

District 11 Mobility Performance Report

2017 First Quarter

DEPARTMENT OF TRANSPORTATION

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: Carlos Mendoza

District 11 Mobility Performance Report

2017 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:

- 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 first quarter, the total delay equaled 3.1 million VHD at the 35 mph speed threshold, and 6.3 million VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 47 thousand VHD at 35 mph, and 94 thousand VHD at 60 mph.

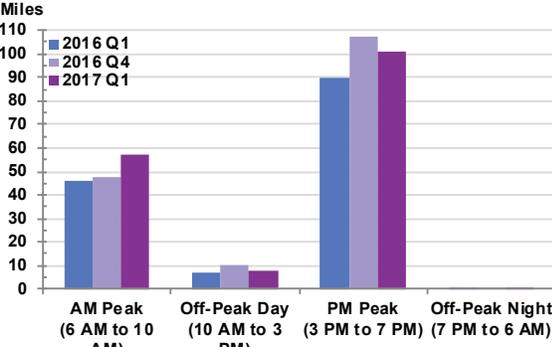
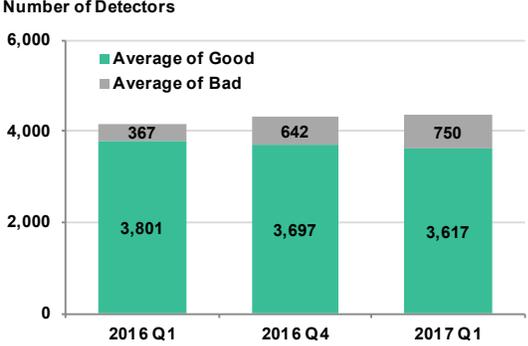
Top Ten Bottlenecks for the Quarter 1

Fwy	Location	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (mins)
I805-S	At I?15	PM	14.702	14.851	60	8.491666667	235,652	10,025
I805-N	At I?15	AM	14.701	14.85	60	3.44	87,619	7,795
SR163-S	FRIARS RD	PM	3.679	4.277	58	3.993103448	83,256	8,800
I805-N	805 NB N/O 52	AM	23.501	23.65	53	3.222641509	83,175	9,405
SR52-E	East of Santo Rd	PM	8.961	8.961	56	4.003571429	79,689	10,490
I5-N	NB 5 @ B ST	AM	15.231	R15.34	58	3.917241379	71,348	7,120
I5-S	5 S N/O VISTA VIEW	AM	39.059	R39.201	57	5.742105263	71,250	5,620
SR78-E	Twin Oaks Valley Rd	PM	13.018	13.022	61	3.791803279	67,846	8,410
SR94-W	94W (F St) @ 5	AM	0.155	1.571	54	3.672222222	66,679	5,445
I5-S	5th Ave	PM	16.001	R16.11	58	2.562068966	65,539	8,335

Quarterly Mobility Statistics

Measure	Graph	Percentage Change									
		Over one year ago	Over last quarter								
Vehicle Miles of Travel (VMT)	<p>Miles (Billions)</p> <table border="1"> <caption>Vehicle Miles of Travel (VMT) - Miles (Billions)</caption> <thead> <tr> <th>Quarter</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>2016 Q1</td> <td>3.4</td> </tr> <tr> <td>2016 Q4</td> <td>3.56</td> </tr> <tr> <td>2017 Q1</td> <td>3.53</td> </tr> </tbody> </table>	Quarter	Value	2016 Q1	3.4	2016 Q4	3.56	2017 Q1	3.53	3.9% ↑	-0.6% ↓
Quarter	Value										
2016 Q1	3.4										
2016 Q4	3.56										
2017 Q1	3.53										
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Millions)</p> <table border="1"> <caption>Total Vehicle Hours of Delay (VHD) at 35 mph - Hours (Millions)</caption> <thead> <tr> <th>Quarter</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>2016 Q1</td> <td>2.8</td> </tr> <tr> <td>2016 Q4</td> <td>3.1</td> </tr> <tr> <td>2017 Q1</td> <td>3.1</td> </tr> </tbody> </table>	Quarter	Value	2016 Q1	2.8	2016 Q4	3.1	2017 Q1	3.1	11.1% ↑	0.5% ↑
Quarter	Value										
2016 Q1	2.8										
2016 Q4	3.1										
2017 Q1	3.1										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <caption>Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph - Hours (Thousands)</caption> <thead> <tr> <th>Quarter</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>2016 Q1</td> <td>41</td> </tr> <tr> <td>2016 Q4</td> <td>47</td> </tr> <tr> <td>2017 Q1</td> <td>47</td> </tr> </tbody> </table>	Quarter	Value	2016 Q1	41	2016 Q4	47	2017 Q1	47	13% ↑	-0.2% ↓
Quarter	Value										
2016 Q1	41										
2016 Q4	47										
2017 Q1	47										
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Millions)</p> <table border="1"> <caption>Total Vehicle Hours of Delay (VHD) at 60 mph - Hours (Millions)</caption> <thead> <tr> <th>Quarter</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>2016 Q1</td> <td>5.81</td> </tr> <tr> <td>2016 Q4</td> <td>6.26</td> </tr> <tr> <td>2017 Q1</td> <td>6.3</td> </tr> </tbody> </table>	Quarter	Value	2016 Q1	5.81	2016 Q4	6.26	2017 Q1	6.3	8.4% ↑	0.6% ↑
Quarter	Value										
2016 Q1	5.81										
2016 Q4	6.26										
2017 Q1	6.3										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <caption>Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph - Hours (Thousands)</caption> <thead> <tr> <th>Quarter</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>2016 Q1</td> <td>86</td> </tr> <tr> <td>2016 Q4</td> <td>94</td> </tr> <tr> <td>2017 Q1</td> <td>94</td> </tr> </tbody> </table>	Quarter	Value	2016 Q1	86	2016 Q4	94	2017 Q1	94	9.9% ↑	0.3% ↑
Quarter	Value										
2016 Q1	86										
2016 Q4	94										
2017 Q1	94										

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 -2.8%	Sun/Hol -36.8%
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
		12 PM -12.3%	5 PM -9.9%
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
		12 PM -40.5%	11 AM -21.3%
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
		1 PM -36.4%	12 PM -61.5%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Monday 44.2%	Friday 13.6%
		8 AM 25.7%	8 AM 19.2%
		5 PM 37.1%	1 PM 21.9%
		4 PM 48%	3 AM 105.9%

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 -	Largest Magnitude Increase over last quarter -	
	San Diego 11.1% ↑	San Diego 0.5% ↑	
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 Night -9.7% ↓	PM Peak -6.1% ↓	
	Largest Magnitude Increase over one year ago -	Largest Magnitude Increase over last quarter -	
	AM Peak 23.2% ↑	AM Peak 19.2% ↑	
Average Number of Good and Bad Detectors		Change in Good over one year ago -5% ↓	Change in Good over last quarter -2.16% ↓
	Change in Bad over one year ago 104% ↑	Change in Bad over last quarter 17% ↑	

Congestion by Route												
Route	County	Vehicle Hours of Delay at 35 mph			Difference 2017 Q1-2016 Q1		Difference 2017 Q1-2016 Q4		Rank			
		2016 Q1	2016 Q4	2017 Q1	Absolute	Percentage	Absolute	Percentage	2016 Q1	2016 Q4	2017 Q1	
I5	San Diego	876,294	950,575	908,099	31,805	3.6%	-42,476	-4.5%	1	1	1	
I805	San Diego	512,154	636,982	656,919	144,765	28.3%	19,937	3.1%	2	2	2	
II5	San Diego	493,601	416,076	434,657	-58,944	-11.9%	18,580	4.5%	3	3	3	
SR78	San Diego	206,161	238,183	219,830	13,670	6.6%	-18,353	-7.7%	4	4	4	
I8	San Diego	185,161	204,511	190,999	5,838	3.2%	-13,511	-6.6%	5	5	5	
SR125	San Diego	104,345	170,360	179,157	74,812	71.7%	8,797	5.2%	7	6	6	
SR52	San Diego	150,571	134,122	132,130	-18,441	-12.2%	-1,992	-1.5%	6	7	7	
SR94	San Diego	66,880	112,310	130,146	63,266	94.6%	17,836	15.9%	9	9	8	
SR163	San Diego	102,538	119,938	119,449	16,911	16.5%	-489	-0.4%	8	8	9	
SR56	San Diego	57,308	59,696	67,117	9,809	17.1%	7,421	12.4%	10	10	10	
I905	San Diego	7,246	3,125	16,970	9,724	134.2%	13,845	443.0%	11	12	11	
SR54	San Diego	2,468	4,781	5,703	3,235	131.0%	922	19.3%	12	11	12	
SR76	San Diego	0	2,945	5,423	5,423		2,478	84.2%		13	13	
SR67	San Diego	0	1,701	4,442	4,442		2,741	161.1%		14	14	
TOTALS		2,764,726	3,055,304	3,071,039	306,313	11.1%	15,735	0.5%				

SR67 and SR76: The reason why the difference between 2016 Q1 and 2017 Q1 is showing blank, is due to the fact that the detection data started to appear on 2016 Q4.