

District 11 Mobility Performance Report

2020 First Quarter

DEPARTMENT OF TRANSPORTATION

January 23, 2020
District 11-Advance Transportation Systems

District 11 Mobility Performance Report

2020 First 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

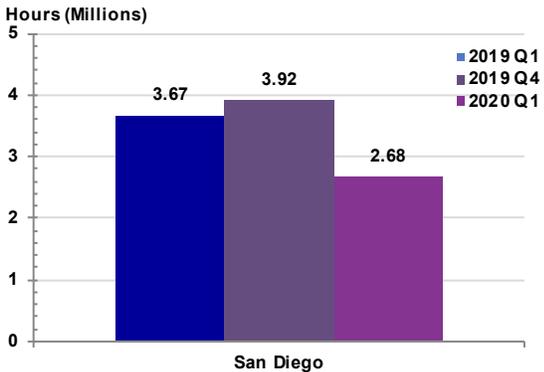
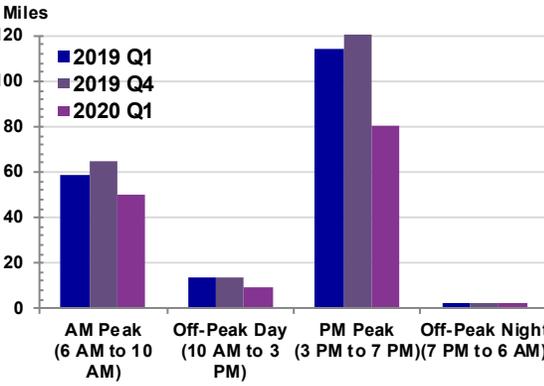
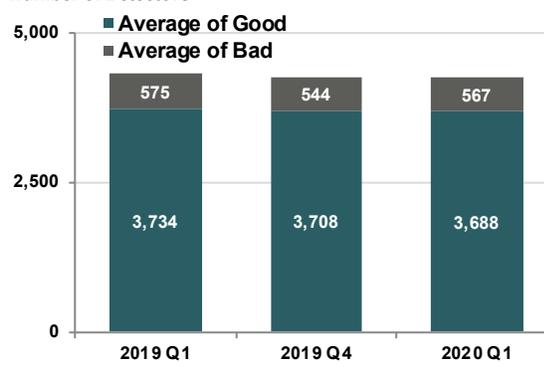
In the first quarter of 2020, the total delay equaled 2.7 million VHD at the 35mph speed threshold, and 5.7 million VHD at the 60mph threshold. The average weekday delay experienced in this quarter was approximately 41 thousand VHD at 35 mph, and 85 thousand VHD at 60 mph.

Top Ten Bottlenecks for the 2020 First Quarter:

Fwy	Location	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (mins)
I805-N	805 NB N-O 52	AM	23.50	23.65	50	3.60	133,577.20	10,295.00
I805-S	805 SB N-O 15	PM	15.17	15.321	48	7.84	121,931.10	4,640.00
I805-S	805 SB @ 15	PM	14.70	14.852	45	7.19	104,779.30	4,655.00
I805-N	At I?15	AM	14.70	14.85	47	3.80	73,348.20	6,000.00
SR78-E	Barham Dr	PM	14.86	14.86	41	5.29	70,216.30	5,730.00
I15-N	15 NB N-O Mission Rd	PM	52.35	R52.09	45	4.42	61,114.20	6,295.00
I5-S	5 S N-O VISTA VIEW	AM	39.06	R39.201	46	6.35	61,059.80	5,530.00
I5-S	5th Ave	PM	16.00	R16.11	48	2.42	59,860.60	6,180.00
I5-S	S-O CLAIRMONT DR	PM	21.37	R21.475	36	7.93	55,373.50	2,420.00
I5-N	NB 5 @ B ST	AM	15.23	R15.34	46	3.18	55,198.50	6,175.00

Measure	Graph	Percentage Change									
Vehicle Miles of Travel (VMT)	<p>Miles (Billions)</p> <table border="1"> <tr><th>Period</th><th>Value</th></tr> <tr><td>2019 Q1</td><td>3.5</td></tr> <tr><td>2019 Q4</td><td>3.6</td></tr> <tr><td>2020 Q1</td><td>3.3</td></tr> </table>	Period	Value	2019 Q1	3.5	2019 Q4	3.6	2020 Q1	3.3	Over one year ago	Over last quarter
		Period	Value								
2019 Q1	3.5										
2019 Q4	3.6										
2020 Q1	3.3										
		-6.5% ↓	-9.1% ↓								
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Period</th><th>Value</th></tr> <tr><td>2019 Q1</td><td>3.7</td></tr> <tr><td>2019 Q4</td><td>3.9</td></tr> <tr><td>2020 Q1</td><td>2.7</td></tr> </table>	Period	Value	2019 Q1	3.7	2019 Q4	3.9	2020 Q1	2.7	Over one year ago	Over last quarter
		Period	Value								
2019 Q1	3.7										
2019 Q4	3.9										
2020 Q1	2.7										
		-27% ↓	-31.6% ↓								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Period</th><th>Value</th></tr> <tr><td>2019 Q1</td><td>56</td></tr> <tr><td>2019 Q4</td><td>61</td></tr> <tr><td>2020 Q1</td><td>41</td></tr> </table>	Period	Value	2019 Q1	56	2019 Q4	61	2020 Q1	41	Over one year ago	Over last quarter
		Period	Value								
2019 Q1	56										
2019 Q4	61										
2020 Q1	41										
		-26.9% ↓	-32.8% ↓								
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Period</th><th>Value</th></tr> <tr><td>2019 Q1</td><td>7.5</td></tr> <tr><td>2019 Q4</td><td>7.7</td></tr> <tr><td>2020 Q1</td><td>5.7</td></tr> </table>	Period	Value	2019 Q1	7.5	2019 Q4	7.7	2020 Q1	5.7	Over one year ago	Over last quarter
		Period	Value								
2019 Q1	7.5										
2019 Q4	7.7										
2020 Q1	5.7										
		-24.3% ↓	-26.5% ↓								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Period</th><th>Value</th></tr> <tr><td>2019 Q1</td><td>112</td></tr> <tr><td>2019 Q4</td><td>117</td></tr> <tr><td>2020 Q1</td><td>85</td></tr> </table>	Period	Value	2019 Q1	112	2019 Q4	117	2020 Q1	85	Over one year ago	Over last quarter
		Period	Value								
2019 Q1	112										
2019 Q4	117										
2020 Q1	85										
		-24% ↓	-27.7% ↓								

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
		Monday -37% ↓	Thursday -32.4% ↓
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
		4 PM -29.5% ↓	5 PM -37.5% ↓
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
		4 PM -60.7% ↓	5 PM -60.8% ↓
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
		4 PM -71% ↓	5 PM -58.8% ↓
		Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
		5 AM 47.1% ↑	4 AM 70.6% ↑
		Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
		1 AM 259.7% ↑	11 AM 17.6% ↑
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		4 AM 32.6% ↑	10 AM 38.1% ↑

Measure	Graph	Percentage Change	
<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>San Diego -27% ↓</p>	<p>San Diego -31.6% ↓</p>
		<p>Largest Magnitude Increase over one year ago</p>	<p>Largest Magnitude Increase over last quarter</p>
		<p>-</p>	<p>-</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), Off-Peak Day (10 AM to 3 PM), PM Peak (3 PM to 7 PM), 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>PM Peak -30% ↓</p>	<p>PM Peak -35.7% ↓</p>
		<p>Largest Magnitude Increase over one year ago</p>	<p>Largest Magnitude Increase over last quarter</p>
		<p>-</p>	<p>-</p>
<p>Average Number of Good and Bad Detectors</p>	 <p>Number of Detectors</p> <p>Average of Good, Average of Bad</p> <p>2019 Q1, 2019 Q4, 2020 Q1</p>	<p>Change in Good over one year ago</p>	<p>Change in Good over last quarter</p>
		<p>-1.2% ↓</p>	<p>-0.5% ↓</p>
		<p>Change in Bad over one year ago</p>	<p>Change in Bad over last quarter</p>
		<p>-1% ↓</p>	<p>4% ↑</p>

Congestion by Route

Route	County	Vehicle Hours of Delay at 35 mph			Difference 2020 Q1-2019 Q1		Difference 2020 Q1-2019 Q4		Rank		
		2019 Q1	2019 Q4	2020 Q1	Absolute	Percentage	Absolute	Percentage	2019 Q1	2019 Q4	2020 Q1
		I5	San Diego	1,235,695	1,246,991	801,507	-434,188	-35.1%	-445,484	-35.7%	1
I805	San Diego	708,608	747,346	542,661	-165,947	-23.4%	-204,685	-27.4%	2	3	2
I15	San Diego	685,469	762,369	533,607	-151,862	-22.2%	-228,762	-30.0%	3	2	3
SR78	San Diego	256,698	284,073	189,365	-67,334	-26.2%	-94,708	-33.3%	4	4	4
SR125	San Diego	204,299	234,278	174,531	-29,768	-14.6%	-59,747	-25.5%	5	5	5
I8	San Diego	190,661	219,445	144,116	-46,545	-24.4%	-75,329	-34.3%	6	6	6
SR163	San Diego	119,802	144,988	81,877	-37,926	-31.7%	-63,111	-43.5%	7	7	7
SR52	San Diego	99,917	98,334	73,306	-26,612	-26.6%	-25,029	-25.5%	8	8	8
SR56	San Diego	74,365	75,106	63,724	-10,642	-14.3%	-11,382	-15.2%	10	10	9
SR94	San Diego	82,203	90,548	63,380	-18,824	-22.9%	-27,168	-30.0%	9	9	10
I905	San Diego	7,128	3,449	6,298	-830	-11.6%	2,849	82.6%	11	13	11
SR76	San Diego	4,266	7,760	3,741	-526	-12.3%	-4,019	-51.8%	12	11	12
SR54	San Diego	3,783	3,757	1,711	-2,072	-54.8%	-2,046	-54.5%	13	12	13
SR67	San Diego	1,415	1,560	746	-670	-47.3%	-814	-52.2%	14	14	14
SR11	San Diego	0	5	51	51		46	936.7%		15	15
TOTALS		3,674,311	3,920,008	2,680,619	-993,693	-27.0%	-1,239,389	-31.6%			