District 11 Mobility Performance Report

2018 First Quarter

DEPARTMENT OF TRANSPORTATION

May 7, 2018
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2018 First 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:

- o Vehicle Miles of Travel (VMT)
- o Vehicle Hours of Delay (VHD), Bottleneck Locations
- o Lost Lane Miles (equivalent lost productivity)
- o 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.
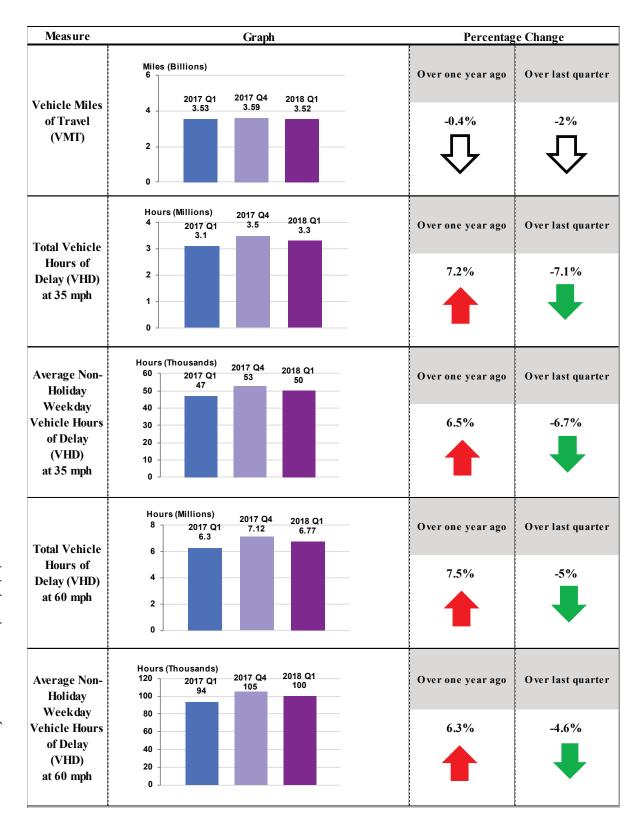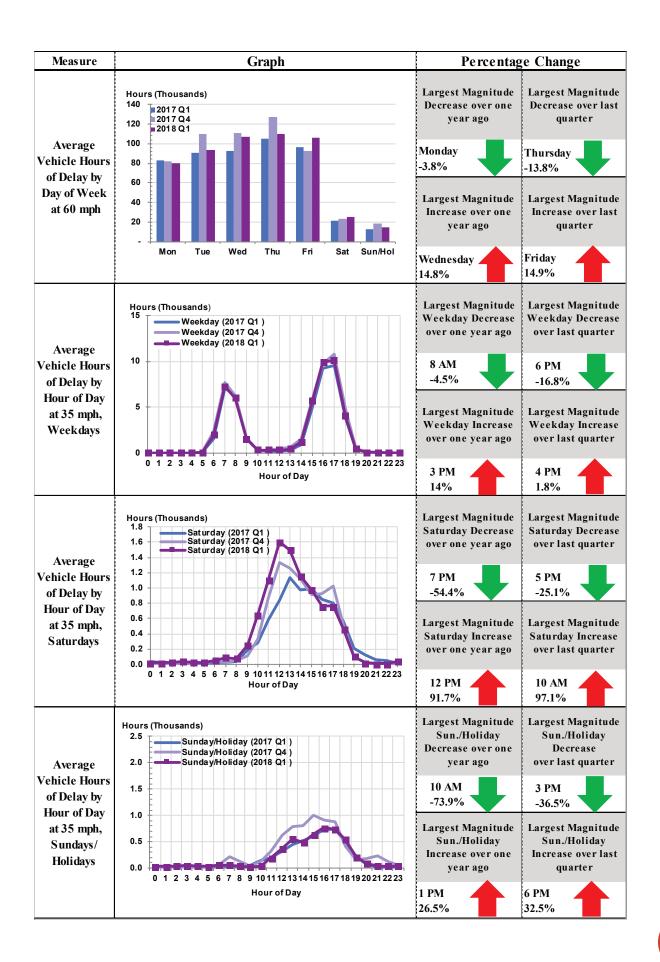
FINDINGS

In the first quarter, the total delay equaled 3.3 million VHD at the 35 mph speed threshold, and 6.77 million VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 50 thousand VHD at 35 mph, and 100 thousand VHD at 60 mph.

Top Ten Bottlenecks for the Quarter 1

Fwy	Location	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (mins)
I805-S	805 SB @ 15	PM	14.70	14.852	58	7.00	160,560.80	8,085.00
I15-N	15 NB N-O Mission Rd	PM	52.35	R52.09	55	5.32	108,488.00	9,540.00
I5-S	5 S N-O VISTA VIEW	AM	39.06	R39.201	59	6.23	102,863.30	8,355.00
I805-S	805 SB N-O 15	PM	15.17	15.321	58	6.88	98,364.60	4,680.00
I805-N	805 NB N-O 52	AM	23.50	23.65	58	1.81	84,195.70	11,860.00
I5-N	5N Lomas Santa Fe EB	PM	37.26	R37.37	59	5.08	79,222.90	5,560.00
I5-S	5th Ave	PM	16.00	R16.11	61	2.60	76,786.40	9,660.00
I5-N	Cannon Rd	PM	48.00	R48.104	62	3.10	76,082.40	10,130.00
I5-N	NB 5 @ B ST	AM	15.23	R15.34	59	3.16	69,733.40	7,405.00
I805-N	At I?15	AM	14.70	14.85	59	2.93	64,148.90	7,330.00

Quarterly Mobility Statistics

Measure	Graph	Percentage Change	
		Over one year ago	Over last quarter
Vehicle Miles of Travel (VMT)	Miles (Billions) 2017 Q1: 3.53, 2017 Q4: 3.59, 2018 Q1: 3.52	-0.4% ⬇	-2% ⬇
Total Vehicle Hours of Delay (VHD) at 35 mph	Hours (Millions) 2017 Q1: 3.1, 2017 Q4: 3.5, 2018 Q1: 3.3	7.2% ⬆	-7.1% ⬇
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	Hours (Thousands) 2017 Q1: 47, 2017 Q4: 53, 2018 Q1: 50	6.5% ⬆	-6.7% ⬇
Total Vehicle Hours of Delay (VHD) at 60 mph	Hours (Millions) 2017 Q1: 6.3, 2017 Q4: 7.12, 2018 Q1: 6.77	7.5% ⬆	-5% ⬇
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	Hours (Thousands) 2017 Q1: 94, 2017 Q4: 105, 2018 Q1: 100	6.3% ⬆	-4.6% ⬇

Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph		**Largest Magnitude Decrease over one year ago** **Monday -3.8%** ⬇	**Largest Magnitude Decrease over last quarter** **Thursday -13.8%** ⬇
		Largest Magnitude Increase over one year ago **Wednesday 14.8%** ⬆	**Largest Magnitude Increase over last quarter** **Friday 14.9%** ⬆
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		**Largest Magnitude Weekday Decrease over one year ago** **8 AM -4.5%** ⬇	**Largest Magnitude Weekday Decrease over last quarter** **6 PM -16.8%** ⬇
		Largest Magnitude Weekday Increase over one year ago **3 PM 14%** ⬆	**Largest Magnitude Weekday Increase over last quarter** **4 PM 1.8%** ⬆
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		**Largest Magnitude Saturday Decrease over one year ago** **7 PM -54.4%** ⬇	**Largest Magnitude Saturday Decrease over last quarter** **5 PM -25.1%** ⬇
		Largest Magnitude Saturday Increase over one year ago **12 PM 91.7%** ⬆	**Largest Magnitude Saturday Increase over last quarter** **10 AM 97.1%** ⬆
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/ Holidays		**Largest Magnitude Sun./Holiday Decrease over one year ago** **10 AM -73.9%** ⬇	**Largest Magnitude Sun./Holiday Decrease over last quarter** **3 PM -36.5%** ⬇
		Largest Magnitude Sun./Holiday Increase over one year ago **1 PM 26.5%** ⬆	**Largest Magnitude Sun./Holiday Increase over last quarter** **6 PM 32.5%** ⬆

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph	Hours (Millions) — bar chart (2017 Q1, 2017 Q4, 2018 Q1) for San Diego	**Largest Magnitude Decrease over one year ago**	**Largest Magnitude Decrease over last quarter**
		–	**San Diego** -7.1% ⬇
		Largest Magnitude Increase over one year ago	**Largest Magnitude Increase over last quarter**
		San Diego 7.2% ⬆	–
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph	Miles — bar chart (2017 Q1, 2017 Q4, 2018 Q1) for AM Peak (6 AM to 10 AM), Off-Peak Day (10 AM to 3 PM), PM Peak (3 PM to 7 PM), Off-Peak Night (7 PM to 6 AM)	**Largest Magnitude Decrease over one year ago**	**Largest Magnitude Decrease over last quarter**
		AM Peak -0.4% ⬇	**PM Peak** -9.1% ⬇
		Largest Magnitude Increase over one year ago	**Largest Magnitude Increase over last quarter**
		Off-Peak Day 27.8% ⬆	–
Average Number of Good and Bad Detectors	Number of Detectors — stacked bar chart. Average of Good / Average of Bad. 2017 Q1: 750 bad, 3,617 good; 2017 Q4: 550 bad, 3,770 good; 2018 Q1: 619 bad, 3,698 good	**Change in Good over one year ago**	**Change in Good over last quarter**
		2% ⬆	-1.91% ⬇
		Change in Bad over one year ago	**Change in Bad over last quarter**
		-17% ⬇	12% ⬆

		Vehicle Hours of Delay at 35 mph			Difference 2018 Q1-2017 Q1		Difference 2018 Q1-2017 Q4		Rank		
Route	County	2017 Q1	2017 Q4	2018 Q1	Absolute	Percentage	Absolute	Percentage	2017 Q1	2017 Q4	2018 Q1
I5	San Diego	908,099	1,141,899	1,083,548	175,448	19.3%	-58,351	-5.1%	1	1	1
I805	San Diego	656,919	636,119	576,478	-80,442	-12.2%	-59,641	-9.4%	2	2	2
I15	San Diego	434,657	628,122	574,862	140,206	32.3%	-53,260	-8.5%	3	3	3
SR78	San Diego	219,830	263,652	254,540	34,709	15.8%	-9,112	-3.5%	4	4	4
I8	San Diego	190,999	203,890	197,702	6,702	3.5%	-6,188	-3.0%	5	5	5
SR125	San Diego	179,157	194,212	177,158	-1,998	-1.1%	-17,054	-8.8%	6	6	6
SR52	San Diego	132,130	134,329	126,969	-5,160	-3.9%	-7,360	-5.5%	7	8	7
SR163	San Diego	119,449	137,171	118,850	-598	-0.5%	-18,321	-13.4%	9	7	8
SR94	San Diego	130,146	116,964	100,152	-29,994	-23.0%	-16,812	-14.4%	8	9	9
SR56	San Diego	67,117	74,789	68,563	1,446	2.2%	-6,226	-8.3%	10	10	10
I905	San Diego	16,970	4,008	5,670	-11,300	-66.6%	1,662	41.5%	11	12	11
SR54	San Diego	5,703	3,419	4,316	-1,387	-24.3%	897	26.2%	12	13	12
SR76	San Diego	5,423	5,868	4,099	-1,324	-24.4%	-1,768	-30.1%	13	11	13
SR67	San Diego	4,442	1,810	195	-4,247	-95.6%	-1,615	-89.2%	14	14	14
TOTALS		3,071,039	3,546,251	3,293,102	222,063	7.2%	-253,149	-7.1%			