

District 11 Mobility Performance Report

2018 Second Quarter

DEPARTMENT OF TRANSPORTATION

August 10, 2018
: Carlos Mendoza

District 11 Mobility Performance Report

2018 Second Quarter

EXECUTIVE SUMMARY

Overview

Caltrans District 11 consists of both the Imperial and San Diego counties, with San Diego having a population of approximately 3,100,000 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 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 second quarter of 2018, the total delay equaled 3.4 million VHD at the 35 mph speed threshold, and 7.06 million VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 47 thousand VHD at 35 mph, and 98 thousand VHD at 60 mph.

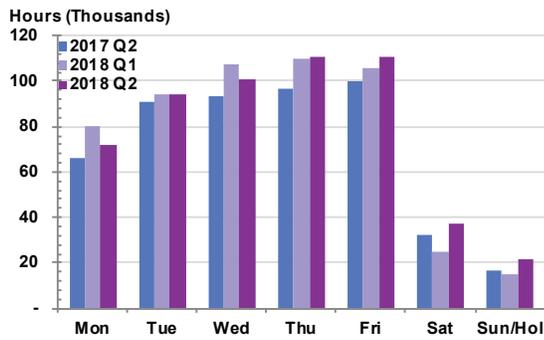
Top Ten Bottlenecks for the Quarter 2

Fwy	Location	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (mins)
I805-S	805 SB @ 15	PM	14.70	14.852	64	7.11	167,370.50	8,235.00
I805-S	805 SB N-O 15	PM	15.17	15.321	62	8.74	101,928.60	4,020.00
I15-S	WB SR-274-BALBOA AVE	PM	9.37	R9.196	64	2.87	100,874.70	10,705.00
I15-N	15 NB N-O Mission Rd	PM	52.35	R52.09	59	5.17	94,929.80	8,410.00
I5-N	5N Lomas Santa Fe EB	PM	37.26	R37.37	59	5.17	94,095.40	6,280.00
I5-S	EB CLAIREMONT DR	PM	21.97	R22.082	60	7.19	93,027.00	4,300.00
I5-N	Cannon Rd	PM	48.00	R48.104	63	3.31	78,431.60	11,985.00
I5-S	5th Ave	PM	16.00	R16.11	64	2.68	75,054.40	8,975.00
SR163-S	FRIARS RD	PM	3.68	4.277	60	3.16	65,006.90	8,370.00
I5-S	S-O CLAIRMONT DR	PM	21.37	R21.475	43	8.27	62,315.70	2,575.00

Quarterly Mobility Statistics

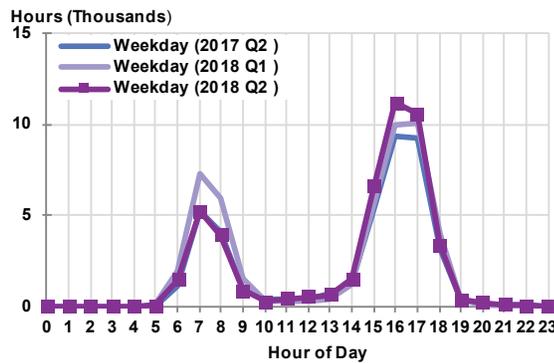
Vehicle Miles of Travel (VMT)	<p>Miles (Billions)</p> <table border="1"> <thead> <tr> <th>Quarter</th> <th>VMT (Billions)</th> </tr> </thead> <tbody> <tr> <td>2017 Q2</td> <td>3.74</td> </tr> <tr> <td>2018 Q1</td> <td>3.52</td> </tr> <tr> <td>2018 Q2</td> <td>3.72</td> </tr> </tbody> </table>	Quarter	VMT (Billions)	2017 Q2	3.74	2018 Q1	3.52	2018 Q2	3.72	Over one year ago	Over last quarter
Quarter	VMT (Billions)										
2017 Q2	3.74										
2018 Q1	3.52										
2018 Q2	3.72										
		-0.7% 	5.6% 								
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Millions)</p> <table border="1"> <thead> <tr> <th>Quarter</th> <th>VHD (Millions)</th> </tr> </thead> <tbody> <tr> <td>2017 Q2</td> <td>3</td> </tr> <tr> <td>2018 Q1</td> <td>3.3</td> </tr> <tr> <td>2018 Q2</td> <td>3.4</td> </tr> </tbody> </table>	Quarter	VHD (Millions)	2017 Q2	3	2018 Q1	3.3	2018 Q2	3.4	Over one year ago	Over last quarter
Quarter	VHD (Millions)										
2017 Q2	3										
2018 Q1	3.3										
2018 Q2	3.4										
		13.4% 	2.1% 								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <thead> <tr> <th>Quarter</th> <th>VHD (Thousands)</th> </tr> </thead> <tbody> <tr> <td>2017 Q2</td> <td>42</td> </tr> <tr> <td>2018 Q1</td> <td>50</td> </tr> <tr> <td>2018 Q2</td> <td>47</td> </tr> </tbody> </table>	Quarter	VHD (Thousands)	2017 Q2	42	2018 Q1	50	2018 Q2	47	Over one year ago	Over last quarter
Quarter	VHD (Thousands)										
2017 Q2	42										
2018 Q1	50										
2018 Q2	47										
		11.7% 	-4.9% 								
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Millions)</p> <table border="1"> <thead> <tr> <th>Quarter</th> <th>VHD (Millions)</th> </tr> </thead> <tbody> <tr> <td>2017 Q2</td> <td>6.4</td> </tr> <tr> <td>2018 Q1</td> <td>6.77</td> </tr> <tr> <td>2018 Q2</td> <td>7.06</td> </tr> </tbody> </table>	Quarter	VHD (Millions)	2017 Q2	6.4	2018 Q1	6.77	2018 Q2	7.06	Over one year ago	Over last quarter
Quarter	VHD (Millions)										
2017 Q2	6.4										
2018 Q1	6.77										
2018 Q2	7.06										
		10.4% 	4.3% 								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <thead> <tr> <th>Quarter</th> <th>VHD (Thousands)</th> </tr> </thead> <tbody> <tr> <td>2017 Q2</td> <td>90</td> </tr> <tr> <td>2018 Q1</td> <td>100</td> </tr> <tr> <td>2018 Q2</td> <td>98</td> </tr> </tbody> </table>	Quarter	VHD (Thousands)	2017 Q2	90	2018 Q1	100	2018 Q2	98	Over one year ago	Over last quarter
Quarter	VHD (Thousands)										
2017 Q2	90										
2018 Q1	100										
2018 Q2	98										
		9.2% 	-2.2% 								

Average Vehicle Hours of Delay by Day of Week at 60 mph



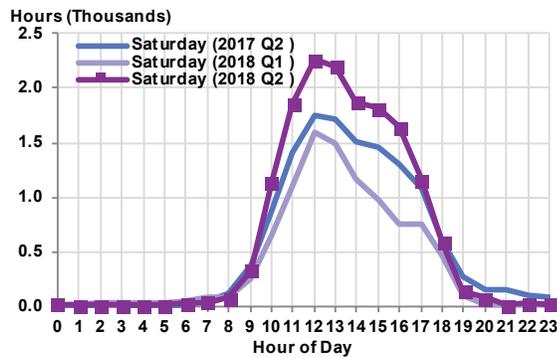
Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
-	Monday -9.6%
Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
Thursday 14%	Saturday 47.3%

Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays



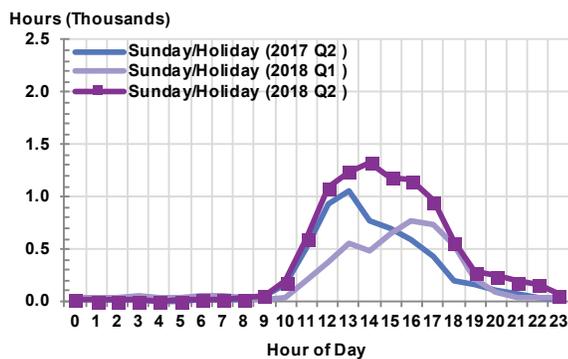
Largest Magnitude Weekday Decrease over one year ago	Largest Magnitude Weekday Decrease over last quarter
8 AM -4.5%	7 AM -28.5%
Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
4 PM 19.1%	4 PM 12.4%

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
9 PM -91.5%	7 AM -57.9%
Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
12 PM 29.5%	4 PM 115.2%

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
12 AM -64.9%	7 AM -76%
Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
4 PM 98.1%	2 PM 172.3%

<p>Total Vehicle Hours of Delay (VHD) by County at 35 mph</p>	<p>Hours (Millions)</p> <p>San Diego</p>	<p>Largest Magnitude Decrease over one year ago</p>	<p>Largest Magnitude Decrease over last quarter</p>
		<p>-</p>	<p>-</p>
		<p>Largest Magnitude Increase over one year ago</p>	<p>Largest Magnitude Increase over last quarter</p>
		<p>San Diego 13.4% </p>	<p>San Diego 2.1% </p>
<p>Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph</p>	<p>Miles</p> <p>AM Peak (6 AM to 10 AM)</p> <p>Off-Peak Day (10 AM to 3 PM)</p> <p>PM Peak (3 PM to 7 PM)</p> <p>Off-Peak Night (7 PM to 6 AM)</p>	<p>Largest Magnitude Decrease over one year ago</p>	<p>Largest Magnitude Decrease over last quarter</p>
		<p>-</p>	<p>AM Peak -27.4% </p>
		<p>Largest Magnitude Increase over one year ago</p>	<p>Largest Magnitude Increase over last quarter</p>
		<p>PM Peak 11.1% </p>	<p>PM Peak 5% </p>
<p>Average Number of Good and Bad Detectors</p>	<p>Number of Detectors</p> <p>Average of Good</p> <p>Average of Bad</p> <p>2017 Q2</p> <p>2018 Q1</p> <p>2018 Q2</p>	<p>Change in Good over one year ago</p>	<p>Change in Good over last quarter</p>
		<p>4% </p>	<p>2.74% </p>
		<p>Change in Bad over one year ago</p>	<p>Change in Bad over last quarter</p>
		<p>-26% </p>	<p>-16% </p>

Congestion by Route											
Route	County	Vehicle Hours of Delay at 35 mph			Difference 2018 Q2-2017 Q2		Difference 2018 Q2-2018 Q1		Rank		
		2017 Q2	2018 Q1	2018 Q2	Absolute	Percentage	Absolute	Percentage	2017 Q2	2018 Q1	2018 Q2
I5	San Diego	1,053,023	1,083,548	1,242,539	189,516	18.0%	158,991	14.7%	1	1	1
I805	San Diego	551,343	576,478	595,196	43,853	8.0%	18,718	3.2%	2	2	2
I15	San Diego	425,009	574,862	575,608	150,599	35.4%	746	0.1%	3	3	3
SR78	San Diego	198,276	254,540	224,365	26,089	13.2%	-30,175	-11.9%	4	4	4
I8	San Diego	170,084	197,702	171,485	1,400	0.8%	-26,217	-13.3%	5	5	5
SR125	San Diego	132,304	177,158	162,628	30,325	22.9%	-14,530	-8.2%	8	6	6
SR163	San Diego	138,430	118,850	140,540	2,109	1.5%	21,689	18.2%	7	8	7
SR52	San Diego	143,373	126,969	113,304	-30,069	-21.0%	-13,665	-10.8%	6	7	8
SR94	San Diego	80,928	100,152	64,736	-16,192	-20.0%	-35,417	-35.4%	9	9	9
SR56	San Diego	54,335	68,563	62,011	7,676	14.1%	-6,552	-9.6%	10	10	10
SR76	San Diego	6,368	4,099	5,808	-560	-8.8%	1,709	41.7%	12	13	11
I905	San Diego	7,800	5,670	4,001	-3,799	-48.7%	-1,668	-29.4%	11	11	12
SR54	San Diego	2,458	4,316	1,309	-1,149	-46.7%	-3,007	-69.7%	13	12	13
SR67	San Diego	1,713	195	134	-1,579	-92.2%	-62	-31.5%	14	14	14
TOTALS		2,965,445	3,293,102	3,363,663	398,219	13.4%	70,562	2.1%			