District 11 Mobility Performance Report

2016 Second Quarter

DEPARTMENT OF TRANSPORTATION

July 18, 2016

: Carlos Mendoza

2016 Second Quarter

EXECUTIVE SUMMARY

Overview

District 11 for Caltrans consists of both the Imperial and San Diego counties. With San Diego having a population of approximately 3,100,000 residents and Imperial County with approximately 175,000 residents. Although, District 11 is composed of these two counties, Imperial County does not report any performance data.

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.

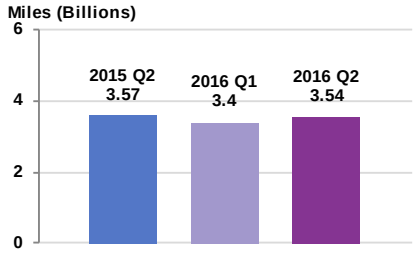
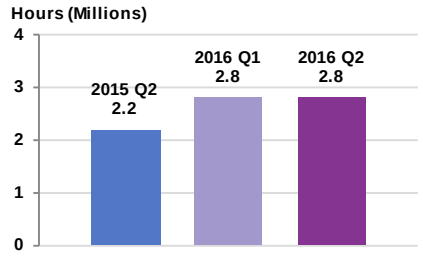
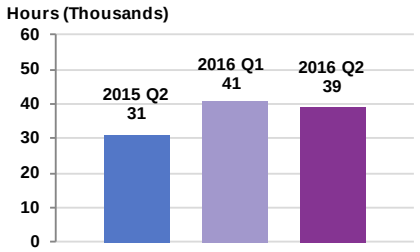
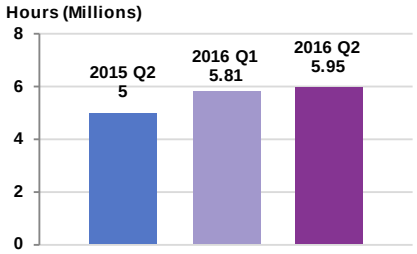
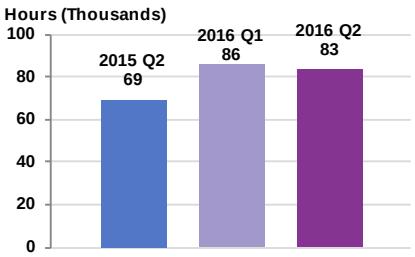
FINDINGS

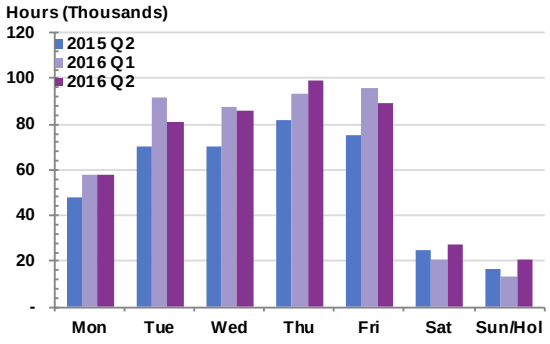
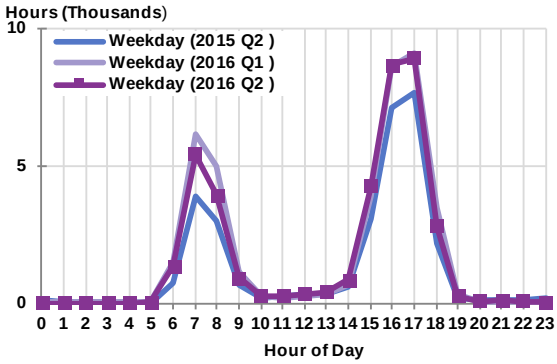
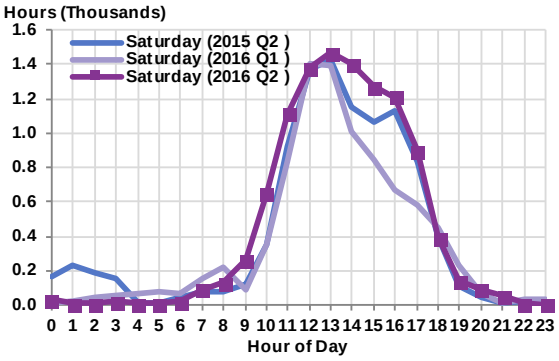
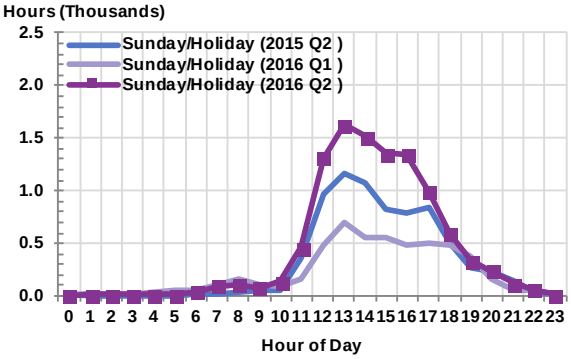
In the second quarter, the total delay equaled 2.8 million VHD at the 35 mph speed threshold, and 5.95 million VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 39 thousand VHD at 35 mph, and 83 thousand VHD at 60 mph.

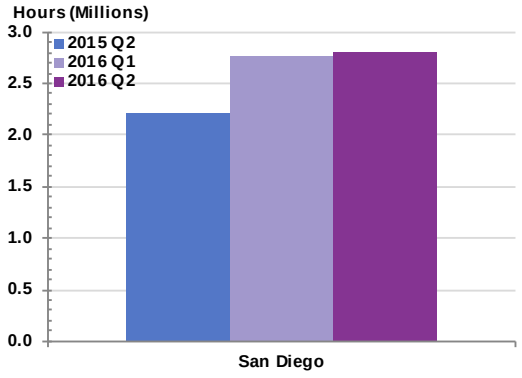
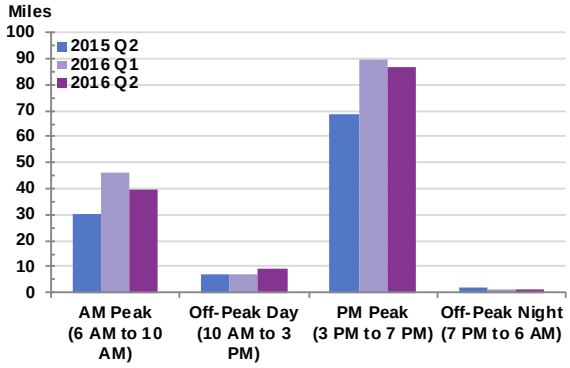
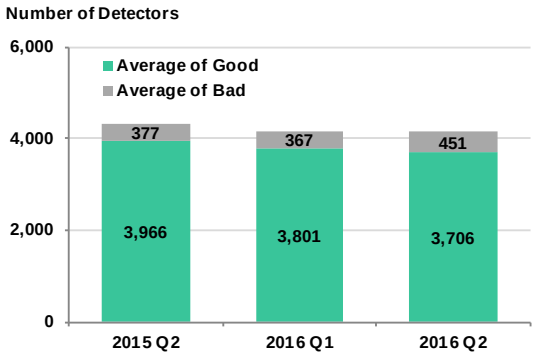
Top Ten Bottlenecks for the Quarter 2

Fwy	Location	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (mins)
I805-S	At I?15	PM	14.702	14.851	64	6.771875	169,776	9,205
SR78-E	Twin Oaks Valley Rd	PM	13.018	13.022	64	4.0765625	116,014	12,160
I15-S	WB SR-274/BALBOA AVE	PM	9.367	R9.196	64	2.9234375	85,837	10,445
I805-N	805 NB S/O 52	AM	23.111	23.26	55	3.263636364	81,833	7,820
I5-S	5th Ave	PM	16.001	R16.11	63	2.753968254	79,054	8,785
I805-N	At I?15	AM	14.701	14.85	62	3.162903226	67,639	6,975
I5-S	5 S N/O VISTA VIEW	AM	39.059	R39.201	62	5.653225806	61,137	5,515
SR163-S	WASHINGTON ST	PM	2.101	2.699	49	3.451020408	55,455	5,705
I5-N	Cannon Rd	PM	47.995	R48.104	62	2.574193548	53,853	9,885
I5-S	EB CLAIREMONT DR	PM	21.973	R22.082	42	6.526190476	47,760	2,710

Quarterly Mobility Statistics

Measure	Graph	Percentage Change	
		Over one year ago	Over last quarter
Vehicle Miles of Travel (VMT)		-0.6%	4.2%
Total Vehicle Hours of Delay (VHD) at 35 mph		26.3%	1.3%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph		26.7%	-5%
Total Vehicle Hours of Delay (VHD) at 60 mph		19%	2.4%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph		19.9%	-3.4%

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
		–	Tuesday -11.8%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Thursday 21%	Sun/Hol 58.5%
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 PM -79.1%	8 AM -20.3%
		Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
		7 AM 40.4%	3 PM 8.2%
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
		1 AM -95.9%	7 PM -37%
		Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
		10 AM 88.9%	4 PM 81%
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
		9 PM -16.9%	8 AM -32.3%
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		4 PM 73.5%	2 PM 171.6%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph		Largest Magnitude Decrease over one year ago –	Largest Magnitude Decrease over last quarter –
		Largest Magnitude Increase over one year ago San Diego 26.3%	Largest Magnitude Increase over last quarter San Diego 1.3%
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph		Largest Magnitude Decrease over one year ago Off-Peak Night -32.7%	Largest Magnitude Decrease over last quarter AM Peak -13.8%
		Largest Magnitude Increase over one year ago PM Peak 26%	Largest Magnitude Increase over last quarter Off-Peak Day 40.1%
Average Number of Good and Bad Detectors		Change in Good over one year ago -7%	Change in Good over last quarter -2%
		Change in Bad over one year ago 20%	Change in Bad over last quarter 23%

Congestion by Route											
		Vehicle Hours of Delay at 35 mph			Difference 2016 Q2-2015 Q2		Difference 2016 Q2-2016 Q1		Rank		
Route	County	2015 Q2	2016 Q1	2016 Q2	Absolute	Percentage	Absolute	Percentage	2015 Q2	2016 Q1	2016 Q2
I5	San Diego	831,731	876,294	967,973	136,242	16.4%	91,679	10.5%	1	1	1
I805	San Diego	448,481	512,154	526,160	77,679	17.3%	14,006	2.7%	2	2	2
I15	San Diego	324,819	493,601	445,247	120,428	37.1%	-48,354	-9.8%	3	3	3
I8	San Diego	116,057	185,161	203,351	87,294	75.2%	18,189	9.8%	5	5	4
SR78	San Diego	155,331	206,161	185,622	30,292	19.5%	-20,538	-10.0%	4	4	5
SR52	San Diego	98,405	150,571	133,676	35,271	35.8%	-16,895	-11.2%	6	6	6
SR163	San Diego	81,879	102,538	114,132	32,254	39.4%	11,595	11.3%	7	8	7
SR125	San Diego	73,999	104,345	109,301	35,302	47.7%	4,956	4.7%	8	7	8
SR94	San Diego	35,755	66,880	59,697	23,941	67.0%	-7,183	-10.7%	10	9	9
SR56	San Diego	46,054	57,308	51,301	5,247	11.4%	-6,007	-10.5%	9	10	10
I905	San Diego	3,951	7,246	4,547	596	15.1%	-2,698	-37.2%	11	11	11
SR54	San Diego	1,655	2,468	737	-918	-55.4%	-1,731	-70.1%	12	12	12
TOTALS		**2,218,116**	**2,764,726**	**2,801,745**	**583,629**	**26.3%**	**37,018**	**1.3%**			

I15: The decrease in VHD at 35 mph between 2016 Q1 and 2016 Q2 could be partially attributed to the I15 Manage Lanes barrier movement that occurs every Thursday.