

District 08 Mobility Performance Report

2023 Quarter Three

DEPARTMENT OF TRANSPORTATION

October 31, 2023
DIVISION OF OPERATIONS
TMS SUPPORT

District 08 Mobility Performance Report

2023 Quarter Three

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 our freeways are strategically placed throughout the district and are collecting data. The MPR uses the data collected from these stations through 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 third quarter of 2023 was 5.28 billion miles, which was a 1.7 percent decrease when compared to VMT from a year ago and a 9.3 percent increase from the previous quarter.

In the third quarter of 2023, at the 35mph speed threshold, Riverside County exhibited 1.67 million vehicle hours of delay followed by San Bernardino County at 1.32 million. Total delay in District 8 equaled 3.0 million VHD for the 35mph speed threshold. This was a 17.7 percent decrease from the previous quarter, and a 9.4 percent increase when compared to the same quarter over a year ago. The 60-mph speed threshold saw a similar trend, during the third quarter of 2023, total delay equaled 8.1 million VHD, which was a decrease in delay by 10.6 percent from last quarter and a 5.2 percent increase in delay for the same quarter over a year ago.

The busiest day of the week as far as congestion for the third quarter of 2023 was Friday with 125,000 hours of delay for speed under 60 mph followed by Tuesday and Thursday at 109,000 hours of delay.

Top Ten Bottlenecks for the Third Quarter of 2023

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	33.5248	-117.1643	43	6.17	231,578.30	185.00
2	Riverside	Rte 71/91	AM	SR91-W	39.86	R	2.542	33.8849	-117.6329	42	6.55	114,562.00	111.25
3	San Bernardino	4th Street	PM	I15-N	109.97	-	3.2	34.0792	-117.5446	63	1.89	66,745.50	222.00
4	San Bernardino	Jurupa	PM	I15-S	107.73	-	.969	34.0475	-117.5502	52	2.41	66,616.50	190.50
5	Riverside	Central / Watkins	AM	I215-N	31.63	-	39.652	33.9604	-117.3117	55	3.11	51,726.10	198.08
6	San Bernardino	Arrowhead Ave	PM	I210-E	75.99	R	23.555	34.1454	-117.2900	60	2.27	40,794.50	153.42
7	Riverside	Main	PM	SR91-E	43.80	-	6.457	33.8798	-117.5640	50	2.13	40,251.80	147.25
8	Riverside	Cajalco Road	PM	I15-S	91.40	-	36.921	33.8220	-117.5196	58	2.77	40,231.40	132.00
9	San Bernardino	Jurupa	AM	I15-S	107.73	-	.969	34.0475	-117.5502	51	1.86	40,230.40	173.33
10	Riverside	Pigeon Pass	PM	SR60-E	54.63	-	14.509	33.9408	-117.2583	60	2.39	39,372.20	212.00

PROJECT STATUS

Some of the following District 8 projects which are separated by county are currently in construction for the year of 2023. These projects will relieve congestion in District 8 once complete. However, during construction there might be an increase in delay for off-peak periods due to lane closures.

Riverside County:

RIV – Rte. 215: Location Moreno Valley from Alessandro Blvd overcrossing to Eucalyptus Ave Overcrossing, EA:1K4604

Postmile: R36.30 to 37.20, Construct NB and SB Auxiliary Lanes

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 91: Location SR-91 at McKinley Ave City of Corona EA:1J990

PM: R9.20 to 9.20 - Reconstruct SR-91/McKinley interchange consisting of retaining wall, drainage, ramp metering and signal placement

RIV – Rte 215: Location Placentia Ave, EA:0F3214

PM: R27.9/32.80 - Interstate 215 at Placentia Interchange Improvement

RIV – Rte 15: Location Between Cajalco Rd and Weirick Rd, EA: 1M750

PM: R35.70 to 37.00 – Add Auxiliary Lanes

RIV – Rte 15: Location Main Street City of Lake Elsinore EA: 1G720

PM: R20.50/21.50 – Ramp Widening and Construct Retaining Wall

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 - 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

San Bernardino County:

SBD – Rte 215: Location – Colton and Washington Overcrossing EA: 1F7304
Postmile 2.70 to 2.70, Replace Concrete Bridge

SBD – Rte 10: Location – LA/SBD county line to 0.2 miles west of Cherry EA: 0C2514
Postmile 0.00 to 13.20, Widen Freeway and add Express Lanes

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 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 – 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

SBD – Rte 71: Location – Chino Hills & Corona and Junction 71/91, EA 08-0G7904
Postmile 0.00 to 8.48, Install Ramp metering, CCTV, CMS VDS and Fiber Optic

SBD – Rte 10, 15, 60, 91, 210, 215 – Varions Locations, EA 08-1M7104
Postmile: Various, Modify Camera Systems

Quarterly Mobility Statistics

Measure	Graph	Percentage Change									
Vehicle Miles of Travel (VMT)	<p>Miles (Billions)</p> <table border="1"> <tr><th>Quarter</th><th>Value</th></tr> <tr><td>2022 Q3</td><td>5.37</td></tr> <tr><td>2023 Q2</td><td>4.83</td></tr> <tr><td>2023 Q3</td><td>5.28</td></tr> </table>	Quarter	Value	2022 Q3	5.37	2023 Q2	4.83	2023 Q3	5.28	Over one year ago	Over last quarter
		Quarter	Value								
		2022 Q3	5.37								
2023 Q2	4.83										
2023 Q3	5.28										
-1.7%	9.3%										
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Quarter</th><th>Value</th></tr> <tr><td>2022 Q3</td><td>2.7</td></tr> <tr><td>2023 Q2</td><td>3.6</td></tr> <tr><td>2023 Q3</td><td>3</td></tr> </table>	Quarter	Value	2022 Q3	2.7	2023 Q2	3.6	2023 Q3	3	Over one year ago	Over last quarter
		Quarter	Value								
		2022 Q3	2.7								
2023 Q2	3.6										
2023 Q3	3										
9.4%	-17.7%										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Quarter</th><th>Value</th></tr> <tr><td>2022 Q3</td><td>36</td></tr> <tr><td>2023 Q2</td><td>46</td></tr> <tr><td>2023 Q3</td><td>40</td></tr> </table>	Quarter	Value	2022 Q3	36	2023 Q2	46	2023 Q3	40	Over one year ago	Over last quarter
		Quarter	Value								
		2022 Q3	36								
2023 Q2	46										
2023 Q3	40										
10.9%	-14%										
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Quarter</th><th>Value</th></tr> <tr><td>2022 Q3</td><td>7.7</td></tr> <tr><td>2023 Q2</td><td>9</td></tr> <tr><td>2023 Q3</td><td>8.1</td></tr> </table>	Quarter	Value	2022 Q3	7.7	2023 Q2	9	2023 Q3	8.1	Over one year ago	Over last quarter
		Quarter	Value								
		2022 Q3	7.7								
2023 Q2	9										
2023 Q3	8.1										
5.2%	-10.6%										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Quarter</th><th>Value</th></tr> <tr><td>2022 Q3</td><td>101</td></tr> <tr><td>2023 Q2</td><td>115</td></tr> <tr><td>2023 Q3</td><td>107</td></tr> </table>	Quarter	Value	2022 Q3	101	2023 Q2	115	2023 Q3	107	Over one year ago	Over last quarter
		Quarter	Value								
		2022 Q3	101								
2023 Q2	115										
2023 Q3	107										
6.1%	-6.9%										

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
		Monday -10.8%	Sun/Hol -40.4%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Tuesday 24.9%	Tuesday 4%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		Largest Magnitude Weekday Decrease over one year ago	Largest Magnitude Weekday Decrease over last quarter
		1 PM -3.9%	4 PM -19.6%
		Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
		6 AM 47.1%	8 AM 7.8%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		Largest Magnitude Saturday Decrease over one year ago	Largest Magnitude Saturday Decrease over last quarter
		9 PM -60.4%	2 PM -27.4%
		Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
		3 PM 40.3%	8 PM 85.2%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/Holidays		Largest Magnitude Sun./Holiday Decrease over one year ago	Largest Magnitude Sun./Holiday Decrease over last quarter
		11 AM -34.7%	2 PM -55.6%
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		11 PM 167.2%	11 PM 57.2%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph		Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		-	Riverside -25.6%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
San Bernardino 15.4%	-		
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph		Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		-	PM Peak -17.9%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
AM Peak 23%	AM Peak 1.5%		
Average Number of Good and Bad Detectors		Change in Good over one year ago	Change in Good over last quarter
		2%	-17%
		Change in Bad over one year ago	Change in Bad over last quarter
-2%	24%		

Congestion by Route

Route	County	Vehicle Hours of Delay at 35 mph			Difference 2023 Q3-2022 Q3		Difference 2023 Q3-2023 Q2		Rank		
		2022 Q3	2023 Q2	2023 Q3	Absolute	Percentage	Absolute	Percentage	2022 Q3	2023 Q2	2023 Q3
		I15	Riverside	475380.2	711693.7	568910.6	93530.4	20%	(142,783)	-20%	2
SR91	Riverside	404936.8	553200	526970.5	122033.7	30%	(26,230)	-5%	5	3	2
I15	San Bernardino	417353.8	710889.9	493142.5	75788.7	18%	(217,747)	-31%	4	2	3
I10	San Bernardino	447219.3	460032.9	462704.8	15485.5	3%	2,672	1%	3	5	4
I215	Riverside	506442	509837.1	372397	-134045	-26%	(137,440)	-27%	1	4	5
I210	San Bernardino	177567	173205.4	211297.1	33730.1	19%	38,092	22%	7	7	6
SR60	Riverside	186910.4	404496.8	168512.6	-18397.8	-10%	(235,984)	-58%	6	6	7
I215	San Bernardino	60061.9	0	72218.9	12157	20%	72,219		8		8
SR60	San Bernardino	41438.1	42203.5	56451.2	15013.1	36%	14,248	34%	9	9	9
I10	Riverside	15920.2	65977.4	29709.8	13789.6	87%	(36,268)	-55%	10	8	10
SR71	San Bernardino	143.6	452.9	24179.3	24035.7	16738%	23,726	5239%	11	10	11
SR71	Riverside	0	0	3016.5	3016.5		3,017				12
TOTALS		2,733,373	3,631,990	2,989,511	256,138	9.4%	-642,479	-17.7%			

The Congestion by Route table shows that congestion in District 8 has decreased by 17.7 percent from the previous quarter and increased by 9.4 percent from one year ago.

SR-71 detector stations are currently under construction and are currently offline, which is why there is little to no vehicle hours of delay shown.