District 07 Mobility Performance Report

2017 Third Quarter

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

October 18, 2017

: Ashraf Armanious

2017 Third Quarter

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 (July – September 2017), the total delay at the 35 mph speed threshold equaled 16 million vehicle hours of delay (VHD) (15.6 Million in Los Angeles County and 0.4 Million in Ventura county) and the total delay at the 60 mph speed threshold equaled 34.4 million VHD. The average weekday daily vehicle hour delay experienced in this quarter was approximately 222 thousand VHD at 35 mph and 464 thousand VHD at 60 mph threshold.
This delays are equivalent to 395 Lost Lane Miles (LLM) from the freeway network in the PM Peak Period (about 9% 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 5:00 pm

Top Ten Bottlenecks for the 2017 Third Quarter:

Rank	Fwy	Location	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (Hrs)
1	I405-S	Howard Hughes Pkwy	PM	48.672	24.9	63	6.7	349,211	3.8
2	I405-N	Nordhoff	PM	68.642	44.87	59	7.5	278,352	4.2
3	I405-S	Lucerne St	PM	33.802	10.03	63	7.5	233,367	3.5
4	I405-N	Waterford	PM	55.882	32.11	58	4.3	227,140	4.1
5	I405-N	Palms Blvd	AM	52.312	28.54	60	7.1	216,655	2.4
6	I5-S	Lakewood	PM	124.78	8.21	62	6.6	197,224	3.0
7	I405-N	Inglewood	AM	42.122	18.35	61	5.7	184,432	3.1
8	I110-S	Vernon	PM	18.82	18.89	62	4.5	172,392	4.0
9	I105-E	Long Beach	PM	11.9	R11.9	63	4.7	166,568	4.7
10	US101-N	Mulholland Dr.	PM	9.948	8.6	62	4.1	155,224	3.6

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 110: WIDENING OFF-RAMP, IN THE CITY OF SOUTH PASADENA AT FAIR OAKS AVENUE; EA 33520

The proposed project is to widen the Northbound Fair Oaks Avenue off-ramp from two lanes to four lanes, restripe the Northbound Fair Oaks Avenue Overcrossing to eliminate the dual left turns to S/B SR-110.

LA 405: WIDENING VENTURA BLVD. ON-RAMP, PM 39.10; EA 20490

Widen the Ventura Boulevard on-ramp to create two SOV and one HOV lanes. The existing one-lane terminus will also be widened to two lanes. Reconstruct the curb ramp at the westbound Ventura Boulevard entrance.

LA 110: IN LOS ANGELES COUNTY, FROM 405/110 INTERCHANGE TO TORRANCE BLVD OFF-RAMP, INTERCHANGE IMPROVEMENTS & CONSTRUCTION AUXILIARY LANE; EA 29370

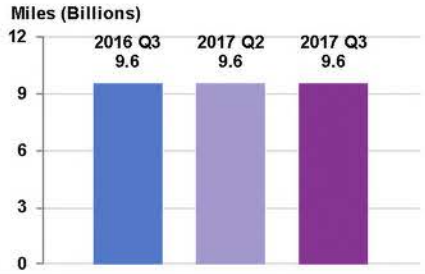
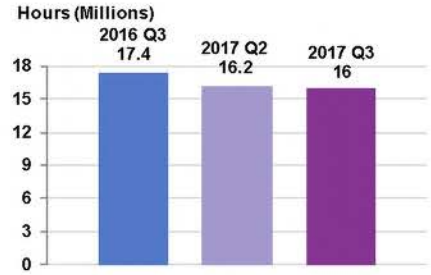
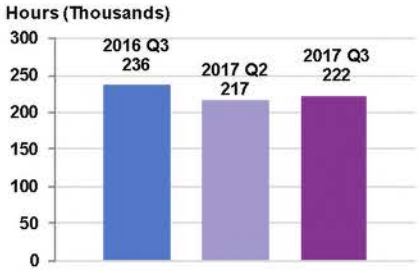
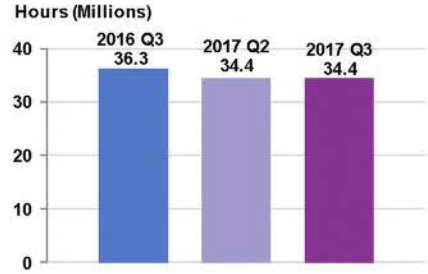
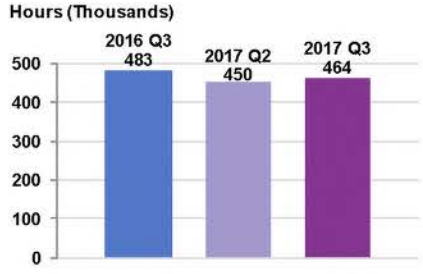
Widen the existing northbound 405/southbound 110 connector or replace it with a flyover and construct a new auxiliary lane on southbound 110 from I-405/I-110 interchange to Del Amo Blvd.

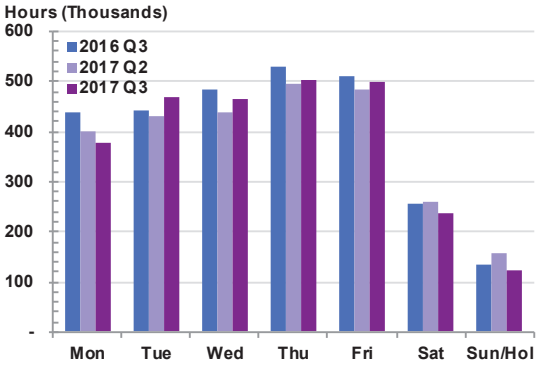
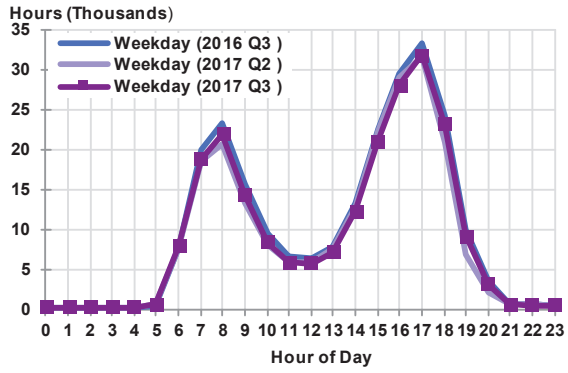
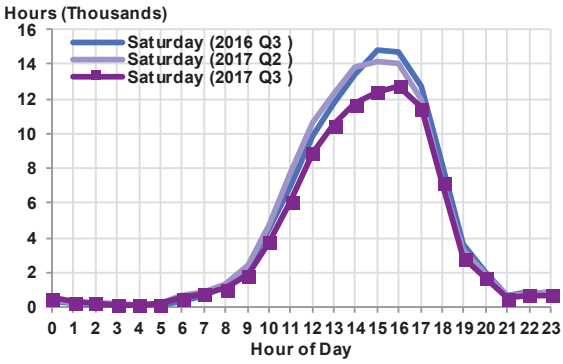
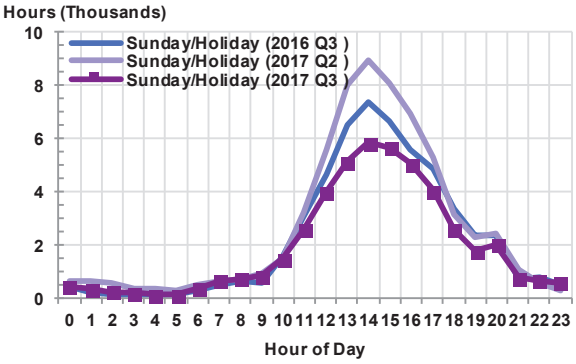
TRANSPORTATION MANAGEMENT SYSTEM PROJECTS TO UPGRADE THE EXISTING COMMUNICATION SYSTEMS.

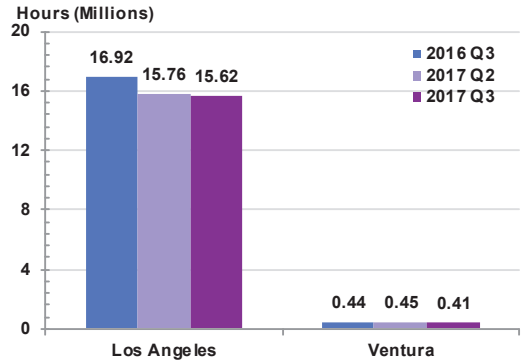
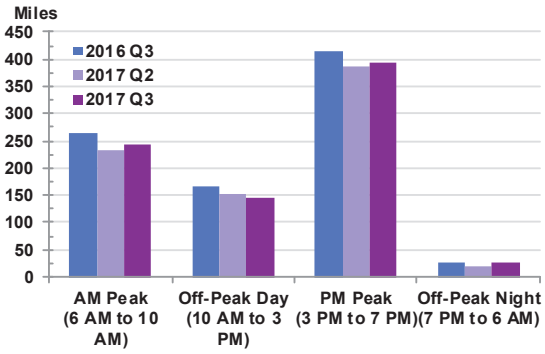
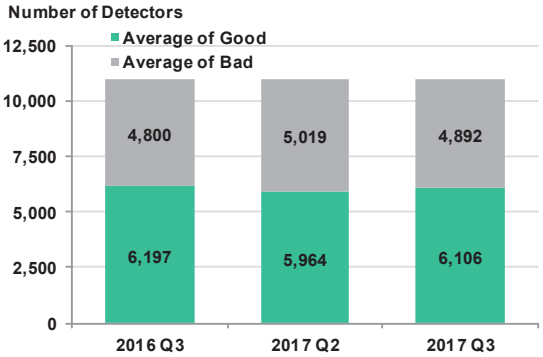
- LA 105: IN LOS ANGELES COUNTY, FROM CALIFORNIA STREET AND IMPERIAL HIGHWAY TO STUDEBAKER ROAD; EA 30460
- LA 605: FROM LA COUNTY LINE TO RTE. 210; EA 31190
- LA 110: BETWEEN SR-47 and I-5; EA 31200

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%	0.1%
Total Vehicle Hours of Delay (VHD) at 35 mph		-7.6%	-1.1%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph		-6.1%	2.3%
Total Vehicle Hours of Delay (VHD) at 60 mph		-5.1%	0.1%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph		-4%	3%

Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph		Largest Magnitude Decrease over one year ago Monday -13.9% Largest Magnitude Increase over one year ago Tuesday 5.4%	Largest Magnitude Decrease over last quarter Sun/Hol -20.5% Largest Magnitude Increase over last quarter Tuesday 8.6%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		Largest Magnitude Weekday Decrease over one year ago 4 PM -4.9% Largest Magnitude Weekday Increase over one year ago 6 AM 1.9%	Largest Magnitude Weekday Decrease over last quarter 3 PM -5.3% Largest Magnitude Weekday Increase over last quarter 7 PM 34%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		Largest Magnitude Saturday Decrease over one year ago 3 PM -16% Largest Magnitude Saturday Increase over one year ago 12 AM 50.2%	Largest Magnitude Saturday Decrease over last quarter 2 PM -15.2% Largest Magnitude Saturday Increase over last quarter 12 AM 23.6%
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 -21.1% Largest Magnitude Sun./Holiday Increase over one year ago 9 AM 48.7%	Largest Magnitude Sun./Holiday Decrease over last quarter 2 PM -34.8% Largest Magnitude Sun./Holiday Increase over last quarter 11 PM 93.4%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph		Largest Magnitude Decrease over one year ago Los Angeles -7.7%	Largest Magnitude Decrease over last quarter Los Angeles -0.9%
		Largest Magnitude Increase over one year ago –	Largest Magnitude Increase over last quarter –
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph		Largest Magnitude Decrease over one year ago AM Peak -7.9%	Largest Magnitude Decrease over last quarter Off-Peak Day -3.1%
		Largest Magnitude Increase over one year ago –	Largest Magnitude Increase over last quarter AM Peak 4.9%
Average Number of Good and Bad Detectors		Change in Good over one year ago -1%	Change in Good over last quarter 2%
		Change in Bad over one year ago 2%	Change in Bad over last quarter -3%

Congestion by Route											
		Vehicle Hours of Delay at 35 mph			Difference 2017 Q3-2016 Q3		Difference 2017 Q3-2017 Q2		Rank		
Route	County	2016 Q3	2017 Q2	2017 Q3	Absolute	Percentage	Absolute	Percentage	2016 Q3	2017 Q2	2017 Q3
I–405	Los Angeles	3,235,957	3,618,602	3,609,633	373,676	11.5%	-8,969	-0.2%	1	1	1
I–5	Los Angeles	2,253,068	1,836,944	1,802,994	-450,074	-20.0%	-33,950	-1.8%	2	2	2
US–101	Los Angeles	1,599,820	1,680,464	1,663,150	63,330	4.0%	-17,314	-1.0%	4	3	3
I–10	Los Angeles	1,991,865	1,501,562	1,494,186	-497,679	-25.0%	-7,376	-0.5%	3	4	4
I–110	Los Angeles	1,250,185	1,189,653	1,231,873	-18,312	-1.5%	42,220	3.5%	6	5	5
I–210	Los Angeles	1,396,519	1,187,526	1,083,218	-313,301	-22.4%	-104,308	-8.8%	5	6	6
I–605	Los Angeles	881,575	993,291	948,592	67,017	7.6%	-44,699	-4.5%	8	7	7
SR–60	Los Angeles	969,550	816,500	818,969	-150,580	-15.5%	2,470	0.3%	7	8	8
SR–91	Los Angeles	767,689	599,213	570,013	-197,676	-25.7%	-29,200	-4.9%	9	9	9
I–105	Los Angeles	659,149	577,362	536,993	-122,156	-18.5%	-40,369	-7.0%	10	10	10
I–710	Los Angeles	355,839	422,524	456,571	100,732	28.3%	34,047	8.1%	14	11	11
SR–134	Los Angeles	419,026	384,055	382,407	-36,619	-8.7%	-1,647	-0.4%	11	13	12
US–101	Ventura	370,926	400,410	363,041	-7,886	-2.1%	-37,369	-9.3%	13	12	13
SR–170	Los Angeles	247,427	307,225	293,319	45,892	18.5%	-13,906	-4.5%	15	14	14
SR–14	Los Angeles	228,517	136,639	231,382	2,865	1.3%	94,743	69.3%	16	17	15
SR–57	Los Angeles	407,340	191,113	180,528	-226,812	-55.7%	-10,585	-5.5%	12	15	16
SR–118	Los Angeles	99,768	152,712	168,723	68,956	69.1%	16,011	10.5%	17	16	17
SR–2	Los Angeles	63,780	109,393	88,781	25,001	39.2%	-20,612	-18.8%	19	18	18
SR–71	Los Angeles	86,462	50,407	49,456	-37,007	-42.8%	-951	-1.9%	18	19	19
SR–23	Ventura	44,837	45,422	40,894	-3,943	-8.8%	-4,528	-10.0%	20	20	20
SR–118	Ventura	22,885	315	8,771	-14,113	-61.7%	8,457	2688.0%	21	23	21
SR–47	Los Angeles	1,731	3,024	4,179	2,447	141.3%	1,154	38.2%	22	21	22
SRI–126	Los Angeles	0	0	1,248	1,248		1,248				23
SR–90	Los Angeles	738	2,042	436	-302	-40.9%	-1,606	-78.7%	23	22	24
TOTALS		**17,354,651**	**16,206,395**	**16,029,356**	**-1,325,294**	**-7.6%**	**-177,039**	**-1.1%**			