

District 06 Mobility Performance Report

2015 Third Quarter

DEPARTMENT OF TRANSPORTATION

October 1, 2015
: Koko Widyatmoko

District 06 Mobility Performance Report

2015 Third Quarter

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 third quarter, total delay equaled 64 thousands vehicle hours of delay (VHD) at the 35 mph speed threshold, and 344 thousands VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 754 VHD at 35 mph, and 4,422 VHD at 60 mph.

Quarterly Mobility Statistics

Measure	Graph	Percentage Change									
Vehicle Miles of Travel (VMT)	<p>Miles (Billions)</p> <table border="1"> <tr><th>Year</th><th>Q3</th></tr> <tr><td>2014</td><td>1.08</td></tr> <tr><td>2015</td><td>1.1</td></tr> <tr><td>2015</td><td>1.13</td></tr> </table>	Year	Q3	2014	1.08	2015	1.1	2015	1.13	Over one year ago	Over last quarter
		Year	Q3								
2014	1.08										
2015	1.1										
2015	1.13										
		4.5% ↑	2.6% ↑								
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year</th><th>Q3</th></tr> <tr><td>2014</td><td>81</td></tr> <tr><td>2015</td><td>85</td></tr> <tr><td>2015</td><td>64</td></tr> </table>	Year	Q3	2014	81	2015	85	2015	64	Over one year ago	Over last quarter
		Year	Q3								
2014	81										
2015	85										
2015	64										
		-21.5% ↓	-25% ↓								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours</p> <table border="1"> <tr><th>Year</th><th>Q3</th></tr> <tr><td>2014</td><td>880</td></tr> <tr><td>2015</td><td>1,110</td></tr> <tr><td>2015</td><td>754</td></tr> </table>	Year	Q3	2014	880	2015	1,110	2015	754	Over one year ago	Over last quarter
		Year	Q3								
2014	880										
2015	1,110										
2015	754										
		-14.3% ↓	-32% ↓								
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year</th><th>Q3</th></tr> <tr><td>2014</td><td>412</td></tr> <tr><td>2015</td><td>401</td></tr> <tr><td>2015</td><td>344</td></tr> </table>	Year	Q3	2014	412	2015	401	2015	344	Over one year ago	Over last quarter
		Year	Q3								
2014	412										
2015	401										
2015	344										
		-16.5% ↓	-14.1% ↓								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours</p> <table border="1"> <tr><th>Year</th><th>Q3</th></tr> <tr><td>2014</td><td>5,122</td></tr> <tr><td>2015</td><td>5,314</td></tr> <tr><td>2015</td><td>4,422</td></tr> </table>	Year	Q3	2014	5,122	2015	5,314	2015	4,422	Over one year ago	Over last quarter
		Year	Q3								
2014	5,122										
2015	5,314										
2015	4,422										
		-13.7% ↑	-16.8% ↓								

Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph		Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		Friday -26%	Friday -22.4%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		-	Saturday 3.6%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		Largest Magnitude Weekday Decrease over one year ago	Largest Magnitude Weekday Decrease over last quarter
		2 PM -45.8%	5 PM -48.5%
		Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
		9 PM 54.2%	10 AM 8.1%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		Largest Magnitude Saturday Decrease over one year ago	Largest Magnitude Saturday Decrease over last quarter
		7 PM -86%	12 PM -55%
		Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
		5 AM 659.3%	7 AM 541.2%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/Holidays		Largest Magnitude Sun./Holiday Decrease over one year ago	Largest Magnitude Sun./Holiday Decrease over last quarter
		5 PM -83.9%	8 PM -56.3%
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		9 PM 202.6%	6 PM 130.7%

Measure	Graph	Percentage Change																					
<p>Total Vehicle Hours of Delay (VHD) by County at 35 mph</p>	<table border="1"> <caption>Total Vehicle Hours of Delay (VHD) by County at 35 mph</caption> <thead> <tr> <th>County</th> <th>2014 Q3</th> <th>2015 Q2</th> <th>2015 Q3</th> </tr> </thead> <tbody> <tr> <td>Fresno</td> <td>30</td> <td>48</td> <td>41</td> </tr> <tr> <td>Kern</td> <td>40</td> <td>15</td> <td>12</td> </tr> <tr> <td>Madera</td> <td>11</td> <td>16</td> <td>10</td> </tr> <tr> <td>Tulare</td> <td>1</td> <td>2</td> <td>1</td> </tr> </tbody> </table>	County	2014 Q3	2015 Q2	2015 Q3	Fresno	30	48	41	Kern	40	15	12	Madera	11	16	10	Tulare	1	2	1	<p>Largest Magnitude Decrease over one year ago</p> <p>Kern -70.1% </p>	<p>Largest Magnitude Decrease over last quarter</p> <p>Fresno -22.3% </p>
County	2014 Q3	2015 Q2	2015 Q3																				
Fresno	30	48	41																				
Kern	40	15	12																				
Madera	11	16	10																				
Tulare	1	2	1																				
<p>Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph</p>	<table border="1"> <caption>Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph</caption> <thead> <tr> <th>Category</th> <th>2014 Q3</th> <th>2015 Q2</th> <th>2015 Q3</th> </tr> </thead> <tbody> <tr> <td>AM Peak (6 AM to 10 AM)</td> <td>0.5</td> <td>1.0</td> <td>0.9</td> </tr> <tr> <td>Off-Peak Day (10 AM to 3 PM)</td> <td>0.6</td> <td>1.0</td> <td>0.8</td> </tr> <tr> <td>PM Peak (3 PM to 7 PM)</td> <td>1.0</td> <td>2.1</td> <td>1.8</td> </tr> <tr> <td>Off-Peak Night (7 PM to 6 AM)</td> <td>0.4</td> <td>1.2</td> <td>0.8</td> </tr> </tbody> </table>	Category	2014 Q3	2015 Q2	2015 Q3	AM Peak (6 AM to 10 AM)	0.5	1.0	0.9	Off-Peak Day (10 AM to 3 PM)	0.6	1.0	0.8	PM Peak (3 PM to 7 PM)	1.0	2.1	1.8	Off-Peak Night (7 PM to 6 AM)	0.4	1.2	0.8	<p>Largest Magnitude Increase over one year ago</p> <p>Fresno 38.9% </p>	<p>Largest Magnitude Increase over last quarter</p> <p>Off-Peak Night -31.3%</p>
Category	2014 Q3	2015 Q2	2015 Q3																				
AM Peak (6 AM to 10 AM)	0.5	1.0	0.9																				
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<p>Average Number of Good and Bad Detectors</p>	<table border="1"> <caption>Average Number of Good and Bad Detectors</caption> <thead> <tr> <th>Quarter</th> <th>Average of Good</th> <th>Average of Bad</th> </tr> </thead> <tbody> <tr> <td>2014 Q3</td> <td>562</td> <td>506</td> </tr> <tr> <td>2015 Q2</td> <td>581</td> <td>487</td> </tr> <tr> <td>2015 Q3</td> <td>560</td> <td>508</td> </tr> </tbody> </table>	Quarter	Average of Good	Average of Bad	2014 Q3	562	506	2015 Q2	581	487	2015 Q3	560	508	<p>Change in Good over one year ago</p> <p>0%</p>	<p>Change in Good over last quarter</p> <p>-4% </p>								
Quarter	Average of Good	Average of Bad																					
2014 Q3	562	506																					
2015 Q2	581	487																					
2015 Q3	560	508																					
		<p>Change in Bad over one year ago</p> <p>0%</p>	<p>Change in Bad over last quarter</p> <p>4% </p>																				

Congestion by Route

Route	County	Vehicle Hours of Delay at 35 mph			Difference 2015 Q3-2014 Q3		Difference 2015 Q3-2015 Q2		Rank		
		2014 Q3	2015 Q2	2015 Q3	Absolute	Percentage	Absolute	Percentage	2014 Q3	2015 Q2	2015 Q3
		SR99	Fresno	20836.8	26472.4	23725.1	2,888	14%	-2,747	-10%	2
SR99	Madera	11229.2	14376.5	9575.6	-1,654	-15%	-4,801	-33%	3	2	2
SR41	Fresno	6499.4	12145.7	7959.8	1,460	22%	-4,186	-34%	5	4	3
SR99	Kern	9557.8	11989.9	7621.7	-1,936	-20%	-4,368	-36%	4	5	4
SR180	Fresno	2098.5	1580.2	5559.3	3,461	165%	3,979	252%	7	7	5
I5	Kern	27309	1169.7	3088.1	-24,221	-89%	1,918	164%	1	9	6
SR168S	Fresno	7.6	44.8	2112.6	2,105	27697%	2,068	4616%	10	12	7
I5	Fresno	152.5	12656.8	1756	1,604	1051%	-10,901	-86%	9	3	8
SR99	Tulare	774	1289.4	1261.1	487	63%	-28	-2%	8	8	9
SR58	Kern	2877.9	2173.5	1156.5	-1,721	-60%	-1,017	-47%	6	6	10
SR198	Tulare	0	237.1	11.8	12	0%	-225	-95%	12	11	11
SR41	Madera	0	1002.7	0	0	0%	-1,003	-100%	13	10	12
SR46	Kern	4	0.6	0	-4	-100%	-1	-100%	11	13	13
SR168	Fresno				0	0%	0	0%	14	14	14
TOTALS		81,347	85,139	63,828	-17,519	-22%	-21,312	-25%			