

District 11 Mobility Performance Report

2016 Fourth Quarter

DEPARTMENT OF TRANSPORTATION

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District 11 Mobility Performance Report

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EXECUTIVE SUMMARY

Overview

Caltrans District 11 consists of both the Imperial and San Diego counties, with San Diego having a population of approximately 3,095,313 residents and Imperial County with approximately 174,528 residents. Although, District 11 is composed of these two counties, Imperial County does not report any performance data due to less population.

The Mobility Performance quarterly analysis compares traffic information with the information collected in the same quarter over a year ago. In addition, it compares traffic information with its preceding quarter. The following parameters are used to show the performance measures of the area freeways:

- 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 total congestion. These thresholds are set by Caltrans and are based upon engineering experience and District input.

FINDINGS

In the fourth quarter of 2016, the total delay equaled 3.1 million VHD at the 35 mph speed threshold, and 6.26 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 4

Fwy	Location	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (mins)
I805-S	At I715	PM	14.702	14.851	57	9.59	233,390	9,390
I5-N	Cannon Rd	PM	47.995	R48.104	59	4.01	112,227	10,445
I805-N	At I715	AM	14.701	14.85	50	4.02	94,204	6,990
I5-S	5 S N/O VISTA VIEW	AM	39.059	R39.201	53	6.00	86,903	6,550
SR78-E	Twin Oaks Valley Rd	PM	13.018	13.022	60	3.80	85,029	10,160
I805-S	University Ave	PM	15.793	15.942	47	8.29	73,404	2,400
I5-S	5th Ave	PM	16.001	R16.11	58	2.62	71,482	8,480
I805-N	805 NB N/O 52	AM	23.501	23.65	54	2.88	67,638	9,180
SR163-S	FRIARS RD	PM	3.679	4.277	55	4.06	67,611	6,360
I5-S	EB CLAIREMONT DR	PM	21.973	R22.082	45	6.55	65,501	3,505

Quarterly Mobility Statistics

Measure	Graph	Percentage Change									
Vehicle Miles of Travel (VMT)	<p>Miles (Billions)</p> <table border="1"> <tr><th>Year</th><th>Q4</th></tr> <tr><td>2015</td><td>3.44</td></tr> <tr><td>2016</td><td>3.59</td></tr> <tr><td>2016</td><td>3.56</td></tr> </table>	Year	Q4	2015	3.44	2016	3.59	2016	3.56	Over one year ago	Over last quarter
		Year	Q4								
2015	3.44										
2016	3.59										
2016	3.56										
		3.3% ↑	-1% ↓								
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Year</th><th>Q4</th></tr> <tr><td>2015</td><td>2.9</td></tr> <tr><td>2016</td><td>3.1</td></tr> <tr><td>2016</td><td>3.1</td></tr> </table>	Year	Q4	2015	2.9	2016	3.1	2016	3.1	Over one year ago	Over last quarter
		Year	Q4								
2015	2.9										
2016	3.1										
2016	3.1										
		3.8% ↑	-1.9% ↓								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year</th><th>Q4</th></tr> <tr><td>2015</td><td>45</td></tr> <tr><td>2016</td><td>43</td></tr> <tr><td>2016</td><td>47</td></tr> </table>	Year	Q4	2015	45	2016	43	2016	47	Over one year ago	Over last quarter
		Year	Q4								
2015	45										
2016	43										
2016	47										
		5.3% ↑	7.8% ↑								
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Year</th><th>Q4</th></tr> <tr><td>2015</td><td>6.03</td></tr> <tr><td>2016</td><td>6.53</td></tr> <tr><td>2016</td><td>6.26</td></tr> </table>	Year	Q4	2015	6.03	2016	6.53	2016	6.26	Over one year ago	Over last quarter
		Year	Q4								
2015	6.03										
2016	6.53										
2016	6.26										
		3.8% ↑	-4% ↓								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year</th><th>Q4</th></tr> <tr><td>2015</td><td>90</td></tr> <tr><td>2016</td><td>90</td></tr> <tr><td>2016</td><td>94</td></tr> </table>	Year	Q4	2015	90	2016	90	2016	94	Over one year ago	Over last quarter
		Year	Q4								
2015	90										
2016	90										
2016	94										
		5.1% ↑	4.4% ↑								

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
		Friday -15.6%	Friday -15.1%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Thursday 14.2%	Thursday 10.7%
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
		9 AM -12.3%	4 PM -6.6%
		Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
		3 PM 16.1%	7 AM 44.4%
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
		7 AM -90%	1 PM -59.2%
		Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
		3 PM 86.1%	10 PM 61.2%
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
		7 AM -43.6%	1 PM -34.6%
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		3 PM 110.6%	5 PM 20.3%

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
		-	San Diego -1.9%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		San Diego 3.8%	-
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 -11.5%	Off-Peak Day -35.2%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		PM Peak 10.1%	AM Peak 30.9%
Average Number of Good and Bad Detectors		Change in Good over one year ago	Change in Good over last quarter
		-4%	-0.40%
		Change in Bad over one year ago	Change in Bad over last quarter
		79%	36%

Congestion by Route											
Route	County	Vehicle Hours of Delay at 35 mph			Difference 2016 Q4-2015 Q4		Difference 2016 Q4-2016 Q3		Rank		
		2015 Q4	2016 Q3	2016 Q4	Absolute	Percentage	Absolute	Percentage	2015 Q4	2016 Q3	2016 Q4
I5	San Diego	928,766	1,123,567	950,575	21,809	2.3%	-172,992	-15.4%	1	1	1
I805	San Diego	527,221	568,927	636,982	109,762	20.8%	68,055	12.0%	3	2	2
I15	San Diego	536,895	476,563	416,076	-120,818	-22.5%	-60,487	-12.7%	2	3	3
SR78	San Diego	238,391	200,739	238,183	-208	-0.1%	37,444	18.7%	4	4	4
I8	San Diego	184,098	196,762	204,511	20,412	11.1%	7,749	3.9%	5	5	5
SR125	San Diego	130,004	136,991	170,360	40,356	31.0%	33,369	24.4%	7	7	6
SR52	San Diego	143,005	116,268	134,122	-8,884	-6.2%	17,853	15.4%	6	8	7
SR163	San Diego	108,365	160,213	119,938	11,573	10.7%	-40,275	-25.1%	8	6	8
SR94	San Diego	68,670	64,668	112,310	43,639	63.5%	47,642	73.7%	10	9	9
SR56	San Diego	71,636	61,651	59,696	-11,940	-16.7%	-1,956	-3.2%	9	10	10
SR54	San Diego	2,200	6,236	4,781	2,581	117.4%	-1,455	-23.3%	12	11	11
I905	San Diego	3,500	2,161	3,125	-375	-10.7%	964	44.6%	11	12	12
SR76	San Diego	0	0	2,945	2,945		2,945				13
SR67	San Diego	0	0	1,701	1,701		1,701				14
TOTALS		2,942,751	3,114,747	3,055,304	112,553	3.8%	-59,443	-1.9%			

SR67 and SR76: The reason why the detection data started to appear on 2016 Q4 was because the detection came back online.