# District 12 Mobility Performance Report

2021 4th Quarter

### **DEPARTMENT OF TRANSPORTATION**

January 31, 2022 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

2021 4th Ouarter

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

seat is Santa Ana. It is the second most densely populated county in the state.

- Vehicle Miles of Travel (VMT)
- 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 4<sup>th</sup> quarter of 2021, total delay equaled to 1.6 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 9.9 percent increase in 35 MPH VHD and 2.0 percent increase in 60 MPH VHD.

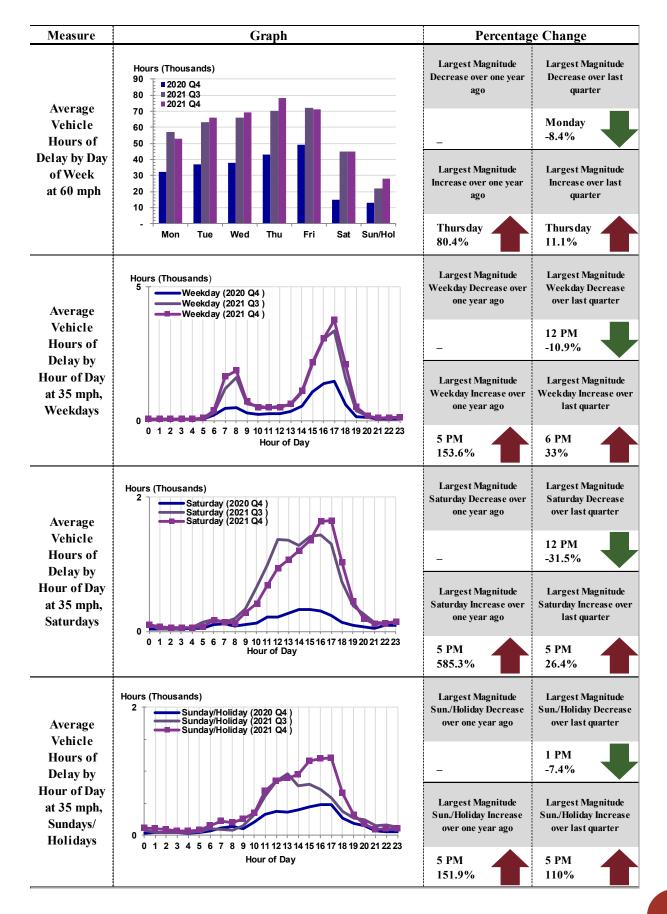
The average weekday VHD experienced in this quarter was approximately 20 thousand VHD at 35 MPH and 67 thousand VHD at 60 MPH. Compared to the previous quarter, there was 10.9 percent increase in 35 MPH VHD and 1.7 percent increase in 60 mph VHD.

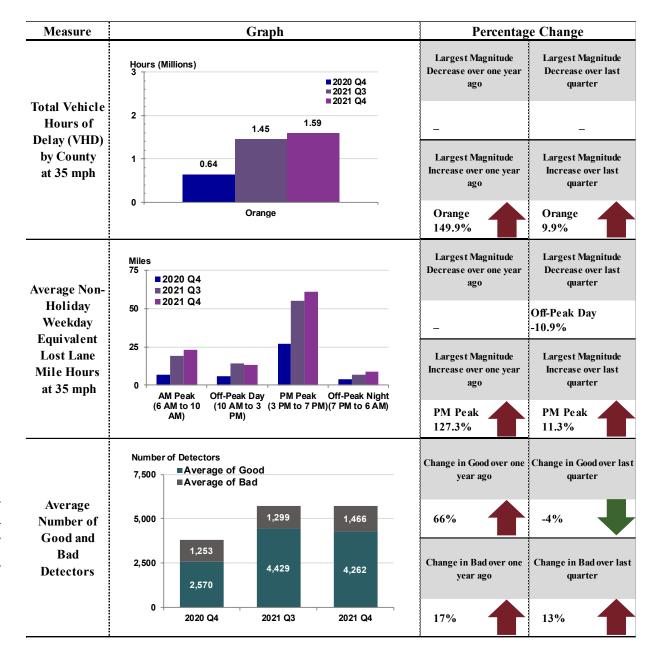
Top 10 Bottlenecks for the 4<sup>th</sup> Quarter of 2021

									#	Avg	Total	Total
					Abs	CA			Days	Extent	Delay	Duration
Со	Shift	Fwy	Dir	Name	PM	PM	Latitude	Longitude	Active	(Miles)	(veh-hrs)	(mins)
Ora	AM	1405	S	BROOKHURST2	13.58	13.81	33.71	-117.95	53	4.47	58,708.10	7,255.00
Ora	PM	1405	Ν	BROOKHUR1	13.51	13.74	33.70	-117.95	57	2.74	41,583.00	5,705.00
Ora	PM	SR91	Е	LAKEVIEW1	28.45	R10.08	33.85	-117.81	56	2.95	36,163.60	11,390.00
Ora	PM	15	Ν	TUSTIN RANCH	100.35	28.1	33.72	-117.80	60	2.83	35,437.00	14,030.00
Ora	PM	1405	Ν	LOCATION 5013 NB	12.89	13.122	33.70	-117.94	58	2.39	29,885.80	3,780.00
Ora	PM	SR55	Ν	TAFT	15.78	15.8	33.82	-117.83	54	2.97	27,912.30	10,495.00
Ora	AM	15	S	MAIN 1	105.19	33	33.77	-117.87	57	0.74	27,125.10	8,630.00
Ora	PM	1405	Ν	BEACH 2	16.53	16.76	33.73	-117.99	61	0.87	26,077.30	9,980.00
Ora	РМ	1405	N	MAGNOLIA1	14.94	15.17	33.72	-117.97	54	0.99	22,735.20	6,520.00
Ora	РМ	1405	N	TMS 5015 NB	15.43	15.66	33.72	-117.98	58	0.68	19,843.90	8,100.00

## 2021 Q4 Quarterly Mobility Statistics







$\mathcal{C}_{\mathbf{q}}$	
ಕ	
7	
<u>S</u>	
Δ	

Congestion by Route												
		Vehicle Hours of Delay at 35 mph			Difference 2021 Q4-2020 Q4		Difference 2021 Q4-2021 Q3		Rank			
Route	County	2020 Q4	2021 Q3	2021 Q4	Absolute	Percentage	Absolute	Percentage	2020 Q4	2021 Q3	2021 Q4	
I5	Orange	173,883	502,288	527,388	353,505	203.3%	25,100	5.0%	2	1	1	
SR91	Orange	188,132	314,623	313,466	125,334	66.6%	-1,157	-0.4%	1	2	2	
I405	Orange	93,118	246,875	273,842	180,724	194.1%	26,967	10.9%	3	3	3	
SR55	Orange	57,826	164,171	152,379	94,553	163.5%	-11,792	-7.2%	4	4	4	
SR57	Orange	53,220	111,640	150,920	97,700	183.6%	39,281	35.2%	5	5	5	
SR22	Orange	40,148	44,701	97,765	57,617	143.5%	53,063	118.7%	6	6	6	
SR73	Orange	20,844	34,415	32,775	11,932	57.2%	-1,640	-4.8%	7	7	7	
SR241	Orange	5,696	18,013	26,683	20,987	368.5%	8,670	48.1%	8	8	8	
I605	Orange	1,648	4,547	6,723	5,075	307.9%	2,175	47.8%	9	9	9	
SR133	Orange	957	1,841	4,239	3,282	343.0%	2,398	130.3%	10	11	10	
SR74	Orange	25	2,344	2,124	2,100	8534.6%	-220	-9.4%	12	10	11	
SR142	Orange	832	803	861	29	3.5%	58	7.2%	11	12	12	
SR261	Orange	9	132	732	724	8514.1%	600	454.7%	13	13	13	
SR1	Orange	0	0	0	0		0					
TOTALS		636,337	1,446,394	1,589,897	953,560	149.9%	143,503	9.9%				