# District 12 Mobility Performance Report

2023 1st Quarter

## **DEPARTMENT OF TRANSPORTATION**

April 29, 2023 District 12 Traffic Operations Northwest

# **EXECUTIVE SUMMARY**

### Overview

Caltrans District 12 (Orange County) is located in southern California and is neighbors with 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. The jurisdictional boundaries of Orange County encompass a metropolitan area of 794 square miles, including 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 sixthmost 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.

2023 1st Ouarter

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

- Vehicle Miles of Travel (VMT)
- Vehicle Hours of Delay (VHD)
- Lost Lane Miles (LLM)
- **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 1<sup>st</sup> guarter of 2023, total delay equaled to 1.6 million vehicle hours of delay (VHD) at the 35 MPH speed threshold and 5.5 million VHD at 60 MPH threshold. Compared to the previous quarter, there was a 6.4 percent increase in 35 MPH VHD and 10.2 percent increase in 60 MPH VHD.

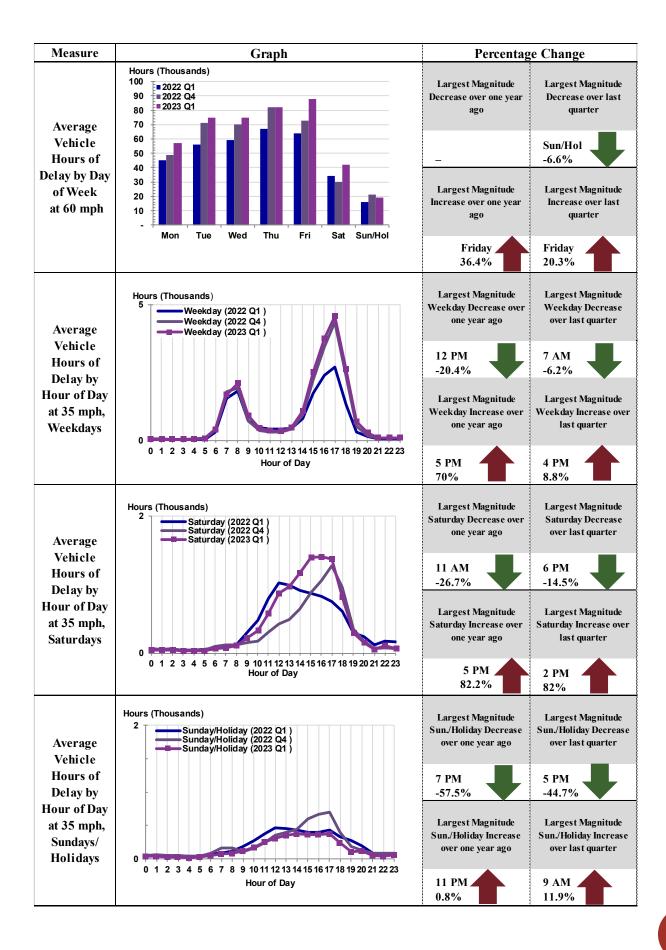
The average weekday VHD experienced in this quarter was approximately 23 thousand VHD at 35 MPH and 76 thousand VHD at 60 MPH. Compared to the previous quarter, there was 8.4 percent increase in 35 MPH VHD and 10.7 percent increase in 60 mph VHD.

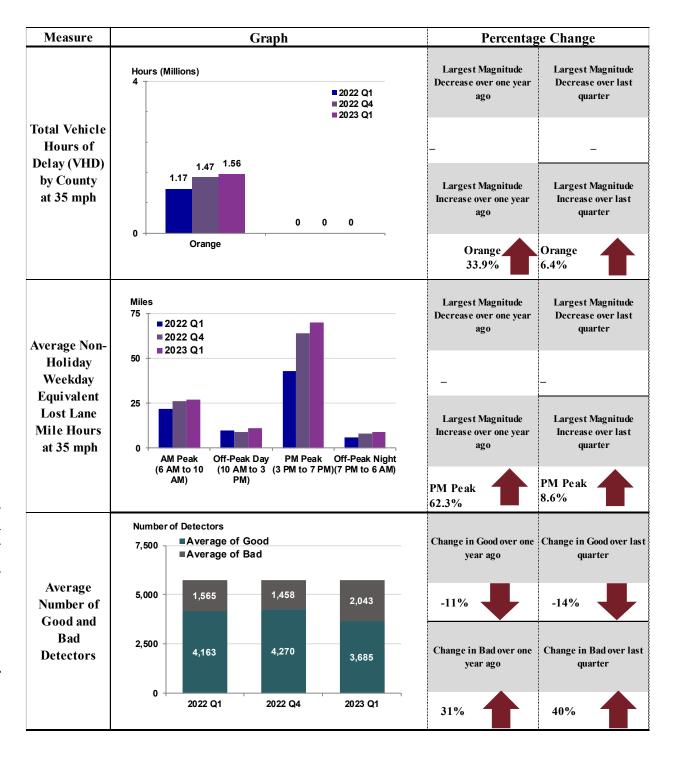
Top 10 Bottlenecks for the 1<sup>st</sup> Quarter of 2023

								#	Avg	Total	Total
				Abs	CA			Days	Extent	Delay	Duration
Co	Shift	Fwy	Name	PM	PM	Latitude	Longitude	Active	(Miles)	(veh-hrs)	(mins)
Ora	PM	1405-N	TMS 2417 NB	20.809	21.039	33.77	-118.05	64	3.89	107,107.50	13,290.00
Ora	PM	1405-N	LOCATION 5013 NB	12.892	13.122	33.70	-117.94	61	2.54	77,976.70	8,950.00
Ora	PM	SR57-N	TONNER	11.266	22.000	33.94	-117.88	64	1.47	61,987.50	15,045.00
Ora	PM	15-N	1ST	103.051	30.800	33.74	-117.84	65	0.51	44,774.20	17,225.00
Ora	PM	SR91-E	LAKEVIEW1	28.453	R10.080	33.85	-117.81	54	3.09	38,792.70	11,130.00
Ora	AM	1405-S	BROOKHURST2	13.580	13.810	33.71	-117.95	52	4.68	34,844.30	5,605.00
Ora	PM	SR55-N	TAFT	15.782	15.800	33.82	-117.83	55	2.98	31,987.20	10,525.00
Ora	AM	15-S	MAIN 1	105.188	33.000	33.77	-117.87	61	0.64	26,083.60	10,090.00
Ora	PM	15-N	RED HILL	101.491	29.240	33.73	-117.82	56	1.92	20,129.40	6,210.00
Ora	PM	SR91-E	West OF GYPSUM	34.143	R15.793	33.87	-117.72	55	2.13	19,088.90	9,805.00

# 2023 Q1 Quarterly Mobility Statistics

Measure	Graph	Percentage Change			
	Miles (Billions)	Over one year ago	Over last quarter		
Vehicle Miles of Travel (VMT)	3 2022 Q1 2022 Q4 2023 Q1 3.11 3.27 3.17	1.8%	-3.1%		
	0		•		
Total Vehicle	Hours (Millions)  2	Over one year ago	Over last quarter		
Hours of Delay (VHD) at 35 mph	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	33.9%	6.4%		
	0 0 0		1		
Average Non- Holiday Weekday	Hours (Thousands)  2023 Q1  25  2022 Q4  21  2022 Q1	Over one year ago	Over last quarter		
Vehicle Hours of	15	41.4%	8.4%		
Delay (VHD) at 35 mph	5 0	1	1		
Total Vehicle	Hours (Millions)	Over one year ago	Over last quarter		
Hours of Delay (VHD) at 60 mph	2022 Q4 2023 Q1 2022 Q1 5.5	28.8%	10.2%		
•	0				
Average Non- Holiday	Hours (Thousands)  100  2022 Q4  76	Over one year ago	Over last quarter		
Weekday Vehicle Hours of	2022 Q1 69 58	30.2%	10.7%		
Delay (VHD) at 60 mph		1			





Congestion by Route

Difference

2022 Q4-2021 Q4

-24.1%

3.2%

-5.4%

35.8%

20.1%

-41.8%

-18.9%

-58.0%

-16.6%

-65.2%

-84.3%

-99.8%

-99.7%

-7.5%

-127,236

10,167

-14,838

54,021

30,668

-40,862

-5,034

-19,023

-1,118

-2,766

-2,119

-119,616

-617

-859

0

Difference

2022 Q4-2022 Q3

15.6%

-3.4%

8.5%

15.2%

-10.4%

22.1%

58.8%

23.1%

53.8%

-59.1%

-29.0%

-95.9%

6.5%

0.0%

2022 Q3 | 2022 Q4 | Absolute | Percentage | Absolute | Percentage | 2021 Q4 | 2022 Q3 | 2022 Q4

54,134

-11,449

20,273

27,013

-21,160

10,298

8,020

2,577

1,960

-2,131

-47

-61

89,428

0

0

Rank

1

2

3

5

4

6

8

7

9

10

13

11

12

1

2

3

5

4

6

7

8

9

10

11

13

12

1

2

3

4

5

6

7

9

10

11

12

13

Vehicle Hours of Delay

at 35 mph

346,018

335,081

238,732

177,928

204,207

46,605

13,629

11,176

3,645

3,604

162

5

64

1,589,897 1,380,853 1,470,281

0

400,152

323,632

259,005

204,941

183,047

56,903

21,649

13,752

5,605

1,473

115

5

3

0

Route

SR91

I405

SR57

SR55

SR22

SR241

SR73

I605

SR133

SR261

SR74

SR1

SR142

TOTALS

I5

County 2021 Q4

Orange

527,388

313,466

273,842

150,920

152,379

97,765

26,683

32,775

6,723

4,239

2,124

732

861

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