

District 12 Mobility Performance Report

2024 3rd Quarter

DEPARTMENT OF TRANSPORTATION

October 31, 2024

District 12 Traffic Operations Northwest

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:

- 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 3rd quarter of 2024, 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 3 percent increase in 35 MPH VHD and 4.2 percent increase in 60 MPH VHD.

The average weekday VHD experienced in this quarter was approximately 21 thousand VHD at 35 MPH and 68 thousand VHD at 60 MPH. Compared to the previous quarter, there was 2 percent increase in 35 MPH VHD and 4.1 percent increase in 60 mph VHD.

Top 10 Bottlenecks for the 3rd Quarter of 2024

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	SR55	N	TAFT	15.78	15.8	33.82	-117.83	63	3.10	41,931	13,525
Ora	PM	I405	N	BROOKHUR2	13.74	13.97	33.71	-117.96	63	1.75	36,477	13,140
Ora	AM	I5	N	ALICIA 1	89.69	17.43	33.60	-117.69	63	1.94	35,840	9,575
Ora	AM	I5	S	MAIN 1	105.19	33	33.77	-117.87	63	1.17	35,672	11,220
Ora	PM	I5	N	ALICIA 1	89.69	17.43	33.60	-117.69	63	1.86	34,305	10,640
Ora	AM	I405	S	HARBOR 1	10.97	11.2	33.69	-117.92	51	1.99	28,099	5,050
Ora	PM	I5	S	RED ROBIN	91.53	19.33	33.62	-117.71	62	1.10	25,668	8,965
Ora	PM	SR55	N	NEWPORT AVE OR MVDS	9.76	R9.755	33.73	-117.83	60	1.14	24,599	8,795
Ora	AM	I5	S	CRESCENT	112.23	40.04	33.84	-117.95	54	1.82	24,144	5,220
Ora	AM	I5	S	LA PALMA	113.17	40.98	33.85	-117.96	62	1.03	22,963	4,285

2024 Q3 Quarterly Mobility Statistics

Measure	Graph	Percentage Change							
Vehicle Miles of Travel (VMT)	<p>Miles (Billions)</p> <table border="1"> <tr><th>Year</th><th>Q3</th></tr> <tr><td>2023</td><td>3.4</td></tr> <tr><td>2024</td><td>3.38</td></tr> </table>	Year	Q3	2023	3.4	2024	3.38	Over one year ago	Over last quarter
		Year	Q3						
		2023	3.4						
2024	3.38								
-0.6%	1.1%								
		↓	↑						
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Year</th><th>Q3</th></tr> <tr><td>2023</td><td>1.3</td></tr> <tr><td>2024</td><td>1.6</td></tr> </table>	Year	Q3	2023	1.3	2024	1.6	Over one year ago	Over last quarter
		Year	Q3						
		2023	1.3						
2024	1.6								
23%	3%								
		↑	↑						
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year</th><th>Q3</th></tr> <tr><td>2023</td><td>17</td></tr> <tr><td>2024</td><td>21</td></tr> </table>	Year	Q3	2023	17	2024	21	Over one year ago	Over last quarter
		Year	Q3						
		2023	17						
2024	21								
20.6%	2%								
		↑	↑						
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Year</th><th>Q3</th></tr> <tr><td>2023</td><td>4.3</td></tr> <tr><td>2024</td><td>5.2</td></tr> </table>	Year	Q3	2023	4.3	2024	5.2	Over one year ago	Over last quarter
		Year	Q3						
		2023	4.3						
2024	5.2								
20.5%	4.2%								
		↑	↑						
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year</th><th>Q3</th></tr> <tr><td>2023</td><td>56</td></tr> <tr><td>2024</td><td>68</td></tr> </table>	Year	Q3	2023	56	2024	68	Over one year ago	Over last quarter
		Year	Q3						
		2023	56						
2024	68								
20.9%	4.1%								
		↑	↑						

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 -7.1% ↓
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		Largest Magnitude Weekday Decrease over one year ago 4 PM -2.9% ↓	Largest Magnitude Weekday Decrease over last quarter 3 PM -11.2% ↓
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		Largest Magnitude Saturday Decrease over one year ago 9 AM -40% ↓	Largest Magnitude Saturday Decrease over last quarter 5 PM -14.4% ↓
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/Holidays		Largest Magnitude Sun./Holiday Decrease over one year ago 7 AM -39.6% ↓	Largest Magnitude Sun./Holiday Decrease over last quarter 1 PM -12.3% ↓
		Largest Magnitude Sun./Holiday Increase over one year ago 12 PM 113.1% ↑	Largest Magnitude Sun./Holiday Increase over last quarter 11 AM 59.1% ↑

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph	<p>Hours (Millions)</p> <p>■ 2023 Q3 ■ 2024 Q2 ■ 2024 Q3</p> <p>Orange</p>	Largest Magnitude Decrease over one year ago -	Largest Magnitude Decrease over last quarter -
		Largest Magnitude Increase over one year ago Orange 23% ↑	Largest Magnitude Increase over last quarter Orange 3% ↑
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph	<p>Miles</p> <p>■ 2023 Q3 ■ 2024 Q2 ■ 2024 Q3</p> <p>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)</p>	Largest Magnitude Decrease over one year ago Off-Peak Night -48.3% ↓	Largest Magnitude Decrease over last quarter Off-Peak Night -49.9% ↓
		Largest Magnitude Increase over one year ago Off-Peak Day 132.8% ↑	Largest Magnitude Increase over last quarter AM Peak 31.8% ↑
Average Number of Good and Bad Detectors	<p>Number of Detectors</p> <p>■ Average of Good ■ Average of Bad</p> <p>2023 Q3 2024 Q2 2024 Q3</p>	Change in Good over one year ago 16% ↑	Change in Good over last quarter -1% ↓
		Change in Bad over one year ago -25% ↓	Change in Bad over last quarter 1% ↑

Congestion by Route											
Route	County	Vehicle Hours of Delay at 35 mph			Difference 2024 Q3-2023 Q3		Difference 2024 Q3-2024 Q2		Rank		
		2023 Q3	2024 Q2	2024 Q3	Absolute	Percentage	Absolute	Percentage	2023 Q3	2024 Q2	2024 Q3
I5	Orange	311,771	393,874	489,680	177,909	57.1%	95,806	24.3%	2	1	1
I405	Orange	352,817	316,926	323,925	-28,892	-8.2%	6,999	2.2%	1	2	2
SR55	Orange	226,201	257,785	267,438	41,238	18.2%	9,653	3.7%	3	3	3
SR91	Orange	189,339	213,216	234,496	45,157	23.8%	21,280	10.0%	4	5	4
SR57	Orange	147,799	235,279	166,902	19,104	12.9%	-68,377	-29.1%	5	4	5
SR22	Orange	22,738	84,025	64,475	41,737	183.6%	-19,550	-23.3%	6	6	6
I605	Orange	16,983	20,236	22,561	5,578	32.8%	2,326	11.5%	7	7	7
SR73	Orange	8,232	13,952	17,874	9,642	117.1%	3,922	28.1%	9	8	8
SR241	Orange	16,088	9,474	4,886	-11,201	-69.6%	-4,588	-48.4%	8	9	9
SR133	Orange	2,842	486	536	-2,306	-81.2%	50	10.3%	10	11	10
SR261	Orange	241	800	201	-41	-16.9%	-599	-74.9%	11	10	11
SR74	Orange	5	5	5	0	0.0%	0	0.0%	12	12	12
SR142	Orange	3	3	3	0	0.0%	0	0.0%	13	13	13
SR1	Orange	0	0	0	0		0				
TOTALS		1,295,059	1,546,059	1,592,982	297,923	23.0%	46,923	3.0%			