District 10 Mobility Performance Report

2021 First Quarter

DEPARTMENT OF TRANSPORTATION

April 30, 2021 : Jaime Q. Quesada

District 10 Mobility Performance Report

2021 First Quarter

EXECUTIVE SUMMARY

Overview

Caltrans District 10 contains eight counties located within the Central Valley (San Joaquin / Stanislaus / Merced) and the Sierra Nevada (Amador / Calaveras / Tuolumne / Mariposa / Alpine). Over the years detection in Alpine and Calaveras Counties has been sparse, so the District 10 Mobility Performance Report (MPR) no longer includes these two counties in the quarterly report.

The MPR quarterly analysis compares information in the current quarter to that of the previous quarter and the quarter one year prior. The following are the performance measures reported in the MPR:

- Vehicle Miles Traveled (VMT)
- Vehicle Hours of Delay (VHD)
- Lost Lane Miles (LLM)
- Detector Health (DH)

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 MPR 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 delay at the 35 mph threshold represents severe congestion while delay at 60 mph represents all congestion, both light and heavy. These thresholds are set by Caltrans and are based upon engineering experience and District input.

FINDINGS

In the first quarter, total delay equaled 450 thousand vehicle hours of delay (VHD) at the 35 mph speed threshold and 1.6 million VHD at the 60 mph threshold. Compared to the same quarter the year before, there was an 8.5 percent total delay decrease in 35 mph quarterly delay and 9 percent

total delay decrease in 60 mph quarterly delay. The average weekday delay experienced in this quarter was approximately 6,676 VHD at 35 mph and 23,611 VHD at 60 mph. Compared to the same quarter the year before, there was a 5.1 percent decrease in 35 mph average weekday quarterly delay and 4.2 percent decrease in 60 mph average weekday quarterly delay. The decreased delay numbers at 35 mph and 60 mph can mainly be attributed to the fact that the COVID-19 lockdown began mid-March and ran through the first quarter of 2021. It is expected that the second quarter of 2021 will show increased delay across the board with COVID-19 cases decreasing and businesses returning to pre-COVID-19 operations.

Top Ten Bottlenecks for Quarter 1

County	Shift	Fwy	Abs PM	CA PM	Latitude	Longitude	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (mins)
SJ	AM	1205-W	1.69	0.761	37.74	-121.54	54	2.46	54,935	8,790
SJ	AM	1205-W	3.31	2.38	37.74	-121.51	39	4.90	51,195	4,565
STA	PM	SR132-E	9.42	1.556	37.64	-121.25	58	5.69	33,079	8,395
SJ	PM	SR99-S	237.50	1.71	37.75	-121.13	59	1.19	16,541	9,135
SJ	PM	SR4-E	66.43	R18.9	37.96	-121.25	39	2.96	15,723	3,395
SJ	PM	1205-E	9.44	R8.51	37.76	-121.41	59	1.48	15,683	8,590
SJ	PM	SR99-S	240.43	4.64	37.77	-121.18	57	0.94	15,027	8,775
SJ	PM	SR99-S	238.76	2.971	37.76	-121.15	51	1.47	14,165	6,425
SJ	PM	1205-E	7.47	R6.543	37.76	-121.44	41	1.88	9,335	3,540
SJ	PM	I205-E		R5.871	37.76		50	0.90	4,119	2,925

SUMMARY TABLE FOR THE 2021 Q1 REPORT

The following District 10 projects are currently being constructed or are scheduled for construction effective April 2021. These current and future (planned) projects will further relieve congestion in District 10:

MERCED COUNTY

MER 99 NB LIVINGSTON MEDIAN WIDENING; EA 10-0Q121

Lane widening from 2 to 3 lanes Approve Construction Contract Date – 08/01/2021 End Project – 10/02/2023

MER 99 SB LIVINGSTON MEDIAN WIDENING; EA 10-0Q122

Lane widening from 2 to 3 lanes Approve Construction Contract Date – 01/19/2019 End Project – 10/01/2021

MER 152 – LOS BANOS BYPASS SEGMENT I; EA 10-41911

Convert 4 lane expressway to 6 lane freeway Approve Construction Contract Date – 05/15/2018 End Project – 11/01/2022

SAN JOAQUIN COUNTY

SJ 4 RAMP METERING IMPROVEMENTS; EA 10-1F180

Install ramp meters along SR 4 between the I-5 and SR 99 Connectors Currently in PRS/PDS; PA&ED Scheduled for mid-2016 End Project – Estimated to be mid 2022

SJ 120 RAMP METERING IMPROVEMENTS; EA 10-1F040

Install ramp meters along SR 4 between the I-5 and SR 99 Connectors Currently in PS&E End Project – Estimated to be 2023

I-205 SMART CORRIDOR PHASE 2; EA 10-1C330

Install ramp meters and ITS elements along I205 from MacArthur to Grant Line Road Currently in PS&E End Project – Estimated to be 2022

I-205 – MOUNTAIN HOUSE PARKWAY INTERCHANGE PROJECT; EA 10-1E210

Improve the I-205 – Mountain House Parkway Interchange to accommodate planned future growth in and around the City of Tracy

Currently in PS&E

End Project – Estimated to be 2025

I-580 – PATTERSON PASS ROAD INTERCHANGE PROJECT; EA 10-1E220

Improve the I-205 – Patterson Pass Road Interchange to accommodate planned future growth in and around the City of Tracy

Currently in PS&E

End Project – Estimated to be 2025

$I-205 - LAMMERS ROAD / 11^{TH} STREET INTERCHANGE PROJECT; EA 10-0H910$

Construct the I-205 - Lammers Road / 11^{th} Street Interchange to accommodate planned future growth in and around the City of Tracy

Currently in PS&E

End Project – Estimated to be 2025

STANISLAUS COUNTY

STA 99 / SJ 99 RAMP METERING & MAINLINE IMPROVEMENTS; EA 10-1C300

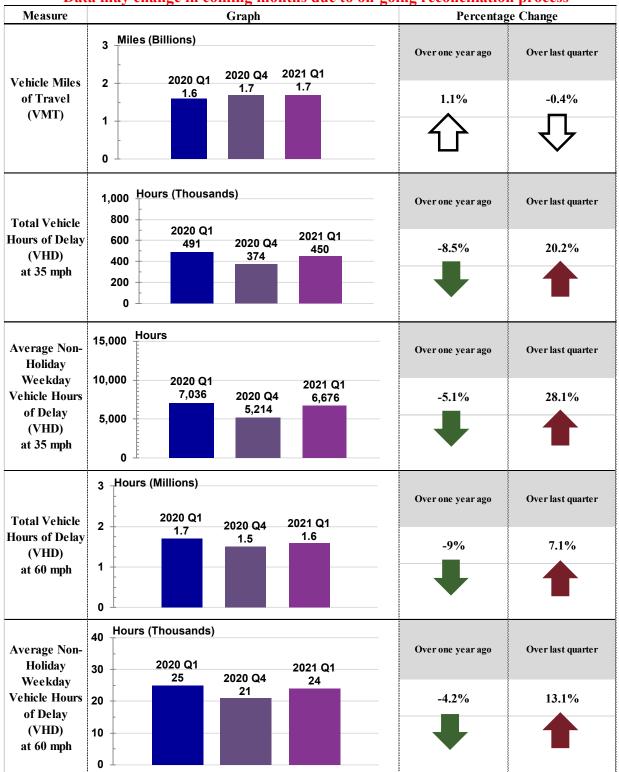
Improve Mainline and Ramp Operations; Standardize Structure Clearance; Add Auxiliary Lane Project Complete

The above capacity increasing, ramp metering, interchange improvement, and interchange construction projects are located on the routes, in the cities, and in the counties that experience the most congestion in District 10. It is expected that the projects will help increase the Vehicle Miles Traveled while reducing congestion and delay as the population and demand in District 10 grows over the next 10 years.

The next section of this report summarizes the District 10 2021 Q1 Quarterly Mobility Statistics.

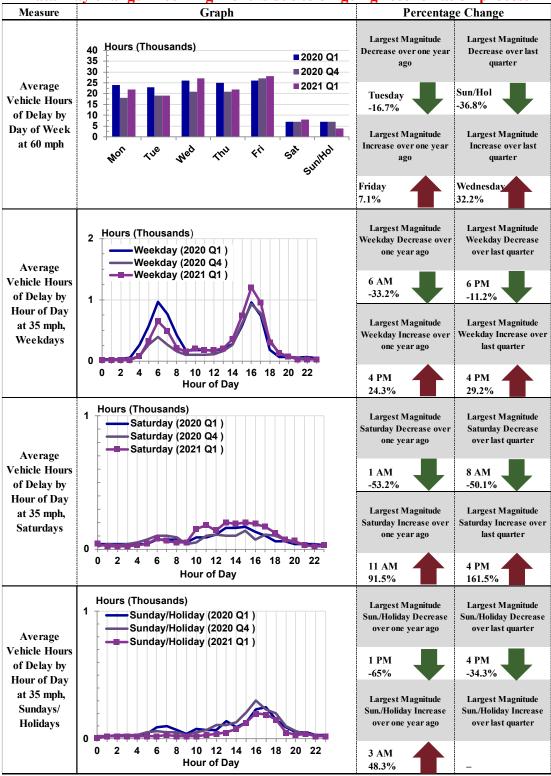
2021 Q1 Quarterly Mobility Statistics District 10

Data may change in coming months due to on-going reconciliation process



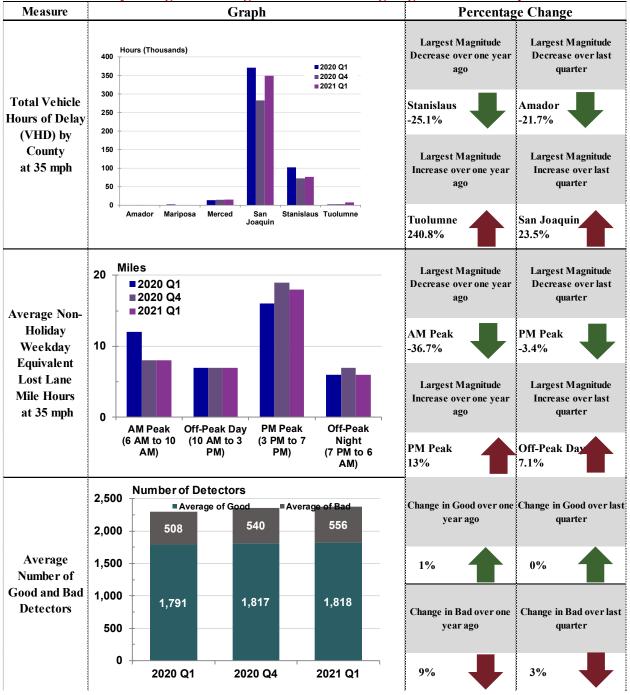
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Congestion by Route											
		Vehicle Hours of Delay at 35 mph			Difference 2021 Q1-2020 Q1		Difference 2021 Q1-2020 Q4		Rank		
Route	County	2020 Q1	2020 Q4	2021 Q1	Absolute	Percentage	Absolute	Percentage	2020 Q1	2020 Q4	2021 Q1
1205	San Joaquin	254036.2	106411.8	159310	-94726.2	-37%	52,898	50%	1	1	1
15	San Joaquin	53631.6	55397.2	120662.4	67030.8	125%	65,265	118%	5	3	2
SR99	San Joaquin	58587.5	71680.9	62868.4	4280.9	7%	(8,812)	-12%	4	2	3
SR99	Stanislaus	73702.9	38511.7	50255.9	-23447	-32%	11,744	30%	3	4	4
SR132	Stanislaus	21371.8	29152.4	22599.3	1227.5	6%	(6,553)	-22%	7	6	5
SR120	San Joaquin	15139.6	20190.8	21020.8	5881.2	39%	830	4%	8	7	6
1580	San Joaquin	122782.7	31245.1	19510.9	-103271.8	-84%	(11,734)	-38%	2	5	7
SR4	San Joaquin	25463.4	12733.5	15973.5	-9489.9	-37%	3,240	25%	6	8	8
SR99	Merced	12254.7	12066.7	13927.5	1672.8	14%	1,861	15%	9	9	9
SR108	Tuolumne	2207.2	2812.1	7844	5636.8	255%	5,032	179%	15	13	10
SR132	San Joaquin	4254.2	6117	4792.9	538.7	13%	(1,324)	-22%	10	10	11
SR12	San Joaquin	3916	4304	3097.2	-818.8	-21%	(1,207)	-28%	12	11	12
SR219	Stanislaus	3160	1491.7	1881.1	-1278.9	-40%	389	26%	13	15	13
15	Stanislaus	4021.1	3531.5	1818	-2203.1	-55%	(1,714)	-49%	11	12	14
15	Merced	1154.6	2026.9	963.4	-191.2	-17%	(1,064)	-52%	16	14	15
SR16	Amador	25.8	834.2	447.3	421.5	1634%	(387)	-46%	21	16	16
SR165	Merced	201.4	425.4	409.1	207.7	103%	(16)	-4%	17	17	17
SR88	Amador	46.6	15.8	236.2	189.6	407%	220	1395%	19	22	18
SR49	Mariposa	2332	63.8	45.6	-2286.4	-98%	(18)	-29%	14	20	19
SR49	Tuolumne	24.5	67.2	7.4	-17.1	-70%	(60)	-89%	22	19	20
SR152	Merced	40.7	252.9	4.9	-35.8	-88%	(248)	-98%	20	18	21
SR104	Amador	2.8	3.7	4.8	2	71%	1	30%	24	23	22
SR124	Amador	6.3	25.3	0.2	-6.1	-97%	(25)	-99%	23	21	23
SR120	Tuolumne	72	1.9	0	-72	-100%	(2)	-100%	18	24	
TO	TOTALS		399,364	507,681	-150,755	-22.9%	108,317	27.1%			