

District 11 Mobility Performance Report

2017 Fourth Quarter

DEPARTMENT OF TRANSPORTATION

January 26, 2018
: Carlos Mendoza

District 11 Mobility Performance Report

2017 Fourth Quarter

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 2017, the total delay equaled 3.5 million VHD at the 35 mph speed threshold, and 7.12 million VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 53 thousand VHD at 35 mph, and 105 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	805 SB @ 15	PM	14.70	14.852	58	7.74	178,955.20	8,445.00
I5-S	5 S N-O VISTA VIEW	AM	39.06	R39.201	55	6.64	121,934.90	8,755.00
I15-N	15 NB N-O Mission Rd	PM	52.35	R52.09	56	5.35	112,686.70	9,815.00
I5-N	Cannon Rd	PM	48.00	R48.104	60	4.08	107,730.40	9,465.00
I805-N	At I715	AM	14.70	14.85	55	4.10	103,473.10	8,135.00
I805-N	805 NB N-O 52	AM	23.50	23.65	54	2.32	92,237.20	10,970.00
I5-S	EB CLAIREMONT DR	PM	21.97	R22.082	48	7.44	89,473.70	4,145.00
I805-S	805 SB N-O 15	PM	15.17	15.321	56	6.88	81,744.30	3,355.00
I5-N	NB 5 @ B ST	AM	15.23	R15.34	54	4.02	79,582.20	6,375.00
SR163-S	FRIARS RD	PM	3.68	4.277	56	2.71	70,668.30	8,170.00

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"> <tr><th>Year</th><th>Q4</th><th>Q3</th><th>Q4</th></tr> <tr><td>2016</td><td>3.56</td><td></td><td></td></tr> <tr><td>2017</td><td></td><td>3.76</td><td>3.59</td></tr> </table>	Year	Q4	Q3	Q4	2016	3.56			2017		3.76	3.59	1% ↑	-4.4% ↓
Year	Q4	Q3	Q4												
2016	3.56														
2017		3.76	3.59												
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Year</th><th>Q4</th><th>Q3</th><th>Q4</th></tr> <tr><td>2016</td><td>3.1</td><td></td><td></td></tr> <tr><td>2017</td><td></td><td>3.3</td><td>3.5</td></tr> </table>	Year	Q4	Q3	Q4	2016	3.1			2017		3.3	3.5	16.1% ↑	8.6% ↑
Year	Q4	Q3	Q4												
2016	3.1														
2017		3.3	3.5												
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><th>Q3</th><th>Q4</th></tr> <tr><td>2016</td><td>47</td><td></td><td></td></tr> <tr><td>2017</td><td></td><td>47</td><td>53</td></tr> </table>	Year	Q4	Q3	Q4	2016	47			2017		47	53	14% ↑	13.1% ↑
Year	Q4	Q3	Q4												
2016	47														
2017		47	53												
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Year</th><th>Q4</th><th>Q3</th><th>Q4</th></tr> <tr><td>2016</td><td>6.26</td><td></td><td></td></tr> <tr><td>2017</td><td></td><td>6.83</td><td>7.12</td></tr> </table>	Year	Q4	Q3	Q4	2016	6.26			2017		6.83	7.12	13.7% ↑	4.3% ↑
Year	Q4	Q3	Q4												
2016	6.26														
2017		6.83	7.12												
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><th>Q3</th><th>Q4</th></tr> <tr><td>2016</td><td>94</td><td></td><td></td></tr> <tr><td>2017</td><td></td><td>97</td><td>105</td></tr> </table>	Year	Q4	Q3	Q4	2016	94			2017		97	105	11.7% ↑	8% ↑
Year	Q4	Q3	Q4												
2016	94														
2017		97	105												

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
		Sun/Hol -9.8%	Friday -9.2%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Tuesday 17.8%	Thursday 13%
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 -20%	12 PM -32.9%
		Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
		3 PM 29.8%	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
		10 AM -16.6%	11 AM -53.1%
		Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
		12 PM 41.8%	6 PM 32.8%
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
		6 PM -45.2%	1 PM -38.5%
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		9 PM 643.1%	5 PM 98.8%

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	San Diego	16.1% ↑	8.6% ↑
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 -22.3% ↓
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		AM Peak	AM Peak
Average Number of Good and Bad Detectors		Change in Good over one year ago	Change in Good over last quarter
		2% ↑	0.79% ↑
		Change in Bad over one year ago	Change in Bad over last quarter
		-14% ↓	-7% ↓

Congestion by Route											
Route	County	Vehicle Hours of Delay at 35 mph			Difference 2017 Q4-2016 Q4		Difference 2017 Q4-2017 Q3		Rank		
		2016 Q4	2017 Q3	2017 Q4	Absolute	Percentage	Absolute	Percentage	2016 Q4	2017 Q3	2017 Q4
I5	San Diego	950,573	1,186,056	1,141,899	191,324	20.1%	-44,157	-3.7%	1	1	1
I805	San Diego	636,982	570,224	636,119	-863	-0.1%	65,895	11.6%	2	2	2
I15	San Diego	416,076	487,929	628,122	212,046	51.0%	140,193	28.7%	3	3	3
SR78	San Diego	238,183	242,489	263,652	25,469	10.7%	21,163	8.7%	4	4	4
I8	San Diego	204,511	179,066	203,890	-621	-0.3%	24,823	13.9%	5	5	5
SR125	San Diego	170,360	155,805	194,212	23,852	14.0%	38,407	24.7%	6	7	6
SR163	San Diego	119,938	157,981	137,171	17,233	14.4%	-20,810	-13.2%	8	6	7
SR52	San Diego	134,122	133,003	134,329	208	0.2%	1,326	1.0%	7	8	8
SR94	San Diego	112,310	74,022	116,964	4,655	4.1%	42,942	58.0%	9	9	9
SR56	San Diego	59,696	66,252	74,789	15,093	25.3%	8,536	12.9%	10	10	10
SR76	San Diego	2,945	3,656	5,868	2,923	99.3%	2,212	60.5%	13	13	11
I905	San Diego	3,125	4,022	4,008	883	28.2%	-14	-0.4%	12	11	12
SR54	San Diego	4,781	3,958	3,419	-1,362	-28.5%	-539	-13.6%	11	12	13
SR67	San Diego	1,701	389	1,810	109	6.4%	1,421	365.5%	14	14	14
TOTALS		3,055,304	3,264,853	3,546,251	490,947	16.1%	281,398	8.6%			