District 07 Mobility Performance Report

2024 Second Quarter

DEPARTMENT OF TRANSPORTATION
OFFICE OF SYSTEM PERFORMANCE
DIVISION OF OPERATIONS

August 11, 2024 : Ashraf Armanious

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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 10.2 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)
- o 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 Second quarter (April to June of 2024), Vehicle miles of Travel (VMT) across all district 7 freeways were 9.09 billion miles, an increase of 2.6 percent from previous quarter.
- There was 24.7 million Vehicle Hours of Delay (VHD) at the 60-mph speed threshold, an increase of 2.7 percent over previous quarter and an increase of 6.8 percent from a year ago.
- ➤ Only 2.8 percent of the 24.7 million VHD were generated in Ventura County, and 97.2 percent were generated in Los Angeles County.
- About 47 percent of the total delay in District 7 at the 35-mph speed threshold were generated from 3 freeways only, I-405 (22%), I-10 (12%), and I-5 (13%).
- These delays were equivalent to 319 Lost Lane Miles Hours (LLM)* from the freeway network during the PM Peak Period, compared to 301 LLM from previous quarter.
- The average weekday daily delay in this quarter was approximately 132,000 VHD at 35-mph speed threshold, and 330,000 VHD at 60-mph speed thresholds (2.7 percent and 1.8 Percent increase respectively over the previous quarter.)
- Thursdays are the most congested days of the week in this quarter then 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 second quarter, loop detectors in good service condition account for only 26.8 percent of the total loops, while 73.2 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	25.1	74.9	2.2
Ventura	616	56.3	43.7	23.7
Totals	11,211	26.8	73.2	3.4

➤ Top Ten Bottlenecks for the 2024 Second 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	Howard Hughes Pkwy	PM	I405-S	48.67	24.9	33.976541	-118.387273	63	5.02	203,481	210
2	Los Angeles	National Blvd	AM	I405-N	52.932	29.16	34.026728	-118.429807	59	5.81	194,225	220
3	Los Angeles	Bel Air Cr	AM	I405-S	59.57	35.8	34.110424	-118.481702	63	5.59	184,858	206
4	Los Angeles	Solano Ave	PM	I110-N	25.01	25.08	34.075092	-118.232059	63	3.70	180,104	271
5	Los Angeles	Adams Blvd	AM	I110-N	20.53	20.6	34.026085	-118.275163	63	4.18	156,217	227
6	Los Angeles	Florence Ave	PM	I605-S	11.216	R9.164	33.935212	-118.099885	55	6.48	152,581	219
7	Los Angeles	White Oak Ave	PM	US101-N	21.70	20.34	34.171285	-118.520359	58	8.61	149,077	151
8	Los Angeles	Downey Rd.	PM	I5-S	130.91	14.34	34.019879	-118.181588	63	2.10	145,347	304
9	Los Angeles	Pasadena Ave	PM	I5-N	136.63	20	34.076978	-118.219273	63	3.10	143,870	246
10	Los Angeles	Robertson Blvd	AM	I10-W	5.655	R7.81	34.029948	-118.392928	63	3.90	139,259	227

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.

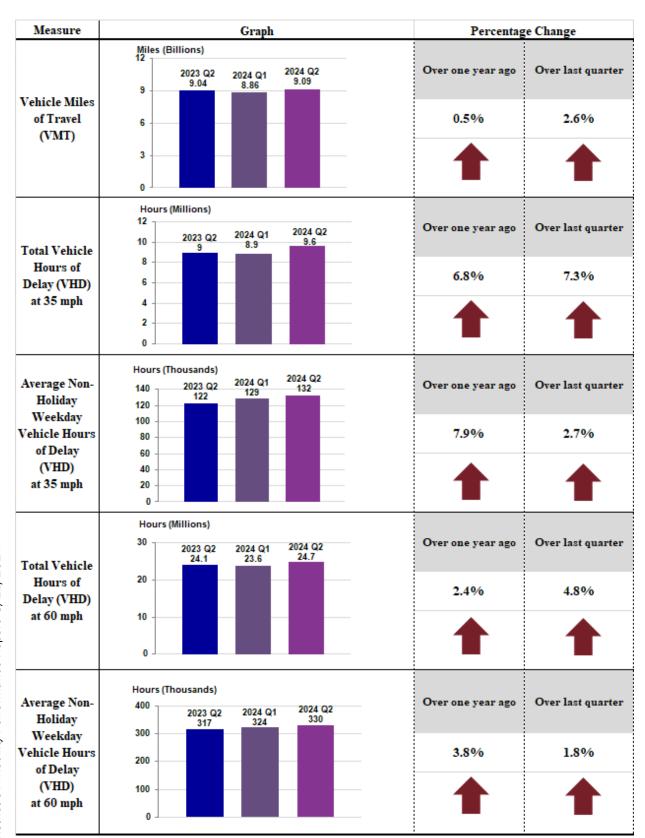
- LA I-10: EA 32720, Upgrade the existing transportation management system elements in and near Santa Monica from Lincoln boulevard to McClure tunnel, on Route 10 (PM 2.1/18.3), Route 2 (PM R18.7), Route 101 (PM 11.8), and Route 105 (pm r1.95).
- LA SR-91: EA 33860, Upgrade existing traffic management 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.

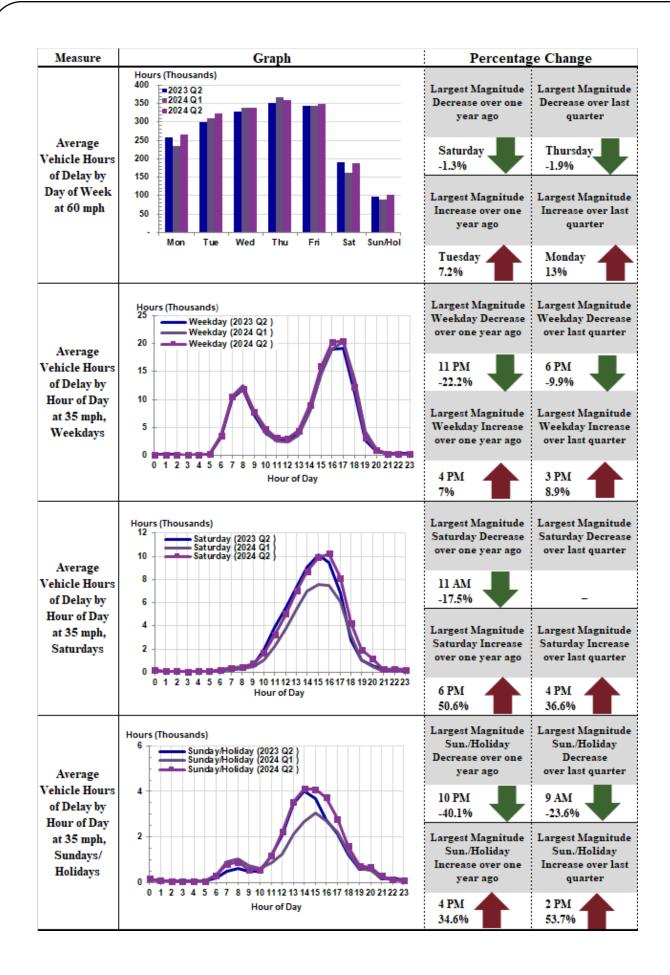
ROADSIDE SAFETY IMPROVEMENT PROJECTS

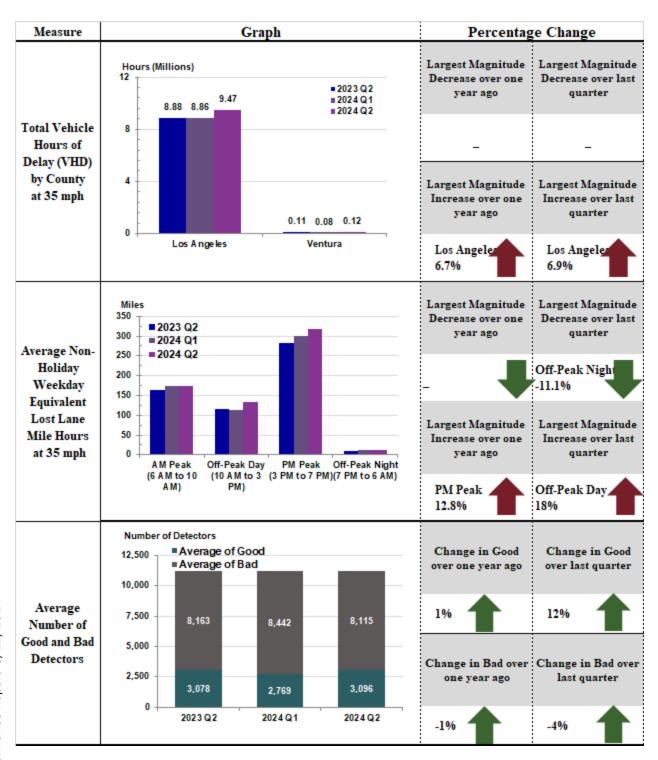
- LA I-110: EA 31200, In Los Angeles County at various locations. The project will replace some of the Transportation Management System (TMS) field elements, which includes replacement of the existing copper cables with fiber optic cables along the corridor and at all Closed-Circuit Television Cameras (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







Congestion by Route												
		Vehicle Hours of Delay at 35 mph				rence 2-2023 Q2		rence 2-2024 Q1	Rank			
Route	County	2023 Q2	2024 Q1	2024 Q2	Absolute	Percentage	Absolute	Percentage	2023 Q2	2024 Q1	2024 Q2	
I-405	Los Angeles	1,951,804	1,925,947	2,081,003	129,199	6.6%	155,056	8.1%	1	1	1	
I-10	Los Angeles	1,007,452	1,257,416	1,217,561	210,108	20.9%	-39,855	-3.2%	3	2	2	
I-5	Los Angeles	1,194,397	1,097,817	1,203,409	9,012	0.8%	105,593	9.6%	2	3	3	
US-101	Los Angeles	790,169	853,343	1,126,016	335,847	42.5%	272,673	32.0%	5	5	4	
I-210	Los Angeles	881,384	886,566	965,267	83,883	9.5%	78,701	8.9%	4	4	5	
SR-60	Los Angeles	671,283	601,290	592,525	-78,759	-11.7%	-8,765	-1.5%	6	6	6	
I-605	Los Angeles	564,906	552,677	556,503	-8,403	-1.5%	3,826	0.7%	8	7	7	
I-110	Los Angeles	581,200	548,812	547,325	-33,875	-5.8%	-1,487	-0.3%	7	8	8	
I-710	Los Angeles	362,193	318,523	318,552	-43,641	-12.0%	29	0.0%	9	9	9	
SR-91	Los Angeles	262,143	241,464	280,244	18,101	6.9%	38,780	16.1%	10	10	10	
SR-134	Los Angeles	158,919	155,029	162,868	3,949	2.5%	7,839	5.1%	13	12	11	
SRv14	Los Angeles	178,996	186,468	127,214	-51,782	-28.9%	-59,254	-31.8%	11	11	12	
I-105	Los Angeles	159,242	120,258	118,507	-40,735	-25.6%	-1,751	-1.5%	12	13	13	
SRv118	Los Angeles	59,218	43,730	74,553	15,335	25.9%	30,823	70.5%	15	15	14	
SRv2	Los Angeles	9,720	18,936	53,538	43,817	450.8%	34,602	182.7%	19	18	15	
US-101	Ventura	65,678	29,842	50,457	-15,220	-23.2%	20,616	69.1%	14	17	16	
SR-57	Los Angeles	37,988	48,865	47,476	9,488	25.0%	-1,389	-2.8%	16	14	17	
SR-23	Ventura	22,697	30,199	38,831	16,134	71.1%	8,632	28.6%	17	16	18	
SR-118	Ventura	22,115	17,655	31,208	9,093	41.1%	13,554	76.8%	18	19	19	
SR-v33	Ventura	3,309	3,309	3,309	0	0.0%	0	0.0%	20	20	20	
SR-47	Los Angeles	1,625	1,312	1,461	-164	-10.1%	150	11.4%	21	21	21	
SR-126	Los Angeles	10	1,188	91	80	788.2%	-1,097	-92.4%	24	22	22	
SR-90	Los Angeles	3	0	0	-3	-96.8%	0	-75.0%	25	24	23	
SR-170	Los Angeles	1,500	0	0	-1,500	-100.0%	0		22		24	
SR-71	Los Angeles	956	840	0	-956	-100.0%	-840	-100.0%	23	23	25	
TOTALS		8,988,907	8,941,484	9,597,916	609,009	6.8%	656,433	-0.03%				