

District 11 Mobility Performance Report

2021 First Quarter

DEPARTMENT OF TRANSPORTATION

April 28, 2021
District 11- Traffic System Performance

District 11 Mobility Performance Report

2021 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 3,338,330 residents and Imperial County with approximately 181,215 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 2021, the total delay equaled 0.8 million VHD at the 35mph speed threshold, and 2.3 million VHD at the 60mph threshold. The average weekday delay experienced in this quarter was approximately 10 thousand VHD at 35 mph, and 32 thousand VHD at 60 mph.

Top Ten Bottlenecks for the 2021 First Quarter:

County	Shift	Fwy	Direction	Name	Abs PM	CA PM	Latitude	Longitude	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (mins)
San Diego	PM	I15-N	N	15 NB N-O Mission Rd	52.35	52.09	33.41	-117.16	34	4.61	38,889.50	4,575.00
San Diego	PM	SR125-S	S	GROSSMONT BLVD	17.42	15.015	32.76	-117.01	58	1.40	30,833.10	7,705.00
San Diego	PM	I5-S	S	N-O CMNO DE LA PLAZA	0.22	.311	32.54	-117.03	40	0.73	30,097.60	8,050.00
San Diego	PM	SR78-E	E	Twin Oaks Valley Rd	13.02	13.022	33.14	-117.16	51	3.42	27,090.40	4,615.00
San Diego	PM	SR125-N	N	125 NB CONNECTOR	16.97	15.216	32.77	-117.00	52	2.60	26,514.10	4,705.00
San Diego	PM	I805-S	S	805 SB N-O 15	15.17	15.321	32.74	-117.12	49	2.14	23,912.10	3,565.00
San Diego	PM	I5-N	N	Del Mar Heights Rd	34.03	34.142	32.95	-117.24	53	0.71	21,585.30	10,640.00
San Diego	PM	SR78-E	E	Barham Dr	14.86	14.86	33.14	-117.13	29	4.76	21,089.70	2,415.00
San Diego	PM	I805-S	S	805 SB @ 15	14.70	14.852	32.73	-117.11	34	3.71	21,049.70	2,435.00
San Diego	PM	I5-N	N	Cannon Rd	48.00	48.104	33.14	-117.33	21	4.85	20,872.40	1,835.00

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>2020 Q1</td><td>3.27</td></tr> <tr><td>2020 Q4</td><td>3</td></tr> <tr><td>2021 Q1</td><td>2.99</td></tr> </table>	Period	Value	2020 Q1	3.27	2020 Q4	3	2021 Q1	2.99	Over one year ago	Over last quarter
		Period	Value								
		2020 Q1	3.27								
2020 Q4	3										
2021 Q1	2.99										
-8.5%	-0.4%										
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>2020 Q1</td><td>2.7</td></tr> <tr><td>2020 Q4</td><td>0.6</td></tr> <tr><td>2021 Q1</td><td>0.8</td></tr> </table>	Period	Value	2020 Q1	2.7	2020 Q4	0.6	2021 Q1	0.8	Over one year ago	Over last quarter
		Period	Value								
		2020 Q1	2.7								
2020 Q4	0.6										
2021 Q1	0.8										
-71.5%	27.9%										
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>2020 Q1</td><td>40</td></tr> <tr><td>2020 Q4</td><td>8</td></tr> <tr><td>2021 Q1</td><td>10</td></tr> </table>	Period	Value	2020 Q1	40	2020 Q4	8	2021 Q1	10	Over one year ago	Over last quarter
		Period	Value								
		2020 Q1	40								
2020 Q4	8										
2021 Q1	10										
-74.7%	27.8%										
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>2020 Q1</td><td>5.7</td></tr> <tr><td>2020 Q4</td><td>2</td></tr> <tr><td>2021 Q1</td><td>2.3</td></tr> </table>	Period	Value	2020 Q1	5.7	2020 Q4	2	2021 Q1	2.3	Over one year ago	Over last quarter
		Period	Value								
		2020 Q1	5.7								
2020 Q4	2										
2021 Q1	2.3										
-58.9%	19.2%										
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>2020 Q1</td><td>84</td></tr> <tr><td>2020 Q4</td><td>27</td></tr> <tr><td>2021 Q1</td><td>32</td></tr> </table>	Period	Value	2020 Q1	84	2020 Q4	27	2021 Q1	32	Over one year ago	Over last quarter
		Period	Value								
		2020 Q1	84								
2020 Q4	27										
2021 Q1	32										
-62%	18.5%										

Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph		Largest Magnitude Decrease over one year ago Tuesday -71.5% ↓	Largest Magnitude Decrease over last quarter -
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		Largest Magnitude Weekday Decrease over one year ago 5 PM -73.1% ↓	Largest Magnitude Weekday Decrease over last quarter 10 PM -53.6% ↓
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		Largest Magnitude Saturday Decrease over one year ago 11 AM -57.2% ↓	Largest Magnitude Saturday Decrease over last quarter 8 AM -28.4% ↓
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/Holidays		Largest Magnitude Sun./Holiday Decrease over one year ago 11 AM -15.6% ↓	Largest Magnitude Sun./Holiday Decrease over last quarter 9 AM -44.9% ↓
		Largest Magnitude Increase over one year ago Sun/Hol 4.4% ↑	Largest Magnitude Increase over last quarter Thursday 31.3% ↑
		Largest Magnitude Weekday Increase over one year ago 2 AM 40.4% ↑	Largest Magnitude Weekday Increase over last quarter 4 PM 44.7% ↑
		Largest Magnitude Saturday Increase over one year ago 8 PM 124% ↑	Largest Magnitude Saturday Increase over last quarter 12 PM 53.4% ↑
		Largest Magnitude Sun./Holiday Increase over one year ago 4 PM 50% ↑	Largest Magnitude Sun./Holiday Increase over last quarter 2 PM 58.5% ↑

Measure	Graph	Percentage Change	
<p>Total Vehicle Hours of Delay (VHD) by County at 35 mph</p>	<p>Hours (Millions)</p> <p>■ 2020 Q1 ■ 2020 Q4 ■ 2021 Q1</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 -71.5% ↓</p>	<p>-</p>
		<p>Largest Magnitude Increase over one year ago</p>	<p>Largest Magnitude Increase over last quarter</p>
		<p>-</p>	<p>San Diego 27.9% ↑</p>
<p>Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph</p>	<p>Miles</p> <p>■ 2020 Q1 ■ 2020 Q4 ■ 2021 Q1</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 -63.5% ↓</p>	<p>-</p>
		<p>Largest Magnitude Increase over one year ago</p>	<p>Largest Magnitude Increase over last quarter</p>
		<p>-</p>	<p>PM Peak 21% ↑</p>
<p>Average Number of Good and Bad Detectors</p>	<p>Number of Detectors</p> <p>■ Average of Good ■ Average of Bad</p> <p>2020 Q1 2020 Q4 2021 Q1</p>	<p>Change in Good over one year ago</p>	<p>Change in Good over last quarter</p>
		<p>-9% ↓</p>	<p>-1% ↓</p>
		<p>Change in Bad over one year ago</p>	<p>Change in Bad over last quarter</p>
		<p>8% ↑</p>	<p>7% ↑</p>

Congestion by Route											
Route	County	Vehicle Hours of Delay at 35 mph			Difference 2021 Q1-2020 Q1		Difference 2021 Q1-2020 Q4		Rank		
		2020 Q1	2020 Q4	2021 Q1	Absolute	Percentage	Absolute	Percentage	2020 Q1	2020 Q4	2021 Q1
I5	San Diego	801,507	171,478	281,343	-520,164	-64.9%	109,865	64.1%	1	1	1
I15	San Diego	533,607	136,936	152,202	-381,406	-71.5%	15,266	11.1%	3	2	2
SR78	San Diego	189,365	93,635	94,678	-94,687	-50.0%	1,043	1.1%	4	3	3
I805	San Diego	542,661	53,382	72,011	-470,650	-86.7%	18,630	34.9%	2	5	4
SR125	San Diego	174,531	74,499	70,409	-104,122	-59.7%	-4,090	-5.5%	5	4	5
SR163	San Diego	81,877	20,151	30,560	-51,317	-62.7%	10,409	51.7%	7	6	6
I8	San Diego	144,116	20,141	17,117	-126,999	-88.1%	-3,024	-15.0%	6	7	7
I905	San Diego	6,298	11,646	15,893	9,595	152.3%	4,247	36.5%	11	8	8
SR52	San Diego	73,306	4,127	10,467	-62,839	-85.7%	6,340	153.6%	8	9	9
SR56	San Diego	63,724	1,570	10,278	-53,446	-83.9%	8,708	554.8%	9	13	10
SR76	San Diego	3,741	3,379	4,511	770	20.6%	1,132	33.5%	12	11	11
SR94	San Diego	63,380	2,887	4,472	-58,908	-92.9%	1,585	54.9%	10	12	12
SR54	San Diego	1,711	4,026	997	-715	-41.8%	-3,029	-75.2%	13	10	13
SR67	San Diego	746	429	200	-545	-73.2%	-229	-53.4%	14	14	14
SR11	San Diego	51	0	5	-46	-90.2%	5	4900.0%	15	15	15
TOTALS		2,680,619	598,286	765,141	-1,915,478	-71.5%	166,855	27.9%			