District 05 Mobility Performance Report

2018 First Quarter

DEPARTMENT OF TRANSPORTATION

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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. Aggregation of new detection data for San Benito County started in first quarter, 2018. Detection were implemented along SR25 on Bolsa Rd (PM 59.5) and SR156 from San Juan Bautista to Hollister (PM 1.71-R12.024) respectively. Therefore, there are no comparable data for 2017 for San Benito County. 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 1st 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.

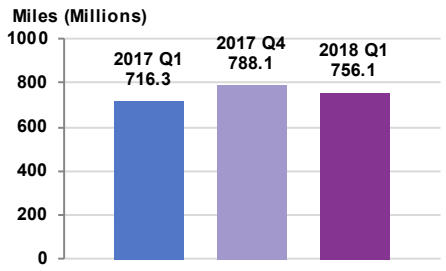
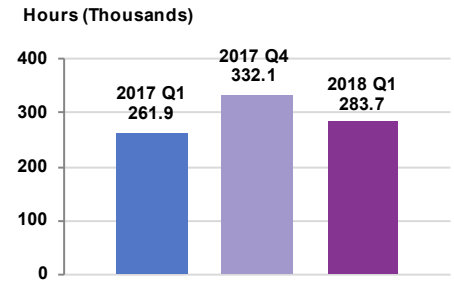
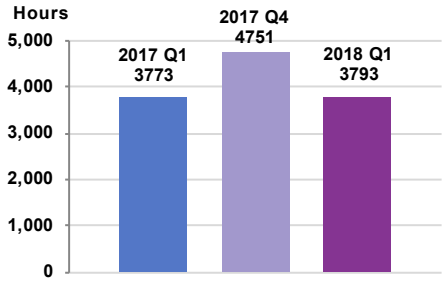
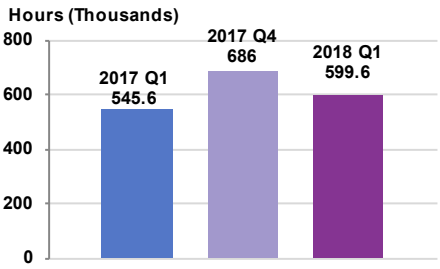
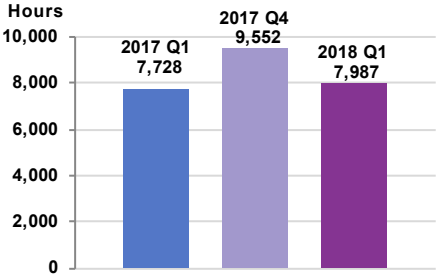
FINDINGS

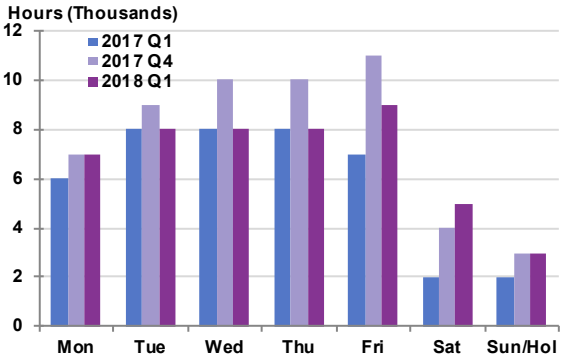
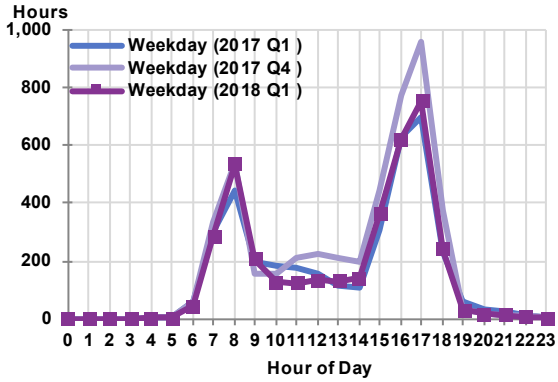
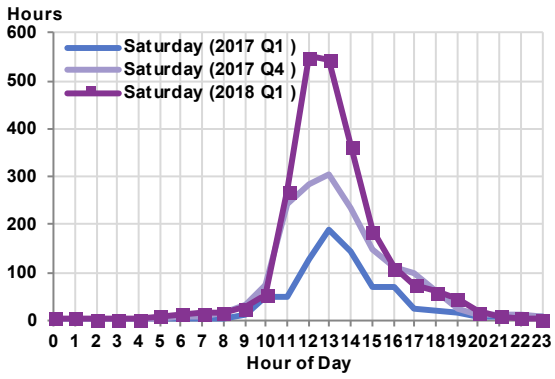
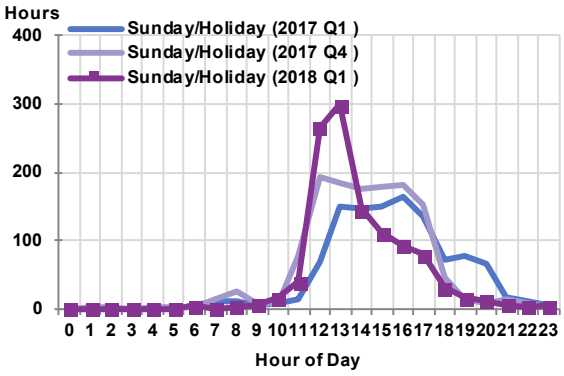
In the first quarter, total delay equaled 283,700 vehicle hours of delay (VHD) at the 35 mph speed threshold, and 599,600 VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 3,793 VHD at 35 mph, and 7,987 VHD at 60 mph.

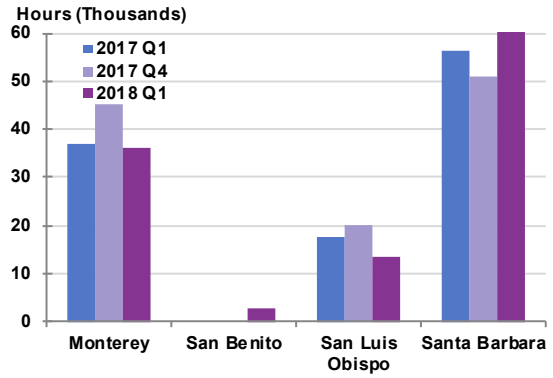
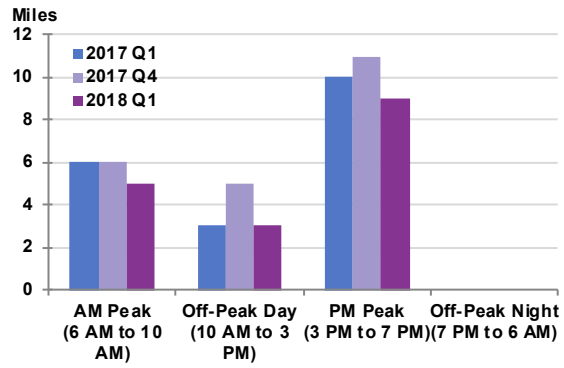
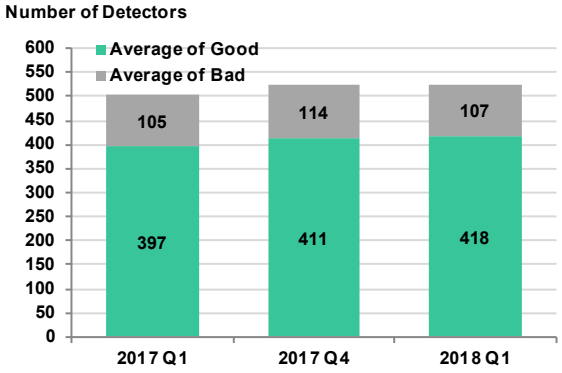
Top Ten Bottlenecks for Quarter 1

County	VDS	Fwy	Location	Type	Shift	Abs PM	CA PM	Latitude	Longitude	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (mins)
SCR	500013151	SR1-S	STATE PARK DR AT HWY 1 SB VDS ML	ML	PM	362.07	10.772	36.979813	-121.914036	50	4.838	28783.1	6360
SCR	500014072	SR1-N	41ST ST EXIT AT HWY 1 SB VDS MLN	ML	AM	365.27	13.929	36.983207	-121.969927	55	4.36364	18169.9	5880
SB	501010102	US101-N	NORTH PADARO LANE 101 NB VDS MLN	ML	AM	90.225	7.30200	34.417097	-119.585526	42	3.74524	9819.4	4775
MON	500010101	SR1-N	SOUTH OF HWY 68 EAST AT HWY 1 NB	ML	PM	328.558	78.023	36.594593	-121.869761	33	1.97879	7756.1	3745
SCR	500014022	SR1-S	PARK AVE AT HWY 1 NB VDS MLSB SB	ML	PM	363.178	11.88	36.983854	-121.933254	57	2.99474	7641	3375
MON	500010142	SR1-N	CANYON DEL REY BLVD AT HWY 1 NB	ML	PM	330.075	79.54	36.611936	-121.85503	53	1.32453	5432.9	6090
SCR	405575	SR1-S	NB1 to NB 17 conn	ML	PM	368.018	16.72	36.989141	-122.019205	32	8.79375	4162.8	1975
SB	501010071	US101-S	SANTA CLAUS LANE 101 SB VDS MLSB	ML	PM	87.528	4.63200	34.405913	-119.543612	42	1.7	3606.9	4380
SCR	500014082	SR1-S	SOQUEL DR NEXT EXIT SIGN HWY 1 N	ML	PM	365.708	14.41	36.985023	-121.978295	28	1.86071	3421.1	1820
SCR	500014052	SR1-S	BAY AVE - PORTER ST AT HWY 1 SB	ML	PM	364.577	13.279	36.983018	-121.95851	52	1.61346	3249	2295

Quarterly Mobility Statistics

Measure	Graph	Percentage Change	
		Over one year ago	Over last quarter
Vehicle Miles of Travel (VMT)		5.6%	-4.1%
Total Vehicle Hours of Delay (VHD) at 35 mph		8.3%	-14.6%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph		0.6%	-20.2%
Total Vehicle Hours of Delay (VHD) at 60 mph		9.9%	-12.6%
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph		3.3%	-16.4%

Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph		Largest Magnitude Decrease over one year ago Tuesday -6.4%	Largest Magnitude Decrease over last quarter Thursday -21.5%
		Largest Magnitude Increase over one year ago Saturday 111.3%	Largest Magnitude Increase over last quarter Saturday 24.5%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		Largest Magnitude Weekday Decrease over one year ago 10 AM -30.8%	Largest Magnitude Weekday Decrease over last quarter 5 PM -21.3%
		Largest Magnitude Weekday Increase over one year ago 8 AM 20%	Largest Magnitude Weekday Increase over last quarter 9 AM 29.1%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		Largest Magnitude Saturday Decrease over one year ago 11 PM -54%	Largest Magnitude Saturday Decrease over last quarter 5 PM -23.4%
		Largest Magnitude Saturday Increase over one year ago 12 PM 335.5%	Largest Magnitude Saturday Increase over last quarter 12 PM 93.9%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/ Holidays		Largest Magnitude Sun./Holiday Decrease over one year ago 4 PM -43.5%	Largest Magnitude Sun./Holiday Decrease over last quarter 4 PM -48.9%
		Largest Magnitude Sun./Holiday Increase over one year ago 12 PM 290.1%	Largest Magnitude Sun./Holiday Increase over last quarter 1 PM 60.9%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph		Largest Magnitude Decrease over one year ago San Luis Obi -22.2%	Largest Magnitude Decrease over last quarter Santa Cruz -21.1%
		Largest Magnitude Increase over one year ago Santa Cruz 12.8%	Largest Magnitude Increase over last quarter Santa Barbara 19.3%
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph		Largest Magnitude Decrease over one year ago PM Peak -15.9%	Largest Magnitude Decrease over last quarter PM Peak -23.8%
		Largest Magnitude Increase over one year ago –	Largest Magnitude Increase over last quarter –
Average Number of Good and Bad Detectors		Change in Good over one year ago 5%	Change in Good over last quarter 2%
		Change in Bad over one year ago 2%	Change in Bad over last quarter -6%

Congestion by Route											
		Vehicle Hours of Delay at 35 mph			Difference 2018 Q1-2017 Q1		Difference 2018 Q1-2017 Q4		Rank		
Route	County	2017 Q1	2017 Q4	2018 Q1	Absolute	Percentage	Absolute	Percentage	2017 Q1	2017 Q4	2018 Q1
SR1	Santa Cruz	93,365	199,360	161,009	67,644	72.5%	-38,351	-19.2%	1	1	1
US101	Santa Barbara	56,443	51,082	60,947	4,503	8.0%	9,865	19.3%	3	2	2
SR1	Monterey	31,737	39,315	32,822	1,085	3.4%	-6,493	-16.5%	4	3	3
US101	San Luis Obispo	17,436	20,016	13,561	-3,876	-22.2%	-6,456	-32.3%	5	4	4
SR17	Santa Cruz	57,639	16,411	9,274	-48,365	-83.9%	-7,137	-43.5%	2	5	5
US101	Monterey	5,331	5,951	3,181	-2,150	-40.3%	-2,770	-46.5%	6	6	6
SR156	San Benito	0	0	2,519	2,519		2,519				7
SR25	San Benito	0	0	359	359		359				8
TOTALS		**261,951**	**332,135**	**283,672**	**21,721**	**8.3%**	**-48,463**	**-14.6%**			

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