

District 08 Mobility Performance Report

2020 QUARTER FOUR

DEPARTMENT OF TRANSPORTATION

January 27, 2021
DIVISION OF OPERATIONS
TMS SUPPORT

District 08 Mobility Performance Report

2020 QUARTER FOUR

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 2.4 million residents while San Bernardino County is estimated at 2.2 million residents. With a total of 4.6 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 fourth quarter of 2020 was 5.0 billion miles, which was a 6.2 percent decrease when compared to VMT from a year ago and a 0.9 percent increase from the previous quarter.

In the fourth quarter of 2020, at the 35mph speed threshold, San Bernardino County exhibited 1.08 million vehicle hours of delay followed by Riverside County at 1.03 million. Total delay in District 8 equaled 2.11 million VHD for the 35mph speed threshold. This was a 30.1 percent increase from the previous quarter, and a 38.4 percent decrease when compared to the same quarter over a year ago. The 60-mph speed threshold saw a similar trend, during the fourth quarter of 2020, total delay equaled 6 million VHD, which was an increase in delay by 20.7 percent from last quarter and a 29.5 percent decrease in delay for the same quarter over a year ago.

The busiest day of the week as far as congestion for the fourth quarter was Friday with 112,000 hours of delay for speed under 60 mph followed by Thursday at 84,000 and Wednesday with 75,000 hours.

Top Ten Bottlenecks for the Fourth Quarter of 2020

Rank	County	Location Name	Shift	Fwy	Abs PM	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	61	6.18	210,137.10	245.33
2	San Bernardino	Jurupa	PM	I15-S	107.73	.969	34.05	-117.55	60	1.92	68,029.40	195.50
3	San Bernardino	Haven Ave	PM	I10-E	54.99	8.22	34.07	-117.57	61	2.29	47,407.10	174.75
4	San Bernardino	4th Street	PM	I15-N	109.97	3.2	34.08	-117.54	60	1.10	46,654.10	228.33
5	Riverside	Green River	AM	SR91-W	38.31	.995	33.88	-117.66	48	2.89	42,543.00	87.00
6	Riverside	El Cerrito	PM	I15-S	92.19	37.702	33.83	-117.53	59	1.90	39,052.30	149.58
7	San Bernardino	Cherry Ave	PM	I10-E	60.12	13.346	34.07	-117.49	48	2.58	27,926.90	99.33
8	San Bernardino	Archibald	PM	I210-E	58.44	6	34.14	-117.59	37	3.26	25,334.80	76.58
9	Riverside	Van Buren Blvd	PM	I215-S	25.13	33.463	33.88	-117.27	58	2.88	24,689.70	110.17
10	San Bernardino	Carnelian	PM	I210-E	57.54	5.1	34.13	-117.61	43	3.11	23,818.50	69.92

PROJECT STATUS

Some of the following District 8 projects which are separated by county are currently in construction while some have been suspended due to COVID-19 pandemic, for the year of 2019 and 2020. 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. 215: Location – Rte. 215 Interchange at Scotts Road, EA: 0A0204

Postmile R14.80 to 16.20 – Interchange improvement at Scotts Road city of Menifee.

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. 15,91: Location - Corona on Rte. 91 from Main St. to Rte. 15, and on Rte. 15, Northbound 15 to WB Connectors EA: 0F5434

Rte 15 - PM 41.08 to 42.31 and Rte. 91 – PM 6.05 to 7.57
Express Lanes' Connectors - Bridge & GP Lane Widening

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 215: Location – Menifee Rte 215 at Newport Rd Interchange, EA: 0J4404

Postmile R17.40 to 19.30, Interchange Improvement.

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.

RIV - Rte. 10: Location - City of Indio at Jefferson St, EA: 475204

Postmile 51.70 to 53.10 - Demolish existing bridge and northbound Indio Boulevard overcrossing and replace with new six-lane bridge.

RIV – Rte 60: Location – Rte 60 from Milliken Ave to 91/215

Postmile 0.0 to R12.2, Replace wireless communication system with Fiber Optic Infrastructure.

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

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

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 215: Locations – Rte 215/Barton Rd, EA: 0J0704

Postmile 0.58/1.95, Project to reconstruct the existing I-215/Barton Rd Interchange.

SBD - Rte 10: Location – San Bernardino County from Redlands to Orange St, EA: 0K2914

Postmile 30.90 to 33.30, Lane Replacement in San Bernardino County in Redlands from Orange Street Undercrossing to Redlands Blvd off-ramp undercrossing.

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 15: Location – Kenwood Ave to West Hesperia, EA: 0Q7404

Postmile 15.40 to 30.80, Lane Replacement on I-15 from 0.4 mile north of Kenwood Avenue to 0.3 mile south of West Hesperia OH

SBD – Rte 15: Location – Rte 15 to 395 Connector, EA: 1L5404

Postmile 31.50 to 32.50, repair Bridge Deck

SBD - Rte 15: Location – Victorville from Mojave Dr to Stoddard Wells Rd, EA: 3555VA

Postmile 42.50 to 46.00, 0.5 Mile North of Mojave Drive to 1.5 Mile North of Stoddard Wells Road Overcrossing, Widen I-15, Reconstruct 3 IC'S, construct 2 new BR and widen 3 BR

SBD – Rte Various Locations, San Bernardino and Riverside County, EA: 1C6304

Install Road Weather Information System and Modify Existing Electrical system

SBD – Rte 10: Location – 0.2 MI w/o Live Oak Canyon Rd to County Line, EA: 0K2934

Postmile: R36.80/39.20, Pavement Rehab & Continuously Reinforced Concrete Pavement

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)	<p>Miles (Billions)</p> <table border="1"> <tr><th>Year</th><th>Q4</th></tr> <tr><td>2019</td><td>5.3</td></tr> <tr><td>2020</td><td>4.9</td></tr> <tr><td>2020</td><td>5</td></tr> </table>	Year	Q4	2019	5.3	2020	4.9	2020	5	Over one year ago	Over last quarter
		Year	Q4								
		2019	5.3								
2020	4.9										
2020	5										
-6.2%	0.9%										
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Year</th><th>Q4</th></tr> <tr><td>2019</td><td>3.4</td></tr> <tr><td>2020</td><td>1.6</td></tr> <tr><td>2020</td><td>2.1</td></tr> </table>	Year	Q4	2019	3.4	2020	1.6	2020	2.1	Over one year ago	Over last quarter
		Year	Q4								
		2019	3.4								
2020	1.6										
2020	2.1										
-38.4%	30.1%										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year</th><th>Q4</th></tr> <tr><td>2019</td><td>47</td></tr> <tr><td>2020</td><td>22</td></tr> <tr><td>2020</td><td>29</td></tr> </table>	Year	Q4	2019	47	2020	22	2020	29	Over one year ago	Over last quarter
		Year	Q4								
		2019	47								
2020	22										
2020	29										
-39.5%	32%										
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Year</th><th>Q4</th></tr> <tr><td>2019</td><td>8.6</td></tr> <tr><td>2020</td><td>5</td></tr> <tr><td>2020</td><td>6.0</td></tr> </table>	Year	Q4	2019	8.6	2020	5	2020	6.0	Over one year ago	Over last quarter
		Year	Q4								
		2019	8.6								
2020	5										
2020	6.0										
-29.5%	20.7%										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year</th><th>Q4</th></tr> <tr><td>2019</td><td>115</td></tr> <tr><td>2020</td><td>67</td></tr> <tr><td>2020</td><td>81</td></tr> </table>	Year	Q4	2019	115	2020	67	2020	81	Over one year ago	Over last quarter
		Year	Q4								
		2019	115								
2020	67										
2020	81										
-29.5%	22.2%										

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
		Tuesday -34.2% ↓	–
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		–	Friday 21.3% ↑
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
		7 AM -75.9% ↓	10 PM -22.2% ↓
		Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
		12 AM 254.5% ↑	5 PM 34.1% ↑
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
		5 PM -50.3% ↓	1 PM -2.3% ↓
		Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
		8 PM 80.2% ↑	5 PM 164.1% ↑
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
		5 PM -43.5% ↓	7 AM -17.3% ↓
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		11 PM 156.8% ↑	4 PM 116.5% ↑

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 -47.8%	-
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		-	San Bernardino 37.8%
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
		AM Peak -71.1%	-
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Off-Peak Night 105.2%	PM Peak 21%
Average Number of Good and Bad Detectors		Change in Good over one year ago	Change in Good over last quarter
		-8%	-1%
		Change in Bad over one year ago	Change in Bad over last quarter
		16.94%	10%

Congestion by Route

Route	County	Vehicle Hours of Delay at 35 mph			Difference 2020 Q4-2019 Q4		Difference 2020 Q4-2020 Q3		Rank		
		2019 Q4	2020 Q3	2020 Q4	Absolute	Percentage	Absolute	Percentage	2019 Q4	2020 Q3	2020 Q4
I15	San Bernardino	332962.5	341635.6	469189.6	136227.1	41%	127,554	37%	6	1	1
I15	Riverside	566108.1	307073.3	420435	-145673.1	-26%	113,362	37%	2	2	2
I10	San Bernardino	535231.1	215540	337389.4	-197841.7	-37%	121,849	57%	4	4	3
I215	Riverside	535366.3	265264.9	326023.5	-209342.8	-39%	60,759	23%	3	3	4
SR91	Riverside	697496.4	194948.4	207756.9	-489739.5	-70%	12,809	7%	1	5	5
I210	San Bernardino	359857.6	120885	171020.4	-188837.2	-52%	50,135	41%	5	6	6
SR60	Riverside	88017.4	61890.3	65491.7	-22525.7	-26%	3,601	6%	8	7	7
SR71	San Bernardino	62945.4	41999.1	47837.6	-15107.8	-24%	5,839	14%	9	8	8
I215	San Bernardino	111681.1	26441.4	41736.9	-69944.2	-63%	15,296	58%	7	10	9
SR60	San Bernardino	54284.8	39580.5	15848.6	-38436.2	-71%	(23,732)	-60%	10	9	10
I10	Riverside	50673.4	6799.9	6999.7	-43673.7	-86%	200	3%	11	11	11
SR71	Riverside	31929.4	1400.5	1655.4	-30274	-95%	255	18%	12	12	12
TOTALS		3,426,554	1,623,459	2,111,385	-1,315,169	-38.4%	487,926	30.1%			

The Congestion by Route table shows that congestion has increased by 30.1% from the previous quarter, however this is still a 38.4% decrease from one year ago.