District 06 Mobility Performance Report

2018 Fourth Quarter

DEPARTMENT OF TRANSPORTATION

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District 06 Mobility Performance Report

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EXECUTIVE SUMMARY

Overview

Caltrans District 6 is geographically diverse, and the second largest of the 12 Districts statewide, stretching from the southernmost part of Yosemite National Park in the north to the Mojave Desert. Also referred to as the Central Valley, District 6 encompasses Madera, Fresno, Tulare, Kings, and Kern counties. District 6 maintains and operates 476 miles of freeway and 1,554 miles of rural and urban highway. This District has the largest portion of road miles to maintain in the state highway system with 2,030 miles. Interstate 5 and State Route 99 span District 6, connecting the Central Valley to Northern and Southern California. These two routes and many others support substantial truck traffic for the agricultural base of the region.

The Mobility Performance Report (MPR) quarterly analysis compares current data with information from the same quarter of the previous year, and from the previous quarter using the following performance measures:

- Vehicle Miles of Travel (VMT)
- Vehicle Hours of Delay (VHD)
- Lost Lane Miles (equivalent lost productivity)
- Detector Health

This information is based on continuous data collected by automated vehicle detector stations deployed on urban-area freeways with recurrent congestion. The MPR presents congestion delay 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. The criteria for speed thresholds are set by Caltrans and are based on engineering experience and District input.

FINDINGS

In the fourth quarter, total delay was 305 thousand Vehicle Hours of Delay (VHD) at the 35mph speed threshold, and 1.4 million VHD at the 60mph threshold. The average non-holiday weekday experience was approximately 3,661 VHD at 35 mph, and 18 thousand VHD at 60 mph.

For the entire district, the VHD for the fourth quarter experienced an overall decrease of 31.7 percent when compared to the previous quarter, however the delay varied with respect to each County and route. The VHD also experienced a 13.8 percent decrease when comparing the fourth quarter of 2018 to the fourth quarter of 2017. Vehicle Miles Traveled decreased 3.3 percent when compared to the third quarter to 1.9 billion. Fresno County experienced the largest decrease in VHD at 42.6 percent, and Madera County experienced the largest increase in VHD at 26 percent, over the previous quarter at the 35mph threshold. An overall decrease in VHD for the district could correspond to the reduction in approved lane closures.

An increase in VHD was observed on State Route 168 in Fresno County. The increase in delay corresponds directly to the detectors reporting "high values" for the entire month of December. The increase in delay could also be attributed to holiday traffic patterns.

An increase in VHD was observed on State Route 198 in Kings County. Recent construction activities for the Hanford-Armona Roundabout project could have contributed to the increase in VHD during the fourth quarter.

CENTRAL REGION ONGOING PROJECTS

The following projects may have contributed to reduce overall vehicle hours of delay and to increase delay in certain locations of District 6.

Fresno County

Interstate 5; 06-0U080 0615000209 Pavement Preservation CAPM (PM 21.0-31.0)

State Route 99; 06-0T360 0615000066 Roadside Safety Improvements (PM 0.0-11.9)

State Route 99; 06-0HT10 0612000287 Route 99 Realignment (PM 23.7-26.2)

Kern County

State Route 58; 06-48461 0614000064 Operational Improvements (PM R52.3-R55.4)

State Route 99; 06-43350 0600000432 Modify Interchange (PM 30.5-31.1)

Kings County

State Route 41; 06-0T301 0615000041 Intersection Improvements (PM 34.7)

State Route 198; 06-0Q320 0613000034 Intersection Improvements – Construct Roundabout (PM 15.5)

Madera County

State Route 41; 06-0V020 0616000091 Intersection Improvements (PM 5.6-6.5)

Tulare County

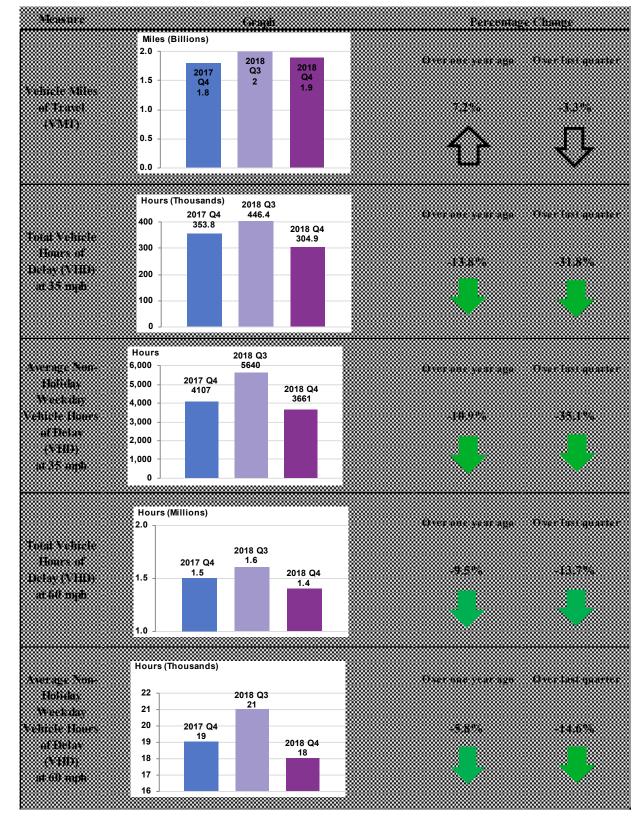
State Route 99; 06-47150 0600000464 Reconstruct Betty Drive Interchange (PM 39.6-41.3)

BOTTLENECKS REPORTED FOR QUARTER 4

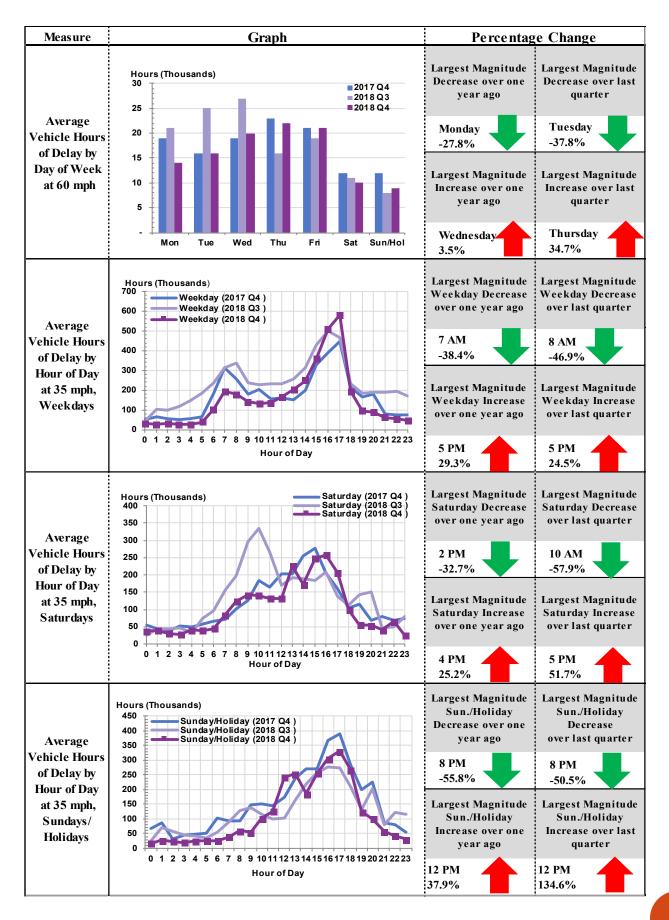
County	Fwy	Location	Shift	VDS	CA PM	# Days Active	Avg Extent (Miles)	Avg Delay (veh- hrs)	Avg Duration (mins)
Madera	99	Gateway Drive SB	PM	602301	9.78	30	2.09	100.71	118.83
Madera	99	0.2 Miles North of Avenue 15.5 SB	PM	602305	12.14	31	1.45	132.63	113.87
Kern	99	North of Ming Avenue NB	PM	619981	22.67	26	0.40	122.06	182.50
Kern	99	North of Rosedale Highway SB	PM	619984	26.294	52	0.92	100.59	112.88

MVDS 619981 Kern 99 NB – For the 4th quarter there were 84 approved lane closures at this location.

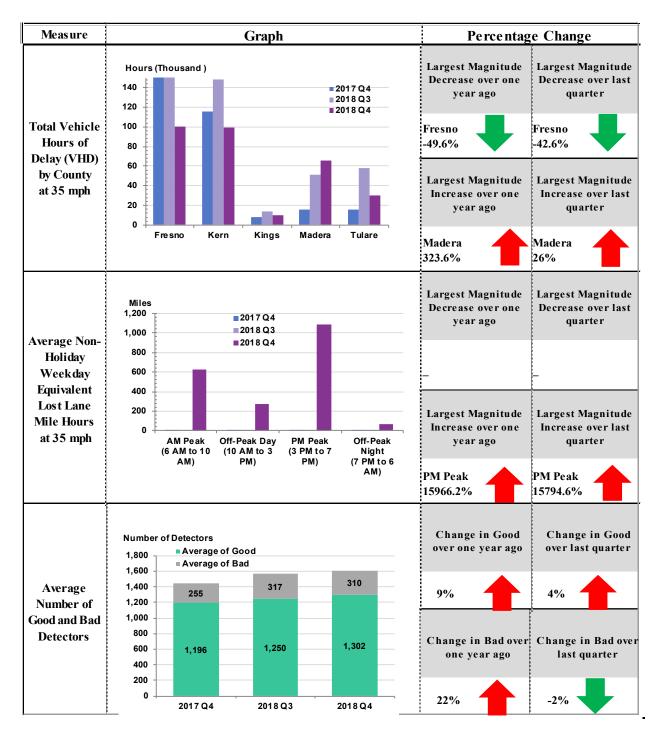
QUARTERLY MOBILITY STATISTICS







6



District 06 Mobility Performance Report | 1/25/2019

7

Congestion by Route											
Route	County	Vehicle Hours of Delay at 35 mph 2017 Q4 2018 Q3 2018 Q4			Difference 2018 Q4-2017 Q4 Absolute Percentage		Difference 2018 Q4-2018 Q3 Absolute Percentage		Rank 2017 Q4 2018 Q3 2018 Q4		
SR99	Madera	15,397	51,310	65,213		, v	13,903	Ŭ	2017 Q4	2018 Q3 6	2018 Q4
15	Kern	46.964	58,801	48,964	2.000		-9.837		3	3	2
SR99	Kern	64,770	83,305	37,058	,	-42.8%	-46,246		2	1	3
SR41	Fresno	38,964	44,155	33,329	-5,635	-14.5%	-10,826		5	7	4
SR99	Tulare	15,989	57,983	28,835	12,845	80.3%	-29,148	-50.3%	6	4	5
SR99	Fresno	45,197	57,667	23,517	-21,680	-48.0%	-34,150	-59.2%	4	5	6
15	Fresno	103,514	59,541	20,143	-83,372	-80.5%	-39,398	-66.2%	1	2	7
SR168S	Fresno	3,203	1,527	10,336	7,133	222.7%	8,810	577.1%	12	14	8
SR58	Kern	3,535	5,295	8,213	4,677	132.3%	2,918	55.1%	10	10	9
SR198	Kings	2,382	1,607	7,505	5,123	215.0%	5,898	367.0%	13	13	10
SR180	Fresno	3,534	6,842	7,131	3,597	101.8%	289	4.2%	11	9	11
SR180S	Fresno	4,288	4,612	5,675	1,386	32.3%	1,063	23.0%	9	12	12
SR46	Kern	9	1,100	4,638	4,628	49238.3%	3,538	321.6%	17	15	13
15	Kings	4,538	7,238	1,629	-2,909	-64.1%	-5,609	-77.5%	8	8	14
SR41	Kings	1,150	5,261	1,389	239	20.8%	-3,872	-73.6%	14	11	15
SR198	Tulare	295	172	1,287	992	336.1%	1,115	648.0%	15	17	16
TOTALS		353,731	446,413	304,859	-48,871	-13.8%	-141,554	-31.7%			

Vehicle Hours of Delay is in Hours