District 07 Mobility Performance Report

2018 Fourth 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 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 the fourth quarter, the total delay at the 35mph speed threshold equaled 17.4 million vehicle hours of delay (VHD), an increase of 5.4 percent over last quarter. Where only 2.4 percent of VHD were generated in Ventura County and 97.6 percent were generated in Los Angeles County. Whereas about 46 percent of VHD in Los Angeles county were generated from I–405, US–101 and I–5 freeways. Similarly, total delay at the 60mph speed threshold equaled 35.8 million VHD, an increase of 1.8 percent over previous quarter.

Vehicle Miles Traveled within District 7 in this quarter was 9.5 billion miles, a decrease of 184 million miles (1.9 percent) over previous quarter.

The average weekday daily delay in this quarter was approximately 250 thousand VHD at 35 mph and 497 thousand VHD at 60 mph threshold.

Thursdays then Fridays were the most congested days of the week, 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 5:00 pm and delays extends between 1:00 pm and 6:00 pm

Top Ten Bottlenecks for the 2018 Fourth Quarter:

Rank	Fwy	Location	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Daily Duration (hrs)
1	I405-N	NORDHOFF	PM	68.642	44.87	60	9.17	403,358	4.4
2	I10-E	LA BREA 2	PM	8.375	R10.53	54	5.50	237,552	2.6
3	US101-S	GAREY STREET	PM	1.798	.45	57	6.25	233,629	4.0
4	I405-S	HOWARD HUGHES PKWY	PM	48.672	24.9	59	5.97	229,686	2.8
5	I405-N	WATERFORD	PM	55.882	32.11	58	4.45	217,022	3.9
6	I405-N	PALMS BLVD	AM	52.312	28.54	57	7.13	206,844	2.1
7	I110-N	STADIUM WAY	PM	24.63	24.7	57	5.10	192,614	4.2
8	I105-E	LONG BEACH 2	PM	11.9	R11.9	60	5.51	190,588	4.7
9	US101-S	LAUREL CANYON	PM	14.067	12.75	61	4.15	184,580	3.8
10	I405-S	LA TIJERA	PM	48.022	24.25	32	7.56	175,283	3.0

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

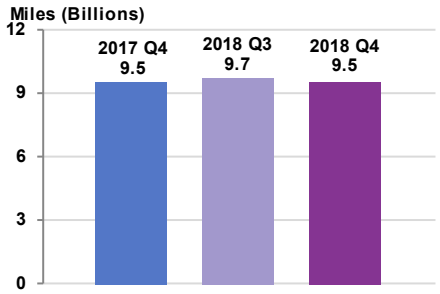
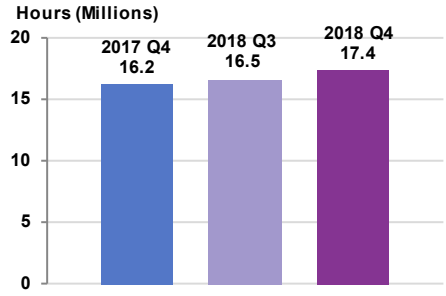
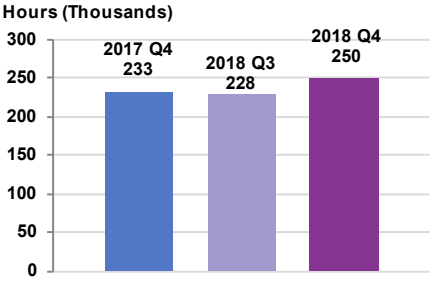
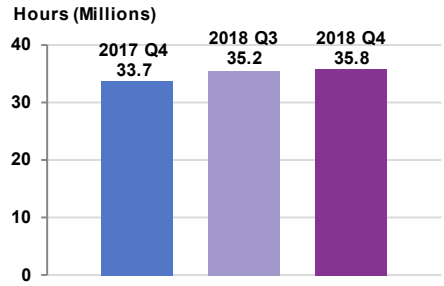
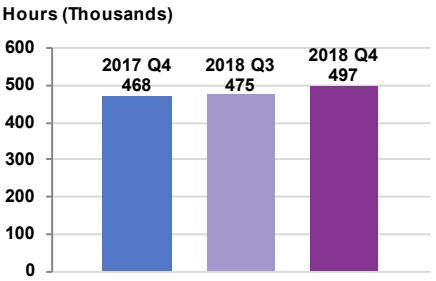
- Construct a new southbound (SB) on-ramp from Universal Studios Boulevard (USB).
- Improve freeway operation by shifting and widening SB US-101 to extend the existing two-lane portion of the Lankershim/Regal on-ramp.
- Modify freeway geometric designs to improve stopping sight distance in the area of 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.

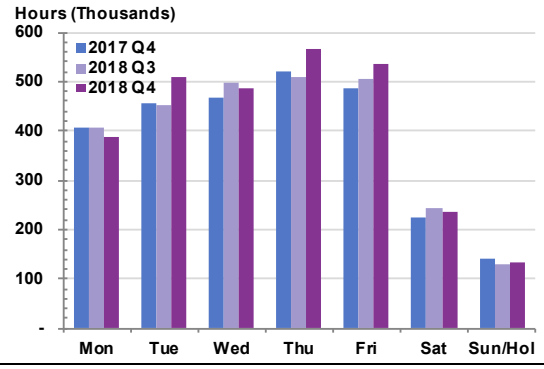
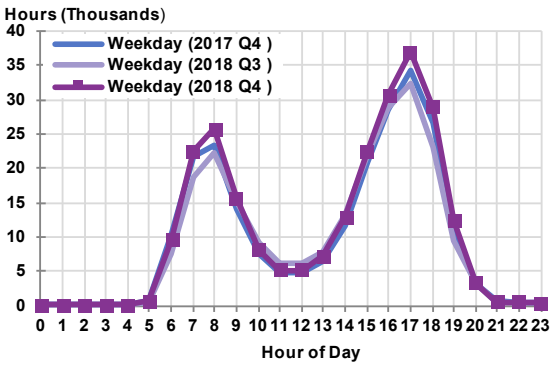
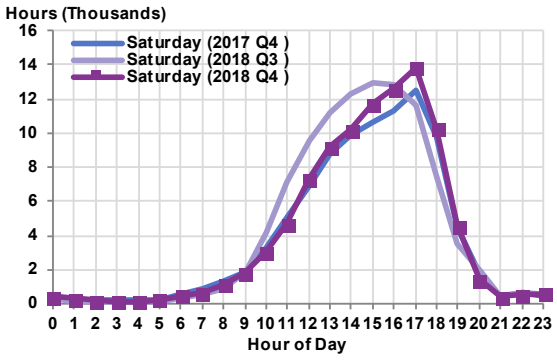
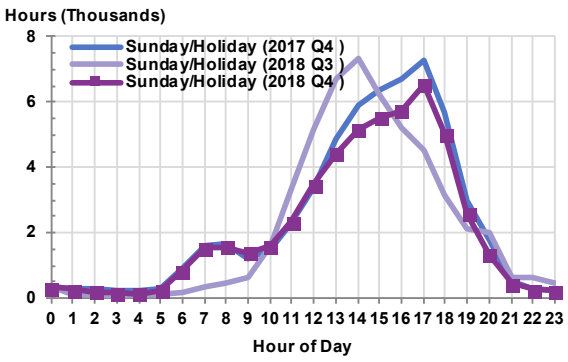
TRANSPORTATION MANAGEMENT SYSTEM PROJECTS TO UPGRADE THE EXISTING COMMUNICATION SYSTEMS.

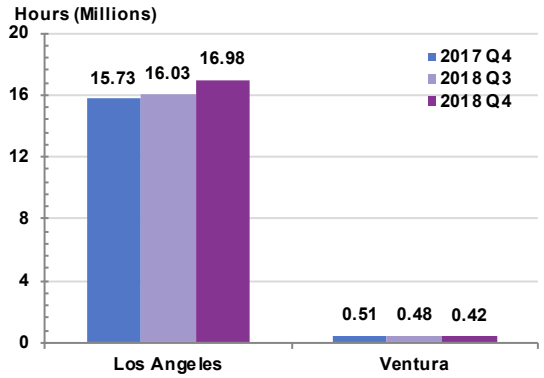
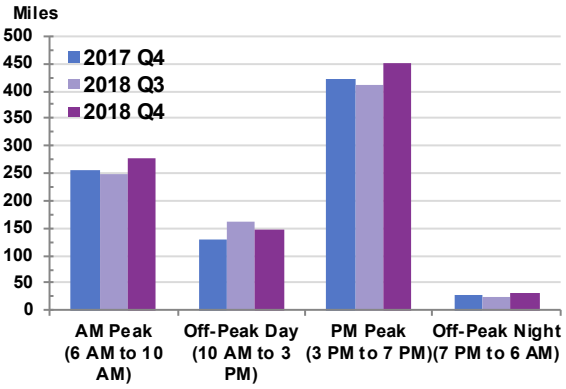
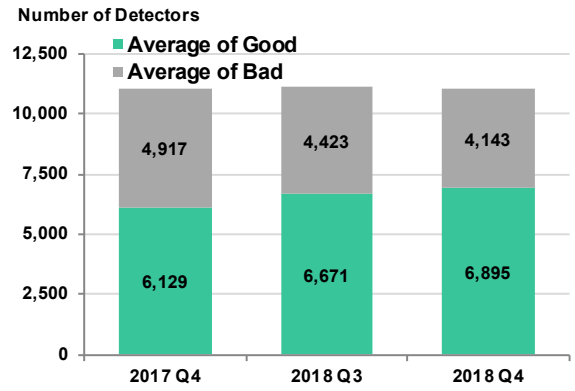
- LA 105: IN LOS ANGELES COUNTY, FROM CALIFORNIA STREET AND IMPERIAL HIGHWAY TO STUDEBAKER ROAD; EA 30460
- LA 605: FROM LA COUNTY LINE TO RTE. 210; EA 31190
- LA 110: BETWEEN SR-47 and I-5; EA 31200

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	
		Over one year ago	Over last quarter
Vehicle Miles of Travel (VMT)		0.5%	-1.9%
Total Vehicle Hours of Delay (VHD) at 35 mph		7.2%	5.4%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph		7.3%	9.5%
Total Vehicle Hours of Delay (VHD) at 60 mph		6.4%	1.8%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph		6.2%	4.8%

Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph		Largest Magnitude Decrease over one year ago Monday -4.5%	Largest Magnitude Decrease over last quarter Monday -4.4%
		Largest Magnitude Increase over one year ago Tuesday 11.5%	Largest Magnitude Increase over last quarter Thursday 11.7%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		Largest Magnitude Weekday Decrease over one year ago 6 AM -7.9%	Largest Magnitude Weekday Decrease over last quarter 11 AM -16.7%
		Largest Magnitude Weekday Increase over one year ago 5 PM 7.4%	Largest Magnitude Weekday Increase over last quarter 6 PM 24.9%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		Largest Magnitude Saturday Decrease over one year ago 11 AM -7.4%	Largest Magnitude Saturday Decrease over last quarter 11 AM -34.3%
		Largest Magnitude Saturday Increase over one year ago 5 PM 10.4%	Largest Magnitude Saturday Increase over last quarter 6 PM 37.6%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/ Holidays		Largest Magnitude Sun./Holiday Decrease over one year ago 4 PM -14.5%	Largest Magnitude Sun./Holiday Decrease over last quarter 1 PM -33.7%
		Largest Magnitude Sun./Holiday Increase over one year ago 9 AM 17.7%	Largest Magnitude Sun./Holiday Increase over last quarter 5 PM 43.9%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph		Largest Magnitude Decrease over one year ago Ventura -16.8%	Largest Magnitude Decrease over last quarter Ventura -12.5%
		Largest Magnitude Increase over one year ago Los Angeles 8%	Largest Magnitude Increase over last quarter Los Angeles 5.9%
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 Off-Peak Day -7.4%
		Largest Magnitude Increase over one year ago PM Peak 7%	Largest Magnitude Increase over last quarter PM Peak 9.9%
Average Number of Good and Bad Detectors		Change in Good over one year ago 13%	Change in Good over last quarter 3%
		Change in Bad over one year ago -16%	Change in Bad over last quarter -6%

Congestion by Route											
		Vehicle Hours of Delay at 35 mph			Difference 2018 Q4-2017 Q4		Difference 2018 Q4-2018 Q3		Rank		
Route	County	2017 Q4	2018 Q3	2018 Q4	Absolute	Percentage	Absolute	Percentage	2017 Q4	2018 Q3	2018 Q4
I–405	Los Angeles	3,547,470	3,460,342	3,539,468	-8,002	-0.2%	79,127	2.3%	1	1	1
US–101	Los Angeles	2,414,351	2,475,506	2,665,762	251,411	10.4%	190,256	7.7%	2	2	2
I–5	Los Angeles	1,783,841	1,537,846	1,617,447	-166,395	-9.3%	79,601	5.2%	3	4	3
I–10	Los Angeles	977,477	1,629,066	1,575,706	598,229	61.2%	-53,360	-3.3%	6	3	4
I–110	Los Angeles	1,138,722	1,135,424	1,303,996	165,275	14.5%	168,573	14.8%	4	5	5
I–210	Los Angeles	1,112,686	951,264	1,172,345	59,659	5.4%	221,081	23.2%	5	7	6
I–605	Los Angeles	891,887	987,974	904,604	12,717	1.4%	-83,370	-8.4%	7	6	7
I–105	Los Angeles	647,500	714,231	688,377	40,876	6.3%	-25,854	-3.6%	9	8	8
SR–60	Los Angeles	854,049	676,062	674,424	-179,625	-21.0%	-1,638	-0.2%	8	10	9
SR–91	Los Angeles	598,095	701,360	670,955	72,860	12.2%	-30,405	-4.3%	10	9	10
I–710	Los Angeles	226,692	477,045	488,210	261,519	115.4%	11,165	2.3%	16	11	11
SR–134	Los Angeles	443,692	348,762	378,768	-64,924	-14.6%	30,006	8.6%	11	13	12
SR–57	Los Angeles	280,738	346,293	361,746	81,008	28.9%	15,453	4.5%	13	14	13
SR–170	Los Angeles	248,413	203,441	297,091	48,678	19.6%	93,650	46.0%	15	15	14
US–101	Ventura	395,450	376,706	267,566	-127,885	-32.3%	-109,141	-29.0%	12	12	15
SR–14	Los Angeles	260,512	172,308	246,825	-13,687	-5.3%	74,517	43.2%	14	16	16
SR–118	Los Angeles	143,291	114,993	216,772	73,482	51.3%	101,780	88.5%	17	17	17
SR–23	Ventura	72,468	60,431	100,412	27,944	38.6%	39,981	66.2%	19	19	18
SR–2	Los Angeles	116,017	74,302	90,983	-25,034	-21.6%	16,681	22.5%	18	18	19
SR–71	Los Angeles	35,879	14,136	85,654	49,775	138.7%	71,519	505.9%	21	21	20
SR–118	Ventura	40,881	46,737	55,208	14,327	35.0%	8,471	18.1%	20	20	21
SR–47	Los Angeles	9,721	8,656	3,718	-6,003	-61.8%	-4,939	-57.1%	22	22	22
SR–90	Los Angeles	1,099	1,875	1,602	503	45.8%	-273	-14.6%	23	23	23
SR–126	Los Angeles	27	1	17	-10	-37.7%	16	2285.7%	24	24	24
TOTALS		**16,240,959**	**16,514,758**	**17,407,654**	**1,166,696**	**7.2%**	**892,896**	**5.4%**			