

District 11 Mobility Performance Report

2023 First Quarter

DEPARTMENT OF TRANSPORTATION

April 28, 2023

: District 11- Traffic System Performance

District 11 Mobility Performance Report

2023 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 3,286,069 residents and Imperial County with approximately 179,851 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 2023, total delay equaled 2.3 million vehicle hours of delay (VHD) at the 35 mph speed threshold, and 5.2 million VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 35 thousand VHD at 35 mph, and 77 thousand VHD at 60 mph.

Top Ten Bottlenecks for the 2023 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	I805-S	S	805 SB N-O 15	15.23	15.38	32.74	-117.12	58	7.00	239,460.60	11,510.00
San Diego	PM	I15-N	N	15 NB 1.5 Mi N-O Mission Rd	52.35	52.09	33.41	-117.16	50	4.24	101,809.60	9,465.00
San Diego	PM	SR125-S	S	Grossmont Blvd to 125 SB	1.83	0	32.59	-116.97	61	4.21	81,474.60	9,885.00
San Diego	PM	I5-S	S	Clairemont Dr EB to 5 SB	21.97	22.082	32.79	-117.21	43	5.48	75,251.40	5,305.00
San Diego	PM	SR78-E	E	Twin Oaks Villy Rd to 78 EB	12.98	12.988	33.14	-117.16	62	3.88	64,610.20	7,710.00
San Diego	PM	SR52-E	E	52 EB W-O 15	7.25	7.245	32.84	-117.12	65	1.50	62,108.60	9,510.00
San Diego	PM	SR163-N	N	163 NB S-O I-8	2.79	3.34	32.76	-117.16	65	2.90	57,505.50	10,725.00
San Diego	PM	I5-S	S	5th Ave to 5 SB	16.00	16.11	32.72	-117.16	58	2.59	53,610.50	6,080.00
San Diego	PM	I15-S	S	15 SB S-O Balboa Ave	8.83	8.662	32.81	-117.11	54	3.20	47,962.30	4,760.00
San Diego	PM	I15-S	S	Balboa Ave WB to 15 SB	9.37	9.195	32.82	-117.12	60	2.58	44,757.90	6,430.00

Quarterly Mobility Statistics

Measure	Graph	Percentage Change									
Vehicle Miles of Travel (VMT)	<table><thead><tr><th>Quarter</th><th>VMT (Billions)</th></tr></thead><tbody><tr><td>2022 Q1</td><td>3.34</td></tr><tr><td>2022 Q4</td><td>3.47</td></tr><tr><td>2023 Q1</td><td>3.39</td></tr></tbody></table>	Quarter	VMT (Billions)	2022 Q1	3.34	2022 Q4	3.47	2023 Q1	3.39	Over one year ago	Over last quarter
		Quarter	VMT (Billions)								
		2022 Q1	3.34								
2022 Q4	3.47										
2023 Q1	3.39										
1.3%	-2.3%										
Total Vehicle Hours of Delay (VHD) at 35 mph	<table><thead><tr><th>Quarter</th><th>VHD (Millions)</th></tr></thead><tbody><tr><td>2022 Q1</td><td>1.7</td></tr><tr><td>2022 Q4</td><td>2.4</td></tr><tr><td>2023 Q1</td><td>2.3</td></tr></tbody></table>	Quarter	VHD (Millions)	2022 Q1	1.7	2022 Q4	2.4	2023 Q1	2.3	Over one year ago	Over last quarter
		Quarter	VHD (Millions)								
		2022 Q1	1.7								
2022 Q4	2.4										
2023 Q1	2.3										
33.3%	-3.9%										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<table><thead><tr><th>Quarter</th><th>VHD (Thousands)</th></tr></thead><tbody><tr><td>2022 Q1</td><td>24</td></tr><tr><td>2022 Q4</td><td>36</td></tr><tr><td>2023 Q1</td><td>35</td></tr></tbody></table>	Quarter	VHD (Thousands)	2022 Q1	24	2022 Q4	36	2023 Q1	35	Over one year ago	Over last quarter
		Quarter	VHD (Thousands)								
		2022 Q1	24								
2022 Q4	36										
2023 Q1	35										
44.6%	-2.4%										
Total Vehicle Hours of Delay (VHD) at 60 mph	<table><thead><tr><th>Quarter</th><th>VHD (Millions)</th></tr></thead><tbody><tr><td>2022 Q1</td><td>4.1</td></tr><tr><td>2022 Q4</td><td>5.1</td></tr><tr><td>2023 Q1</td><td>5.2</td></tr></tbody></table>	Quarter	VHD (Millions)	2022 Q1	4.1	2022 Q4	5.1	2023 Q1	5.2	Over one year ago	Over last quarter
		Quarter	VHD (Millions)								
		2022 Q1	4.1								
2022 Q4	5.1										
2023 Q1	5.2										
25.7%	2.4%										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<table><thead><tr><th>Quarter</th><th>VHD (Thousands)</th></tr></thead><tbody><tr><td>2022 Q1</td><td>58</td></tr><tr><td>2022 Q4</td><td>74</td></tr><tr><td>2023 Q1</td><td>77</td></tr></tbody></table>	Quarter	VHD (Thousands)	2022 Q1	58	2022 Q4	74	2023 Q1	77	Over one year ago	Over last quarter
		Quarter	VHD (Thousands)								
		2022 Q1	58								
2022 Q4	74										
2023 Q1	77										
33%	3.7%										

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
		Saturday -13.7%	Thursday -7.2%
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
		9 PM -36.6%	5 PM -10.3%
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
		12 PM -27.4%	5 PM -8.4%
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 -63.3%	4 PM -60%
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		8 AM 213.5%	8 PM 150.1%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph	Hours (Millions) ■ 2022 Q1 ■ 2022 Q4 ■ 2023 Q1 San Diego	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		—	San Diego -3.9%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		San Diego 33.3%	—
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph	Miles ■ 2022 Q1 ■ 2022 Q4 ■ 2023 Q1 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)	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		—	Off-Peak Night -1.4%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		PM Peak 44.5%	AM Peak 22.2%
Average Number of Good and Bad Detectors	Number of Detectors ■ Average of Good ■ Average of Bad 2022 Q1 2022 Q4 2023 Q1	Change in Good over one year ago	Change in Good over last quarter
		-15%	-8%
		Change in Bad over one year ago	Change in Bad over last quarter
		39%	16%

Route	County	Vehicle Hours of Delay at 35 mph			Difference 2023 Q1-2022 Q1		Difference 2023 Q1-2022 Q4		Rank		
		2022 Q1	2022 Q4	2023 Q1	Absolute	Percentage	Absolute	Percentage	2022 Q1	2022 Q4	2023 Q1
I5	San Diego	655,931	636,251	551,449	-104,482	-15.9%	-84,802	-13.3%	1	1	1
I15	San Diego	274,910	381,677	469,666	194,756	70.8%	87,989	23.1%	3	3	2
I805	San Diego	298,328	433,089	467,808	169,481	56.8%	34,719	8.0%	2	2	3
SR78	San Diego	114,223	224,990	252,194	137,972	120.8%	27,205	12.1%	5	5	4
I8	San Diego	81,560	97,485	153,107	71,547	87.7%	55,623	57.1%	6	7	5
SR52	San Diego	60,783	105,180	141,512	80,729	132.8%	36,331	34.5%	7	6	6
SR125	San Diego	146,157	347,304	96,412	-49,745	-34.0%	-250,892	-72.2%	4	4	7
SR163	San Diego	44,851	78,992	67,492	22,641	50.5%	-11,500	-14.6%	8	8	8
SR56	San Diego	24,551	48,769	60,943	36,392	148.2%	12,174	25.0%	10	9	9
SR94	San Diego	29,356	46,012	46,138	16,782	57.2%	126	0.3%	9	10	10
I905	San Diego	10,915	14,066	9,888	-1,027	-9.4%	-4,178	-29.7%	11	11	11
SR67	San Diego	409	1,993	6,506	6,097	1491.0%	4,512	226.4%	14	13	12
SR54	San Diego	1,342	6,499	4,286	2,944	219.4%	-2,213	-34.1%	13	12	13
SR11	San Diego	8	15	2	-6	-78.8%	-14	-89.0%	15	15	14
SR76	San Diego	2,433	332	1	-2,432	-100.0%	-331	-99.7%	12	14	15
TOTALS		1,745,756	2,422,654	2,327,404	581,647	33.3%	-95,251	-3.9%			