

# District 05 Mobility Performance Report

2021 First Quarter

**DEPARTMENT OF TRANSPORTATION**

August 10, 2021  
: Nicholas Zangl

2021 First Quarter

## EXECUTIVE SUMMARY

### Overview

Caltrans District 5 contains five counties located along the central coast of California: Santa Barbara, San Luis Obispo, Monterey, Santa Cruz and San Benito Counties. All counties are in urban settings within city limits and rural settings outside city limits. 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 151,700 vehicle hours of delay (VHD) at the 35 mph speed threshold, and 436,700 VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 1,641 VHD at 35 mph, and 4,782 VHD at 60 mph.

### Top Ten Bottlenecks for Quarter 1

County	Fwy	Location	Type	Shift	Abs PM	CA PM	Latitude	Longitude	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (mins)
SCR	SR1-S	PARK AVE AT HWY 1 NB VDS MLSB SB	ML	PM	363.178	11.88	36.983854	-121.933254	53	2.11132	5691.7	4020
SCR	SR1-S	SOQUEL DR NEXT EXIT SIGN HWY 1 N	ML	PM	365.708	14.41	36.985023	-121.978295	50	1.5	4578.3	3865
SCR	SR1-S	BAY AVE - PORTER ST AT HWY 1 SB	ML	PM	364.577	13.279	36.983018	-121.95851	56	0.79464	4372.3	5115
SCR	SR1-S	PARK AVE NEXT EXIT SIGN HWY 1 NB	ML	PM	362.747	11.449	36.982938	-121.92552	36	3.38333	4090.6	1945
SB	US101-S	CABRILLO BLVD SB 101 PM 94.57 VD	ML	PM	94.55	11.662	34.422964	-119.658994	61	0.3	3848.2	13360
SB	US101-S	SANTA CLAUS LANE 101 SB VDS MLSB	ML	PM	87.528	4.63200	34.405913	-119.543612	38	0.8	3373.3	6035
SCR	SR1-S	STATE PARK DR AT HWY 1 NB VDS ML	ML	PM	361.617	10.319	36.976222	-121.907143	13	3.26923	2952.3	1315
SLO	US101-S	MATTIE RD 101 NB VDS MLSB SB	ML	PM	191.796	18.261	35.154187	-120.66268	8	3.6	2009.2	690
SB	US101-S	EVANS AVE 101 NB VDS MLSB SB	ML	PM	90.958	8.062	34.420459	-119.598167	29	0.8	1798.8	2650
MON	SR1-N	CARPENTER RD HWY 1 NB VDS MLNB N	ML	PM	324.954	74.419	36.56444	-121.911973	45	1.2	1766.9	4275

## Quarterly Mobility Statistics

Measure	Graph	Percentage Change									
		Over one year ago	Over last quarter								
Vehicle Miles of Travel (VMT)	<p>Miles (Millions)</p> <table border="1"> <thead> <tr> <th>Quarter</th> <th>VMT (Millions)</th> </tr> </thead> <tbody> <tr> <td>2020 Q1</td> <td>829.2</td> </tr> <tr> <td>2020 Q4</td> <td>822.9</td> </tr> <tr> <td>2021 Q1</td> <td>816.7</td> </tr> </tbody> </table>	Quarter	VMT (Millions)	2020 Q1	829.2	2020 Q4	822.9	2021 Q1	816.7	-1.5%	-0.8%
Quarter	VMT (Millions)										
2020 Q1	829.2										
2020 Q4	822.9										
2021 Q1	816.7										
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <thead> <tr> <th>Quarter</th> <th>VHD (Thousands)</th> </tr> </thead> <tbody> <tr> <td>2020 Q1</td> <td>260.2</td> </tr> <tr> <td>2020 Q4</td> <td>125.6</td> </tr> <tr> <td>2021 Q1</td> <td>151.7</td> </tr> </tbody> </table>	Quarter	VHD (Thousands)	2020 Q1	260.2	2020 Q4	125.6	2021 Q1	151.7	-41.7%	20.8%
Quarter	VHD (Thousands)										
2020 Q1	260.2										
2020 Q4	125.6										
2021 Q1	151.7										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours</p> <table border="1"> <thead> <tr> <th>Quarter</th> <th>VHD (Hours)</th> </tr> </thead> <tbody> <tr> <td>2020 Q1</td> <td>3367</td> </tr> <tr> <td>2020 Q4</td> <td>1720</td> </tr> <tr> <td>2021 Q1</td> <td>1641</td> </tr> </tbody> </table>	Quarter	VHD (Hours)	2020 Q1	3367	2020 Q4	1720	2021 Q1	1641	-51.3%	-4.6%
Quarter	VHD (Hours)										
2020 Q1	3367										
2020 Q4	1720										
2021 Q1	1641										
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <thead> <tr> <th>Quarter</th> <th>VHD (Thousands)</th> </tr> </thead> <tbody> <tr> <td>2020 Q1</td> <td>587.7</td> </tr> <tr> <td>2020 Q4</td> <td>396.8</td> </tr> <tr> <td>2021 Q1</td> <td>436.7</td> </tr> </tbody> </table>	Quarter	VHD (Thousands)	2020 Q1	587.7	2020 Q4	396.8	2021 Q1	436.7	-25.7%	10%
Quarter	VHD (Thousands)										
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Quarter	VHD (Hours)										
2020 Q1	7719										
2020 Q4	4960										
2021 Q1	4782										

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 -45.6% ↓	Tuesday -18.1% ↓
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
Sun/Hol 47% ↑	Sun/Hol 85.5% ↑		
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 AM -91% ↓	3 PM -12.1% ↓
		Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
8 PM 537.7% ↑	4 PM 2.5% ↑		
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 -63.2% ↓	7 AM -19.3% ↓
		Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
4 PM 113.1% ↑	4 PM 105.5% ↑		
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
		12 PM -50.6% ↓	6 AM -58.2% ↓
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
4 PM 117.1% ↑	2 PM 414.5% ↑		

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
		Santa Cruz -54.2% ↓	San Benito -45.8% ↓
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		San Luis Obispo 13% ↑	Monterey 65.9% ↑
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
		AM Peak -82.7% ↓	PM Peak -4.9% ↓
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Off-Peak Night 284.7% ↑	Off-Peak Night 14.4% ↑
Average Number of Good and Bad Detectors		Change in Good over one year ago	Change in Good over last quarter
		6% ↑	2% ↑
		Change in Bad over one year ago	Change in Bad over last quarter
		-13% ↓	-1% ↓

**Congestion by Route**

Route	County	Vehicle Hours of Delay at 35 mph			Difference 2021 Q1-2020 Q1		Difference 2021 Q1-2020 Q4		Rank		
		2020 Q1	2020 Q4	2021 Q1	Absolute	Percentage	Absolute	Percentage	2020 Q1	2020 Q4	2021 Q1
		SR1	Santa Cruz	129,394	56,040	54,571	-74,823	-57.8%	-1,469	-2.6%	1
US101	Santa Barbara	44,473	24,224	33,493	-10,980	-24.7%	9,270	38.3%	2	2	2
SR1	Monterey	36,858	11,811	24,825	-12,033	-32.6%	13,015	110.2%	3	3	3
SR17	Santa Cruz	17,006	5,487	12,535	-4,471	-26.3%	7,049	128.5%	4	7	4
US101	San Luis Obispo	9,011	8,312	10,185	1,174	13.0%	1,873	22.5%	6	5	5
US101	Monterey	6,270	5,670	5,799	-471	-7.5%	128	2.3%	7	6	6
SR156	San Benito	4,385	10,180	5,520	1,136	25.9%	-4,659	-45.8%	8	4	7
SR68	Monterey	12,808	3,842	4,761	-8,046	-62.8%	919	23.9%	5	8	8
<b>TOTALS</b>		<b>260,204</b>	<b>125,565</b>	<b>151,690</b>	<b>-108,514</b>	<b>-41.7%</b>	<b>26,125</b>	<b>20.8%</b>			