

District 05 Mobility Performance Report

2022 First Quarter

DEPARTMENT OF TRANSPORTATION

April 29, 2022
: Nicholas Zangl

2022 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 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 278,000 vehicle hours of delay (VHD) at the 35 mph speed threshold, and 707,300 VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 3,711 VHD at 35 mph, and 9,046 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	BAY AVE - PORTER ST AT HWY 1 SB	ML	PM	364.577	13.279	36.983018	-121.95851	62	1.30484	20070.5	12050
SB	US101-S	SAN YSIDRO RD 101 NB VDS MLSB SB	ML	PM	92.928	10.04	34.422455	-119.632021	58	2.7	18169.1	8030
MON	SR1-N	CANYON DEL REY BLVD AT HWY 1 NB	ML	PM	330.075	R79.54	36.611936	-121.85503	58	2.85345	14538.6	6225
SCR	SR1-N	PARK AVE AT HWY 1 SB VDS MLNB NB	ML	AM	363.679	12.338	36.98406	-121.941535	41	4.16098	10261.7	3635
MON	SR1-S	SOUTH OF FREMONT BLVD AT HWY 1 N	ML	AM	330.929	R80.46	36.622494	-121.845397	53	3.30755	6299.6	3530
SCR	SR1-S	SOQUEL DR NEXT EXIT SIGN HWY 1 N	ML	PM	365.708	14.41	36.985023	-121.978295	51	1.32549	6201.6	5175
SCR	SR1-S	STATE PARK DR AT HWY 1 NB VDS ML	ML	PM	361.617	10.319	36.976222	-121.907143	44	2.32045	6135.8	4565
SCR	SR1-N	BAY AVE - PORTER ST AT HWY 1 NB	ML	PM	364.373	13.032	36.983544	-121.954147	62	0.5	5676.8	12060
SB	US101-N	BAILARD AVE 101 NB VDS MLNB NB	ML	AM	84.742	1.819	34.389586	-119.501353	48	1.625	5615.4	4005
MON	SR68-E	LAGUNA SECA MAIN ENTRANCE HWY 68	ML	PM	11.238	11.034	36.570195	-121.759253	62	2.5	4421.5	10400

Quarterly Mobility Statistics

Measure	Graph	Percentage Change													
Vehicle Miles of Travel (VMT)	<p>Miles (Millions)</p> <table border="1"> <tr><th>Year</th><th>Quarter</th><th>Value (Millions)</th></tr> <tr><td>2021</td><td>Q1</td><td>816.7</td></tr> <tr><td>2021</td><td>Q4</td><td>910.9</td></tr> <tr><td>2022</td><td>Q1</td><td>890.6</td></tr> </table>	Year	Quarter	Value (Millions)	2021	Q1	816.7	2021	Q4	910.9	2022	Q1	890.6	Over one year ago	Over last quarter
		Year	Quarter	Value (Millions)											
2021	Q1	816.7													
2021	Q4	910.9													
2022	Q1	890.6													
		9.1% ↑	-2.2% ↓												
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year</th><th>Quarter</th><th>Value (Thousands)</th></tr> <tr><td>2021</td><td>Q1</td><td>151.7</td></tr> <tr><td>2021</td><td>Q4</td><td>401.2</td></tr> <tr><td>2022</td><td>Q1</td><td>278</td></tr> </table>	Year	Quarter	Value (Thousands)	2021	Q1	151.7	2021	Q4	401.2	2022	Q1	278	Over one year ago	Over last quarter
		Year	Quarter	Value (Thousands)											
2021	Q1	151.7													
2021	Q4	401.2													
2022	Q1	278													
		83.2% ↑	-30.7% ↓												
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours</p> <table border="1"> <tr><th>Year</th><th>Quarter</th><th>Value (Hours)</th></tr> <tr><td>2021</td><td>Q1</td><td>1641</td></tr> <tr><td>2021</td><td>Q4</td><td>5038</td></tr> <tr><td>2022</td><td>Q1</td><td>3711</td></tr> </table>	Year	Quarter	Value (Hours)	2021	Q1	1641	2021	Q4	5038	2022	Q1	3711	Over one year ago	Over last quarter
		Year	Quarter	Value (Hours)											
2021	Q1	1641													
2021	Q4	5038													
2022	Q1	3711													
		126.2% ↑	-26.3% ↓												
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year</th><th>Quarter</th><th>Value (Thousands)</th></tr> <tr><td>2021</td><td>Q1</td><td>436.7</td></tr> <tr><td>2021</td><td>Q4</td><td>965.1</td></tr> <tr><td>2022</td><td>Q1</td><td>707.3</td></tr> </table>	Year	Quarter	Value (Thousands)	2021	Q1	436.7	2021	Q4	965.1	2022	Q1	707.3	Over one year ago	Over last quarter
		Year	Quarter	Value (Thousands)											
2021	Q1	436.7													
2021	Q4	965.1													
2022	Q1	707.3													
		62% ↑	-26.7% ↓												
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year</th><th>Quarter</th><th>Value (Thousands)</th></tr> <tr><td>2021</td><td>Q1</td><td>5</td></tr> <tr><td>2021</td><td>Q4</td><td>12</td></tr> <tr><td>2022</td><td>Q1</td><td>9</td></tr> </table>	Year	Quarter	Value (Thousands)	2021	Q1	5	2021	Q4	12	2022	Q1	9	Over one year ago	Over last quarter
		Year	Quarter	Value (Thousands)											
2021	Q1	5													
2021	Q4	12													
2022	Q1	9													
		89.2% ↑	-22.6% ↓												

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 -28% ↓
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 -75.3% ↓	5 PM -27.6% ↓
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
		10 AM -62.6% ↓	5 PM -43.8% ↓
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
		1 PM -20.4% ↓	2 PM -52.3% ↓
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Thursday 126.3% ↑	-
		4 PM 111.1% ↑	10 AM 18.3% ↑
		6 PM 59.7% ↑	7 PM 30.7% ↑
		5 PM 24.9% ↑	8 PM 20.3% ↑

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph	<p>Hours (Thousands)</p> <p>■ 2021 Q1 ■ 2021 Q4 ■ 2022 Q1</p>	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		San Luis Obispo -1.7% ↓	Santa Barbara -39.7% ↓
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Monterey 125.1% ↑	-
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph	<p>Miles</p> <p>■ 2021 Q1 ■ 2021 Q4 ■ 2022 Q1</p>	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		Off-Peak Night -2.9% ↓	PM Peak -27.3% ↓
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		PM Peak 104.2% ↑	-
Average Number of Good and Bad Detectors	<p>Number of Detectors</p> <p>■ Average of Good ■ Average of Bad</p>	Change in Good over one year ago	Change in Good over last quarter
		23% ↑	2% ↑
		Change in Bad over one year ago	Change in Bad over last quarter
		-79% ↓	-27% ↓

Congestion by Route

Route	County	Vehicle Hours of Delay at 35 mph			Difference 2022 Q1-2021 Q1		Difference 2022 Q1-2021 Q4		Rank		
		2021 Q1	2021 Q4	2022 Q1	Absolute	Percentage	Absolute	Percentage	2021 Q1	2021 Q4	2022 Q1
		SR1	Santa Cruz	54,571	130,560	96,493	41,923	76.8%	-34,066	-26.1%	1
US101	Santa Barbara	33,493	122,734	73,953	40,460	120.8%	-48,781	-39.7%	2	2	2
SR1	Monterey	24,825	53,956	51,350	26,525	106.8%	-2,606	-4.8%	3	3	3
US101	Monterey	5,799	17,776	10,759	4,960	85.5%	-7,017	-39.5%	6	6	4
US101	San Luis Obispo	10,185	26,120	10,006	-178	-1.7%	-16,113	-61.7%	5	4	5
SR156	San Benito	5,520	21,179	9,663	4,143	75.0%	-11,516	-54.4%	7	5	6
SR17	Santa Cruz	12,535	11,654	8,171	-4,365	-34.8%	-3,483	-29.9%	4	7	7
TOTALS		146,929	383,979	260,396	113,467	77.2%	-123,584	-32.2%			