District 12 Mobility Performance Report

2020 4th Quarter

DEPARTMENT OF TRANSPORTATION

January 29, 2021 District 12 Traffic Operations Northwest

DISTRICT 12 MOBILITY PERFORMANCE REPORT

2020 4th Quarter

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 July 2017, the total population in Orange County was 3,190,400. 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 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:

- 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 MPR 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.

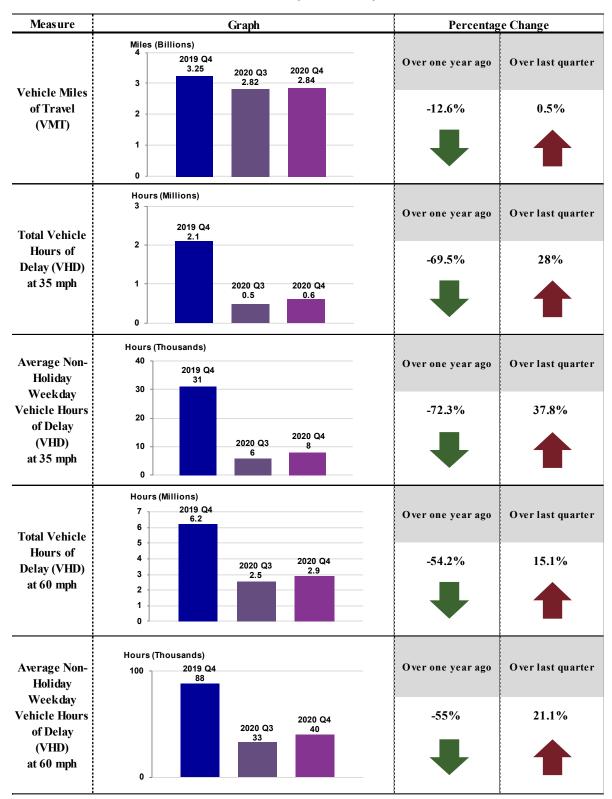
FINDINGS

In the 4th quarter, of 2020, total delay equaled to 0.64 million vehicle hours of delay (VHD) at the 35mph speed threshold and 2.85 million VHD at 60mph threshold. Compared to the second quarter, there was a 69.4 percent increase in 35mph VHD and 61.8 percent increase in 60mph VHD.

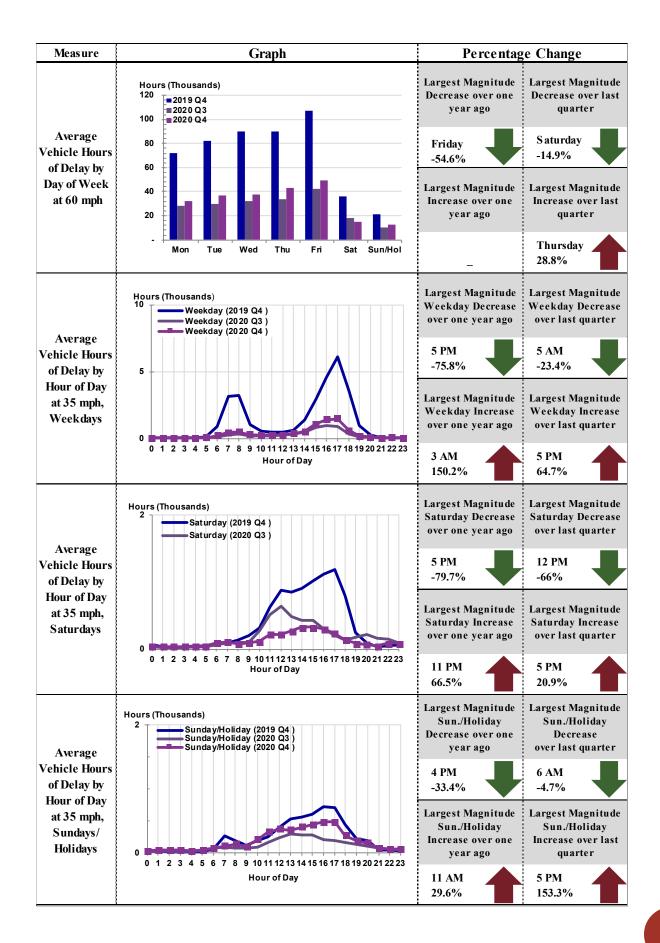
The average weekday VHD experienced in this quarter was approximately 8 thousands VHD at 35mph and 40 thousands VHD at 60mph. Compared to the third quarter, there was 37.8 percent increase in 35 mph VHD and 21.1 percent increase in 60 mph VHD.

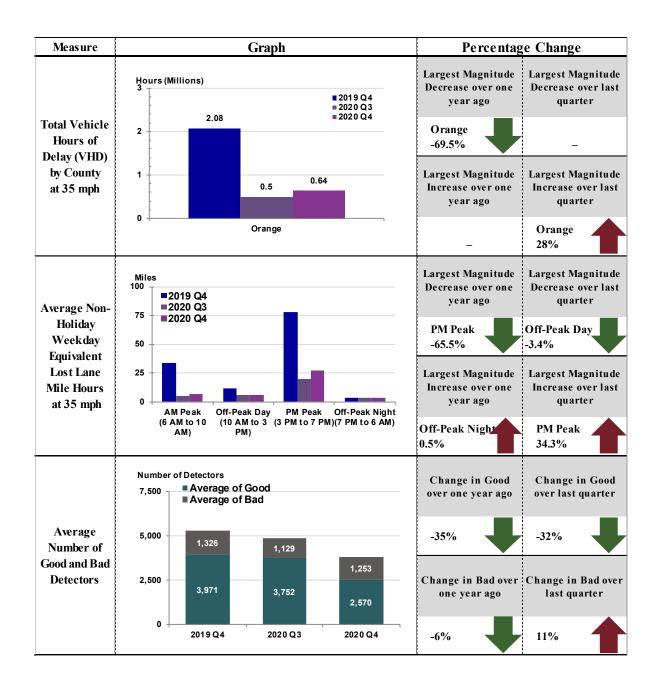
Co	Shift	Fwy	Dir	Abs PM	СА РМ	Latitude	Longitude	# Days Active	Avg Extent	Total Delay	Total Duration
									(Miles)	(veh-hrs)	(mins)
Ora	РM	I405	Ν	13.51	13.74	33.70	-117.95	51	2.24	27,199.10	5,375.00
Ora	РM	15	Ν	100.35	28.1	33.72	-117.80	59	3.62	24,277.90	10,275.00
Ora	ΡM	I405	Ν	11.37	11.6	33.69	-117.92	50	0.40	16,683.90	8,630.00
Ora	AM	15	S	105.19	33	33.77	-117.87	54	0.73	16,130.10	6,775.00
Ora	ΡM	I405	Ν	16.53	16.76	33.73	-117.99	61	0.70	13,849.10	11,450.00
Ora	РM	SR91	Е	34.14	R15.793	33.87	-117.72	52	2.51	12,170.00	4,935.00
Ora	РM	SR91	W	28.55	R10.14	33.85	-117.81	57	1.03	10,910.00	6,070.00
Ora	РM	15	Ν	100.35	28.1	33.72	-117.80	50	0.85	10,768.70	6,820.00
Ora	ΡM	I405	Ν	15.16	15.39	33.72	-117.97	57	0.50	10,148.20	10,060.00
Ora	РM	SR55	Ν	8.12	R8.12	33.71	-117.85	58	1.31	10,026.30	6,155.00

Top 10 Bottlenecks for the 4 th Quarter	c of 2020
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2020 Q4 Quarterly Mobility Statistics





Congestion by Route											
		Vehi	cle Hours of De at 35 mph	lay	Difference 2020 Q4-2019 Q4		Difference 2020 Q4-2020 Q3		Rank		
Route	County	2019 Q4	2020 Q3	2020 Q4	Absolute	Percentage	Absolute	Percentage	2019 Q4	2020 Q3	2020 Q4
SR91	Orange	345,495	147,772	188,132	-157,363	-45.5%	40,360	27.3%	3	1	1
I5	Orange	528,946	127,369	173,883	-355,063	-67.1%	46,514	36.5%	1	2	2
I405	Orange	471,857	59,778	93,118	-378,740	-80.3%	33,339	55.8%	2	4	3
SR55	Orange	323,434	43,058	57,826	-265,607	-82.1%	14,769	34.3%	4	5	4
SR57	Orange	152,316	62,138	53,220	-99,096	-65.1%	-8,917	-14.4%	5	3	5
SR22	Orange	106,308	33,397	40,148	-66,160	-62.2%	6,751	20.2%	6	6	6
SR73	Orange	92,510	15,031	20,844	-71,667	-77.5%	5,812	38.7%	7	7	7
SR241	Orange	36,479	3,925	5,696	-30,783	-84.4%	1,771	45.1%	8	8	8
1605	Orange	9,425	1,846	1,648	-7,777	-82.5%	-198	-10.7%	9	10	9
SR133	Orange	9,213	2,233	957	-8,257	-89.6%	-1,276	-57.2%	10	9	10
SR142	Orange	4,630	534	832	-3,797	-82.0%	298	55.8%	11	11	11
SR74	Orange	3,662	171	25	-3,637	-99.3%	-147	-85.6%	12	12	12
SR261	Orange	456	51	9	-447	-98.1%	-42	-83.3%	13	13	13
SR1	Orange	0	0	0	0		0				
TOTALS		2,084,730	497,303	636,337	-1,448,393	-69.5%	139,034	28.0%			