

District 03 Mobility Performance Report

2015 Third Quarter

DEPARTMENT OF TRANSPORTATION

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EXECUTIVE SUMMARY

Overview

Caltrans District 3 contains eleven counties that located in northern California. Most of its congestion and delay take place at urbanized counties of Sacramento, Placer, and Yolo.

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), Bottleneck Locations
- 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 2.4 million vehicle hours of delay (VHD) at the 35 mph speed threshold, and 6.8 million VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 12 thousand VHD at 35 mph, and 35 thousand VHD at 60 mph.

Top Ten Bottlenecks for the Quarter 3

Fwy	Location	Shift	Abs PM	CA PM	# Days Active	Average Extent (Miles)	Total Delay (veh-hrs)	Total Duration (minutes)
SR51-N	NB Fulton Ave.	PM	6.87	6.87	64	2.6	41,808	9,370
US50-E	Stockton Blvd.	PM	6.35	R.711	60	2.4	37,594	5,785
SR51-N	North of A St.	PM	2.00	2.00	64	1.4	27,515	6,660
I80-E	E of CR 105d	PM	76.69	4.50	27	4.3	26,281	3,260
SR51-S	Auburn Blvd	AM	7.55	7.57	60	1.7	25,301	8,605
SR51-S	EB Exposition Bl.	PM	3.32	3.32	64	1.1	24,740	12,100
US50-W	15th St	PM	4.51	L1.351	31	2.7	22,887	3,830
SR99-S	EB Consumnes River	PM	290.64	16.20	55	1.8	22,218	9,405
SR51-N	Elvas UP	PM	2.40	2.40	45	2.0	21,222	3,175
I5-N	L St.	PM	518.86	23.57	64	1.1	20,169	7,475

Note: For the table above, the 3rd quarter delay calculation was based on 60 mph threshold, AM or PM weekday peak period.

Quarterly Mobility Statistics

Measure	Graph	Percentage Change									
Vehicle Miles of Travel (VMT)	<p>Miles (Billions)</p> <table border="1"> <tr><th>Quarter</th><th>VMT (Billions)</th></tr> <tr><td>2014 Q3</td><td>2.36</td></tr> <tr><td>2015 Q2</td><td>2.37</td></tr> <tr><td>2015 Q3</td><td>2.50</td></tr> </table>	Quarter	VMT (Billions)	2014 Q3	2.36	2015 Q2	2.37	2015 Q3	2.50	Over one year ago	Over last quarter
		Quarter	VMT (Billions)								
2014 Q3	2.36										
2015 Q2	2.37										
2015 Q3	2.50										
		6% ↑	5.5% ↑								
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Quarter</th><th>VHD (Thousands)</th></tr> <tr><td>2014 Q3</td><td>708</td></tr> <tr><td>2015 Q2</td><td>809</td></tr> <tr><td>2015 Q3</td><td>938</td></tr> </table>	Quarter	VHD (Thousands)	2014 Q3	708	2015 Q2	809	2015 Q3	938	Over one year ago	Over last quarter
		Quarter	VHD (Thousands)								
2014 Q3	708										
2015 Q2	809										
2015 Q3	938										
		32.5% ↑	15.9% ↑								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours</p> <table border="1"> <tr><th>Quarter</th><th>VHD (Hours)</th></tr> <tr><td>2014 Q3</td><td>8,492</td></tr> <tr><td>2015 Q2</td><td>11,171</td></tr> <tr><td>2015 Q3</td><td>12,230</td></tr> </table>	Quarter	VHD (Hours)	2014 Q3	8,492	2015 Q2	11,171	2015 Q3	12,230	Over one year ago	Over last quarter
		Quarter	VHD (Hours)								
2014 Q3	8,492										
2015 Q2	11,171										
2015 Q3	12,230										
		44% ↑	9.5% ↑								
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Quarter</th><th>VHD (Millions)</th></tr> <tr><td>2014 Q3</td><td>2</td></tr> <tr><td>2015 Q2</td><td>2.2</td></tr> <tr><td>2015 Q3</td><td>2.6</td></tr> </table>	Quarter	VHD (Millions)	2014 Q3	2	2015 Q2	2.2	2015 Q3	2.6	Over one year ago	Over last quarter
		Quarter	VHD (Millions)								
2014 Q3	2										
2015 Q2	2.2										
2015 Q3	2.6										
		26.2% ↑	15.2% ↑								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Quarter</th><th>VHD (Thousands)</th></tr> <tr><td>2014 Q3</td><td>26</td></tr> <tr><td>2015 Q2</td><td>31</td></tr> <tr><td>2015 Q3</td><td>35</td></tr> </table>	Quarter	VHD (Thousands)	2014 Q3	26	2015 Q2	31	2015 Q3	35	Over one year ago	Over last quarter
		Quarter	VHD (Thousands)								
2014 Q3	26										
2015 Q2	31										
2015 Q3	35										
		31.3% ↑	11% ↑								

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
		Sun/Hol -3.6%	
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Monday 52.3%	Friday 16.1%
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
		8 PM -33.8%	5 PM -2.2%
		Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
		5 PM 26.3%	8 AM 10.8%
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
		1 PM -25.6%	2 PM -3.8%
		Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
		5 PM 101%	11 AM 57.5%
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
		3 PM -17.6%	12 AM -24.1%
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		6 PM 17.8%	12 PM 201%

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
		Yuba -45.5%	
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
		-	Off-Peak Day -6.4%
Average Number of Good and Bad Detectors		Change in Good over one year ago	Change in Good over last quarter
		-6%	-5.4%
		Change in Bad over one year ago	Change in Bad over last quarter
		25%	18%

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
SR51	Sacramento	158175	253374.6	231693.5	73518.5	46%	(21,681)	-9%	1	1	1
SR99	Sacramento	112547.3	113299.6	154621.9	42074.6	37%	41,322	36%	2	3	2
US50	Sacramento	111503.6	132488.9	148403.3	36899.7	33%	15,914	12%	3	2	3
I80	Yolo	88942.1	93292	98502.6	9560.5	11%	5,211	6%	4	4	4
I5	Sacramento	80522	74611.5	81266.6	744.6	1%	6,655	9%	5	5	5
I80	Sacramento	50899.9	51017	54743.6	3843.7	8%	3,727	7%	6	6	6
I80	Placer	37249.7	21107.2	43346.6	6096.9	16%	22,239	105%	7	8	7
SR113	Yolo	907.4	4802.1	28544.5	27637.1	3046%	23,742	494%	16	11	8
US50	Yolo	19923.4	22671.5	21944	2020.6	10%	(728)	-3%	8	7	9
SR160	Sacramento	12321.4	19160.2	18534.7	6213.3	50%	(626)	-3%	9	9	10
I5	Yolo	3192.3	3277	16019.7	12827.4	402%	12,743	389%	13	13	11
I80	Nevada	10820.6	3804.9	13661.2	2840.6	26%	9,856	259%	10	12	12
SR65	Placer	10206.9	13989.4	11726	1519.1	15%	(2,263)	-16%	11	10	13
US50	El Dorado	2827.3	503.6	6402.5	3575.2	126%	5,899	1171%	14	15	14
SR99	Butte	14	24.8	4142.6	4128.6	29490%	4,118	16604%	18	17	15
SR70	Yuba	6936	1725.6	3782.1	-3153.9	-45%	2,057	119%	12	14	16
SR99	Sutter	64.9	66.3	836.2	771.3	1188%	770	1161%	17	16	17
I80	Sierra	0	0	0	0		-				
SR12	Sacramento	0	0	0	0		-				
SR267	Placer	1129.5	0	0	-1129.5	-100%	-		15		
SR275	Yolo	0	2.2	0	0		(2)	-100%		18	
SR89	Placer	5.3	0	0	-5.3	-100%	-		19		
TOTALS		708,189	809,218	938,172	229,983	32%	128,953	16%			

As identified by the congestion table above, there were significant increase in delay reported on Butte-99, Yolo-113, and Sutter-99. Caltrans had 4 construction projects on Butte-99 and couple of lane widening projects on Sutter-99 (PM 11.0/14.3). This could be the cause of significant increase in delay on the above congestion summary table. Due to Vehicle Detection Station (VDS) malfunction from 8/31/2015 on Yolo-113, nearby Covell Blvd, caused erroneous reporting on delay numbers and it is reported to our Electrical Systems Unit for follow up.

Like the previous quarter, the on-going HOV lane project on Sac-80 (nearby the I-80/I-5 connector) continue to create congestion and delay on I-80 and nearby freeways. It is anticipated that the trend may continue until the project is completed.