District 08 Mobility Performance Report

2021 QUARTER ONE

DEPARTMENT OF TRANSPORTATION

April 26, 2021

DIVISION OF OPERATIONS
TMS SUPPORT

District 08 Mobility Performance Report

2021 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 2021 was 4.89 billion miles, which was a 1.5 percent decrease when compared to VMT from a year ago and a 1.7 percent increase from the previous quarter.

In the first quarter of 2021, at the 35mph speed threshold, Riverside County exhibited 1.22 million vehicle hours of delay followed by San Bernardino County at 0.95 million. Total delay in District 8 equaled 2.2 million VHD for the 35mph speed threshold. This was a 2.9 percent increase from the previous quarter, and a 13.6 percent decrease when compared to the same quarter over a year ago. The 60-mph speed threshold saw a similar trend, during the first quarter of 2021, total delay equaled 6.3 million VHD, which was an increase in delay by 4.8 percent from last quarter and a 6.5 percent decrease in delay for the same quarter over a year ago.

The busiest day of the week as far as congestion for the first quarter of 2021 was Friday with 127,000 hours of delay for speed under 60 mph followed by Thursday at 88,000 and Wednesday with 77,000 hours.

Top Ten Bottlenecks for the First Quarter of 2021

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	5.39	180,579.50	245.00
2	Riverside	Green River	AM	SR91-W	38.31	0.995	33.88	-117.66	55	3.89	109,840.20	147.67
3	San Bernardino	Jurupa	PM	I15-S	107.73	0.969	34.05	-117.55	61	1.91	78,042.00	194.42
4	Riverside	Cajalco Road	PM	I15-S	91.40	36.921	33.82	-117.52	41	3.17	71,303.80	148.58
5	San Bernardino	Haven Ave	PM	I10-E	54.99	8.22	34.07	-117.57	61	2.52	58,280.80	211.75
6	Riverside	Main	PM	SR91-E	43.84	6.492	33.88	-117.56	60	1.68	44,947.10	208.08
7	San Bernardino	4th Street	PM	I15-N	109.97	3.2	34.08	-117.54	60	1.10	43,501.40	212.83
8	Riverside	Van Buren Blvd	PM	I215-S	25.13	33.463	33.88	-117.27	61	2.94	37,539.10	148.75
9	San Bernardino	Cherry Ave	PM	I10-E	60.12	13.346	34.07	-117.49	58	2.40	29,920.10	119.08
10	Riverside	Pigeon Pass	PM	SR60-E	54.63	14.509	33.94	-117.26	58	2.23	27,550.80	159.25

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. 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. 10,15,60: Location On Routes 10, 15, 60, 210, 215, EA: 1H5304
Postmiles: Various – Repair Traffic Monitoring Stations

RIV – Rte. 74: Location City of Perris at 215/74
Postmile: 27.50 to 28.00 – Install New Ramp Metering System.

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: 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.

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.

San Bernardino County:

SBD – Rte. 10,15, 210, 215: Location On Routes 10, 15, 60, 210, 215, EA: 1H5304
Postmiles: Various – Repair Traffic Monitoring Stations

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

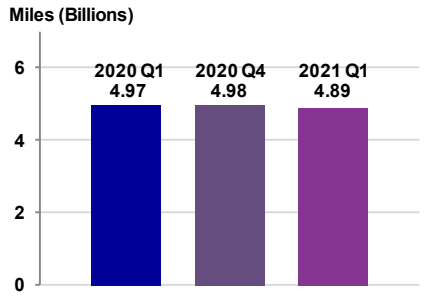
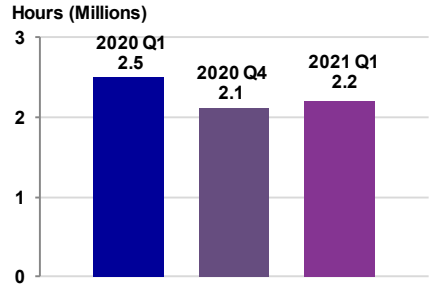
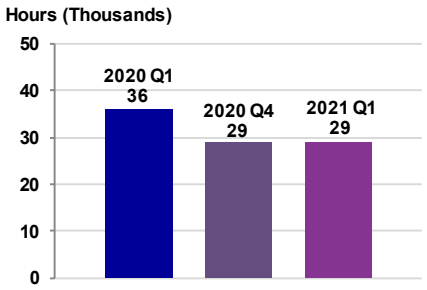
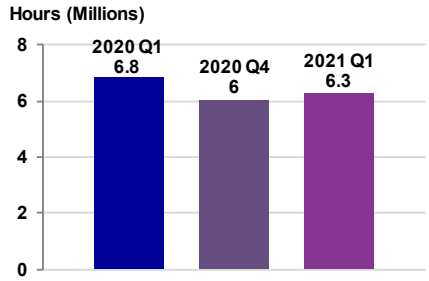
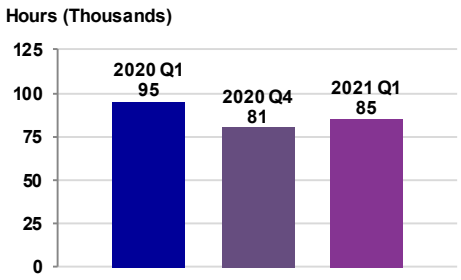
SBD - Rte 15: Location – Victorville from Mojave Dr to Stoddard Wells Rd, EA: 3555VA
Postmile 42.50 to 46.00, 0.5 Mile North of Mojave Drive to 1.5 Mile North of Stoddard Wells Road Overcrossing, Widen I-15, Reconstruct 3 IC'S, construct 2 new BR and widen 3 BR

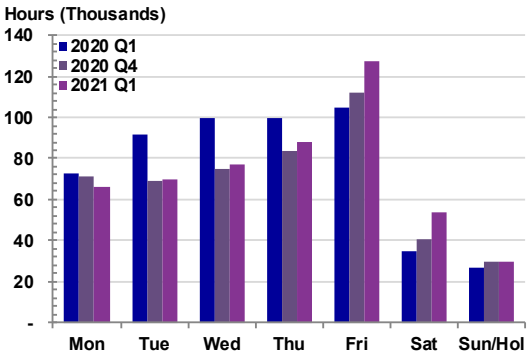
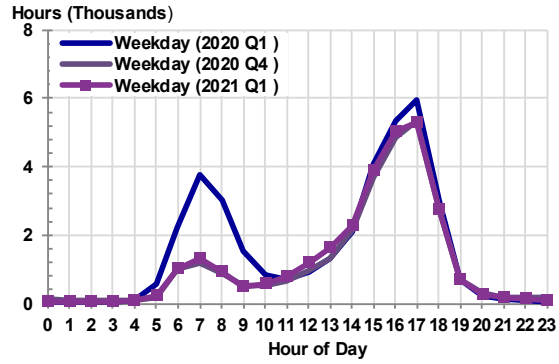
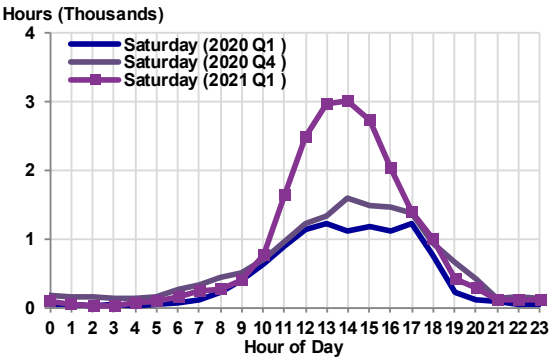
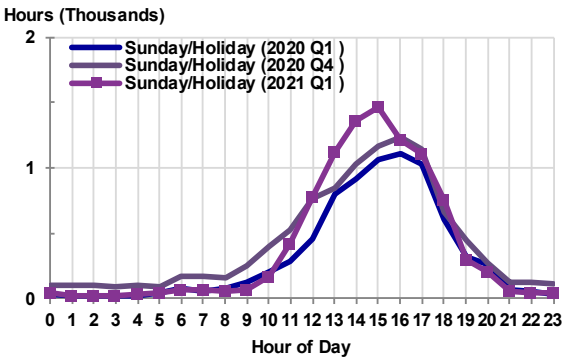
SBD – Rte Various Locations, San Bernardino and Riverside County, EA: 1C6304
Install Road Weather Information System and Modify Existing Electrical system

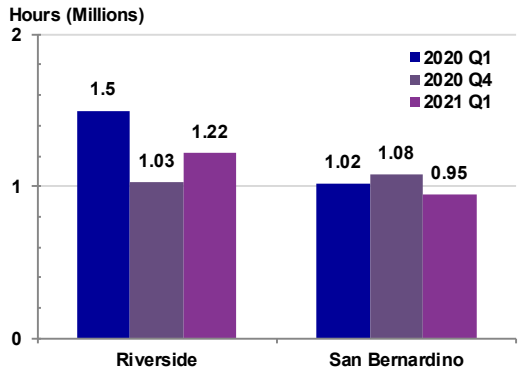
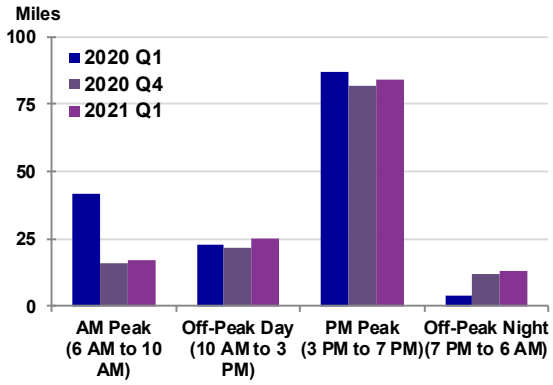
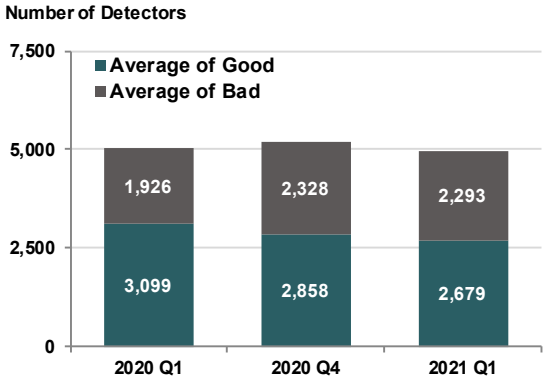
SBD – Rte 10: Location – 0.2 MI w/o Live Oak Canyon Rd to County Line, EA: 0K2934
Postmile: R36.80/39.20, Pavement Rehab & Continuously Reinforced Concrete Pavement

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	
		Over one year ago	Over last quarter
Vehicle Miles of Travel (VMT)		-1.5%	-1.7%
Total Vehicle Hours of Delay (VHD) at 35 mph		-13.6%	2.9%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph		-19.6%	1.8%
Total Vehicle Hours of Delay (VHD) at 60 mph		-6.5%	4.8%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph		-9.8%	5%

Measure	Graph	Percentage Change			
Average Vehicle Hours of Delay by Day of Week at 60 mph		Largest Magnitude Decrease over one year ago	Tuesday -24.3%	Largest Magnitude Decrease over last quarter	Monday -6.6%
		Largest Magnitude Increase over one year ago	Friday 20.3%	Largest Magnitude Increase over last quarter	Friday 12.8%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		Largest Magnitude Weekday Decrease over one year ago	7 AM -65.3%	Largest Magnitude Weekday Decrease over last quarter	11 PM -44.5%
		Largest Magnitude Weekday Increase over one year ago	1 PM 21.6%	Largest Magnitude Weekday Increase over last quarter	1 PM 21.5%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		Largest Magnitude Saturday Decrease over one year ago	3 AM -32.3%	Largest Magnitude Saturday Decrease over last quarter	7 PM -37.9%
		Largest Magnitude Saturday Increase over one year ago	2 PM 167.7%	Largest Magnitude Saturday Increase over last quarter	1 PM 124.1%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/ Holidays		Largest Magnitude Sun./Holiday Decrease over one year ago	8 PM -22.5%	Largest Magnitude Sun./Holiday Decrease over last quarter	10 AM -57.1%
		Largest Magnitude Sun./Holiday Increase over one year ago	2 PM 48.7%	Largest Magnitude Sun./Holiday Increase over last quarter	2 PM 31.7%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph		Largest Magnitude Decrease over one year ago Riverside -18.7%	Largest Magnitude Decrease over last quarter San Bernardino -12%
		Largest Magnitude Increase over one year ago –	Largest Magnitude Increase over last quarter Riverside 18.6%
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph		Largest Magnitude Decrease over one year ago AM Peak -59%	Largest Magnitude Decrease over last quarter –
		Largest Magnitude Increase over one year ago Off-Peak Night 223.6%	Largest Magnitude Increase over last quarter Off-Peak Day 13.4%
Average Number of Good and Bad Detectors		Change in Good over one year ago -14%	Change in Good over last quarter -6%
		Change in Bad over one year ago 19%	Change in Bad over last quarter -1%

Congestion by Route											
		Vehicle Hours of Delay at 35 mph			Difference 2021 Q1-2020 Q1		Difference 2021 Q1-2020 Q4		Rank		
Route	County	2020 Q1	2020 Q4	2021 Q1	Absolute	Percentage	Absolute	Percentage	2020 Q1	2020 Q4	2021 Q1
I15	Riverside	492,612	420,435	404,368	-88,244	-17.9%	-16,067	-3.8%	1	2	1
I215	Riverside	459,193	326,024	382,286	-76,907	-16.7%	56,263	17.3%	2	4	2
I15	San Bernardino	213,570	469,190	354,141	140,571	65.8%	-115,049	-24.5%	6	1	3
SR91	Riverside	453,506	207,757	338,491	-115,016	-25.4%	130,734	62.9%	3	5	4
I10	San Bernardino	363,634	337,389	336,505	-27,130	-7.5%	-885	-0.3%	4	3	5
I210	San Bernardino	286,379	171,020	166,118	-120,261	-42.0%	-4,903	-2.9%	5	6	6
SR60	Riverside	63,116	65,492	79,845	16,728	26.5%	14,353	21.9%	8	7	7
I215	San Bernardino	93,350	41,737	45,768	-47,582	-51.0%	4,031	9.7%	7	9	8
SR71	San Bernardino	57,063	47,838	39,527	-17,535	-30.7%	-8,310	-17.4%	9	8	9
I10	Riverside	26,832	7,000	13,056	-13,776	-51.3%	6,057	86.5%	10	11	10
SR60	San Bernardino	2,033	15,849	10,917	8,884	436.9%	-4,932	-31.1%	12	10	11
SR71	Riverside	4,209	1,655	1,736	-2,473	-58.8%	81	4.9%	11	12	12
TOTALS		**2,515,497**	**2,111,385**	**2,172,756**	**-342,741**	**-13.6%**	**61,372**	**2.9%**			

The Congestion by Route table shows that congestion has increased by 2.9% from the previous quarter, however this is still a 13.6% decrease from one year ago.