

District 11 Mobility Performance Report

2021 Fourth Quarter

DEPARTMENT OF TRANSPORTATION

January 25, 2022
: District 11- Traffic System Performance

District 11 Mobility Performance Report

2021 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 3,298,634 residents and Imperial County with approximately 179,702 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 2021, total delay equaled 2.6 million vehicle hours of delay (VHD) at the 35 mph speed threshold, and 5.7 million VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 34 thousand VHD at 35 mph, and 76 thousand VHD at 60 mph.

Top Ten Bottlenecks for the 2021 Fourth 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	I805-S	S	805 SB N-O 15	15.17	15.321	32.74	-117.12	55	7.38	245,892.20	12,335.00
San Diego	PM	I5-N	N	Cannon Rd	48.00	R48.104	33.14	-117.33	58	8.76	239,374.10	11,935.00
San Diego	PM	SR78-E	E	Twin Oaks Valley Rd	13.02	13.022	33.14	-117.16	59	3.88	68,127.30	7,730.00
San Diego	PM	I5-S	S	5th Ave	16.00	R16.11	32.72	-117.16	55	2.66	59,862.40	7,215.00
San Diego	PM	I15-N	N	15 NB N-O Mission Rd	52.35	R52.09	33.41	-117.16	38	5.24	57,343.50	5,665.00
San Diego	PM	I5-S	S	N-O CMNO DE LA PLAZA	0.22	R.311	32.54	-117.03	60	0.92	57,247.50	14,735.00
San Diego	PM	SR125-S	S	GROSSMONT BLVD	17.42	15.015	32.76	-117.01	57	1.40	46,842.80	7,985.00
San Diego	PM	I15-S	S	WB SR-274-BALBOA AVE	9.37	R9.196	32.82	-117.12	57	2.64	43,080.30	6,375.00
San Diego	PM	I5-N	N	N5 HOV SO Manchester	37.97	R38.081	33.01	-117.26	61	5.84	39,293.00	11,055.00
San Diego	PM	SR52-E	E	52 EB E-O I-15	7.84	7.84	32.84	-117.11	52	2.94	38,648.50	7,410.00

Quarterly Mobility Statistics

Measure	Graph	Percentage Change									
Vehicle Miles of Travel (VMT)	<p>Miles (Billions)</p> <table border="1"> <tr><th>Year/Quarter</th><th>Value</th></tr> <tr><td>2020 Q4</td><td>3</td></tr> <tr><td>2021 Q3</td><td>3.55</td></tr> <tr><td>2021 Q4</td><td>3.48</td></tr> </table>	Year/Quarter	Value	2020 Q4	3	2021 Q3	3.55	2021 Q4	3.48	Over one year ago	Over last quarter
		Year/Quarter	Value								
		2020 Q4	3								
2021 Q3	3.55										
2021 Q4	3.48										
15.8%	-2%										
↑	↓										
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Year/Quarter</th><th>Value</th></tr> <tr><td>2020 Q4</td><td>0.6</td></tr> <tr><td>2021 Q3</td><td>2.2</td></tr> <tr><td>2021 Q4</td><td>2.6</td></tr> </table>	Year/Quarter	Value	2020 Q4	0.6	2021 Q3	2.2	2021 Q4	2.6	Over one year ago	Over last quarter
		Year/Quarter	Value								
		2020 Q4	0.6								
2021 Q3	2.2										
2021 Q4	2.6										
328.4%	17.9%										
↑	↑										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year/Quarter</th><th>Value</th></tr> <tr><td>2020 Q4</td><td>8</td></tr> <tr><td>2021 Q3</td><td>27</td></tr> <tr><td>2021 Q4</td><td>34</td></tr> </table>	Year/Quarter	Value	2020 Q4	8	2021 Q3	27	2021 Q4	34	Over one year ago	Over last quarter
		Year/Quarter	Value								
		2020 Q4	8								
2021 Q3	27										
2021 Q4	34										
325.8%	25.5%										
↑	↑										
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Year/Quarter</th><th>Value</th></tr> <tr><td>2020 Q4</td><td>2</td></tr> <tr><td>2021 Q3</td><td>5</td></tr> <tr><td>2021 Q4</td><td>5.7</td></tr> </table>	Year/Quarter	Value	2020 Q4	2	2021 Q3	5	2021 Q4	5.7	Over one year ago	Over last quarter
		Year/Quarter	Value								
		2020 Q4	2								
2021 Q3	5										
2021 Q4	5.7										
193.5%	14.7%										
↑	↑										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year/Quarter</th><th>Value</th></tr> <tr><td>2020 Q4</td><td>27</td></tr> <tr><td>2021 Q3</td><td>64</td></tr> <tr><td>2021 Q4</td><td>76</td></tr> </table>	Year/Quarter	Value	2020 Q4	27	2021 Q3	64	2021 Q4	76	Over one year ago	Over last quarter
		Year/Quarter	Value								
		2020 Q4	27								
2021 Q3	64										
2021 Q4	76										
181.3%	18.8%										
↑	↑										

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
		-	Saturday -5.9% ↓
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 AM -40.3% ↓
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
		-	2 PM -39.7% ↓
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
		-	1 PM -25.8% ↓
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Thursday 233% ↑	Wednesday 37.8% ↑
		5 PM 335.3% ↑	5 PM 27.4% ↑
		12 PM 267% ↑	5 PM 20.5% ↑
		1 PM 458.2% ↑	5 PM 94.7% ↑

Measure	Graph	Percentage Change	
<p>Total Vehicle Hours of Delay (VHD) by County at 35 mph</p>	<p>Hours (Millions)</p> <p>■ 2020 Q4 ■ 2021 Q3 ■ 2021 Q4</p> <p>San Diego</p>	<p>Largest Magnitude Decrease over one year ago</p> <p>–</p>	<p>Largest Magnitude Decrease over last quarter</p> <p>–</p>
		<p>Largest Magnitude Increase over one year ago</p>	<p>Largest Magnitude Increase over last quarter</p>
		<p>San Diego ↑ 328.4%</p>	<p>San Diego ↑ 17.9%</p>
<p>Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph</p>	<p>Miles</p> <p>■ 2020 Q4 ■ 2021 Q3 ■ 2021 Q4</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>–</p>	<p>Largest Magnitude Decrease over last quarter</p> <p>–</p>
		<p>Largest Magnitude Increase over one year ago</p>	<p>Largest Magnitude Increase over last quarter</p>
		<p>PM Peak ↑ 292.7%</p>	<p>Off-Peak Night ↑ 728.9%</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 Q4 2021 Q3 2021 Q4</p>	<p>Change in Good over one year ago</p> <p>-8% ↓</p>	<p>Change in Good over last quarter</p> <p>-5.7% ↓</p>
		<p>Change in Bad over one year ago</p> <p>47% ↑</p>	<p>Change in Bad over last quarter</p> <p>29% ↑</p>

Congestion by Route											
Route	County	Vehicle Hours of Delay at 35 mph			Difference 2021 Q4-2020 Q4		Difference 2021 Q4-2021 Q3		Rank		
		2020 Q4	2021 Q3	2021 Q4	Absolute	Percentage	Absolute	Percentage	2020 Q4	2021 Q3	2021 Q4
I5	San Diego	171,478	1,007,485	981,897	810,419	472.6%	-25,588	-2.5%	1	1	1
I805	San Diego	53,382	264,212	526,283	472,901	885.9%	262,071	99.2%	5	3	2
I15	San Diego	136,936	361,559	388,837	251,901	184.0%	27,278	7.5%	2	2	3
SR78	San Diego	93,635	180,423	209,307	115,673	123.5%	28,884	16.0%	3	4	4
SR125	San Diego	74,499	132,494	154,345	79,846	107.2%	21,851	16.5%	4	5	5
I8	San Diego	20,141	71,720	92,451	72,310	359.0%	20,731	28.9%	7	6	6
SR52	San Diego	4,127	55,488	73,701	69,574	1685.7%	18,214	32.8%	9	7	7
SR163	San Diego	20,151	35,528	58,279	38,128	189.2%	22,751	64.0%	6	8	8
SR94	San Diego	2,887	23,050	35,383	32,496	1125.5%	12,333	53.5%	12	9	9
SR56	San Diego	1,570	22,464	31,863	30,293	1929.9%	9,399	41.8%	13	10	10
SR76	San Diego	3,379	4,367	4,012	633	18.7%	-355	-8.1%	11	13	11
I905	San Diego	11,646	7,977	3,226	-8,420	-72.3%	-4,751	-59.6%	8	11	12
SR54	San Diego	4,026	6,519	2,857	-1,169	-29.0%	-3,662	-56.2%	10	12	13
SR67	San Diego	429	357	679	249	58.0%	321	89.9%	14	14	14
SR11	San Diego	0	0	2	2	2200.0%	2		15		15
TOTALS		598,286	2,173,643	2,563,122	1,964,837	328.4%	389,480	17.9%			