

District 05 Mobility Performance Report

2021 Third Quarter

DEPARTMENT OF TRANSPORTATION

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: Nicholas Zangl

2021 Third 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 Monterey are the top two most congested counties in the 3rd 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 third quarter, total delay equaled 458,700 vehicle hours of delay (VHD) at the 35 mph speed threshold, and 1,118,900 VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 5,019 VHD at 35 mph, and 11,978 VHD at 60 mph.

Top Ten Bottlenecks for Quarter 3

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	364.58	13.279	36.98	-121.96	63	1.55	25,673.60	13,495.00
MON	SR1-N	CANYON DEL REY BLVD AT HWY 1 NB	ML	PM	330.08	R79.54	36.61	-121.86	61	2.99	18,941.10	6,900.00
SCR	SR1-S	STATE PARK DR AT HWY 1 NB VDS ML	ML	PM	361.62	10.319	36.98	-121.91	60	2.67	8,728.90	6,860.00
SCR	SR1-N	PARK AVE AT HWY 1 SB VDS MLNB NB	ML	AM	363.68	12.338	36.98	-121.94	36	3.89	8,026.90	3,070.00
SCR	SR1-S	SOQUEL DR NEXT EXIT SIGN HWY 1 N	ML	PM	365.71	14.41	36.99	-121.98	59	1.44	7,815.00	5,050.00
SCR	SR1-N	BAY AVE - PORTER ST AT HWY 1 NB	ML	PM	364.37	13.032	36.98	-121.95	64	0.50	6,521.10	13,715.00
SB	US101-N	BAILARD AVE 101 NB VDS MLNB NB	ML	AM	84.74	1.819	34.39	-119.50	58	1.53	6,331.80	4,475.00
SLO	US101-S	MATTIE RD 101 NB VDS MLSB SB	ML	PM	191.80	18.261	35.15	-120.66	25	3.80	6,292.00	2,060.00
MON	SR1-N	CARPENTER RD HWY 1 NB VDS MLNB N	ML	PM	324.95	74.419	36.56	-121.91	65	1.50	5,891.30	9,890.00
SBT	SR156-W	BUSINESS RTE 156 ON HWY 156 WB V	ML	AM	13.93	7.564	36.85	-121.45	45	2.60	4,898.20	3,525.00

Quarterly Mobility Statistics

Measure	Graph	Percentage Change									
Vehicle Miles of Travel (VMT)	<p>Miles (Billions)</p> <table border="1"> <tr><th>Quarter</th><th>VMT (Billions)</th></tr> <tr><td>2020 Q3</td><td>0.9</td></tr> <tr><td>2021 Q2</td><td>0.9</td></tr> <tr><td>2021 Q3</td><td>1.0</td></tr> </table>	Quarter	VMT (Billions)	2020 Q3	0.9	2021 Q2	0.9	2021 Q3	1.0	Over one year ago	Over last quarter
		Quarter	VMT (Billions)								
2020 Q3	0.9										
2021 Q2	0.9										
2021 Q3	1.0										
		17.3%	5.7%								
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Quarter</th><th>VHD (Thousands)</th></tr> <tr><td>2020 Q3</td><td>185.4</td></tr> <tr><td>2021 Q2</td><td>372.2</td></tr> <tr><td>2021 Q3</td><td>458.7</td></tr> </table>	Quarter	VHD (Thousands)	2020 Q3	185.4	2021 Q2	372.2	2021 Q3	458.7	Over one year ago	Over last quarter
		Quarter	VHD (Thousands)								
2020 Q3	185.4										
2021 Q2	372.2										
2021 Q3	458.7										
		147.4%	23.2%								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours</p> <table border="1"> <tr><th>Quarter</th><th>VHD (Hours)</th></tr> <tr><td>2020 Q3</td><td>1905</td></tr> <tr><td>2021 Q2</td><td>4134</td></tr> <tr><td>2021 Q3</td><td>5019</td></tr> </table>	Quarter	VHD (Hours)	2020 Q3	1905	2021 Q2	4134	2021 Q3	5019	Over one year ago	Over last quarter
		Quarter	VHD (Hours)								
2020 Q3	1905										
2021 Q2	4134										
2021 Q3	5019										
		163.5%	21.4%								
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Quarter</th><th>VHD (Millions)</th></tr> <tr><td>2020 Q3</td><td>0.5</td></tr> <tr><td>2021 Q2</td><td>0.9</td></tr> <tr><td>2021 Q3</td><td>1.1</td></tr> </table>	Quarter	VHD (Millions)	2020 Q3	0.5	2021 Q2	0.9	2021 Q3	1.1	Over one year ago	Over last quarter
		Quarter	VHD (Millions)								
2020 Q3	0.5										
2021 Q2	0.9										
2021 Q3	1.1										
		137.5%	21.4%								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Quarter</th><th>VHD (Thousands)</th></tr> <tr><td>2020 Q3</td><td>5</td></tr> <tr><td>2021 Q2</td><td>10</td></tr> <tr><td>2021 Q3</td><td>12</td></tr> </table>	Quarter	VHD (Thousands)	2020 Q3	5	2021 Q2	10	2021 Q3	12	Over one year ago	Over last quarter
		Quarter	VHD (Thousands)								
2020 Q3	5										
2021 Q2	10										
2021 Q3	12										
		142.5%	20%								

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
		-	-
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Friday 135.6% ↑	Friday 20.6% ↑
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 -27.2% ↓	7 PM -11.3% ↓
		Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
		5 PM 156.2% ↑	5 PM 23.5% ↑
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
		9 AM -59.6% ↓	7 PM -41.4% ↓
		Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
		1 PM 172.4% ↑	12 PM 57.3% ↑
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
		10 AM -89.8% ↓	7 PM -14.2% ↓
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		2 PM 126.6% ↑	12 PM 47.7% ↑

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
		-	-
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
Santa Cruz	Santa Cruz		
142.5%	19.8%		
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
		-	Off-Peak Day
		-0.4%	-0.4%
Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter		
PM Peak	PM Peak		
149%	25%		
Average Number of Good and Bad Detectors		Change in Good over one year ago	Change in Good over last quarter
		11%	5%
		Change in Bad over one year ago	Change in Bad over last quarter
-19%	-22%		

Congestion by Route

Route	County	Vehicle Hours of Delay at 35 mph			Difference 2021 Q3-2020 Q3		Difference 2021 Q3-2021 Q2		Rank		
		2020 Q3	2021 Q2	2021 Q3	Absolute	Percentage	Absolute	Percentage	2020 Q3	2021 Q2	2021 Q3
		SR1	Santa Cruz	52,104	141,136	172,449	120,345	231.0%	31,313	22.2%	1
SR1	Monterey	22,669	64,020	85,981	63,312	279.3%	21,961	34.3%	4	2	2
US101	Santa Barbara	40,435	46,014	68,140	27,706	68.5%	22,126	48.1%	2	4	3
SR156	San Benito	20,524	49,459	50,881	30,357	147.9%	1,422	2.9%	5	3	4
US101	Monterey	8,789	24,450	22,900	14,111	160.5%	-1,550	-6.3%	7	5	5
US101	San Luis Obispo	11,207	17,502	20,401	9,193	82.0%	2,899	16.6%	6	7	6
SR17	Santa Cruz	27,005	19,009	19,357	-7,649	-28.3%	348	1.8%	3	6	7
SR68	Monterey	2,668	10,633	18,586	15,917	596.5%	7,953	74.8%	8	8	8
TOTALS		185,402	372,221	458,694	273,292	147.4%	86,472	23.2%			