/Bennett on-ramp for safety.

TRANSPORTATION MANAGEMENT SYSTEM PROJECTS TO UPGRADE THE EXISTING COMMUNICATION SYSTEMS.

- LA 105: IN LOS ANGELES COUNTY, FROM CALIFORNIA STREET AND IMPERIAL HIGHWAY TO STUDEBAKER ROAD; EA 30460
- LA 605: FROM LA COUNTY LINE TO RTE. 210; EA 31190
- LA 110: BETWEEN SR-47 and I-5; EA 31200

This list of ongoing or planned projects is only a partial list, please contact CALTRANS for more details.

Quarterly Mobility Statistics

Measure	Graph	Percentage Change									
Vehicle Miles of Travel (VMT)	Miles (Billions) <table><tr><th>Quarter</th><th>VMT (Billions)</th></tr><tr><td>2018 Q2</td><td>9.58</td></tr><tr><td>2019 Q1</td><td>9.06</td></tr><tr><td>2019 Q2</td><td>9.45</td></tr></table>	Quarter	VMT (Billions)	2018 Q2	9.58	2019 Q1	9.06	2019 Q2	9.45	Over one year ago	Over last quarter
		Quarter	VMT (Billions)								
		2018 Q2	9.58								
2019 Q1	9.06										
2019 Q2	9.45										
-1.3%	4.3%										
Total Vehicle Hours of Delay (VHD) at 35 mph	Hours (Millions) <table><tr><th>Quarter</th><th>VHD (Millions)</th></tr><tr><td>2018 Q2</td><td>16.5</td></tr><tr><td>2019 Q1</td><td>16.9</td></tr><tr><td>2019 Q2</td><td>16.4</td></tr></table>	Quarter	VHD (Millions)	2018 Q2	16.5	2019 Q1	16.9	2019 Q2	16.4	Over one year ago	Over last quarter
		Quarter	VHD (Millions)								
		2018 Q2	16.5								
2019 Q1	16.9										
2019 Q2	16.4										
-0.4%	-3%										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	Hours (Thousands) <table><tr><th>Quarter</th><th>VHD (Thousands)</th></tr><tr><td>2018 Q2</td><td>224</td></tr><tr><td>2019 Q1</td><td>243</td></tr><tr><td>2019 Q2</td><td>225</td></tr></table>	Quarter	VHD (Thousands)	2018 Q2	224	2019 Q1	243	2019 Q2	225	Over one year ago	Over last quarter
		Quarter	VHD (Thousands)								
		2018 Q2	224								
2019 Q1	243										
2019 Q2	225										
0.7%	-1.1%										
Total Vehicle Hours of Delay (VHD) at 60 mph	Hours (Millions) <table><tr><th>Quarter</th><th>VHD (Millions)</th></tr><tr><td>2018 Q2</td><td>34.8</td></tr><tr><td>2019 Q1</td><td>35.8</td></tr><tr><td>2019 Q2</td><td>35.2</td></tr></table>	Quarter	VHD (Millions)	2018 Q2	34.8	2019 Q1	35.8	2019 Q2	35.2	Over one year ago	Over last quarter
		Quarter	VHD (Millions)								
		2018 Q2	34.8								
2019 Q1	35.8										
2019 Q2	35.2										
1%	-1.9%										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	Hours (Thousands) <table><tr><th>Quarter</th><th>VHD (Thousands)</th></tr><tr><td>2018 Q2</td><td>462</td></tr><tr><td>2019 Q1</td><td>500</td></tr><tr><td>2019 Q2</td><td>471</td></tr></table>	Quarter	VHD (Thousands)	2018 Q2	462	2019 Q1	500	2019 Q2	471	Over one year ago	Over last quarter
		Quarter	VHD (Thousands)								
		2018 Q2	462								
2019 Q1	500										
2019 Q2	471										
1.9%	-5.8%										

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 -8.2%	Tuesday -14.2%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Wednesday 5.6%	Thursday 2.8%
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
		6 AM -5.5%	6 PM -22.1%
		Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
		5 PM 3.2%	2 PM 11.2%
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
		6 PM -9.2%	6 PM -20.7%
		Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
		4 AM 5.7%	2 PM 13.4%
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
		2 PM -10.8%	6 PM -34.5%
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		8 AM 19%	1 PM 31.4%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph	Hours (Millions) Los Angeles: 15.96, 16.56, 16.02 Ventura: 0.5, 0.33, 0.36 Legend: 2018 Q2 (Blue), 2019 Q1 (Grey), 2019 Q2 (Purple)	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		Ventura -26.8% ↓	Los Angeles -3.3% ↓
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Los Angeles 0.4% ↑	Ventura 11.8% ↑
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph	Miles Legend: 2018 Q2 (Blue), 2019 Q1 (Grey), 2019 Q2 (Purple)	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		Off-Peak Night -7.4% ↓	AM Peak -9.1% ↓
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		PM Peak 4.8% ↑	Off-Peak Day 8.4% ↑
Average Number of Good and Bad Detectors	Number of Detectors Legend: Average of Good (Dark Blue), Average of Bad (Grey) 2018 Q2: 6,502 (Good), 4,579 (Bad) 2019 Q1: 6,539 (Good), 4,506 (Bad) 2019 Q2: 6,503 (Good), 4,548 (Bad)	Change in Good over one year ago	Change in Good over last quarter
		0%	-1% ↓
		Change in Bad over one year ago	Change in Bad over last quarter
		-1% ↑	1% ↑

Congestion by Route

Route	County	Vehicle Hours of Delay at 35 mph			Difference 2019 Q2-2018 Q2		Difference 2019 Q2-2019 Q1		Rank		
		2018 Q2	2019 Q1	2019 Q2	Absolute	Percentage	Absolute	Percentage	2018 Q2	2019 Q1	2019 Q2
I-405	Los Angeles	3,245,725	3,251,147	3,166,039	-79,686	-2.5%	-85,107	-2.6%	1	1	1
US-101	Los Angeles	2,514,573	2,534,788	2,630,223	115,650	4.6%	95,435	3.8%	2	2	2
I-10	Los Angeles	1,581,466	1,775,737	1,642,985	61,520	3.9%	-132,752	-7.5%	3	3	3
I-5	Los Angeles	1,503,653	1,495,454	1,520,618	16,966	1.1%	25,164	1.7%	4	4	4
I-210	Los Angeles	1,045,676	1,200,212	1,371,041	325,364	31.1%	170,829	14.2%	6	5	5
I-110	Los Angeles	1,168,430	1,178,857	981,127	-187,303	-16.0%	-197,730	-16.8%	5	6	6
I-605	Los Angeles	956,115	923,682	953,847	-2,268	-0.2%	30,165	3.3%	7	7	7
SR-60	Los Angeles	757,113	746,331	791,889	34,777	4.6%	45,559	6.1%	9	8	8
I-105	Los Angeles	768,060	713,148	693,138	-74,922	-9.8%	-20,011	-2.8%	8	9	9
SR-91	Los Angeles	592,062	633,259	625,572	33,510	5.7%	-7,688	-1.2%	10	10	10
I-710	Los Angeles	568,728	581,168	575,745	7,018	1.2%	-5,422	-0.9%	11	11	11
SR-134	Los Angeles	365,425	420,962	331,218	-34,208	-9.4%	-89,744	-21.3%	13	12	12
SR-57	Los Angeles	265,014	358,943	315,014	50,000	18.9%	-43,929	-12.2%	14	13	13
US-101	Ventura	390,317	213,870	271,453	-118,864	-30.5%	57,582	26.9%	12	15	14
SR-14	Los Angeles	187,690	249,110	131,978	-55,711	-29.7%	-117,132	-47.0%	16	14	15
SR-71	Los Angeles	49,617	156,832	105,171	55,554	112.0%	-51,661	-32.9%	21	17	16
SR-118	Los Angeles	81,781	193,535	93,970	12,189	14.9%	-99,565	-51.4%	18	16	17
SR-2	Los Angeles	84,131	112,553	90,475	6,345	7.5%	-22,078	-19.6%	17	18	18
SR-23	Ventura	56,101	75,404	63,085	6,983	12.4%	-12,320	-16.3%	19	19	19
SR-118	Ventura	50,614	36,142	29,393	-21,221	-41.9%	-6,749	-18.7%	20	20	20
SR-47	Los Angeles	7,787	3,828	4,279	-3,508	-45.0%	451	11.8%	22	22	21
SR-90	Los Angeles	597	2,377	545	-52	-8.8%	-1,832	-77.1%	23	23	22
SR-126	Los Angeles	1	3	60	59	6588.9%	57	1724.2%	24	24	23
SR-170	Los Angeles	219,055	32,425	0	-219,055	-100.0%	-32,425	-100.0%	15	21	
TOTALS		16,459,728	16,889,764	16,388,864	-70,864	-0.4%	-500,900	-3.0%			

SR-126 two separate incidents in April

SR-170 ALL Loops are down from Mid December 2018