# District 10 Mobility Performance Report

2017 Third Quarter

**DEPARTMENT OF TRANSPORTATION** 

January 9, 2018 : Jaime Q. Quesada

# District 10 Mobility Performance Report

# 2017 Third 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 or annual analysis.

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 third quarter, total delay equaled 115 thousand vehicle hours of delay (VHD) at the 35 mph speed threshold (44.9% decrease over one year ago; 56.6% increase over last quarter),

and 474 thousand VHD at the 60 mph threshold (27.5% decrease over one year ago; 48% increase over last quarter). The average weekday delay experienced in this quarter was approximately 1,507 VHD at 35 mph (43.7% decrease over one year ago; 48.9% increase over last quarter), and 6,590 VHD at 60 mph (25.5% decrease over one year ago; 45.8% increase over last quarter). The decreases in VHD over one year ago can be attributed to completion of the I5 widening which included HOV lanes, SR 99 South Stockton Widening, and SR 99 Manteca Widening projects. The increases in VHD over last quarter can be attributed to improved detection as shown in the Average Number of Good and Bad Detectors summary chart on Page 6 of this report

Top Ten Bottlenecks for 2017 Quarter 3

FWY	COUNTY	LOCATION	SHIFT	ABS. PM	CA PM	# DAYS	AVG. EXTENT	TOTAL DELAY	TOTAL DURATION
						ACTVE	(MILES)	(VEH-HRS)	(MINS)
1205-W	SJ	E-O Hansen Rd	AM	3.310	2.38	59	4.9	122,533	9,265
SR99-S	STA	Kansas Ave	PM	227.834	R16.799	53	1.1	10,790	5,955
SR99-S	SJ	S-O Rte 120	PM	241.202	5_417	49	0.5	4,890	5,930
SR99-S	SJ	N-O Jack Tone Rd	PM	238.974	3.189	52	0.4	4,665	7,685
SR99-N	STA	N-O Carpenter Rd-Briggsmore Ave	PM	229.580	M18.52	10	3.0	4,220	735
SR99-S	SJ	S-O Austin Rd OC	PM	240.425	4.64	59	0.2	3,364	8,575
SR99-N	STA	Crows Landing Rd OC	PM	225.533	R14.473	30	0.4	3,022	3,560
SR99-N	STA	Whitmore Ave OC	AM	222.968	R11.908	20	2.3	2,855	1,410
SR99-N	STA	Crows Landing Rd OC	AM	225.533	R14.473	33	0.4	2,280	2,950
15-N	SJ	N-O French Camp Rd	PM	468 140	R22.648	45	0.2	1,007	3,305

The following District 10 projects are currently being constructed or are scheduled for construction effective January 2018. These current and future (planned) projects will further relieve congestion in District 10:

#### MERCED COUNTY

#### MER 99 MISSION AVENUE INTERCHANGE / FREEWAY; EA 10-36311

Convert from 4 lane expressway to 6 lane freeway on an 8 lane right of way Approve Construction Contract Date – 04/07/2008

End Project – 04/02/2018

# 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 PRS/PDS; PA&ED Scheduled for mid-2016 End Project – Estimated to be mid 2020

## 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 PA&ED End Project -11/01/2021

#### STANISLAUS COUNTY

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

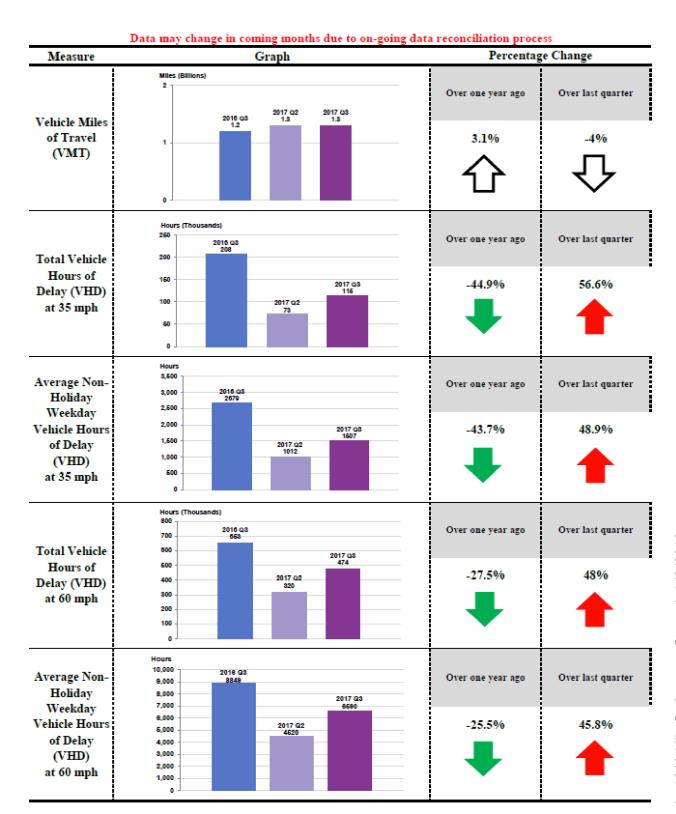
Improve Mainline and Ramp Operations; Standardize Structure Clearance; Add Auxiliary Lane Currently in PA&ED

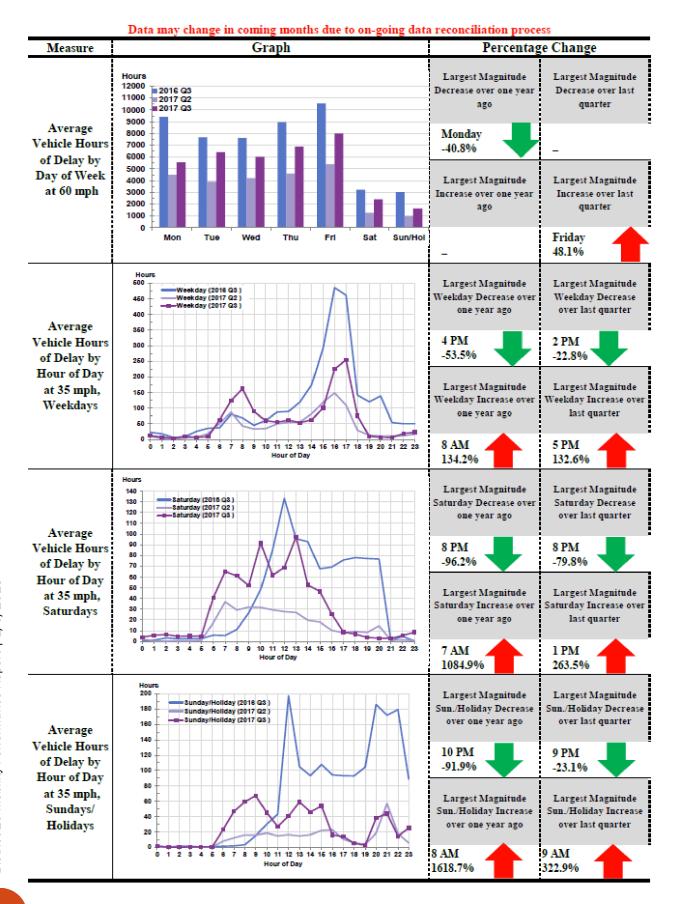
End Project – Estimated to be mid 2020

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.

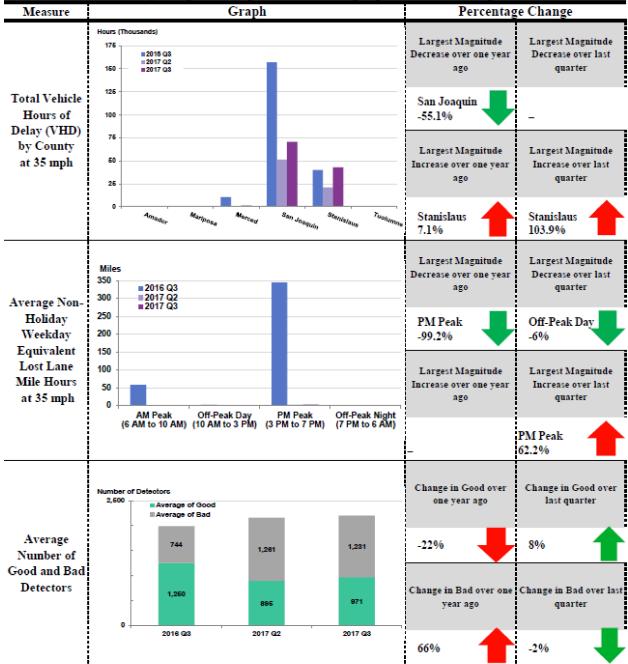
The next section of this report summarizes the District 10 2017 Q3 Quarterly Mobility Statistics.

# 2017 Q3 Quarterly Mobility Statistics - District 10





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



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Congestion by Route											
		Vehic	le Hours of ( at 35 mph	Delay	Difference 2017 Q3-2016 Q3			ne rice -2017 Q2	Rank		
Route	County	2016 Q3	2017 Q2	2017 Q3	Absolute	Percentage	Absolute	Percentage	2016 Q3	2017 02	2017 Q3
<b>I</b> 205	San Joaquin	271.280	188,203	191.624	-79,655	-29.4%	3,421	1.8%	I	l	L
5R99	San Joaquin	121,405	37,376	61,140	-60,365	49.6%	23,765	65.6%	2	7)	2
5R99	Stanislaus	22,448	18,271	30,507	8,058	35.9%	12,236	67.0%	3	3	3
5R132	Stanislaus	0	0	10,577	10,577		10.577				4
1580	San Joaquin	10.261	6,839	5,205	-5,054	49.3%	-1.533	-23.9%	6	4	5
15	San Joaquin	3,517	3,417	1,220	-1.299	-36 <i>9</i> %	-0.198	-35.1%	8	5	6
SR219	Stanuslarus	1,865	2,797	1,870	5	0.3%	-927	-33.1%	9	6	7
5R99	Mercei	9,902	710	1.255	-8.646	-87.3%	546	76.9%	7	9	3
5RJ32	San Joaquin	422	2,582	1,131	709	168.1%	-1.451	-56.2%	12	7	9
5R120	San Joaquin	0	502	752	752		250	49.9%		10	ID
5R4	San Joaquin	19,139	1,017	308	-18.831	-98.4%	-709	-69.7%	4	8	11
5RJ2	San Joaquin	0	0	3	3		3				12
I5	Merced	113	0	0	-113	-100.0%	0		13		
I5	Stanislaus	15,806	0	0	-15,806	-100.0%	0		5		
5RJ04	Amador	0	0	0	0		0				
5R408	Taglance	0	0	0	0		0				
-5R120	Toolarne	0	0	0	0		0				
5RJ52	Merced	522	0	0	-522	-100.0%	0		- 11	·	
5R49	Maraposa	528	0	0	-528	-100.0%	0		10		
5RSS	Amaict	0	0	0	0		0				
TOTALS		477,206	261.714	306,594	-170,613	-35.8%	44.980	17.1%			

SR 132 San Joaquin: No delay detected in 2016 Q3 and 2017 Q2.

SR 120 San Joaquin: No delay detected in 2016 Q3.

SR 12 San Joaquin: No delay detected in 2016 Q3 and 2017 Q2.

I5 Merced: No delay detected in 2017 Q2 and 2017 Q3.I5 Stanislaus: No delay detected in 2017 Q2 and 2017 Q3.

SR 104 Amador: No delay detected in 2016 Q3, 2017 Q2, and 2017 Q3.

SR 108 Tuolumne: No delay detected in 2016 Q3, 2017 Q2, and 2017 Q3.

SR 120 Tuolumne: No delay detected in 2016 Q3, 2017 Q2, and 2017 Q3.

SR 152 Merced: No delay detected in 2017 Q2 and 2017 Q3.

SR 49 Mariposa: No delay detected in 2017 Q2 and 2017 Q3.

SR 88 Aniador: No delay detected in 2016 Q3, 2017 Q2, and 2017 Q3.