

# Unit 9, Professional Engineers 2023 Salary Survey

Report to the  
Governor and  
Legislature

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# Overview

This salary survey report is prepared by the Department of Human Resources (CalHR) as required by the Memorandum of Understanding (MOU) between the state and the Professional Engineers in California Government (PECG).

The Department and PECG jointly completed the 2023 Unit 9 salary survey. Although the current MOU requires this survey to be completed, it also states that salary increases for Unit 9 employees as a result of a lag in the survey, “shall not be provided during the term of this MOU.”

The survey results indicate that the state lags behind in maximum base pay for its engineers. The table below illustrates the lag for each working level.

**Table 1: Survey Results**

Level of Work	State Lag
Entry Level	8.3%
Journey Level	9.0%
First Level Supervisor	6.6%

# Methodology

## Memorandum of Understanding Survey Requirement

This salary survey was initiated and completed based on the requirements outlined in Article 3.1 of the MOU effective July 2, 2003 through July 2, 2008. Over time the Department and PEGC agreed to a detailed methodology. By the terms of the current MOU<sup>1</sup> (effective July 1, 2022 through June 30, 2025), the surveyed agencies and benchmark comparisons may only be changed upon mutual agreement between the Department and PEGC.

Article 3.1 of the MOU requires the Department to:

- Annually survey the 18 public agencies and 10 University of California campuses used in the December 2002 survey.
- Calculate the salary lead or lag based on the weighted average of maximum salaries of employees in the surveyed organization’s previously agreed upon classifications.<sup>2</sup>

## State of California’s Benchmark Job Classifications

For this survey, the required three benchmarks for the state are:



<sup>1</sup> Attachment 1 displays Article 3.1 in the current MOU (effective July 1, 2022 through July 1, 2025).

<sup>2</sup> Attachment 2 displays the surveyed organizations, their surveyed job classifications, and the minimum and maximum salaries of those job classifications.

# Survey Lag Calculation

The agreed upon methodology requires a comparison to be made between the State of California’s maximum salary to the weighted average maximum salary for the surveyed organizations.

There are two parts to the survey lag calculation. The first part weights the maximum salary of each surveyed organization by the total number of engineers in the comparable classification(s) in each organization. This is done separately for the entry level, journey level, and first level supervisor categories, resulting in a separate weighted average salary for each level.

The second part of the lag computation compares the weighted average salary for the surveyed organizations with the maximum salary of the state benchmark engineer classification. The percentage difference is the survey lag. A separate lag is computed for entry level, journey level, and first level supervisors.

To illustrate how the lag is calculated the table below uses fictitious salary, incumbent counts, and organizations.

**Table 2: Simplified Illustration of Survey Lag Calculation**

Surveyed Organization	Entry Level Maximum Salary A	No. of Engineers in Survey Class B	Product = A x B
Organization A	\$7,000	135	\$945,00
Organization B	\$8,500	25	\$212,500
Total		160	\$1,157,500
Weighted Average Salary	\$7,234 <sup>1</sup>		
State of California Salary	\$6,900		
State Salary Lag	\$334		
State Salary Lag Percent	4.8% <sup>2</sup>		

<sup>1</sup> Calculation is \$1,157,500/160

<sup>2</sup> Calculation is \$7,234 less \$6,900 divided by \$6,900, rounded to one decimal



# Lag Calculation Anomalies

There are two unique anomalies affecting the lag calculation.

The first is a few of the surveyed organizations use two classifications for either entry or journey level. Five surveyed organizations used two classifications for the entry level, and one surveyed organization used two classifications for the journey level.

For those organizations using two classifications for a single level, the Department combined the incumbent counts for the two classifications, and then weighted the survey using the higher-salaried classification by the combined incumbent count.

The second anomaly affecting the lag calculation is the additional pay that the City of San Diego provides their engineers for possessing a state certification as a Registered Engineer.

The City of San Diego pays an additional 15 percent of salary to its employees in the journey level and first level supervisor classifications for possessing state certification as a Registered Civil Engineer. To compute the survey's salary lag, 15 percent of pay was added to the maximum salary, and then was weighted by an incumbent count.

PECG and the Department agreed on the application of the two anomalies for the survey methodology.

# Survey Results

## Salary Lag for Entry Level, Journey Level, and First Level Supervisors

The survey results for the state’s three benchmark job classifications are displayed below.

**Table 3: Display of Survey Lags\***

Level of Work	Entry Level	Journey Level	First Level Supervisor
State Benchmark Classification	Transportation Engineer (Civil) Range A/B	Transportation Engineer (Civil) Range D	Senior Transportation Engineer, Caltrans
Lag for State	8.3%	9.0%	6.6%

\*Attachment 3 provides the detail on the lag computations.

As agreed upon in the current MOU, rank and file civil service job classifications in Unit 9 are not automatically entitled to salary increases to compensate for any salary disparity (or “lag”) between Unit 9 salaries and benchmark comparisons used in this survey.

Salary Survey Text from  
Unit 9 Memorandum of Understanding  
(2022-2025)

**ARTICLE 3**  
**SALARIES AND COMPENSATION**  
**3.1 Salary Parity for Unit 9**

The State and PEGC will continue to complete the salary survey of Unit 9. This survey will include the Professional Engineer Benchmarks that utilize the California public agencies and the University of California included in the department's survey dated December 2002, and the local agency classifications and salary range matches contained therein. The salary survey for those classifications and agencies shall be current data. The agencies and classifications included in the survey shall only be changed upon agreement between CalHR and PEGC.

Salary Methodology:

- A. All steps in each salary range shall be increased by the same percentage. The salary for intermediate classifications in ranges between the Entry and Supervisory levels shall be based on prorating or interpolating the salaries.
- B. All salary increases shall be rounded to the nearest dollar. In no event shall salaries be reduced as a result of this provision. CalHR and PEGC may negotiate salaries above the minimum level on any general, regional, specialty, classification, department, or other basis they choose to agree upon.
- C. Salaries for Unit 9 employees shall be increased as appropriate to correspond to the timing of the salaries received by local agency employees included in the survey.

By mutual agreement CalHR and PEGC can meet to discuss benchmarks and methodologies.

Beginning with the January 2016 salary survey, the calculation of the salary lead or lag for Unit 9 employees shall be based on the weighted average salaries of employees in the classifications in the surveyed agencies as of January 1.

Notwithstanding the above provisions, salary increases pursuant to this section shall not be provided during the term of this MOU.

The most current version of the salary survey will be posted on the CalHR website.



**List of Surveyed Organizations and Entry Level Classifications  
for 2023 Unit 9 Salary Survey**

Organization	Entry Level	Min	Max
State of California	Transportation Engineer A/B	\$5,995	\$8,590
Alameda County	Junior Engineer	\$7,205	\$8,327
Contra Costa County	Engineer - Entry	\$6,953	\$8,265
Fresno County	Engineer II	\$6,892	\$8,376
Los Angeles County	C.E Assistant	\$6,706	\$8,109
	Sr. C.E. Assistant	\$6,707	\$8,561
Orange County	Junior Civil Engineer	\$6,666	\$7,628
Riverside County	Junior Engineer	\$6,130	\$7,504
	Assistant Engineer	\$7,018	\$9,028
Sacramento County	Asst. Civil Eng. Level 2	\$7,393	\$9,434
San Bernardino County	Capital Improvement Project Manager I	\$5,528	\$7,601
San Diego County	Assistant Engineer	\$6,469	\$7,954
Santa Clara County	Assistant Civil Engineer	\$8,517	\$10,356
SF City/County	Junior Engineer	\$8,322	\$10,114
	Assistant Engineer	\$9,397	\$11,423
City of Fresno	Engineer I	\$6,875	\$8,355
City of Los Angeles	Civil Engineer Associate I	\$7,365	\$9,152
City of Oakland	Assistant Engineer, Level 1	\$7,447	\$9,142
City of Riverside	Assistant Engineer	\$6,854	\$8,333
City of Sacramento	Junior Engineer	\$4781	\$6728
	Assistant Civil Engineer	\$5832	\$8207
City of San Diego	Junior Engineer	\$5,896	\$7,138
	Assistant Engineer	\$6,825	\$8,222
City of San Jose	Engineer I	\$7,531	\$9,528
University of California, Berkeley	Professional Engineer 3	N/A	N/A
University of California, Davis	Professional Engineer 3	\$6,217	\$11,750
University of California, Irvine	Professional Engineer 3	\$6,575	\$12,092
University of California, Los Angeles	Professional Engineer 3	\$6,158	\$14,225
University of California, Merced	Professional Engineer 3	\$6,033	\$11,100
University of California, Riverside	Professional Engineer 3	N/A	N/A
University of California, San Diego	Professional Engineer 3	\$5,283	\$11,900
University of California, Santa Cruz	Professional Engineer 3	\$6,325	\$11,642
University of California, Santa Barbara	Professional Engineer 3	N/A	N/A
University of California, San Francisco	Professional Engineer 3	\$5,475	\$13,942

**List of Surveyed Organizations and Journey Level Classifications  
for 2023 Unit 9 Salary Survey**

Organization	Journey Level	Min	Max
State of California	Transportation Engineer D	\$8,975	\$11,230
Alameda County	Associate Civil Engineer	\$9,840	\$11,957
Contra Costa County	Engineer - Project	\$9,564	\$11,091
Fresno County	Senior Engineer	\$8,317	\$10,111
Los Angeles County	Assoc. Civil Engineer	\$8,884	\$11,340
	Civil Engineer	\$9,902	\$12,639
Orange County	Civil Engineer	\$9,207	\$10,549
Riverside County	Associate Civil Engineer	\$8,035	\$10,268
Sacramento County	Associate Civil Engineer	\$9,241	\$11,233
San Bernardino County	Capital Improvement Project Manager II	\$6,512	\$8,968
San Diego County	Civil Engineer	\$8,102	\$9,951
Santa Clara County	Associate Civil Engineer	\$10,157	\$12,346
SF City/County	Associate Engineer	\$11,039	\$13,418
City of Fresno	Professional Engineer	\$8,738	\$10,606
City of Los Angeles	Civil Engineer	\$8,463	\$12,375
City of Oakland	Civil Engineer	\$10,057	\$12,348
City of Riverside	Associate Engineer	\$8,122	\$10,884
City of Sacramento	Associate Civil Engineer	\$7,327	\$10,309
City of San Diego	Associate Engineer	\$9,037	\$10,909
City of San Jose	Associate Engineer	\$9,832	\$12,447
University of California, Berkeley	Professional Engineer 4	N/A	N/A
University of California, Davis	Professional Engineer 4	\$6,750	\$13,383
University of California, Irvine	Professional Engineer 4	\$7,267	\$13,633
University of California, Los Angeles	Professional Engineer 4	\$6,792	\$16,042
University of California, Merced	Professional Engineer 4	N/A	N/A
University of California, Riverside	Professional Engineer 4	N/A	N/A
University of California, San Diego	Professional Engineer 4	\$5,917	\$13,333
University of California, Santa Cruz	Professional Engineer 4	\$7,017	\$13,117
University of California, Santa Barbara	Professional Engineer 4	\$6,925	\$14,125
University of California, San Francisco	Professional Engineer 4	\$6,142	\$15,625

**List of Surveyed Organizations and First Level Supervisor Classifications for  
2023 Unit 9 Salary Survey**

<b>Organization</b>	<b>First Supervisory Level</b>	<b>Min</b>	<b>Max</b>
State of California	Sr. Transportation Engineer	\$10,569	\$13,228
Alameda County	Supervising Civil Engineer	\$11,729	\$14,264
Contra Costa County	Associate Civil Engineer	\$8,456	\$11,373
Fresno County	Supervising Engineer	\$9,152	\$11,125
Los Angeles County	Senior Civil Engineer	\$11,037	\$14,088
Orange County	Senior Civil Engineer	\$10,549	\$12,095
Riverside County	Senior Civil Engineer	\$8,597	\$11,469
Sacramento County	Senior Civil Engineer	\$11,334	\$12,497
San Bernardino County	Capital Improvement Project Manager III	\$7,179	\$9,887
San Diego County	Senior Civil Engineer	\$9,363	\$11,513
Santa Clara County	Senior Civil Engineer	\$11,895	\$14,496
SF City/County	Senior Engineer	\$14,660	\$17,814
City of Fresno	Supervising Professional Engineer	\$9,573	\$11,617
City of Los Angeles	Senior Civil Engineer	\$9,953	\$14,552
City of Oakland	Civil Engineer, Supervisor	\$12,074	\$14,825
City of Riverside	Principal Engineer	\$9,687	\$16,459
City of Sacramento	Supervising Engineer	\$9,903	\$12,993
City of San Diego	Senior Civil Engineer	\$10,413	\$12,587
City of San Jose	Senior Engineer	\$11,344	\$14,347
University of California, Berkeley	Professional Engineer 5	N/A	N/A
University of California, Davis	Professional Engineer 5	\$7,300	\$15,250
University of California, Irvine	Professional Engineer 5	\$7,942	\$15,458
University of California, Los Angeles	Professional Engineer 5	\$7,492	\$18,058
University of California, Merced	Professional Engineer 5	N/A	N/A
University of California, Riverside	Professional Engineer 5	N/A	N/A
University of California, San Diego	Professional Engineer 5	\$6,575	\$14,992
University of California, Santa Cruz	Professional Engineer 5	\$7,767	\$14,783
University of California, Santa Barbara	Professional Engineer 5	\$7,608	\$15,975
University of California, San Francisco	Professional Engineer 5	\$6,875	\$17,491

## Computation of Weighted Average Salary and Lag for 2023 Unit 9 Salary Survey

A	Entry Level			Journey Level			First Supervisory Level		
	B	C	D	E	F	G	H	I	J
Jurisdiction	Salary Maximum	Number	Cal. Of Weighted Avg. Max =B*C	Salary Maximum	Number	Cal. Of Weighted Avg. Max =E*F	Salary Maximum	Number	Cal. Of Weighted Avg. Max =H*I
Alameda County	\$8,327	2	\$16,654	\$11,957	6	\$71,739	\$14,264	3	\$42,791
Contra Costa County	\$8,265	7	\$57,855	\$11,091	1	\$11,091	\$11,373	7	\$79,611
Fresno County	\$8,376	5	\$41,880	\$10,111	3	\$30,333	\$11,125	3	\$33,375
Los Angeles County	\$8,561	148	\$1,267,028	\$12,639	446	\$5,636,994	\$14,088	111	\$1,563,818
Orange County	\$7,628	0	\$0	\$10,549	50	\$527,454	\$12,095	21	\$253,999
Riverside County	\$9,028	31	\$279,868	\$10,268	17	\$174,556	\$11,469	15	\$172,035
Sacramento County	\$9,434	79	\$745,306	\$11,233	81	\$909,907	\$12,497	48	\$599,840
San Bernardino County	\$7,601	2	\$15,201	\$8,968	5	\$44,841	\$9,887	5	\$49,435
San Diego County	\$7,954	42	\$334,079	\$9,951	30	\$298,532	\$11,513	30	\$345,384
Santa Clara County	\$10,356	11	\$113,920	\$12,346	12	\$148,148	\$14,496	10	\$144,957
SF City/County	\$11,423	252	\$2,878,596	\$13,418	202	\$2,710,470	\$17,814	100	\$1,781,433
City of Fresno	\$8,355	2	\$16,710	\$10,606	9	\$95,454	\$11,617	6	\$69,702
City of Los Angeles	\$9,152	53	\$485,074	\$12,375	130	\$1,608,728	\$14,552	32	\$465,651
City of Oakland	\$9,142	36	\$329,095	\$12,348	20	\$246,958	\$14,825	8	\$118,602
City of Riverside	\$8,333	2	\$16,666	\$10,884	7	\$76,188	\$16,459	11	\$181,049
City of Sacramento	\$8,207	25	\$205,175	\$10,309	15	\$154,637	\$12,993	12	\$155,916
City of San Diego	\$8,222	355	\$2,918,810	\$10,909	99	\$1,079,981	\$12,587	80	\$1,006,940
City of San Jose	\$9,528	28	\$266,776	\$12,447	145	\$1,804,812	\$14,347	39	\$559,535
UC - Berkeley	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0
UC - Davis	\$11,750	7	\$82,250	\$13,383	5	\$66,917	\$15,250	0	\$0
UC - Irvine	\$12,092	1	\$12,092	\$13,633	1	\$13,633	\$15,458	1	\$15,458
UC - Los Angeles	\$14,225	5	\$71,125	\$16,042	0	\$0	\$18,058	0	\$0
UC - Merced	\$11,100	1	\$11,100	\$0	0	\$0	\$0	0	\$0
UC - Riverside	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0
UC - San Diego	\$11,900	0	\$0	\$13,333	3	\$40,000	\$14,992	0	\$0
UC - Santa Cruz	\$11,642	1	\$11,642	\$13,117	1	\$13,117	\$14,783	0	\$0
UC - Santa Barbara	\$0	0	\$0	\$14,125	0	\$0	\$15,975	0	\$0
UC - San Francisco	\$13,942	2	\$27,883	\$15,625	1	\$15,625	\$17,491	0	\$0
		1,097	\$10,204,784		1,289	\$15,780,116		542	\$7,639,531
Weighted Average			\$9,302			\$12,242			\$14,095
State of California			\$8,590			\$11,230			\$13,228
State Lag - \$\$\$			\$712			\$1,012			\$867
State Lag - %			8.3%			9.0%			6.6%