

District 07 Mobility Performance Report

2019 Fourth Quarter

DEPARTMENT OF TRANSPORTATION
OFFICE OF SYSTEM PERFORMANCE
DIVISION OF OPERATIONS

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EXECUTIVE SUMMARY

Overview

Caltrans District 7, consisting of Los Angeles and Ventura counties, is part of the second-largest urban region in the United States. Los Angeles County is the most populous county in the United States with more than 10 million residents as of 2018. Ventura County has a population of 0.85 million. These two counties have a large amount of sparsely populated national forests and national recreation areas.

The Quarterly Mobility Performance Report (MPR) compares information with over a year ago and over previous quarter in the following performance measures:

- Vehicle Miles of Travel (VMT)
- Vehicle Hours of Delay (VHD) and Bottleneck Locations
- Lost Lane Miles Hours (equivalent lost productivity)
- Detection Health

This information is based on daily data collected, 24 hours a day, by automated vehicle detector stations deployed along the State Highway System. The Mobility Performance Report presents congestion information at two speed thresholds: delay from vehicles traveling below 60 miles per hour (mph), and delay from vehicles traveling below 35 mph. The delay at the 35 mph speed threshold represents severe congestion while delay at 60 mph speed threshold represents both light and heavy congestions. These two speed thresholds are set by Caltrans based on engineering judgement.

FINDINGS

- In this fourth quarter (October – December of 2019), there were 17.3 million VHD at the 35 mph speed threshold - an increase of 3.2 percent over previous quarter. 2.6 percent of 17.3 million VHD were generated in Ventura County and 97.4 percent were generated in Los Angeles County. About 46 percent of VHD in Los Angeles County were generated from I-405, US-101 and I-10 freeways. Similarly, a total of 36.1 million VHD occurred at the 60 mph speed threshold - an increase of 0.3 percent over the previous quarter.
- This delay was equivalent to 459 Lost Lane Miles (LLM) from the freeway network in the PM Peak Period (about 10.5% of the total monitored Lane Miles.)
- Total Vehicle Miles Traveled (VMT) in District 7 in this quarter was 9.35 billion miles - a decrease of 218 million miles (2.3 percent) over the previous quarter.
- The average weekday daily delay in this quarter were approximately 249,000 VHD at 35 mph and 501,000 VHD at 60 mph speed thresholds.
- Fridays were the most congested days of the week followed by Thursdays. Morning peak hour was at 8:00 AM. Afternoon peak hour was at 5:00 PM. The peak periods extended from 6:00 AM to 9:30 AM and from 2:30 PM to 7:00 PM.
- The weekend's peak hour (Saturday and Sunday) was at 5:00 PM and peak period extended between 12:00 PM and 6:00 PM.
- Good Loop Detectors in this fourth quarter were 60.3 percent of the total loops- an increase of 15.0 percent over the previous quarter.

Top Ten Bottlenecks for the 2019 Fourth Quarter:

Rank	Fwy	Location	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Duration (Hrs)
1	I405-S	HOWARD HUGHES PKWY	PM	48.67	24.90	57	6.0	274,504	3.6
2	I405-N	WATERFORD	PM	55.88	32.11	60	4.2	254,943	4.2
3	I405-N	VALLEY VISTA	PM	62.19	38.42	55	6.2	250,587	3.9
4	US101-S	BROADWAY	PM	2.43	1.08	58	5.1	249,519	4.2
5	I10-E	LOS ANGELES	PM	13.63	15.78	60	7.0	234,101	3.0
6	I405-N	PALMS BLVD	AM	52.31	28.54	60	6.3	215,100	3.3
7	US101-N	N-O HIGHLAND	PM	9.95	8.60	58	3.9	189,929	3.8
8	I5-S	OSMOND	PM	116.77	0.20	61	8.5	187,788	2.7
9	I405-N	NORDHOFF	PM	68.64	44.87	61	4.7	183,302	4.4
10	US101-S	WOODLEY	AM	19.43	18.10	53	4.2	182,795	3.5

Project Status:

The Following Projects are currently being constructed or are scheduled for construction in District 7. These projects are expected to relieve traffic congestion in Los Angeles and Ventura counties.

LA 5: WIDEN AND REALIGN FREEWAY (SEGMENT 2); EA 2159U

Widen Interstate 5 by adding one High Occupancy Vehicle (HOV) lane and one or two mixed-flow lanes in each direction, reconstruction of Valley View Avenue Interchange, and adjacent frontage roads in Los Angeles County, in La Mirada and Santa Fe Springs, from Artesia Blvd to North Fork Coyote Creek.

LA 5: WIDEN FREEWAY, CONSTRUCT HOV LANES; EA 21593 (Segment 3)

Widen Interstate 5 by adding one HOV lane and one or two mixed-flow lanes in each direction and upgrade the inside and outside shoulders to standard width in Los Angeles County, in Santa Fe Springs and Norwalk, from 0.1 mile north of Carmenita Road Overcrossing to 0.1 mile north of Silverbow Ave Pedestrian Overcrossing.

LA 5: WIDEN AND REALIGN FREEWAY, CONSTRUCT HOV LANES (SEGMENT 4); EA 21594

Widen Interstate 5 by adding one HOV lane and one or two mixed-flow lanes in each direction and upgrade the inside and outside shoulders to standard width; remove and replace San Antonio Avenue Undercrossing, Imperial Highway Undercrossing, and Pioneer Boulevard Undercrossing; construct new southbound Imperial Highway off-ramp (over Pioneer Boulevard) structure in Los Angeles County from 0.4 mile south of San Antonio Drive Undercrossing to 0.7 mile north of Pioneer Boulevard Undercrossing.

LA 5: WIDEN AND REALIGN FREEWAY, CONSTRUCT HOV LANES (SEGMENT 5); EA 21595

Widen Interstate 5 by adding one HOV lane, one or two mixed-flow lanes in each direction and upgrade the inside and outside shoulders to standard width; remove and replace Florence Avenue Overcrossing, northbound on-ramp bridge from Florence Avenue, and Orr and Day Overhead railroad bridge in Los Angeles County from north of Orr and Day Overhead to I-605/I-5 Interchange.

LA 5: WIDEN FREEWAY & CONSTRUCT HOV LANES (SEGMENT 4); EA 12184

Add one HOV lane in each direction along I-5 in Los Angeles, Glendale, and Burbank from I-5/SR-134 separation to Magnolia Boulevard Overcrossing Bridge in Los Angeles County.

LA 5: WIDEN & REALIGN FREEWAY FOR HOV LANES; REALIGN METROLINK RAILROAD TRACKS; EA 1218W

Add one HOV lane in each direction in Burbank from West Magnolia Boulevard Overcrossing to 0.3 mile north of Buena Vista Street/Winona Avenue Undercrossing in Los Angeles County.

LA 10: WIDEN FREEWAY, CONSTRUCT HOV LANES; EA 1193U (Segment 3)

Construct one HOV lane in each direction along I-10 in LA County from Citrus Avenue in West Covina to SR-57 in Pomona.

LA 10: WIDEN FREEWAY, CONSTRUCT HOV LANES; EA 1170U (Segment 2)

Construct one HOV lane in each direction along I-10 from Puente Avenue in city of Baldwin Park to Citrus Avenue in West Covina to reduce traffic congestion.

LA 405: IN LOS ANGELES COUNTY, FROM I-10 TO US-101 WIDEN FOR HOV LANE; EA 12030

Widen the existing northbound I-405. This project will provide continuous carpool lanes on I-405 by closing the last gap.

LA 101: IN LOS ANGELES COUNTY, ON SOUTHBOUND US-101, BETWEEN LANKERSHIM BLVD OFF-RAMP AND BARHAM BLVD OFF-RAMP; EA 29920

Modify interchange and improve both freeway systems access and safety on southbound US-101 between Lankershim Blvd. off-ramp and Barham Blvd. off-ramp in Los Angeles.

TRANSPORTATION MANAGEMENT SYSTEM PROJECTS TO UPGRADE THE EXISTING COMMUNICATION SYSTEMS.

- LA 002: Repair/Restoration of the Intelligent Transportation System (ITS) in Los Angeles County and Ventura County. EA 34060.
- LA 10: Repair Ramp Metering and Vehicle Detection System on various routes. EA 34050.
- LA 405: Upgrade existing Traffic Management Communication System from Ventura Blvd. Undercrossing to I-5/I-405 Separation. EA 25710.

ROADSIDE SAFETY IMPROVEMENT PROJECTS

- LA 210: In Los Angeles County, in Pasadena and Arcadia from Fair Oaks to Huntington Dr. EA 30360
- LA 405: In Los Angeles County, Inglewood and Culver City, from I-105 to Port Road Undercrossing. EA 29630.
- LA 060: In the cities of Los Angeles, Monterey Park, Montebello, from Mednik Ave to Markland Drive. EA 29580.
- LA 005: In Los Angeles County at various locations. EA 29510.

This list of ongoing or planned projects is only a partial list, please contact CALTRANS District 7 for more details.

Quarterly Mobility Statistics

Measure	Graph	Percentage Change									
Vehicle Miles of Travel (VMT)	Miles (Billions) <table><tr><th>Quarter</th><th>VMT (Billions)</th></tr><tr><td>2018 Q4</td><td>9.5</td></tr><tr><td>2019 Q3</td><td>9.57</td></tr><tr><td>2019 Q4</td><td>9.35</td></tr></table>	Quarter	VMT (Billions)	2018 Q4	9.5	2019 Q3	9.57	2019 Q4	9.35	Over one year ago	Over last quarter
		Quarter	VMT (Billions)								
		2018 Q4	9.5								
		2019 Q3	9.57								
2019 Q4	9.35										
-1.6%	-2.3%										
Total Vehicle Hours of Delay (VHD) at 35 mph	Hours (Millions) <table><tr><th>Quarter</th><th>VHD (Millions)</th></tr><tr><td>2018 Q4</td><td>17.4</td></tr><tr><td>2019 Q3</td><td>16.8</td></tr><tr><td>2019 Q4</td><td>17.3</td></tr></table>	Quarter	VHD (Millions)	2018 Q4	17.4	2019 Q3	16.8	2019 Q4	17.3	Over one year ago	Over last quarter
		Quarter	VHD (Millions)								
		2018 Q4	17.4								
		2019 Q3	16.8								
2019 Q4	17.3										
-0.5%	3.2%										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	Hours (Thousands) <table><tr><th>Quarter</th><th>VHD (Thousands)</th></tr><tr><td>2018 Q4</td><td>250</td></tr><tr><td>2019 Q3</td><td>229</td></tr><tr><td>2019 Q4</td><td>249</td></tr></table>	Quarter	VHD (Thousands)	2018 Q4	250	2019 Q3	229	2019 Q4	249	Over one year ago	Over last quarter
		Quarter	VHD (Thousands)								
		2018 Q4	250								
		2019 Q3	229								
2019 Q4	249										
-0.2%	9%										
Total Vehicle Hours of Delay (VHD) at 60 mph	Hours (Millions) <table><tr><th>Quarter</th><th>VHD (Millions)</th></tr><tr><td>2018 Q4</td><td>35.8</td></tr><tr><td>2019 Q3</td><td>36</td></tr><tr><td>2019 Q4</td><td>36.1</td></tr></table>	Quarter	VHD (Millions)	2018 Q4	35.8	2019 Q3	36	2019 Q4	36.1	Over one year ago	Over last quarter
		Quarter	VHD (Millions)								
		2018 Q4	35.8								
		2019 Q3	36								
2019 Q4	36.1										
0.8%	0.3%										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	Hours (Thousands) <table><tr><th>Quarter</th><th>VHD (Thousands)</th></tr><tr><td>2018 Q4</td><td>497</td></tr><tr><td>2019 Q3</td><td>479</td></tr><tr><td>2019 Q4</td><td>501</td></tr></table>	Quarter	VHD (Thousands)	2018 Q4	497	2019 Q3	479	2019 Q4	501	Over one year ago	Over last quarter
		Quarter	VHD (Thousands)								
		2018 Q4	497								
		2019 Q3	479								
2019 Q4	501										
0.8%	4.7%										

Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph	Hours (Thousands) ■ 2018 Q4 ■ 2019 Q3 ■ 2019 Q4	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		Tuesday -5.4%	Saturday -4.8%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Monday 11.3%	Friday 12.7%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays	Hours (Thousands) — Weekday (2018 Q4) — Weekday (2019 Q3) — Weekday (2019 Q4) Hour of Day	Largest Magnitude Weekday Decrease over one year ago	Largest Magnitude Weekday Decrease over last quarter
		8 AM -6.9%	11 AM -21.3%
		Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
		3 PM 5.7%	6 PM 23.1%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays	Hours (Thousands) — Saturday (2018 Q4) — Saturday (2019 Q3) — Saturday (2019 Q4) Hour of Day	Largest Magnitude Saturday Decrease over one year ago	Largest Magnitude Saturday Decrease over last quarter
		5 PM -11.1%	12 PM -25.8%
		Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
		2 PM 2.7%	6 PM 52.6%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/Holidays	Hours (Thousands) — Sunday/Holiday (2018 Q4) — Sunday/Holiday (2019 Q3) — Sunday/Holiday (2019 Q4) Hour of Day	Largest Magnitude Sun./Holiday Decrease over one year ago	Largest Magnitude Sun./Holiday Decrease over last quarter
		7 PM -17.6%	1 PM -30.6%
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		3 PM 15.4%	5 PM 15.5%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph	Hours (Millions) Los Angeles: 16.98, 16.37, 16.86 Ventura: 0.42, 0.41, 0.46 Legend: 2018 Q4 (blue), 2019 Q3 (purple), 2019 Q4 (pink)	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		Los Angeles -0.7% ↓	—
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Ventura 7.8% ↑	Los Angeles 3% ↑
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph	Miles AM Peak (6 AM to 10 AM): 275, 250, 275 Off-Peak Day (10 AM to 3 PM): 140, 170, 150 PM Peak (3 PM to 7 PM): 450, 420, 450 Off-Peak Night (7 PM to 6 AM): 20, 10, 20 Legend: 2018 Q4 (blue), 2019 Q3 (purple), 2019 Q4 (pink)	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		Off-Peak Night -5% ↓	Off-Peak Day -10.6% ↓
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		PM Peak 1.7% ↑	PM Peak 7.4% ↑
Average Number of Good and Bad Detectors	Number of Detectors 2018 Q4: 6,895 (Good), 4,143 (Bad) 2019 Q3: 5,805 (Good), 5,241 (Bad) 2019 Q4: 6,698 (Good), 4,408 (Bad) Legend: Average of Good (teal), Average of Bad (grey)	Change in Good over one year ago	Change in Good over last quarter
		-3% ↓	15% ↑
		Change in Bad over one year ago	Change in Bad over last quarter
		6% ↑	-16% ↓

Congestion by Route

Route	County	Vehicle Hours of Delay at 35 mph			Difference 2019 Q4-2018 Q4		Difference 2019 Q4-2019 Q3		Rank		
		2018 Q4	2019 Q3	2019 Q4	Absolute	Percentage	Absolute	Percentage	2018 Q4	2019 Q3	2019 Q4
I-405	Los Angeles	3,539,468	3,323,814	3,527,826	-11,643	-0.3%	204,012	6.1%	1	1	1
US-101	Los Angeles	2,665,762	2,637,359	2,590,936	-74,826	-2.8%	-46,423	-1.8%	2	2	2
I-10	Los Angeles	1,575,706	1,661,886	1,909,378	333,672	21.2%	247,492	14.9%	4	3	3
I-5	Los Angeles	1,617,447	1,538,807	1,618,496	1,049	0.1%	79,690	5.2%	3	4	4
I-210	Los Angeles	1,172,345	1,301,665	1,421,029	248,684	21.2%	119,364	9.2%	6	5	5
SR-60	Los Angeles	674,424	834,948	935,292	260,868	38.7%	100,344	12.0%	9	8	6
I-110	Los Angeles	1,303,996	904,931	899,581	-404,415	-31.0%	-5,350	-0.6%	5	7	7
I-605	Los Angeles	904,604	928,220	830,380	-74,224	-8.2%	-97,840	-10.5%	7	6	8
I-105	Los Angeles	688,377	704,795	631,563	-56,814	-8.3%	-73,232	-10.4%	8	10	9
SR-91	Los Angeles	670,955	706,241	624,028	-46,926	-7.0%	-82,212	-11.6%	10	9	10
I-710	Los Angeles	488,210	563,896	548,899	60,688	12.4%	-14,998	-2.7%	11	11	11
SR-134	Los Angeles	378,768	415,776	434,314	55,546	14.7%	18,538	4.5%	12	12	12
US-101	Ventura	267,566	332,877	368,596	101,030	37.8%	35,719	10.7%	15	14	13
SR-57	Los Angeles	361,746	334,524	305,714	-56,032	-15.5%	-28,810	-8.6%	13	13	14
SR-14	Los Angeles	246,825	212,882	197,768	-49,056	-19.9%	-15,114	-7.1%	16	15	15
SR-71	Los Angeles	85,654	88,575	135,513	49,859	58.2%	46,938	53.0%	20	18	16
SR-118	Los Angeles	216,772	91,084	135,009	-81,763	-37.7%	43,925	48.2%	17	17	17
SR-2	Los Angeles	90,983	100,386	107,097	16,114	17.7%	6,711	6.7%	19	16	18
SR-118	Ventura	55,208	33,933	45,459	-9,749	-17.7%	11,526	34.0%	21	20	19
SR-23	Ventura	100,412	38,600	40,284	-60,128	-59.9%	1,684	4.4%	18	19	20
SR-126	Los Angeles	17	3,056	5,362	5,345	32007.8%	2,306	75.5%	24	22	21
SR-47	Los Angeles	3,718	14,763	2,799	-918	-24.7%	-11,964	-81.0%	22	21	22
SR-33	Ventura	0	0	1,794	1,794		1,794				23
SR-90	Los Angeles	1,602	1,467	1,508	-94	-5.8%	41	2.8%	23	23	24
SR-170	Los Angeles	297,091	0	0	-297,091	-100.0%	0		14		
TOTALS		17,407,654	16,774,484	17,318,624	-89,030	-0.5%	544,140	3.2%			
SR-170 ALL Loops are down from Mid December 2018											