District 12
Mobility Performance Report

2023 2nd Quarter

EXECUTIVE SUMMARY

Overview

Caltrans District 12 (Orange County) is located in southern California and is adjacent to District 7 (Los Angeles), District 8 (San Bernardino), and District 11 (San Diego). As of April 1, 2020, the total population in Orange County was 3,010,232. Orange County encompasses 794 square miles, and includes 34 cities, and 17 State highway routes. The county has 1,059 lane miles of general purpose lanes and 226 lane miles of High-Occupancy Vehicle (HOV) lanes, which is one of California's largest HOV lane networks. Orange County is the third most populous county in California, the sixth-most populous in the United States, and more populous than twenty-one U.S. states. Its county seat is Santa Ana. It is the second most densely populated county in the state.

The Mobility Performance quarterly analysis compares information from the most recent quarter and the previous 4 quarters, involving the following performance measures:

- o Vehicle Miles of Travel (VMT)

- o Vehicle Hours of Delay (VHD)

- o Lost Lane Miles (LLM)

- o 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 Mobility Performance Report uses congestion at two speed thresholds: delay from vehicles traveling below 35 MPH and delay from vehicles traveling

below 60 MPH. The 35 MPH limit represents severe congestion while the 60 MPH limit represents light and heavy congestion. These thresholds/limits are set by Caltrans and are based upon engineering experience and District input.

FINDINGS

In the 2nd quarter of 2023, total delay equaled to 1.5 million vehicle hours of delay (VHD) at the 35 MPH speed threshold and 5.2 million VHD at 60 MPH threshold. Compared to the previous quarter, there was a 1.1 percent decrease in 35 MPH VHD and 4.3 percent decrease in 60 MPH VHD.

The average weekday VHD experienced in this quarter was approximately 20 thousand VHD at 35 MPH and 67 thousand VHD at 60 MPH. Compared to the previous quarter, there was 12.2 percent decrease in 35 MPH VHD and 11.9 percent decrease in 60 mph VHD.

Top 10 Bottlenecks for the 2nd Quarter of 2023

Co	Shift	Fwy	Dir	Name	Abs PM	CA PM	Latitude	Longitude	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (mins)
Ora	PM	I405	N	LOCATION 5013 NB	12.89	13.122	33.70	-117.94	64	2.85	94,720	9,615
Ora	PM	I405	N	TMS 2417 NB	20.81	21.039	33.77	-118.05	64	2.79	87,610	14,275
Ora	PM	SR57	N	TONNER	11.27	22	33.94	-117.88	64	1.56	57,364	14,630
Ora	PM	SR91	E	LAKEVIEW1	28.45	R10.08	33.85	-117.81	58	3.06	38,270	10,845
Ora	PM	SR55	N	TAFT	15.78	15.8	33.82	-117.83	61	3.11	37,043	11,680
Ora	AM	I5	S	MAIN 1	105.19	33	33.77	-117.87	63	0.86	27,942	11,515
Ora	PM	I5	N	RED HILL	101.49	29.24	33.73	-117.82	64	2.07	24,395	15,590
Ora	PM	I5	N	1ST	103.05	30.8	33.74	-117.84	60	0.47	23,285	9,795
Ora	PM	I5	N	CULVER 1	98.82	R26.56	33.71	-117.78	41	1.97	19,119	8,825
Ora	PM	SR91	E	W OF SCALES	31.72	R13.349	33.87	-117.76	49	3.50	18,283	5,815

2023 Q2 Quarterly Mobility Statistics

Measure	Graph	Percentage Change	
		Over one year ago	Over last quarter
Vehicle Miles of Travel (VMT)	Miles (Billions) 2022 Q2: 3.28 2023 Q1: 3.17 2023 Q2: 3.38	2.9% ↑	6.6% ↑
Total Vehicle Hours of Delay (VHD) at 35 mph	Hours (Millions) 2022 Q2: 1.4 2023 Q1: 1.6 2023 Q2: 1.5	8.4% ↑	-1.1% ↓
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	Hours (Thousands) 2022 Q2: 18 2023 Q1: 23 2023 Q2: 20	7.9% ↑	-12.2% ↓
Total Vehicle Hours of Delay (VHD) at 60 mph	Hours (Millions) 2022 Q2: 4.9 2023 Q1: 5.5 2023 Q2: 5.2	7.6% ↑	-4.3% ↓
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	Hours (Thousands) 2022 Q2: 64 2023 Q1: 76 2023 Q2: 67	5.2% ↑	-11.9% ↓

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Measure	Graph	Percentage Change	
		Over one year ago	Over last quarter
Vehicle Miles of Travel (VMT)	Miles (Billions) 2022 Q2: 3.28, 2023 Q1: 3.17, 2023 Q2: 3.38	2.9% ⬆	6.6% ⬆
Total Vehicle Hours of Delay (VHD) at 35 mph	Hours (Millions) 2022 Q2: 1.4, 2023 Q1: 1.6, 2023 Q2: 1.5	8.4% ⬆	-1.1% ⬇
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	Hours (Thousands) 2022 Q2: 18, 2023 Q1: 23, 2023 Q2: 20	7.9% ⬆	-12.2% ⬇
Total Vehicle Hours of Delay (VHD) at 60 mph	Hours (Millions) 2022 Q2: 4.9, 2023 Q1: 5.5, 2023 Q2: 5.2	7.6% ⬆	-4.3% ⬇
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	Hours (Thousands) 2022 Q2: 64, 2023 Q1: 76, 2023 Q2: 67	5.2% ⬆	-11.9% ⬇

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph	Hours (Millions) 1.43, 1.56, 1.55 — Orange 0, 0, 0 Legend: 2022 Q2, 2023 Q1, 2023 Q2	**Largest Magnitude Decrease over one year ago** — **Largest Magnitude Increase over one year ago** Orange 8.4% ⬆	**Largest Magnitude Decrease over last quarter** Orange -1.1% ⬇ **Largest Magnitude Increase over last quarter** —
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph	Miles 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) Legend: 2022 Q2, 2023 Q1, 2023 Q2	**Largest Magnitude Decrease over one year ago** Off-Peak Day -14.1% ⬇ **Largest Magnitude Increase over one year ago** PM Peak 21% ⬆	**Largest Magnitude Decrease over last quarter** PM Peak -15.8% ⬇ **Largest Magnitude Increase over last quarter** Off-Peak Day 0.7% ⬆
Average Number of Good and Bad Detectors	Number of Detectors 2022 Q2: Good 4,161, Bad 1,567 2023 Q1: Good 3,685, Bad 2,043 2023 Q2: Good 3,754, Bad 1,974 Legend: Average of Good, Average of Bad	**Change in Good over one year ago** -10% ⬇ **Change in Bad over one year ago** 26% ⬆	**Change in Good over last quarter** 2% ⬆ **Change in Bad over last quarter** -3% ⬇

		Vehicle Hours of Delay at 35 mph			Difference 2023 Q2-2022 Q2		Difference 2023 Q2-2023 Q1		Rank		
Route	County	2022 Q2	2023 Q1	2023 Q2	Absolute	Percentage	Absolute	Percentage	2022 Q2	2023 Q1	2023 Q2
I5	Orange	456,073	420,637	423,119	-32,954	-7.2%	2,483	0.6%	1	1	1
SR91	Orange	292,077	380,644	351,134	59,057	20.2%	-29,509	-7.8%	2	2	2
I405	Orange	236,682	303,029	284,571	47,889	20.2%	-18,458	-6.1%	3	3	3
SR55	Orange	181,798	194,124	240,421	58,623	32.2%	46,296	23.8%	4	4	4
SR57	Orange	151,408	170,253	170,352	18,944	12.5%	100	0.1%	5	5	5
SR22	Orange	70,513	62,374	34,900	-35,613	-50.5%	-27,474	-44.0%	6	6	6
SR241	Orange	16,936	20,098	23,092	6,156	36.4%	2,994	14.9%	7	7	7
SR73	Orange	12,807	8,407	8,981	-3,826	-29.9%	574	6.8%	8	8	8
I605	Orange	5,311	2,183	8,848	3,537	66.6%	6,665	305.3%	9	9	9
SR261	Orange	28	1,299	759	731	2610.7%	-540	-41.6%	13	10	10
SR133	Orange	2,163	1,038	283	-1,880	-86.9%	-755	-72.7%	10	11	11
SR74	Orange	298	5	5	-293	-98.3%	0	0.0%	12	12	12
SR142	Orange	722	3	3	-719	-99.6%	0	0.0%	11	13	13
SR1	Orange	0	0	0	0		0				
TOTALS		1,426,816	1,564,092	1,546,468	119,653	8.4%	-17,624	-1.1%			

Congestion by Route