District 07 Mobility Performance Report

2017 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 Forest 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 information 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 (October – December 2017), the total delay at the 35 mph speed threshold equaled 16.2 million vehicle hours of delay (VHD) (15.7 Million in Los Angeles County and 0.5 Million in Ventura county) and the total delay at the 60 mph speed threshold equaled 33.7 million VHD. The average weekday daily vehicle hour delay experienced in this quarter was approximately 233 thousand VHD at 35 mph threshold, an increase of 5% from previous Quarter and 468 thousand VHD at 60 mph threshold, an increase of 1% from previous quarter.
This delays are equivalent to 422 Lost Lane Miles (LLM) from the freeways network in the PM Peak Period (about 10% of the total monitored Lane Miles.)

Thursdays and 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 1:00 pm and 6:00 pm

Top Ten Bottlenecks for the 2017 Fourth Quarter:

Rank	Fwy	Location	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Daily Duration (hrs)
1	I405-S	Lucerne St	PM	33.802	10.03	59	7.76	234,184	3.3
2	I405-N	Valley Vista Blvd.	PM	62.192	38.42	52	5.59	229,269	4.0
3	I405-N	Waterford St.	PM	55.882	32.11	57	4.29	217,820	4.0
4	I105-E	Long Beach Blvd.	PM	11.9	R11.9	60	5.55	180,793	4.7
5	I405-N	Nordhoff St.	PM	68.642	44.87	53	5.13	163,091	4.0
6	US101-N	Mulholland Dr.	PM	9.948	8.6	59	4.05	163,043	3.5
7	SR57-N	57/60 Interchange	PM	16.617	4.8	59	4.72	162,011	4.7
8	I405-S	Sepulveda Blvd.	AM	58.502	34.73	57	5.74	152,402	2.5
9	US101-S	Hayvenhurst Ave.	AM	19.832	18.5	55	3.89	150,191	3.3
10	I605-S	Placita Pl.	PM	12.962	R10.91	56	4.51	146,446	4.5

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: INSTALL CONCRETE BARRIER & METAL BEAM GUARD RAILING, IN THE CITY OF CARSON FROM ALAMEDA ST. TOAVALON BLVD. ; EA 28740

To construct new concrete barrier and MBGR on both northbound and southbound directions along the I-405 between northbound on-ramp from Alameda Street and Avalon Boulevard Undercrossing (UC). Reconstruct shoulder on southbound, includes modifying drainage and irrigation utilities, and relocating or modifying electrical and communications systems. Improvements will enhance the safety of the state highway

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

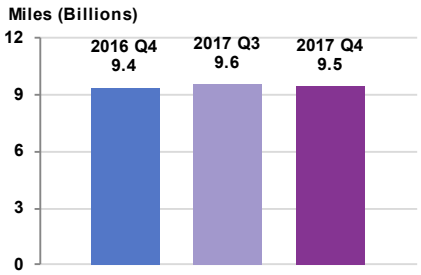
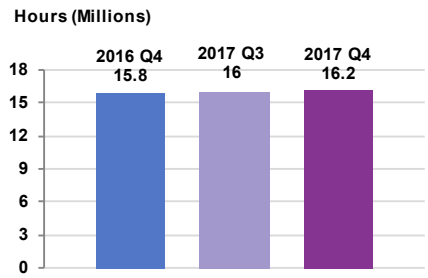
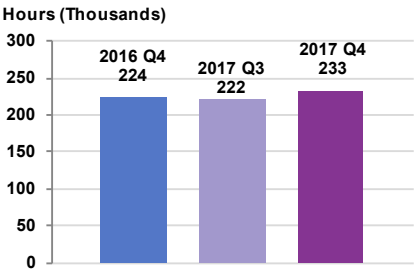
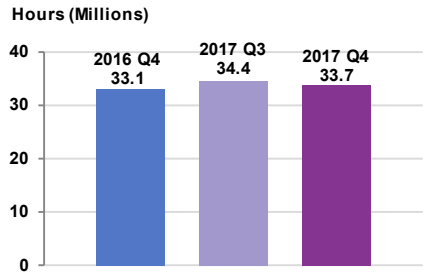
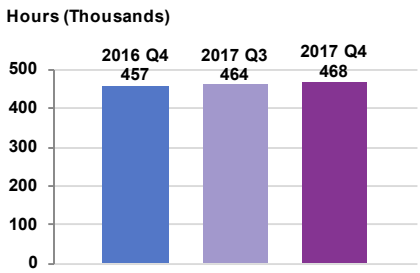
- Construct a new southbound (SB) on-ramp from Universal Studios Boulevard (USB).
- Improve freeway operation by shifting and widening SB US-101 to extend the existing two-lane portion of the Lankershim/Regal on-ramp.
- Modify freeway geometric designs to improve stopping sight distance in the area of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

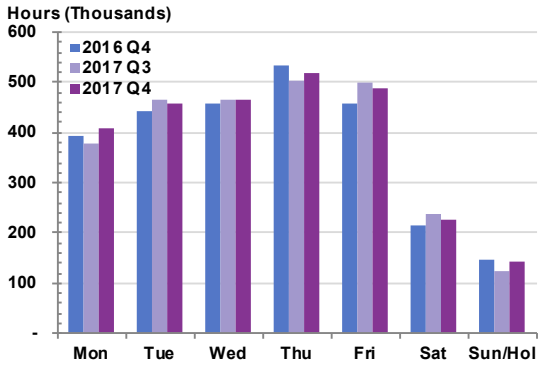
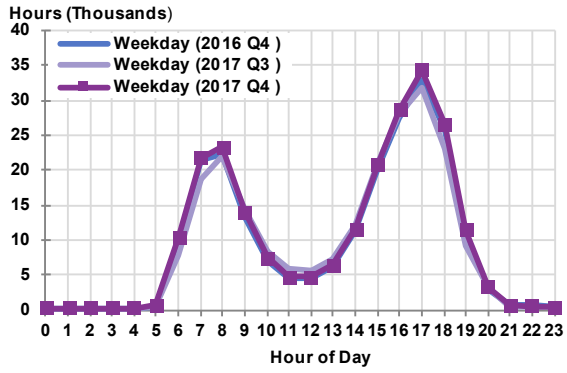
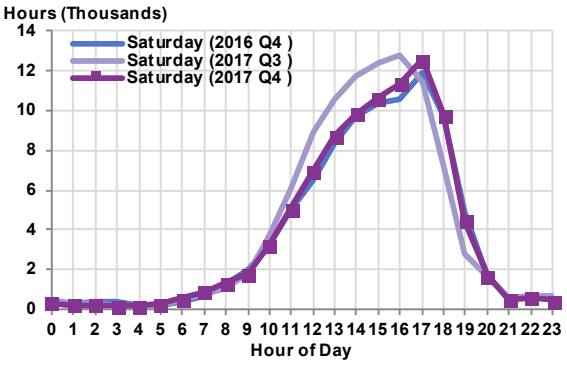
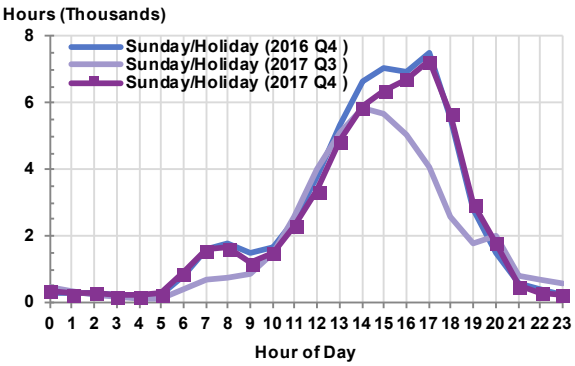
TRANSPORTATION MANAGEMENT SYSTEM PROJECTS TO UPGRADE THE EXISTING COMMUNICATION SYSTEMS.

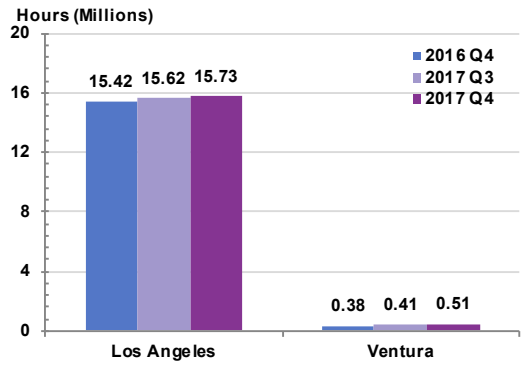
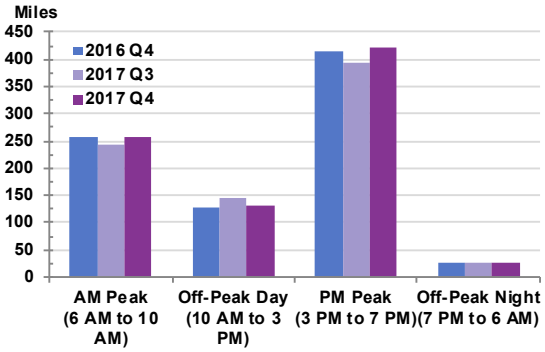
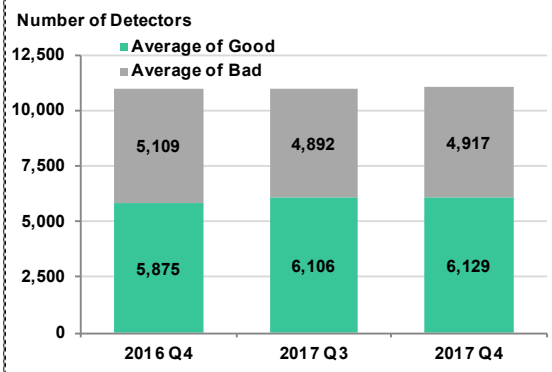
- LA 105: IN LOS ANGELES COUNTY, FROM CALIFORNIA STREET AND IMPERIAL HIGHWAY TO STUDEBAKER ROAD; EA 30460
- LA 605: FROM LA COUNTY LINE TO RTE. 210; EA 31190
- LA 110: BETWEEN SR-47 and I-5; EA 31200

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)		0.4%	-1.9%
Total Vehicle Hours of Delay (VHD) at 35 mph		2.8%	1.3%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph		3.7%	4.9%
Total Vehicle Hours of Delay (VHD) at 60 mph		1.8%	-2.1%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph		2.3%	0.9%

Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph		Largest Magnitude Decrease over one year ago Thursday -2.2%	Largest Magnitude Decrease over last quarter Saturday -5.8%
		Largest Magnitude Increase over one year ago Friday 6.5%	Largest Magnitude Increase over last quarter Monday 7.7%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		Largest Magnitude Weekday Decrease over one year ago 10 PM -24%	Largest Magnitude Weekday Decrease over last quarter 11 AM -19.6%
		Largest Magnitude Weekday Increase over one year ago 5 PM 4.2%	Largest Magnitude Weekday Increase over last quarter 6 PM 15%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		Largest Magnitude Saturday Decrease over one year ago 7 PM -8.2%	Largest Magnitude Saturday Decrease over last quarter 12 PM -22%
		Largest Magnitude Saturday Increase over one year ago 4 PM 7.8%	Largest Magnitude Saturday Increase over last quarter 6 PM 36.1%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/ Holidays		Largest Magnitude Sun./Holiday Decrease over one year ago 2 PM -11.1%	Largest Magnitude Sun./Holiday Decrease over last quarter 12 PM -15.5%
		Largest Magnitude Sun./Holiday Increase over one year ago 8 PM 19.2%	Largest Magnitude Sun./Holiday Increase over last quarter 5 PM 78.6%

Measure	Graph	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
Total Vehicle Hours of Delay (VHD) by County at 35 mph		–	–	Los Angeles 2%	Los Angeles 0.7%
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph		AM Peak -1%	Off-Peak Day -12%	PM Peak 2.2%	PM Peak 6.7%
Average Number of Good and Bad Detectors		Change in Good over one year ago: 4%	Change in Good over last quarter: 0%	Change in Bad over one year ago: -4%	Change in Bad over last quarter: 1%

Congestion by Route											
		Vehicle Hours of Delay at 35 mph			Difference 2017 Q4-2016 Q4		Difference 2017 Q4-2017 Q3		Rank		
Route	County	2016 Q4	2017 Q3	2017 Q4	Absolute	Percentage	Absolute	Percentage	2016 Q4	2017 Q3	2017 Q4
I–405	Los Angeles	2,988,159	3,609,633	3,547,470	559,311	18.7%	-62,163	-1.7%	1	1	1
US–101	Los Angeles	1,617,815	1,663,150	2,414,351	796,536	49.2%	751,201	45.2%	3	3	2
I–5	Los Angeles	1,847,157	1,802,994	1,783,841	-63,315	-3.4%	-19,153	-1.1%	2	2	3
I–110	Los Angeles	1,127,653	1,231,873	1,138,722	11,069	1.0%	-93,151	-7.6%	6	5	4
I–210	Los Angeles	1,362,525	1,083,218	1,112,686	-249,838	-18.3%	29,469	2.7%	5	6	5
I–10	Los Angeles	1,594,164	1,494,186	977,477	-616,687	-38.7%	-516,709	-34.6%	4	4	6
I–605	Los Angeles	942,409	948,592	891,887	-50,522	-5.4%	-56,705	-6.0%	7	7	7
SR–60	Los Angeles	942,233	818,969	854,049	-88,184	-9.4%	35,080	4.3%	8	8	8
I–105	Los Angeles	517,517	536,993	647,500	129,984	25.1%	110,508	20.6%	10	10	9
SR–91	Los Angeles	633,113	570,013	598,095	-35,018	-5.5%	28,082	4.9%	9	9	10
SR–134	Los Angeles	422,360	382,407	443,692	21,332	5.1%	61,285	16.0%	11	12	11
US–101	Ventura	303,641	363,041	395,450	91,810	30.2%	32,409	8.9%	14	13	12
SR–57	Los Angeles	191,592	180,528	280,738	89,146	46.5%	100,210	55.5%	16	16	13
SR–14	Los Angeles	198,057	231,382	260,512	62,455	31.5%	29,130	12.6%	15	15	14
SR–170	Los Angeles	376,969	293,319	248,413	-128,556	-34.1%	-44,906	-15.3%	13	14	15
I–710	Los Angeles	392,929	456,571	226,692	-166,237	-42.3%	-229,879	-50.3%	12	11	16
SR–118	Los Angeles	121,391	168,723	143,291	21,900	18.0%	-25,433	-15.1%	17	17	17
SR–2	Los Angeles	62,541	88,781	116,017	53,477	85.5%	27,236	30.7%	19	18	18
SR–23	Ventura	60,369	40,894	72,468	12,099	20.0%	31,574	77.2%	20	20	19
SR–118	Ventura	15,007	8,771	40,881	25,874	172.4%	32,110	366.1%	21	21	20
SR–71	Los Angeles	73,291	49,456	35,879	-37,412	-51.0%	-13,576	-27.5%	18	19	21
SR–47	Los Angeles	5,343	4,179	9,721	4,377	81.9%	5,542	132.6%	22	22	22
SR–90	Los Angeles	1,111	436	1,099	-11	-1.0%	664	152.3%	23	24	23
SR–126	Los Angeles	0	1,248	27	27		-1,222	-97.9%		23	24
TOTALS		**15,797,342**	**16,029,356**	**16,240,959**	**443,616**	**2.8%**	**211,602**	**1.3%**			