

District 07 Mobility Performance Report

2024 Third Quarter

**DEPARTMENT OF TRANSPORTATION
OFFICE OF SYSTEM PERFORMANCE, DATA COLLECTION, AND ANALYSIS
DIVISION OF TRANSPORTATION SAFETY & OPERATIONS**

October 23, 2024

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District 07 Mobility Performance Report

2024 Third Quarter

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 10.2 million residents as of 2020. Ventura County has a population of 0.84 million.

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 third quarter (July to September of 2024), Vehicle miles of Travel (VMT) across all district 7 freeways were 9.18 billion miles, an increase of 1.1 percent from previous quarter.
- There was 25.2 million Vehicle Hours of Delay (VHD) at the 60-mph speed threshold, an increase of 1.8 percent over previous quarter and an increase of 4.7 percent from a year ago.
- Only 812 thousand of the 25.2 million VHD were generated in Ventura County, and 24.3 Million VHD were generated in Los Angeles County.
- About 45 percent of the total delay in District 7 at the 35-mph speed threshold were generated from 3 freeways only, I-405 (20%), I-10 (13%), and I-5 (12%).
- These delays were equivalent to 320 Lost Lane Miles Hours (LLM)^{*} from the freeway network during the PM Peak Period, compared to 319 LLM from previous quarter.
- The average weekday daily delay in this quarter was approximately 134,000 VHD at 35-mph speed threshold, and 337,000 VHD at 60-mph speed thresholds (1.1 percent and 2.3 Percent increase respectively over the previous quarter.)
- Thursdays are the most congested days of the week in this quarter then Wednesdays and Fridays. Morning peak hour was at 8:00 AM. Afternoon peak hour was at 5:00 PM. The peak periods extended from 6:30 AM to 9:00 AM and from 2:30 PM to 6:00 PM.
- Weekend's peak hour (Saturday and Sunday) was at 3:00 PM, and peak period extended between 1:00 PM and 5:00 PM.

* **Lost Lane Miles Hours (Lost Productivity):** This is the number of lane-mile-hours that are lost due to the freeway operating under congested conditions. When the freeway is in congestion - speed is below 35 mph - PeMS find the ratio between the measured flow and the capacity for this location. This drop in capacity is due to the fact that the freeway is operating in congested conditions instead of in free flow)

➤ By the end of the third quarter, loop detectors in good service condition account for only 25 percent of the total loops, while 75 percent of total loop detectors are nonoperational. Almost 3.4 percent of the total loops were out due to construction projects.

County	# Det	% Good	% Bad	% Construction
Los Angeles	10595	23.2	76.8	2.2
Ventura	616	55.0	45.0	23.7
Totals	11,211	25.0	75.0	3.4

➤ Top Ten Bottlenecks for the 2024 Third Quarter:

Rank	County	Location	Shift	Fwy	Abs PM	CA PM	Latitude	Longitude	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (hours)
1	Los Angeles	Stagg St	PM	I405-N	66.97	43.2	34.213275	-118.473134	60	8.2	269,595	247
2	Los Angeles	Solano Ave	PM	I110-N	25.01	25.08	34.075092	-118.232059	64	3.7	194,625	291
3	Los Angeles	Howard Hughes Pkwy	PM	I405-S	48.67	24.9	33.976541	-118.387273	60	4.8	191,811	198
4	Los Angeles	Florence Ave	PM	I605-S	11.216	R9.164	33.935212	-118.099885	61	6.2	175,576	242
5	Los Angeles	Bel Air Cr	AM	I405-S	59.57	35.8	34.110424	-118.481702	60	6.3	166,378	190
6	Los Angeles	Adams Blvd	AM	I110-N	20.53	20.6	34.026085	-118.275163	64	4.4	155,580	230
7	Los Angeles	Markland - Wilcox	PM	SR60-E	7.47	R7.3	34.035592	-118.101149	61	4.9	151,938	231
8	Los Angeles	National Blvd	AM	I405-N	52.932	29.16	34.026728	-118.429807	54	4.6	148,556	198
9	Los Angeles	Downey Rd	PM	I5-S	130.91	14.34	34.019879	-118.181588	64	2.1	146,581	308
10	Los Angeles	Pasadena Ave.	PM	I5-N	136.633	20	34.076978	-118.219273	64	3.1	145,330	249

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 I-405: EA 34070, LA CIENEGA BLVD SOUTHBOUND ON AND OFF-RAMPS IMPROVEMENTS.

This project widens the southbound I-405 La Cienega Blvd exit ramp from one to two lanes, from the diverge point on, and then widens to four lanes at the ramp terminal intersection. The entrance ramp from La Cienega Blvd will be widened from one lane to two lanes up through the ramp meter line and then taper to one lane to join the existing collector-distributor road just before the Century Blvd UC.

LA SR-57: EA 27912, IN LOS ANGELES COUNTY, IN DIAMOND BAR AND CITY OF INDUSTRY ON ROUTE 60 FROM E60-S57 CONNECTOR OC TO GOLDEN SPRINGS DRIVE UC.

This project will reconstruct Grand Ave OC, and NB SR-57 Connector to EB SR-60. This project will also construct EB SR-60 Bypass Off-Ramp to Grand Ave, EB SR-60 Bypass, and construct SB Grand Ave To EB SR-60 Loop On-Ramp.

LA I-405: EA 29360, IN TORRANCE. INTERCHANGE IMPROVEMENTS AND NEW AUX LN.

This project will improve Interstate 405 (I-405) @ Crenshaw Boulevard & 182nd Street interchange and add auxiliary lanes on I-405 between Western Avenue and Crenshaw Boulevard in Los Angeles County. Improvements include constructing a new southbound on-ramp from northbound Crenshaw Boulevard.

TRANSPORTATION MANAGEMENT SYSTEM PROJECTS TO UPGRADE THE EXISTING COMMUNICATION SYSTEMS.

- **LA I-10: EA 32720**, Upgrade the existing transportation management system elements in and near Santa Monica from Lincoln boulevard to McClure tunnel, on Route 10 (PM 2.1/18.3), Route 2 (PM R18.7), Route 101 (PM 11.8), and Route 105 (pm r1.95).
- **LA SR-91: EA 33860**, Upgrade existing traffic management communication in and near Carson from Route 110 to Orange County line, on Route 2 (PM R18.7), Route 5 (PM 6.8), and Route 105 (PM R2.0).
- **LA SR-60: EA 32710**, Upgrade transportation management system.
- **LA US-101: EA 33780**, This project proposes to upgrade the existing Transportation Management System (TMS) elements including Closed-Circuit Television (CCTV) cameras, Changeable Message Signs, Vehicle Detection Stations, Ramp Metering Systems, and Internet Protocol (IP) ready network at various locations in Los Angeles County.

ROADSIDE SAFETY IMPROVEMENT PROJECTS

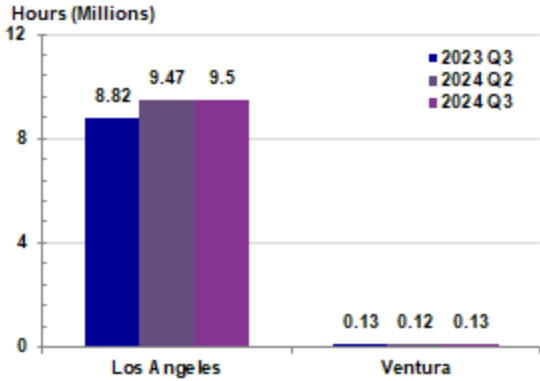
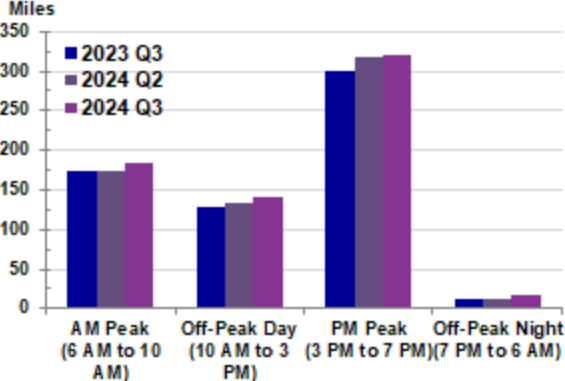
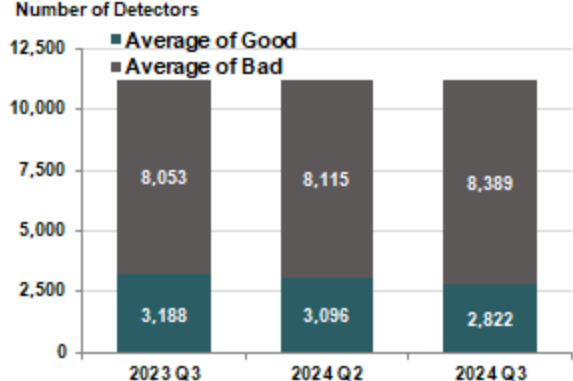
- **LA I-110: EA 31200**, In Los Angeles County at various locations. The project will replace some of the Transportation Management System (TMS) field elements, which includes replacement of the existing copper cables with fiber optic cables along the corridor and at all Closed-Circuit Television Cameras (CCTVs), Ramp Metering Systems (RMS), Vehicle Detection Stations (VDS), and Extinguishable Message Sign (EMS).
- **LA I-405: EA 32180**, in Los Angeles County near Carson and long beach at various locations from 0.1 mile north of route 710 to route 110/405 separation.

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)	<p>Miles (Billions)</p> <table border="1"> <tr><th>Year</th><th>Q3</th></tr> <tr><td>2023</td><td>9.1</td></tr> <tr><td>2024</td><td>9.09</td></tr> <tr><td>2024</td><td>9.18</td></tr> </table>	Year	Q3	2023	9.1	2024	9.09	2024	9.18	Over one year ago	Over last quarter
		Year	Q3								
		2023	9.1								
2024	9.09										
2024	9.18										
1%	1.1%										
↑	↑										
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Year</th><th>Q3</th></tr> <tr><td>2023</td><td>9</td></tr> <tr><td>2024</td><td>9.6</td></tr> <tr><td>2024</td><td>9.6</td></tr> </table>	Year	Q3	2023	9	2024	9.6	2024	9.6	Over one year ago	Over last quarter
		Year	Q3								
		2023	9								
2024	9.6										
2024	9.6										
7.6%	0.4%										
↑	↑										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year</th><th>Q3</th></tr> <tr><td>2023</td><td>127</td></tr> <tr><td>2024</td><td>132</td></tr> <tr><td>2024</td><td>134</td></tr> </table>	Year	Q3	2023	127	2024	132	2024	134	Over one year ago	Over last quarter
		Year	Q3								
		2023	127								
2024	132										
2024	134										
5.6%	1.1%										
↑	↑										
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Millions)</p> <table border="1"> <tr><th>Year</th><th>Q3</th></tr> <tr><td>2023</td><td>24</td></tr> <tr><td>2024</td><td>24.7</td></tr> <tr><td>2024</td><td>25.2</td></tr> </table>	Year	Q3	2023	24	2024	24.7	2024	25.2	Over one year ago	Over last quarter
		Year	Q3								
		2023	24								
2024	24.7										
2024	25.2										
4.7%	1.8%										
↑	↑										
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table border="1"> <tr><th>Year</th><th>Q3</th></tr> <tr><td>2023</td><td>326</td></tr> <tr><td>2024</td><td>330</td></tr> <tr><td>2024</td><td>337</td></tr> </table>	Year	Q3	2023	326	2024	330	2024	337	Over one year ago	Over last quarter
		Year	Q3								
		2023	326								
2024	330										
2024	337										
3.4%	2.3%										
↑	↑										

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
		Tuesday -3.3% ↓	Saturday -7.4% ↓
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
		8 AM -2.3% ↓	4 PM -5.7% ↓
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
		12 PM -3.8% ↓	4 PM -22.7% ↓
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 -0.7% ↓	3 PM -33.6% ↓
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		5 PM 39.2% ↑	7 PM 23.8% ↑

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 Los Angeles 7.7% ↑	Largest Magnitude Increase over last quarter Los Angeles 0.3% ↑
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 -
		Largest Magnitude Increase over one year ago PM Peak 6.4% ↑	Largest Magnitude Increase over last quarter AM Peak 6.1% ↑
Average Number of Good and Bad Detectors		Change in Good over one year ago -11% ↓	Change in Good over last quarter -9% ↓
		Change in Bad over one year ago 4% ↑	Change in Bad over last quarter 3% ↑

Congestion by Route

Route	County	Vehicle Hours of Delay at 35 mph			Difference 2024 Q3-2023 Q3		Difference 2024 Q3-2024 Q2		Rank		
		2023 Q3	2024 Q2	2024 Q3	Absolute	Percentage	Absolute	Percentage	2023 Q3	2024 Q2	2024 Q3
I-405	Los Angeles	1,880,611	2,081,003	1,928,253	47,642	2.5%	-152,750	-7.3%	1	1	1
I-10	Los Angeles	1,101,853	1,217,561	1,270,684	168,831	15.3%	53,123	4.4%	3	2	2
I-5	Los Angeles	1,191,469	1,203,409	1,141,260	-50,208	-4.2%	-62,149	-5.2%	2	3	3
US-101	Los Angeles	853,761	1,126,016	1,129,768	276,007	32.3%	3,752	0.3%	4	4	4
I-210	Los Angeles	833,179	965,267	906,453	73,274	8.8%	-58,814	-6.1%	5	5	5
I-605	Los Angeles	588,223	556,503	673,575	85,352	14.5%	117,072	21.0%	7	7	6
SR-60	Los Angeles	660,498	592,525	659,171	-1,327	-0.2%	66,646	11.2%	6	6	7
I-110	Los Angeles	563,324	547,325	609,442	46,118	8.2%	62,117	11.3%	8	8	8
I-710	Los Angeles	352,252	318,552	320,388	-31,864	-9.0%	1,836	0.6%	9	9	9
SRv91	Los Angeles	279,124	280,244	284,266	5,142	1.8%	4,022	1.4%	10	10	10
SR-14	Los Angeles	169,427	127,214	123,163	-46,264	-27.3%	-4,051	-3.2%	11	12	11
SR-57	Los Angeles	57,403	47,476	121,360	63,957	111.4%	73,884	155.6%	15	17	12
I-105	Los Angeles	141,539	118,507	117,648	-23,891	-16.9%	-859	-0.7%	12	13	13
SR-134	Los Angeles	94,917	162,868	102,864	7,947	8.4%	-60,005	-36.8%	13	11	14
SR-118	Los Angeles	51,157	74,553	58,656	7,499	14.7%	-15,897	-21.3%	16	14	15
USv101	Ventura	75,059	50,457	52,498	-22,561	-30.1%	2,040	4.0%	14	16	16
SRv2	Los Angeles	0	53,538	47,744	47,744		-5,794	-10.8%		15	17
SR-23	Ventura	22,131	38,831	44,462	22,332	100.9%	5,631	14.5%	18	18	18
SR-118	Ventura	26,924	31,208	34,115	7,191	26.7%	2,907	9.3%	17	19	19
SR-33	Ventura	3,309	3,309	3,309	0	0.0%	0	0.0%	19	20	20
SR-126	Los Angeles	702	91	3,131	2,429	346.2%	3,041	3356.0%	22	22	21
SR-47	Los Angeles	1,856	1,461	2,293	437	23.5%	832	57.0%	20	21	22
SR-170	Los Angeles	0	0	0	0		0				23
SRv71	Los Angeles	1,691	0	0	-1,691	-100.0%	0		21		24
SRv90	Los Angeles	8	0	0	-8	-100.0%	0	-100.0%	23	23	25
TOTALS		8,950,412	9,597,916	9,634,500	684,088	7.6%	36,584	-0.03%			