District 07 Mobility Performance Report

2015 Fourth Quarter

DEPARTMENT OF TRANSPORTATION

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2015 Fourth Quarter

EXECUTIVE SUMMARY

Overview

Caltrans District 7 contains two counties located in coastal southern California: Los Angeles and Ventura Counties. Both counties are urban counties, with Los Angeles as the most populous county in the United States at almost 10 million residents and Ventura County with 800,000 residents. Although these are urban counties, they do contain a large amount of sparsely populated National Forest and National Recreation Area land.

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)
- Detector Health

This information is based on data collected every day of the quarter, twenty–four 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 35 miles per hour (mph), and delay from vehicles traveling below 60 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 upon engineering experience and District input.

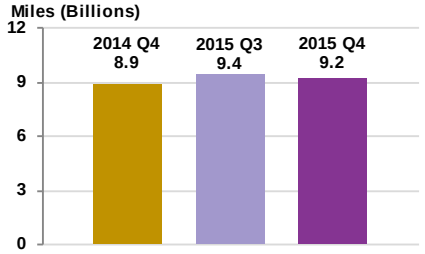
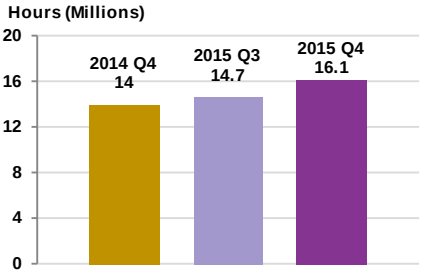
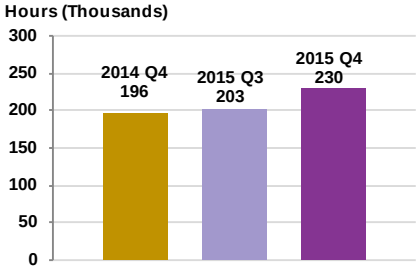
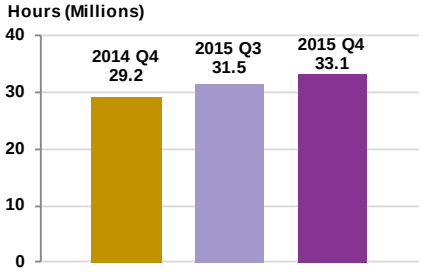
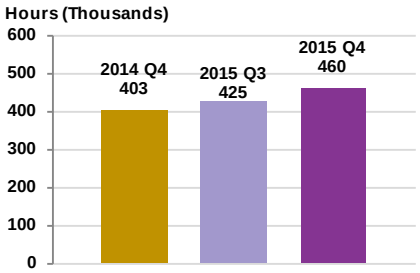
FINDINGS

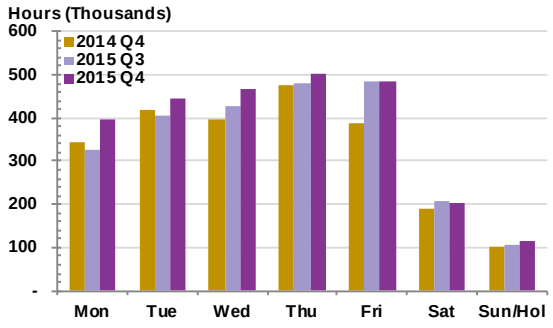
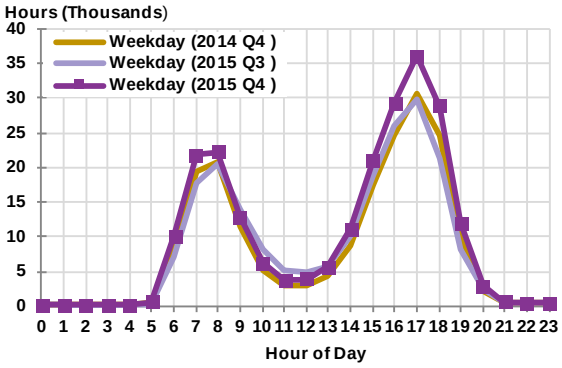
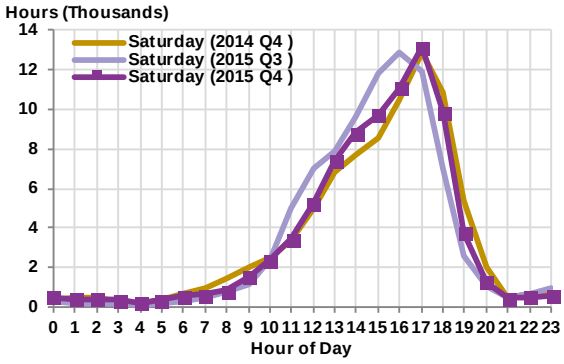
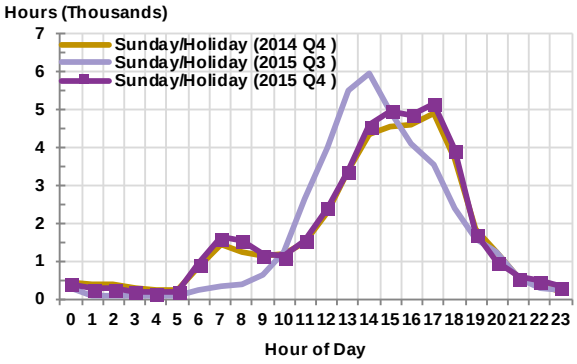
In the fourth quarter, total delay equaled 16.1 million vehicle hours of delay (VHD) at the 35 mph speed threshold, and 33.1 million VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 230 thousand VHD at 35 mph, and 460 thousand VHD at 60 mph.

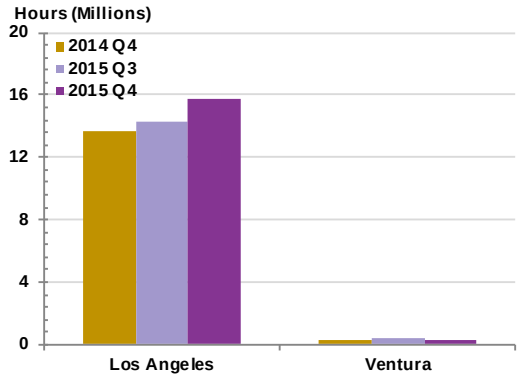
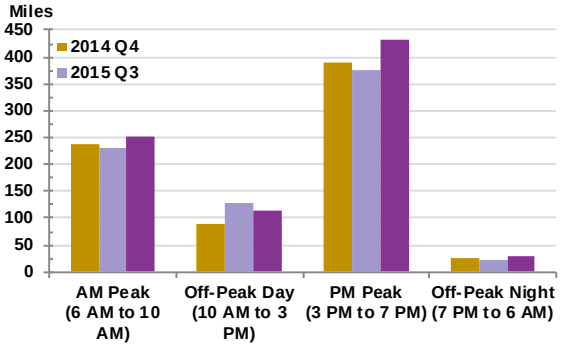
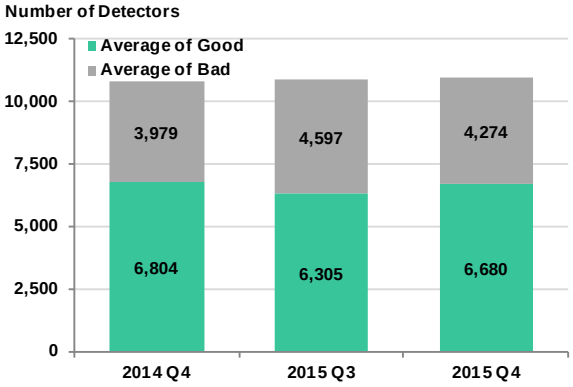
Top Ten Bottlenecks for the Fourth Quarter

Fwy	Aproximate Location	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Average Duration (hrs)
I405-N	Nordoff St.	PM	68.64	44.87	60	9.6	438,390	4.3
I210-E	Azusa Ave.	PM	40	R39.71	56	8.2	330,550	4.2
I405-S	Howard Hughes Pkwy	PM	48.67	24.9	59	6.4	272,487	3.5
I405-S	Lucerne St	PM	33.8	10.03	61	7.8	254,204	3.5
I405-N	Waterford St.	PM	55.88	32.11	58	4.2	195,135	3.8
US101-N	Lankershim Blvd	PM	11.39	10.04	52	5.6	193,892	3.9
I5-N	Riverside Dr.	PM	137.7	21.1	55	5.6	167,828	3.3
I110-S	Vernon Ave.	PM	18.82	18.89	62	4.7	162,105	3.4
I10-E	Meeker Ave	PM	32.5	34	39	5.5	159,028	3.7
I105-E	Long Beach Blvd.	PM	11.9	R11.9	61	5.0	156,841	4.5

Quarterly Mobility Statistics

Measure	Graph	Percentage Change	
		Over one year ago	Over last quarter
Vehicle Miles of Travel (VMT)		3.2%	-1.7%
Total Vehicle Hours of Delay (VHD) at 35 mph		15.3%	9.5%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph		17.4%	13.6%
Total Vehicle Hours of Delay (VHD) at 60 mph		13.4%	5%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph		14.1%	8.2%

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 Saturday -1.8%
		Largest Magnitude Increase over one year ago Friday 24.8%	Largest Magnitude Increase over last quarter Monday 21.2%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		Largest Magnitude Weekday Decrease over one year ago 12 AM -24.6%	Largest Magnitude Weekday Decrease over last quarter 10 AM -23.9%
		Largest Magnitude Weekday Increase over one year ago 5 PM 17.9%	Largest Magnitude Weekday Increase over last quarter 6 PM 34.1%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		Largest Magnitude Saturday Decrease over one year ago 7 PM -29.1%	Largest Magnitude Saturday Decrease over last quarter 3 PM -17.3%
		Largest Magnitude Saturday Increase over one year ago 3 PM 14.3%	Largest Magnitude Saturday Increase over last quarter 6 PM 41.1%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/ Holidays		Largest Magnitude Sun./Holiday Decrease over one year ago 8 PM -21.7%	Largest Magnitude Sun./Holiday Decrease over last quarter 1 PM -38.7%
		Largest Magnitude Sun./Holiday Increase over one year ago 3 PM 8.7%	Largest Magnitude Sun./Holiday Increase over last quarter 5 PM 46%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph		Largest Magnitude Decrease over one year ago Ventura -0.9%	Largest Magnitude Decrease over last quarter Ventura -17.2%
		Largest Magnitude Increase over one year ago Los Angeles 15.7%	Largest Magnitude Increase over last quarter Los Angeles 10.2%
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 -11.8%
		Largest Magnitude Increase over one year ago PM Peak 11.8%	Largest Magnitude Increase over last quarter PM Peak 15.6%
Average Number of Good and Bad Detectors		Change in Good over one year ago -2%	Change in Good over last quarter 6.0%
		Change in Bad over one year ago 7%	Change in Bad over last quarter -7.0%

Congestion by Route											
		Vehicle Hours of Delay at 35 mph			Difference 2015 Q4-2014 Q4		Difference 2015 Q4-2015 Q3		Rank		
Route	County	2014 Q4	2015 Q3	2015 Q4	Absolute	Percentage	Absolute	Percentage	2014 Q4	2015 Q3	2015 Q4
I–405	Los Angeles	2,141,124	2,809,670	3,082,649	941,525	44.0%	272,980	9.7%	1	1	1
I–10	Los Angeles	1,944,763	1,870,720	2,087,114	142,351	7.3%	216,393	11.6%	2	2	2
I–5	Los Angeles	1,403,813	1,454,143	1,685,486	281,674	20.1%	231,344	15.9%	4	4	3
US–101	Los Angeles	1,879,247	1,853,079	1,598,497	-280,750	-14.9%	-254,583	-13.7%	3	3	4
I–210	Los Angeles	1,135,255	1,012,041	1,306,516	171,261	15.1%	294,475	29.1%	5	6	5
I–110	Los Angeles	1,065,357	1,123,541	1,294,886	229,529	21.5%	171,345	15.3%	6	5	6
SR–60	Los Angeles	765,960	887,945	966,358	200,398	26.2%	78,413	8.8%	7	7	7
I–605	Los Angeles	694,853	732,800	853,020	158,167	22.8%	120,220	16.4%	8	8	8
SR–91	Los Angeles	483,948	533,209	620,357	136,409	28.2%	87,148	16.3%	10	9	9
I–105	Los Angeles	530,608	521,367	539,477	8,869	1.7%	18,110	3.5%	9	10	10
SR–57	Los Angeles	389,361	429,485	380,351	-9,010	-2.3%	-49,133	-11.4%	11	11	11
SR–134	Los Angeles	315,545	257,033	321,128	5,583	1.8%	64,095	24.9%	12	14	12
SR–170	Los Angeles	236,616	158,924	314,203	77,587	32.8%	155,280	97.7%	15	15	13
I–710	Los Angeles	288,060	274,675	285,029	-3,031	-1.1%	10,354	3.8%	13	13	14
US101	Ventura	251,661	331,154	260,366	8,705	3.5%	-70,788	-21.4%	14	12	15
SR–14	Los Angeles	143,380	149,851	144,098	718	0.5%	-5,753	-3.8%	16	16	16
SR–71	Los Angeles	62,578	98,299	144,003	81,425	130.1%	45,704	46.5%	19	18	17
SR–118	Los Angeles	94,471	98,896	101,645	7,175	7.6%	2,749	2.8%	17	17	18
SR–2	Los Angeles	70,301	52,469	55,595	-14,706	-20.9%	3,126	6.0%	18	19	19
SR–23	Ventura	25,190	39,818	44,021	18,831	74.8%	4,203	10.6%	21	20	20
SR–47	Los Angeles	1,706	1,118	4,162	2,457	144.0%	3,044	272.2%	22	21	21
SR–118	Ventura	33,439	402	3,161	-30,279	-90.5%	2,759	686.0%	20	23	22
SR–90	Los Angeles	229	488	992	763	332.8%	504	103.3%	23	22	23
TOTALS		**13,957,463**	**14,691,125**	**16,093,112**	**2,135,649**	**15.3%**	**1,401,987**	**9.5%**			

SR-118 Ventura in 2015-Q3 compared to 2015-Q4, delays are effected due to the detectors missing data 2015-Q3 (almost 1% data observed)
SR-90 Los Angeles 2015-Q4 difference from previous Quarter is relative to the small number of delay (504 VHD).
SR-47 Los Angeles 2015-Q3 drop in delays is due to detectors health (3-weeks in Q3 loops were out)
SR-170 Los Angeles 2015-Q3 was less than normal due to detectors helth