

# District 05 Mobility Performance Report

2016 First Quarter

**DEPARTMENT OF TRANSPORTATION**

April 12, 2016  
: Sam Toh

2016 First Quarter

## EXECUTIVE SUMMARY

### Overview

Caltrans District 5 contains five counties located in central coast California: Santa Barbara, San Luis Obispo, Monterey, Santa Cruz and San Benito Counties. There is no detection in San Benito County currently. All of the counties are in an urban setting within the cities limit and rural outside city limit. Santa Cruz and Santa Barbara are the top two most congested counties in the 1<sup>st</sup> quarter.

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 first quarter, total delay equaled 178,200 thousand VHD at the 35 mph speed threshold, and 359,000 thousand VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 2,293 thousand VHD at 35 mph, and 4,659 thousand VHD at 60 mph.

### Top Ten Bottlenecks for Quarter 1

County	Fwy	Location	Type	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (mins)
SCR	SR1-S	SOQUEL DR NEXT EXIT SIGN HWY 1 N	ML	PM	365.708	14.41	52	1.8	23508	9990
SB	US101-S	CESAR CHAVEZ UC 101 SB VDS MLSB	ML	AM	96.043	13.155	73.9	340.0	15709	7090
MON	SR1-N	CASA VERDE WAY HWY 1 SB VDS MLNB	ML	PM	329.082	78.547	42	3.2	11755	3940
SB	US101-S	TURNPIKE AVE 101 NB PM 102.654 V	ML	PM	102.609	19.745	4.3	115.0	8942	4715
SLO	US101-S	BELLO ST 101 NB VDS MLSB SB	ML	PM	190.714	17.179	38	3.9	7173	3470
MON	SR1-N	CANYON DEL REY BLVD AT HWY 1 NB	ML	PM	330.075	79.54	56	1.3	6950	5720
SB	US101-N	CASSITAS PASS RD 101 NB VDS MLNB	ML	PM	85.408	2.485	8.3	45.0	6686	8670
SB	US101-N	SANTA MONICA RD 101 NB VDS MLNB	ML	AM	86.818	3.895	50.2	115.0	5339	4715
SCR	SR1-S	BAY AVE / PORTER ST AT HWY 1 SB	ML	PM	364.577	13.279	58	0.6	4185	11660
SB	US101-S	TURNPIKE AVE 101 SB PM 103.213 V	ML	PM	103.167	20.303	42.2	120.0	3616	2675

## Quarterly Mobility Statistics

Measure	Graph	Percentage Change									
Vehicle Miles of Travel (VMT)	<p>Miles (Millions)</p> <table border="1"> <tr><th>Year/Quarter</th><th>VMT (Millions)</th></tr> <tr><td>2015 Q1</td><td>408</td></tr> <tr><td>2015 Q4</td><td>379.1</td></tr> <tr><td>2016 Q1</td><td>408.4</td></tr> </table>	Year/Quarter	VMT (Millions)	2015 Q1	408	2015 Q4	379.1	2016 Q1	408.4	Over one year ago	Over last quarter
Year/Quarter	VMT (Millions)										
2015 Q1	408										
2015 Q4	379.1										
2016 Q1	408.4										
		0.1%	7.7%								
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year/Quarter</th><th>VHD (Thousands)</th></tr> <tr><td>2015 Q1</td><td>138.6</td></tr> <tr><td>2015 Q4</td><td>190.9</td></tr> <tr><td>2016 Q1</td><td>178.2</td></tr> </table>	Year/Quarter	VHD (Thousands)	2015 Q1	138.6	2015 Q4	190.9	2016 Q1	178.2	Over one year ago	Over last quarter
Year/Quarter	VHD (Thousands)										
2015 Q1	138.6										
2015 Q4	190.9										
2016 Q1	178.2										
		28.6%	-6.6%								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours</p> <table border="1"> <tr><th>Year/Quarter</th><th>VHD (Hours)</th></tr> <tr><td>2015 Q1</td><td>1757</td></tr> <tr><td>2015 Q4</td><td>2708</td></tr> <tr><td>2016 Q1</td><td>2293</td></tr> </table>	Year/Quarter	VHD (Hours)	2015 Q1	1757	2015 Q4	2708	2016 Q1	2293	Over one year ago	Over last quarter
Year/Quarter	VHD (Hours)										
2015 Q1	1757										
2015 Q4	2708										
2016 Q1	2293										
		30.5%	-15.3%								
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year/Quarter</th><th>VHD (Thousands)</th></tr> <tr><td>2015 Q1</td><td>335.2</td></tr> <tr><td>2015 Q4</td><td>396.8</td></tr> <tr><td>2016 Q1</td><td>359</td></tr> </table>	Year/Quarter	VHD (Thousands)	2015 Q1	335.2	2015 Q4	396.8	2016 Q1	359	Over one year ago	Over last quarter
Year/Quarter	VHD (Thousands)										
2015 Q1	335.2										
2015 Q4	396.8										
2016 Q1	359										
		7.1%	-9.5%								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours</p> <table border="1"> <tr><th>Year/Quarter</th><th>VHD (Hours)</th></tr> <tr><td>2015 Q1</td><td>4355</td></tr> <tr><td>2015 Q4</td><td>5564</td></tr> <tr><td>2016 Q1</td><td>4659</td></tr> </table>	Year/Quarter	VHD (Hours)	2015 Q1	4355	2015 Q4	5564	2016 Q1	4659	Over one year ago	Over last quarter
Year/Quarter	VHD (Hours)										
2015 Q1	4355										
2015 Q4	5564										
2016 Q1	4659										
		7%	-16.3%								

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
		Thursday -5.5%	Friday -30.1%
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
		-	5 PM -14.3%
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
		12 PM -20.1%	11 AM -35.9%
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
		8 PM -36.5%	7 AM -37.6%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Tuesday 15.9%	Sun/Hol 62.2%
		7 AM 166.2%	9 AM 18.2%
		9 AM 1441.7%	3 PM 103.4%
		2 PM 34.9%	5 PM 151.9%

Measure	Graph	Percentage Change	
<b>Total Vehicle Hours of Delay (VHD) by County at 35 mph</b>		<b>Largest Magnitude Decrease over one year ago</b> Santa Cruz -12.1%	<b>Largest Magnitude Decrease over last quarter</b> Santa Cruz -20.6%
		<b>Largest Magnitude Increase over one year ago</b> Santa Barbara 207.1%	<b>Largest Magnitude Increase over last quarter</b> Monterey 47.1%
<b>Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph</b>		<b>Largest Magnitude Decrease over one year ago</b> PM Peak -75.3%	<b>Largest Magnitude Decrease over last quarter</b> PM Peak -82.5%
		<b>Largest Magnitude Increase over one year ago</b> -	<b>Largest Magnitude Increase over last quarter</b> -
<b>Average Number of Good and Bad Detectors</b>		<b>Change in Good over one year ago</b> 1%	<b>Change in Good over last quarter</b> 0%
		<b>Change in Bad over one year ago</b> -3%	<b>Change in Bad over last quarter</b> 0%

**Congestion by Route**

Route	County	Vehicle Hours of Delay at 35 mph			Difference 2016 Q1-2015 Q1		Difference 2016 Q1-2015 Q4		Rank		
		2015 Q1	2015 Q4	2016 Q1	Absolute	Percentage	Absolute	Percentage	2015 Q1	2015 Q4	2016 Q1
SR1	Santa Cruz	68,181	87,456	80,342	12,161	17.8%	-7,115	-8.1%	1	1	1
US101	Santa Barbara	19,385	59,873	60,479	41,094	212.0%	606	1.0%	3	2	2
SR1	Monterey	29,588	22,047	33,138	3,550	12.0%	11,092	50.3%	2	3	3
US101	San Luis Obispo	5,965	16,328	13,422	7,457	125.0%	-2,907	-17.8%	5	4	4
SR17	Santa Cruz	15,527	5,222	6,547	-8,980	-57.8%	1,326	25.4%	4	5	5
<b>TOTALS</b>		<b>138,645</b>	<b>190,926</b>	<b>193,927</b>	<b>55,282</b>	<b>39.9%</b>	<b>3,001</b>	<b>1.6%</b>			