

District 07 Mobility Performance Report

2018 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 856,500. Although these are urban counties, they do contain a large amount of sparsely populated National Forest and National Recreation Area.

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 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 quarter (April 2018 – June 2018), the total delay at the 35 mph speed threshold equaled 16.5 million vehicle hours of delay (VHD). Out of which only 3 percent of this delay are generated in Ventura County and 97 percent are generated in Los Angeles County. Whereas about 46 percent of the Los Angeles county delays are generated from only three freeways (I-405, US-101, I-10). This total delay is 10.8 percent higher than the previous Quarter (2018-Q1).

Similarly, total delay at the 60 mph speed threshold equaled 34.8 million vehicle hours of delay (VHD), an increase of 10.4 percent over previous Quarter.

Vehicle Miles Traveled within district 7 in this quarter was 9.6 Billion Miles an increase of 400 Million Miles (3.8 percent) over previous quarter.

The average weekday daily delay in this quarter was approximately 224 thousand VHD at 35 mph and 462 thousand VHD at 60 mph threshold.

Thursdays then Fridays are the most congested days of the week, with Peak hours extend from 6:00 am to 9:30 am and from 2:30 pm to 7:00 pm. Peak hour in the weekend (Saturday and Sunday) is generally between 12:00 pm and 5:00 pm

Top Ten Bottlenecks for the 2018 Second Quarter:

Rank	Fwy	Location	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Average Duration (Hrs)
1	US101-S	Garey Street	PM	1.798	.45	64	6.3	242,140	3.8
2	I405-N	Nordhoff St.	PM	68.642	44.87	63	6.6	208,825	3.8
3	I105-E	Long Beach Blvd.	PM	11.9	R11.9	64	5.5	207,016	4.6
4	I110-N	Adams Blvd.	AM	20.53	20.6	64	4.1	198,914	3.5
5	I405-S	Howard Hughes Pkwy	PM	48.672	24.9	64	4.3	177,938	3.6
6	I405-N	Valley Vista Blvd.	PM	62.192	38.42	57	4.6	177,286	3.4
7	I110-S	Vernon Ave.	PM	18.82	18.89	63	4.0	175,628	4.0
8	I405-S	Getty - Sepulveda	AM	58.502	34.73	64	6.3	173,105	2.6
9	I605-S	Telegraph Rd.	PM	12.412	R10.36	45	5.6	167,466	4.2
10	US101-S	Laurel Canyon Blvd.	PM	14.067	12.75	64	3.9	150,502	4.2

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 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>2017 Q2</td><td>9.6</td></tr><tr><td>2018 Q1</td><td>9.2</td></tr><tr><td>2018 Q2</td><td>9.6</td></tr></table>	Quarter	VMT (Billions)	2017 Q2	9.6	2018 Q1	9.2	2018 Q2	9.6	Over one year ago	Over last quarter
		Quarter	VMT (Billions)								
2017 Q2	9.6										
2018 Q1	9.2										
2018 Q2	9.6										
		-0.4% ↓	3.8% ↑								
Total Vehicle Hours of Delay (VHD) at 35 mph	Hours (Millions) <table><tr><th>Quarter</th><th>VHD (Millions)</th></tr><tr><td>2017 Q2</td><td>16.2</td></tr><tr><td>2018 Q1</td><td>14.9</td></tr><tr><td>2018 Q2</td><td>16.5</td></tr></table>	Quarter	VHD (Millions)	2017 Q2	16.2	2018 Q1	14.9	2018 Q2	16.5	Over one year ago	Over last quarter
		Quarter	VHD (Millions)								
2017 Q2	16.2										
2018 Q1	14.9										
2018 Q2	16.5										
		1.6% ↑	10.8% ↑								
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>2017 Q2</td><td>217</td></tr><tr><td>2018 Q1</td><td>210</td></tr><tr><td>2018 Q2</td><td>224</td></tr></table>	Quarter	VHD (Thousands)	2017 Q2	217	2018 Q1	210	2018 Q2	224	Over one year ago	Over last quarter
		Quarter	VHD (Thousands)								
2017 Q2	217										
2018 Q1	210										
2018 Q2	224										
		3.2% ↑	6.3% ↑								
Total Vehicle Hours of Delay (VHD) at 60 mph	Hours (Millions) <table><tr><th>Quarter</th><th>VHD (Millions)</th></tr><tr><td>2017 Q2</td><td>34.4</td></tr><tr><td>2018 Q1</td><td>31.5</td></tr><tr><td>2018 Q2</td><td>34.8</td></tr></table>	Quarter	VHD (Millions)	2017 Q2	34.4	2018 Q1	31.5	2018 Q2	34.8	Over one year ago	Over last quarter
		Quarter	VHD (Millions)								
2017 Q2	34.4										
2018 Q1	31.5										
2018 Q2	34.8										
		1.3% ↑	10.4% ↑								
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>2017 Q2</td><td>450</td></tr><tr><td>2018 Q1</td><td>434</td></tr><tr><td>2018 Q2</td><td>462</td></tr></table>	Quarter	VHD (Thousands)	2017 Q2	450	2018 Q1	434	2018 Q2	462	Over one year ago	Over last quarter
		Quarter	VHD (Thousands)								
2017 Q2	450										
2018 Q1	434										
2018 Q2	462										
		2.6% ↑	6.6% ↑								

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 -7.7%	–
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Wednesday 5.1%	Saturday 17.5%
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
		11 AM -2.1%	7 PM -22.4%
		Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
		4 PM 4.3%	3 PM 20.8%
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
		11 AM -14.2%	7 PM -24.3%
		Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
		3 PM 2.1%	3 PM 35.9%
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
		6 PM -20.1%	6 PM -24.4%
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		12 PM 4.1%	1 PM 73.1%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph	Hours (Millions) 2017 Q2 2018 Q1 2018 Q2 Los Angeles Ventura	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 1.3% ↑	Los Angeles 10.2% ↑
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph	Miles 2017 Q2 2018 Q1 2018 Q2 AM Peak (6 AM to 10 AM) Off-Peak Day (10 AM to 3 PM) PM Peak (3 PM to 7 PM) Off-Peak Night (7 PM to 6 AM)	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		—	Off-Peak Night -9.2% ↓
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		PM Peak 5.1% ↑	Off-Peak Day 23.6% ↑
Average Number of Good and Bad Detectors	Number of Detectors Average of Good Average of Bad 2017 Q2 2018 Q1 2018 Q2	Change in Good over one year ago	Change in Good over last quarter
		9% ↑	14% ↑
		Change in Bad over one year ago	Change in Bad over last quarter
		-9% ↑	-14% ↑

Congestion by Route											
Route	County	Vehicle Hours of Delay at 35 mph			Difference 2018 Q2-2017 Q2		Difference 2018 Q2-2018 Q1		Rank		
		2017 Q2	2018 Q1	2018 Q2	Absolute	Percentage	Absolute	Percentage	2017 Q2	2018 Q1	2018 Q2
I-405	Los Angeles	3,618,602	3,106,200	3,245,725	-372,877	-10.3%	139,525	4.5%	1	1	1
US-101	Los Angeles	1,680,464	2,197,421	2,514,573	834,109	49.6%	317,152	14.4%	3	2	2
I-10	Los Angeles	1,501,562	1,242,098	1,581,466	79,903	5.3%	339,367	27.3%	4	4	3
I-5	Los Angeles	1,836,944	1,541,799	1,503,653	-333,292	-18.1%	-38,147	-2.5%	2	3	4
I-110	Los Angeles	1,189,653	1,134,495	1,168,430	-21,222	-1.8%	33,935	3.0%	5	5	5
I-210	Los Angeles	1,187,526	942,799	1,045,676	-141,850	-11.9%	102,878	10.9%	6	6	6
I-605	Los Angeles	993,291	654,643	956,115	-37,176	-3.7%	301,472	46.1%	7	9	7
I-105	Los Angeles	577,362	670,751	768,060	190,698	33.0%	97,308	14.5%	10	8	8
SR-60	Los Angeles	816,500	806,642	757,113	-59,387	-7.3%	-49,530	-6.1%	8	7	9
SR-91	Los Angeles	599,213	510,203	592,062	-7,151	-1.2%	81,859	16.0%	9	10	10
I-710	Los Angeles	422,524	254,892	568,728	146,203	34.6%	313,836	123.1%	11	14	11
US-101	Ventura	400,410	298,868	390,317	-10,094	-2.5%	91,449	30.6%	12	13	12
SR-134	Los Angeles	384,055	418,108	365,425	-18,629	-4.9%	-52,683	-12.6%	13	11	13
SR-57	Los Angeles	191,113	229,154	265,014	73,901	38.7%	35,859	15.6%	15	15	14
SR-170	Los Angeles	307,225	327,878	219,055	-88,170	-28.7%	-108,824	-33.2%	14	12	15
SR-14	Los Angeles	136,639	194,836	187,690	51,051	37.4%	-7,147	-3.7%	17	16	16
SR-2	Los Angeles	109,393	97,515	84,131	-25,263	-23.1%	-13,385	-13.7%	18	18	17
SR-118	Los Angeles	152,712	109,146	81,781	-70,931	-46.4%	-27,365	-25.1%	16	17	18
SR-23	Ventura	45,422	51,049	56,101	10,679	23.5%	5,053	9.9%	20	19	19
SR-118	Ventura	315	22,718	50,614	50,300	15988.4%	27,896	122.8%	23	21	20
SR-71	Los Angeles	50,407	26,186	49,617	-789	-1.6%	23,432	89.5%	19	20	21
SR-47	Los Angeles	3,024	22,436	7,787	4,762	157.5%	-14,650	-65.3%	21	22	22
SR-90	Los Angeles	2,042	830	597	-1,445	-70.7%	-233	-28.1%	22	23	23
SR-126	Los Angeles	0	20	1	1		-19	-95.5%		24	24
TOTALS		16,206,395	14,860,687	16,459,728	253,333	1.6%	1,599,041	10.8%			