

District 05 Mobility Performance Report

2023 First Quarter

DEPARTMENT OF TRANSPORTATION

April 20, 2023
: David Gallego

2023 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 289,900 vehicle hours of delay (VHD) at the 35 mph speed threshold, and 665,700 VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 3,990 VHD at 35 mph, and 9,151 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	BAY AVE - PORTER ST AT HWY 1 SB	ML	PM	364.577	13.279	57	2.25263	34967.5	10520
SCR	SR1-N	PARK AVE AT HWY 1 SB VDS MLNB NB	ML	AM	363.679	12.338	42	4.16429	24725.7	4530
MON	SR1-N	CANYON DEL REY BLVD AT HWY 1 NB	ML	PM	330.075	R79.54	50	2.686	21606.8	5970
SCR	SR1-S	STATE PARK DR AT HWY 1 NB VDS ML	ML	PM	361.617	10.319	49	2.4449	17265.6	5910
SB	US101-S	SAN YSIDRO RD 101 NB VDS MLSB SB	ML	PM	92.928	10.04	40	2.71	12107.4	2950
MON	SR1-S	SOUTH OF FREMONT BLVD AT HWY 1 N	ML	AM	330.929	R80.46	47	3.01915	11872.3	3040
SB	US101-S	HWY 150 AT 101 NB VDS MLSB SB	ML	PM	83.993	0.9570000000000008	14	1.65714	9512.4	2075
SLO	US101-S	SPYGLASS DR 101 SB VDS MLSB SB	ML	PM	193.322	R19.797	47	2.18936	8708.6	3915
MON	SR68-E	LAGUNA SECA MAIN ENTRANCE HWY 68	ML	PM	11.238	11.034	60	2.5	8335.6	10150
SLO	US101-S	SHELL BEACH RD 101 NB VDS MLSB S	ML	PM	191.451	17.916	31	3.14839	7784.7	2370

Quarterly Mobility Statistics

Measure	Graph	Percentage Change													
Vehicle Miles of Travel (VMT)	<p>Miles (Millions)</p> <table border="1"> <tr><th>Year</th><th>Q1</th><th>Q4</th><th>Q1</th></tr> <tr><td>2022</td><td>890.64</td><td>972.32</td><td></td></tr> <tr><td>2023</td><td></td><td></td><td>952.98</td></tr> </table>	Year	Q1	Q4	Q1	2022	890.64	972.32		2023			952.98	Over one year ago	Over last quarter
		Year	Q1	Q4	Q1										
		2022	890.64	972.32											
		2023			952.98										
7%	-2%														
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year</th><th>Q1</th><th>Q4</th><th>Q1</th></tr> <tr><td>2022</td><td>278</td><td>276.5</td><td></td></tr> <tr><td>2023</td><td></td><td></td><td>289.9</td></tr> </table>	Year	Q1	Q4	Q1	2022	278	276.5		2023			289.9	Over one year ago	Over last quarter
		Year	Q1	Q4	Q1										
		2022	278	276.5											
		2023			289.9										
4.3%	4.8%														
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours</p> <table border="1"> <tr><th>Year</th><th>Q1</th><th>Q4</th><th>Q1</th></tr> <tr><td>2022</td><td>3,711</td><td>4,022</td><td></td></tr> <tr><td>2023</td><td></td><td></td><td>3,990</td></tr> </table>	Year	Q1	Q4	Q1	2022	3,711	4,022		2023			3,990	Over one year ago	Over last quarter
		Year	Q1	Q4	Q1										
		2022	3,711	4,022											
		2023			3,990										
7.5%	-0.8%														
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year</th><th>Q1</th><th>Q4</th><th>Q1</th></tr> <tr><td>2022</td><td>707.3</td><td>669.4</td><td></td></tr> <tr><td>2023</td><td></td><td></td><td>665.7</td></tr> </table>	Year	Q1	Q4	Q1	2022	707.3	669.4		2023			665.7	Over one year ago	Over last quarter
		Year	Q1	Q4	Q1										
		2022	707.3	669.4											
		2023			665.7										
-5.9%	-0.6%														
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours</p> <table border="1"> <tr><th>Year</th><th>Q1</th><th>Q4</th><th>Q1</th></tr> <tr><td>2022</td><td>9,047</td><td>9,387</td><td></td></tr> <tr><td>2023</td><td></td><td></td><td>9,151</td></tr> </table>	Year	Q1	Q4	Q1	2022	9,047	9,387		2023			9,151	Over one year ago	Over last quarter
		Year	Q1	Q4	Q1										
		2022	9,047	9,387											
		2023			9,151										
1.2%	-2.5%														

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 -32.1% ↓	Thursday -13.6% ↓
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
Friday 25.5% ↑	Friday 14.4% ↑		
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
		12 PM -35% ↓	1 PM -43.6% ↓
		Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
6 PM 50.8% ↑	8 AM 40.1% ↑		
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
		6 PM -60.1% ↓	7 PM -53.8% ↓
		Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
10 AM 74.3% ↑	2 PM 263.8% ↑		
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
		5 PM -31.8% ↓	8 AM -98.6% ↓
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
12 PM 44.4% ↑	3 PM 54.1% ↑		

Measure	Graph	Percentage Change	
<p>Total Vehicle Hours of Delay (VHD) by County at 35 mph</p>		<p>Largest Magnitude Decrease over one year ago</p>	<p>Largest Magnitude Decrease over last quarter</p>
		<p>Monterey -5.4%</p>	<p>Santa Barbara -9.1%</p>
		<p>Largest Magnitude Increase over one year ago</p>	<p>Largest Magnitude Increase over last quarter</p>
		<p>San Luis Obispo 226.6%</p>	<p>San Luis Obispo 125.9%</p>
<p>Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph</p>		<p>Largest Magnitude Decrease over one year ago</p>	<p>Largest Magnitude Decrease over last quarter</p>
		<p>AM Peak -3.5%</p>	<p>Off-Peak Day -16.3%</p>
		<p>Largest Magnitude Increase over one year ago</p>	<p>Largest Magnitude Increase over last quarter</p>
		<p>PM Peak 6.3%</p>	<p>AM Peak 9.9%</p>
<p>Average Number of Good and Bad Detectors</p>		<p>Change in Good over one year ago</p>	<p>Change in Good over last quarter</p>
		<p>12%</p>	<p>-1%</p>
		<p>Change in Bad over one year ago</p>	<p>Change in Bad over last quarter</p>
		<p>-1%</p>	<p>71%</p>

Congestion by Route											
Route	County	Vehicle Hours of Delay at 35 mph			Difference 2023 Q1-2022 Q1		Difference 2023 Q1-2022 Q4		Rank		
		2022 Q1	2022 Q4	2023 Q1	Absolute	Percentage	Absolute	Percentage	2022 Q1	2022 Q4	2023 Q1
SR1	Santa Cruz	96,493	95,259	101,243	4,749	4.9%	5,984	6.3%	1	1	1
US101	Santa Barbara	73,953	77,813	70,731	-3,222	-4.4%	-7,082	-9.1%	2	2	2
SR1	Monterey	51,350	44,087	47,564	-3,786	-7.4%	3,477	7.9%	3	3	3
US101	San Luis Obispo	10,006	14,466	32,676	22,670	226.6%	18,210	125.9%	6	6	4
SR68	Monterey	17,554	15,874	16,991	-563	-3.2%	1,117	7.0%	4	4	5
US101	Monterey	10,759	14,563	10,790	31	0.3%	-3,773	-25.9%	5	5	6
SR156	San Benito	9,663	10,295	6,437	-3,226	-33.4%	-3,858	-37.5%	7	7	7
SR17	Santa Cruz	8,171	4,192	3,435	-4,736	-58.0%	-757	-18.1%	8	8	8
TOTALS		277,950	276,549	289,867	11,917	4.3%	13,318	4.8%			