

# District 10 Mobility Performance Report

2020 Second Quarter

**DEPARTMENT OF TRANSPORTATION**

July 17, 2020  
: Jaime Q. Quesada

## District 10 Mobility Performance Report

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2020 Second 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 second quarter, total delay equaled 266 thousand vehicle hours of delay (VHD) at the 35 mph speed threshold and 1.1 million VHD at the 60 mph threshold. Compared to the same quarter the year before, there was a 57.1 percent total delay decrease in 35 mph quarterly delay and 40.2

percent total delay decrease in 60 mph quarterly delay. The average weekday delay experienced in this quarter was approximately 3,795 VHD at 35 mph and 16,026 VHD at 60 mph. Compared to the same quarter the year before, there was a 56.1 percent decrease in 35 mph average weekday quarterly delay and 37.7 percent decrease in 60 mph average weekday quarterly delay. The decreased delay numbers at 35 mph and 65 mph can mainly be attributed to the fact that the COVID-19 lockdown began mid-March through the second quarter of 2020.

## Top Ten Bottlenecks for Quarter 2

County	Fwy	Location	Type	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (mins)
SJ	I205-W	W-O Mtn House Pkwy OC	ML	AM	1.691	0.761	39	2.24	23,524	4,395
SJ	SR132-E	E-O Kasson Rd	ML	PM	9.420	1.556	41	5.53	12,153	4,025
STA	I205-E	W-O Tracy Blvd	ML	PM	7.473	R6.543	40	1.84	11,090	4,035
SJ	I205-E	MacArthur Dr	ML	PM	9.440	R8.51	42	1.53	10,934	5,265
SJ	I205-E	W-O Corral Hollow Rd	ML	PM	6.801	R5.871	38	0.76	3,797	2,495
SJ	I205-E	W-O Tracy Blvd UC	ML	PM	7.896	R6.966	43	0.60	1,274	1,460
SJ	SR99-S	N-O Off to Jack Tone Rd	ML	PM	238.756	2.971	23	1.44	3,785	1,970
SJ	SR99-S	Austin Rd	ML	PM	240.827	5.042	33	0.67	3,596	3,340
SJ	SR99-S	S-O On from Jack Tone Rd	ML	PM	238.179	2.394	39	0.30	2,418	5,400
SJ	SR99-S	N-O Jack Tone Rd	ML	PM	238.974	3.189	29	1.10	1,453	1,250

The following District 10 projects are currently being constructed or are scheduled for construction effective July 2020. 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 – 10/01/2020

**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 2020

**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<sup>TH</sup> STREET INTERCHANGE PROJECT; EA 10-0H910**

Construct the I-205 – Lammers Road / 11<sup>th</sup> 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 2020 Q2 Quarterly Mobility Statistics.

## 2020 Q2 Quarterly Mobility Statistics District 10

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

Measure	Graph	Percentage Change									
<b>Vehicle Miles of Travel (VMT)</b>	<p><b>Miles (Billions)</b></p> <table border="1" style="margin: auto;"> <tr><th>Year</th><th>Q2</th></tr> <tr><td>2019</td><td>1.8</td></tr> <tr><td>2020</td><td>1.6</td></tr> <tr><td>2020</td><td>1.5</td></tr> </table>	Year	Q2	2019	1.8	2020	1.6	2020	1.5	Over one year ago	Over last quarter
		Year	Q2								
		2019	1.8								
2020	1.6										
2020	1.5										
-19.9%	-11.5%										
↓	↓										
<b>Total Vehicle Hours of Delay (VHD) at 35 mph</b>	<p><b>Hours (Thousands)</b></p> <table border="1" style="margin: auto;"> <tr><th>Year</th><th>Q2</th></tr> <tr><td>2019</td><td>620</td></tr> <tr><td>2020</td><td>491</td></tr> <tr><td>2020</td><td>266</td></tr> </table>	Year	Q2	2019	620	2020	491	2020	266	Over one year ago	Over last quarter
		Year	Q2								
		2019	620								
2020	491										
2020	266										
-57.1%	-45.8%										
↓	↓										
<b>Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph</b>	<p><b>Hours</b></p> <table border="1" style="margin: auto;"> <tr><th>Year</th><th>Q2</th></tr> <tr><td>2019</td><td>8,646</td></tr> <tr><td>2020</td><td>7,036</td></tr> <tr><td>2020</td><td>3,795</td></tr> </table>	Year	Q2	2019	8,646	2020	7,036	2020	3,795	Over one year ago	Over last quarter
		Year	Q2								
		2019	8,646								
2020	7,036										
2020	3,795										
-56.1%	-46.1%										
↓	↓										
<b>Total Vehicle Hours of Delay (VHD) at 60 mph</b>	<p><b>Hours (Millions)</b></p> <table border="1" style="margin: auto;"> <tr><th>Year</th><th>Q2</th></tr> <tr><td>2019</td><td>1.9</td></tr> <tr><td>2020</td><td>1.7</td></tr> <tr><td>2020</td><td>1.1</td></tr> </table>	Year	Q2	2019	1.9	2020	1.7	2020	1.1	Over one year ago	Over last quarter
		Year	Q2								
		2019	1.9								
2020	1.7										
2020	1.1										
-40.2%	-35.7%										
↓	↓										
<b>Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph</b>	<p><b>Hours (Thousands)</b></p> <table border="1" style="margin: auto;"> <tr><th>Year</th><th>Q2</th></tr> <tr><td>2019</td><td>26</td></tr> <tr><td>2020</td><td>25</td></tr> <tr><td>2020</td><td>16</td></tr> </table>	Year	Q2	2019	26	2020	25	2020	16	Over one year ago	Over last quarter
		Year	Q2								
		2019	26								
2020	25										
2020	16										
-37.7%	-35.1%										
↓	↓										

## 2020 Q2 Quarterly Mobility Statistics District 10

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

Measure	Graph	Percentage Change	
<p>Average Vehicle Hours of Delay by Day of Week at 60 mph</p>		<p>Largest Magnitude Decrease over one year ago</p> <p>Friday -39.5% ↓</p> <p>Largest Magnitude Increase over one year ago</p>	<p>Largest Magnitude Decrease over last quarter</p> <p>Wednesday -41.8% ↓</p> <p>Largest Magnitude Increase over last quarter</p>
<p>Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays</p>		<p>Largest Magnitude Weekday Decrease over one year ago</p> <p>4 PM -58% ↓</p> <p>Largest Magnitude Weekday Increase over one year ago</p> <p>2 AM 13.4% ↑</p>	<p>Largest Magnitude Weekday Decrease over last quarter</p> <p>6 AM -68.1% ↓</p> <p>Largest Magnitude Weekday Increase over last quarter</p> <p>12 PM 12.2% ↑</p>
<p>Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays</p>		<p>Largest Magnitude Saturday Decrease over one year ago</p> <p>12 PM -80.1% ↓</p> <p>Largest Magnitude Saturday Increase over one year ago</p> <p>8 AM 18% ↑</p>	<p>Largest Magnitude Saturday Decrease over last quarter</p> <p>3 PM -64.7% ↓</p> <p>Largest Magnitude Saturday Increase over last quarter</p>
<p>Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/Holidays</p>		<p>Largest Magnitude Sun./Holiday Decrease over one year ago</p> <p>2 PM -79.2% ↓</p> <p>Largest Magnitude Sun./Holiday Increase over one year ago</p> <p>7 AM 50.5% ↑</p>	<p>Largest Magnitude Sun./Holiday Decrease over last quarter</p> <p>5 PM -71.7% ↓</p> <p>Largest Magnitude Sun./Holiday Increase over last quarter</p> <p>3 AM 62.4% ↑</p>

7/17/2020

## 2020 Q2 Quarterly Mobility Statistics District 10

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

Measure	Graph	Percentage Change	
<b>Total Vehicle Hours of Delay (VHD) by County at 35 mph</b>		Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		San Joaquin -66%	San Joaquin -58.4%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Merced 71.5%	Merced 86.5%
<b>Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph</b>		Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		PM Peak -55.9%	PM Peak -44.3%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
<b>Average Number of Good and Bad Detectors</b>		Change in Good over one year ago	Change in Good over last quarter
		6%	2%
		Change in Bad over one year ago	Change in Bad over last quarter
		-12%	3%

## 2020 Q2 Quarterly Mobility Statistics District 10

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

Congestion by Route											
Route	County	Vehicle Hours of Delay at 35 mph			Difference 2020 Q2-2019 Q2		Difference 2020 Q2-2020 Q1		Rank		
		2019 Q2	2020 Q1	2020 Q2	Absolute	Percentage	Absolute	Percentage	2019 Q2	2020 Q1	2020 Q2
I205	San Joaquin	373297.7	254036.2	80751	-292546.7	-78%	(173,285)	-68%	1	1	1
SR99	Stanislaus	109964	73702.9	64980.1	-44983.9	-41%	(8,723)	-12%	2	3	2
SR99	San Joaquin	85545.4	58587.5	33279.5	-52265.9	-61%	(25,308)	-43%	3	4	3
SR99	Merced	10225.9	12254.7	24865.5	14639.6	143%	12,611	103%	9	9	4
I580	San Joaquin	24359.9	122782.7	23374.3	-985.6	-4%	(99,408)	-81%	8	2	5
I5	San Joaquin	79129.7	53631.6	22286	-56843.7	-72%	(31,346)	-58%	4	5	6
SR120	San Joaquin	27696.2	15139.6	10864.8	-16831.4	-61%	(4,275)	-28%	7	8	7
I5	Stanislaus	4409.6	4021.1	9486.3	5076.7	115%	5,465	136%	12	11	8
SR132	Stanislaus	31265.4	21371.8	8926.5	-22338.9	-71%	(12,445)	-58%	5	7	9
SR4	San Joaquin	30327.8	25463.4	5127.2	-25200.6	-83%	(20,336)	-80%	6	6	10
SR12	San Joaquin	5418.4	3916	4051.8	-1366.6	-25%	136	3%	11	12	11
SR132	San Joaquin	7131.9	4254.2	3102.3	-4029.6	-57%	(1,152)	-27%	10	10	12
SR108	Tuolumne	1193.6	2207.2	1246.6	53	4%	(961)	-44%	15	15	13
SR219	Stanislaus	2765.6	3160	1190.9	-1574.7	-57%	(1,969)	-62%	14	13	14
I5	Merced	1077.4	1154.6	534	-543.4	-50%	(621)	-54%	16	16	15
SR16	Amador	285.8	25.8	261.6	-24.2	-8%	236	914%	19	21	16
SR88	Amador	338.7	46.6	130.8	-207.9	-61%	84	181%	18	19	17
SR165	Merced	153.4	201.4	55	-98.4	-64%	(146)	-73%	23	17	18
SR49	Mariposa	374.4	2332	33.1	-341.3	-91%	(2,299)	-99%	17	14	19
SR152	Merced	3390.1	40.7	12.1	-3378	-100%	(29)	-70%	13	20	20
SR104	Amador	1.5	2.8	11.3	9.8	653%	9	304%	24	24	21
SR49	Tuolumne	272	24.5	11	-261	-96%	(14)	-55%	21	22	22
SR120	Tuolumne	232.3	72	9.6	-222.7	-96%	(62)	-87%	22	18	23
SR124	Amador	277	6.3	1.7	-275.3	-99%	(5)	-73%	20	23	24
SR120	Stanislaus	0	0	0	0		-				
<b>TOTALS</b>		<b>799,134</b>	<b>658,436</b>	<b>294,593</b>	<b>-504,541</b>	<b>-63.1%</b>	<b>-363,843</b>	<b>-55.3%</b>			

7/17/2020