

District 08 Mobility Performance Report

2022 QUARTER ONE

DEPARTMENT OF TRANSPORTATION

May 3, 2022
DIVISION OF OPERATIONS
TMS SUPPORT

District 08 Mobility Performance Report

2022 QUARTER ONE

EXECUTIVE SUMMARY

Overview

Caltrans District 8 covers approximately 28,650 square miles of land, making it the largest district in California. District 8 consists of two counties; San Bernardino and Riverside. Both counties are in Southern California and part of the Inland Empire. Riverside County has an estimated population of 2.5 million residents while San Bernardino County is estimated at 2.2 million residents. With a total of 4.7 million residents, District 8 comprises of twelve percent of California's total population.

The quarterly Mobility Performance Report compares the data from the current quarter with over a year ago as well as the previous quarter, for the following performance measures:

- Vehicle Miles of Travel (VMT)
- Vehicle Hours of Delay (VHD)
- Lost Lane Miles (LLM)
- Delay by County and Route
- Detector Health
- Bottleneck Locations

Vehicle Detector Stations installed on urban-area freeways are continuously collect data and are strategically placed at locations where congestion is regularly experienced. The MPR uses the data collected from Caltrans Performance Measurement System (PeMS) to produce this report and conduct traffic studies. This report presents congestion information at two speed thresholds: delay from vehicles traveling below 35 miles per hour (mph), and delay from vehicles traveling below 60 mph. The 35-mph threshold represents severe congestion, while delay at 60 mph represents all congestion. These thresholds are set by Caltrans and are based upon engineering experience and District input.

FINDINGS

Vehicle Miles Traveled (VMT) in District 8 during the first quarter of 2022 was 5.08 billion miles, which was a 3.7 percent increase when compared to VMT from a year ago and a 4.1 percent decrease from the previous quarter.

In the first quarter of 2022, at the 35mph speed threshold, Riverside County exhibited 1.81 million vehicle hours of delay followed by San Bernardino County at 1.33 million. Total delay in District 8 equaled 3.1 million VHD for the 35mph speed threshold. This was a 22.7 percent decrease from the previous quarter, and a 44.6 percent increase when compared to the same quarter over a year ago. The 60-mph speed threshold saw a similar trend, during the first quarter of 2022, total delay equaled 8.3 million VHD, which was a decrease in delay by 17.3 percent from last quarter and a 30.9 percent increase in delay for the same quarter over a year ago.

The busiest day of the week as far as congestion for the first quarter of 2022 was Friday with 147,000 hours of delay for speed under 60 mph followed by Thursday at 120,000.

Top Ten Bottlenecks for the First Quarter of 2022

Rank	County	Location Name	Shift	Fwy	Abs PM	Prefix	CA PM	Latitude	Longitude	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (Hours)
1	Riverside	Winchester Road	PM	I15-N	61.32	-	6.8	33.52	-117.16	62	6.76	280,885.10	263.75
2	San Bernardino	Jurupa	PM	I15-S	107.73	-	.969	34.05	-117.55	62	2.47	84,993.40	218.50
3	Riverside	Pigeon Pass	PM	SR60-E	54.63	-	14.509	33.94	-117.26	62	3.92	58,417.50	171.00
4	Riverside	Cajalco Road	PM	I15-S	91.40	-	36.921	33.82	-117.52	49	3.05	49,614.00	145.75
5	San Bernardino	4th Street	PM	I15-N	109.97	-	3.2	34.08	-117.54	59	1.10	43,057.60	205.25
6	San Bernardino	Jurupa	AM	I15-S	107.73	-	.969	34.05	-117.55	59	1.76	37,914.70	167.00
7	Riverside	Harley Knox Blvd	AM	I215-N	24.17	R	32.5	33.86	-117.26	59	2.87	36,143.50	118.92
8	Riverside	Pierce	PM	SR91-W	48.15	-	10.724	33.90	-117.49	62	1.82	33,186.50	201.83
9	Riverside	Pierce	AM	SR91-W	48.15	-	10.724	33.90	-117.49	56	1.83	33,139.30	189.08
10	Riverside	Main Street	PM	SR60-E	52.10	-	11.815	34.00	-117.36	59	3.13	32,669.40	109.25

PROJECT STATUS

Some of the following District 8 projects which are separated by county are currently in construction for the year of 2021 and 2022. These projects will relieve congestion in District 8 once complete however, during the construction phase there might be an increase in delay during off-peak periods due to lane closures.

Riverside County:

**RIV – Rte. 74: Location Lake Elsinore from RIV County Line to Monte Vista St
EA: 1C8504, PM: 0.00 to 5.80 – Widen Existing Lanes to provide 12’ Lanes**

RIV – Rte. 15: Location - City of Lake Elsinore on I-15 From 1.6 mile south of to 0.4-mile North of Railroad Canyon Rd, EA: 0A4414

Postmile 17.60 to 19.60 - Freeway and Bridge widening, JPCP, HMA, Retaining Walls, Ramp Modifications, Local Street Improvements.

RIV – Rte. 15: Location – Murrieta From 0.3 miles south of to 0.6 miles north of California Oaks Ave. Undercrossing, EA: 0A4904

Postmile 10.30 to 10.90 – Bridge widening, Traffic and Drainage Improvements.

RIV – Rte 15: Location – SR74 to SR-60 and I-215 to SR-74, EA: 0J0804

I-15 Corridor Improvement Project to add two Toll Express lane each direction from Cajalco Road to State Route 60, widen bridges and add sound wall.

RIV - Rte 15: Location - Interstate 15/Cajalco Road Interchange, EA: 0J6104

Postmile 36.40 to 37.60 - Interchange Improvements & Reconstruction

RIV- Rte 60: Location – City of Beaumont, Gilman Springs Road to 1.37 miles west of Jack Rabbit Trail EA: 0N69U4

Postmile 22.10 to 26.60 – Construct a Truck Climbing Lane and Truck Descending Lane

RIV – Rte 60: Location – City of Beaumont, Potrero Blvd

Postmile 28.80 to 30.20 – New Bridge and Highway widening.

San Bernardino County:

SBD – Rte 10: Location – LA/SBD county line to 0.2 miles west of Cherry EA: 0C2514

Postmile 0.00 to 13.20, Widen Express Lanes (Phase 1)

SBD – Rte 210: Location – Highland Ave to San Bernardino Ave EA: 0C70U4

Postmile 25.00 to 33.20, Widen Freeway add one lane in each direction.

SBD – Rte 60: Locations – Central Avenue EA: 0C8704

Postmile 2.08 to 2.80, Central Avenue Ramp Improvement

SBD – Rte 15: Location - Limonite Ave/I-15, EA: 0E1504

Postmile 46.70 to 49.70, Limonite Avenue at I-15 interchange Improvement Project, in city of Eastvale and Jurupa Valley.

SBD – Rte 60: Location – Near Chino and Various Locations from 0.1 mile west of Pipeline Ave OC to 0.1 Mile East of Benson Ave. EA: 0F0304

Postmile 0.07 to 3.00, Bridge Replacement, Pipeline Ave, Monte Vista Ave, Benson Ave.

SBD – Rte 10: Location – Colton at Santa Ana River Bridge EA: 0Q9104

Postmile 23.80 to 23.80, Bridge Rehabilitation and Seismic Retrofit.

SBD – Rte 10: Location – Alabama street to 0.2 Miles East of County Line Road, EA 384234

Postmile: 29.40 to 39.20, Install Fiber Optic System and Modify Electrical System

Quarterly Mobility Statistics

Measure	Graph	Percentage Change									
Vehicle Miles of Travel (VMT)	Miles (Billions) <table><tr><th>Period</th><th>VMT (Billions)</th></tr><tr><td>2021 Q1</td><td>4.89</td></tr><tr><td>2021 Q4</td><td>5.29</td></tr><tr><td>2022 Q1</td><td>5.08</td></tr></table>	Period	VMT (Billions)	2021 Q1	4.89	2021 Q4	5.29	2022 Q1	5.08	Over one year ago	Over last quarter
		Period	VMT (Billions)								
		2021 Q1	4.89								
		2021 Q4	5.29								
2022 Q1	5.08										
3.7%	-4.1%										
Total Vehicle Hours of Delay (VHD) at 35 mph	Hours (Millions) <table><tr><th>Period</th><th>VHD (Millions)</th></tr><tr><td>2021 Q1</td><td>2.2</td></tr><tr><td>2021 Q4</td><td>4.1</td></tr><tr><td>2022 Q1</td><td>3.1</td></tr></table>	Period	VHD (Millions)	2021 Q1	2.2	2021 Q4	4.1	2022 Q1	3.1	Over one year ago	Over last quarter
		Period	VHD (Millions)								
		2021 Q1	2.2								
		2021 Q4	4.1								
2022 Q1	3.1										
44.6%	-22.7%										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	Hours (Thousands) <table><tr><th>Period</th><th>VHD (Thousands)</th></tr><tr><td>2021 Q1</td><td>29</td></tr><tr><td>2021 Q4</td><td>50</td></tr><tr><td>2022 Q1</td><td>43</td></tr></table>	Period	VHD (Thousands)	2021 Q1	29	2021 Q4	50	2022 Q1	43	Over one year ago	Over last quarter
		Period	VHD (Thousands)								
		2021 Q1	29								
		2021 Q4	50								
2022 Q1	43										
46.9%	-14.2%										
Total Vehicle Hours of Delay (VHD) at 60 mph	Hours (Millions) <table><tr><th>Period</th><th>VHD (Millions)</th></tr><tr><td>2021 Q1</td><td>6.3</td></tr><tr><td>2021 Q4</td><td>10</td></tr><tr><td>2022 Q1</td><td>8.3</td></tr></table>	Period	VHD (Millions)	2021 Q1	6.3	2021 Q4	10	2022 Q1	8.3	Over one year ago	Over last quarter
		Period	VHD (Millions)								
		2021 Q1	6.3								
		2021 Q4	10								
2022 Q1	8.3										
30.9%	-17.3%										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	Hours (Thousands) <table><tr><th>Period</th><th>VHD (Thousands)</th></tr><tr><td>2021 Q1</td><td>85</td></tr><tr><td>2021 Q4</td><td>123</td></tr><tr><td>2022 Q1</td><td>112</td></tr></table>	Period	VHD (Thousands)	2021 Q1	85	2021 Q4	123	2022 Q1	112	Over one year ago	Over last quarter
		Period	VHD (Thousands)								
		2021 Q1	85								
		2021 Q4	123								
2022 Q1	112										
30.4%	-9.4%										

Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph	Hours (Thousands) ■ 2021 Q1 ■ 2021 Q4 ■ 2022 Q1	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		–	Sun/Hol -39.6% ↓
		Largest Magnitude Increase over one year ago Thursday 36.9% ↑	Largest Magnitude Increase over last quarter Friday 10.8% ↑
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays	Hours (Thousands) — Weekday (2021 Q1) — Weekday (2021 Q4) — Weekday (2022 Q1)	Largest Magnitude Weekday Decrease over one year ago 4 AM -18.2% ↓	Largest Magnitude Weekday Decrease over last quarter 5 PM -14.6% ↓
		Largest Magnitude Weekday Increase over one year ago 4 PM 37.1% ↑	Largest Magnitude Weekday Increase over last quarter 10 AM 4.7% ↑
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays	Hours (Thousands) — Saturday (2021 Q1) — Saturday (2021 Q4) — Saturday (2022 Q1)	Largest Magnitude Saturday Decrease over one year ago 3 PM -7.5% ↓	Largest Magnitude Saturday Decrease over last quarter 5 PM -54.2% ↓
		Largest Magnitude Saturday Increase over one year ago 5 PM 44.4% ↑	Largest Magnitude Saturday Increase over last quarter 3 AM 7.9% ↑
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/Holidays	Hours (Thousands) — Sunday/Holiday (2021 Q1) — Sunday/Holiday (2021 Q4) — Sunday/Holiday (2022 Q1)	Largest Magnitude Sun./Holiday Decrease over one year ago 6 AM -43.1% ↓	Largest Magnitude Sun./Holiday Decrease over last quarter 5 PM -49.4% ↓
		Largest Magnitude Sun./Holiday Increase over one year ago 4 PM 66.6% ↑	Largest Magnitude Sun./Holiday Increase over last quarter 4 AM 16.9% ↑

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph	Hours (Millions)	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		—	San Bernardino -29.1%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Riverside 48.5%	—
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph	Miles	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		—	PM Peak -21.4%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		AM Peak 159.6%	—
Average Number of Good and Bad Detectors	Number of Detectors	Change in Good over one year ago	Change in Good over last quarter
		17%	2%
		Change in Bad over one year ago	Change in Bad over last quarter
		-11%	-2%

Congestion by Route

Route	County	Vehicle Hours of Delay at 35 mph			Difference 2022 Q1-2021 Q1		Difference 2022 Q1-2021 Q4		Rank		
		2021 Q1	2021 Q4	2022 Q1	Absolute	Percentage	Absolute	Percentage	2021 Q1	2021 Q4	2022 Q1
I15	Riverside	404,368	809,409	638,471	234,103	57.9%	-170,938	-21.1%	1	2	1
I15	San Bernardino	354,141	870,391	616,774	262,634	74.2%	-253,617	-29.1%	3	1	2
I215	Riverside	382,286	625,772	577,871	195,585	51.2%	-47,902	-7.7%	2	3	3
I10	San Bernardino	336,505	510,284	377,724	41,220	12.2%	-132,560	-26.0%	5	4	4
SR91	Riverside	338,491	483,852	324,734	-13,757	-4.1%	-159,117	-32.9%	4	5	5
SR60	Riverside	79,845	204,509	236,758	156,913	196.5%	32,249	15.8%	7	7	6
I210	San Bernardino	166,118	331,643	222,130	56,012	33.7%	-109,513	-33.0%	6	6	7
I215	San Bernardino	45,768	96,255	69,421	23,654	51.7%	-26,833	-27.9%	8	8	8
SR60	San Bernardino	10,917	26,047	40,011	29,094	266.5%	13,963	53.6%	11	11	9
I10	Riverside	13,056	63,696	33,588	20,532	157.3%	-30,108	-47.3%	10	9	10
SR71	San Bernardino	39,527	41,175	3,672	-35,855	-90.7%	-37,503	-91.1%	9	10	11
SR71	Riverside	1,736	677	18	-1,719	-99.0%	-660	-97.4%	12	12	12
TOTALS		2,172,756	4,063,710	3,141,172	968,416	44.6%	-922,538	-22.7%			

The Congestion by Route table shows that congestion has decreased by 22.7% from the previous quarter but has increased by 44.6% from one year ago.