

District 06 Mobility Performance Report

2015 Fourth Quarter

DEPARTMENT OF TRANSPORTATION

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: Koko Widyatmoko

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EXECUTIVE SUMMARY

Overview

Caltrans District 6 is geographically diverse district and the third largest of the 12 Districts statewide, stretching from the southernmost part of Yosemite National Park in the north to the Mojave Desert. It includes Madera, Fresno, Tulare, Kings and Kern counties. District 6 consists of 476 miles of freeway and 1,554 miles of rural and urban highway. The District has the largest portion of road miles to maintain in the state highway system with 2,030 miles.

The Mobility Performance quarterly analysis compares information with over a year ago and over last quarter in 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 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 2015 fourth quarter, the total delay equaled 173 thousands vehicle hours of delay (VHD) at the 35 mph speed threshold, and 643 thousands VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 2,045 VHD at 35 mph, and 8,136 VHD at 60 mph.

The VHD in this quarter increased by 171.2% compared to the previous quarter. The increase is believed to be a result of better detections after the completion of two projects to repair and replace bad or damaged detections.

The increased VHD on I-5 could be related to a construction of pavement replacement project in Kern County between post mile 62 and 73. The project resulted a significant traffic delay in the vicinity.

Additionally, there are 4 new detection stations installed and came on-line in this quarter. Two in Kings County, on State Route 198 and State Route 41. One in Madera County on State Route 152. One in Fresno County on State Route 168.

Quarterly Mobility Statistics

Measure	Graph	Percentage Change	
Vehicle Miles of Travel (VMT)	<p>Miles (Billions)</p> <p>2014 Q4: 1.04 2015 Q3: 1.13 2015 Q4: 1.19</p>	Over one year ago	Over last quarter
		13.8%	4.6%
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <p>2014 Q4: 81 2015 Q3: 64 2015 Q4: 173</p>	Over one year ago	Over last quarter
		112.6%	171.2%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours</p> <p>2014 Q4: 790 2015 Q3: 754 2015 Q4: 2,045</p>	Over one year ago	Over last quarter
		158.9%	171.2%
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <p>2014 Q4: 425 2015 Q3: 344 2015 Q4: 643</p>	Over one year ago	Over last quarter
		51.2%	86.6%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours</p> <p>2014 Q4: 5,287 2015 Q3: 4,422 2015 Q4: 8,136</p>	Over one year ago	Over last quarter
		53.9%	84%

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>Largest Magnitude Decrease over last quarter</p>
		<p>Largest Magnitude Increase over one year ago</p> <p>Friday 62.5% ↑</p>	<p>Largest Magnitude Increase over last quarter</p> <p>Thursday 141.1% ↑</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>Largest Magnitude Weekday Decrease over last quarter</p>
		<p>Largest Magnitude Weekday Increase over one year ago</p> <p>5 PM 138.4% ↑</p>	<p>Largest Magnitude Weekday Increase over last quarter</p> <p>5 PM 303.5% ↑</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>Largest Magnitude Saturday Decrease over last quarter</p> <p>7 AM -42.9% ↓</p>
		<p>Largest Magnitude Saturday Increase over one year ago</p> <p>6 PM 730.4% ↑</p>	<p>Largest Magnitude Saturday Increase over last quarter</p> <p>5 PM 543.7% ↑</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>3 PM -66.4% ↓</p>	<p>Largest Magnitude Sun./Holiday Decrease over last quarter</p> <p>11 PM -34.2% ↓</p>
		<p>Largest Magnitude Sun./Holiday Increase over one year ago</p> <p>11 AM 188.6% ↑</p>	<p>Largest Magnitude Sun./Holiday Increase over last quarter</p> <p>5 PM 418.8% ↑</p>

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph		Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		Kern -35.5%	-
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph		Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		-	-
Average Number of Good and Bad Detectors		Change in Good over one year ago	Change in Good over last quarter
		14%	20%
		Change in Bad over one year ago	Change in Bad over last quarter
		-10%	-14%

Congestion by Route

Route	County	Vehicle Hours of Delay at 35 mph			Difference 2015 Q4-2014 Q4		Difference 2015 Q4-2015 Q3		Rank		
		2014 Q4	2015 Q3	2015 Q4	Absolute	Percentage	Absolute	Percentage	2014 Q4	2015 Q3	2015 Q4
		SR99	Fresno	16142.6	23725.1	102228.7	86,086	533%	78,504	331%	2
SR99	Madera	14321.7	9575.6	16519.7	2,198	15%	6,944	73%	3	2	2
I5	Kern	27378.4	3088.1	11000.8	-16,378	-60%	7,913	256%	1	6	3
SR99	Kern	6446.6	7621.7	10916.1	4,470	69%	3,294	43%	5	4	4
SR180	Fresno	1397.7	5559.3	9501.8	8,104	580%	3,943	71%	8	5	5
SR41	Fresno	8308.3	7959.8	9400	1,092	13%	1,440	18%	4	3	6
SR168S	Fresno	29.4	2112.6	5655.5	5,626	19136%	3,543	168%	10	7	7
SR58	Kern	4515	1156.5	2812	-1,703	-38%	1,656	143%	6	10	8
I5	Fresno	17.6	1756	2741.6	2,724	15477%	986	56%	12	8	9
SR99	Tulare	2533.2	1261.1	1555.6	-978	-39%	295	23%	7	9	10
SR198	Kings			473.3	473	100%	473	100%	16	16	11
SR152	Madera			139.9	140	100%	140	100%	14	14	12
SR41	Kings			106.3	106	100%	106	100%	17	17	13
SR198	Tulare	290.2	11.8	23	-267	-92%	11	95%	9	11	14
SR168	Fresno			11.2	11	100%	11	100%	15	15	15
SR41	Madera	24.4	0	0	-24	-100%	0	0%	11	12	16
SR46	Kern	0.9	0	0	-1	-100%	0	0%	13	13	17
TOTALS		81,406	63,828	173,086	91,680	113%	109,258	171%			