

Unit 9, Professional Engineers 2021 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 2021 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	2.6%
Journey Level	6.7%
First Level Supervisor	4.6%

Methodology

Memorandum of Understanding Survey Requirement

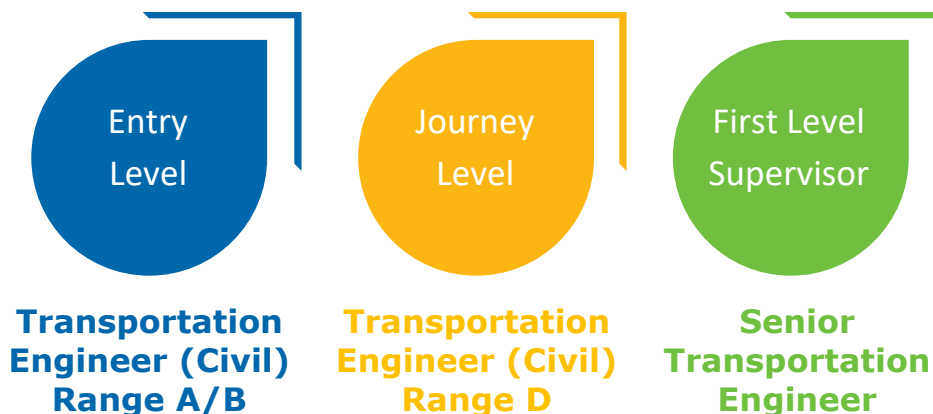
This salary survey was initiated and completed based on the requirements outlined in Article 3.1 of the MOU effective July 2, 2003 through July 2, 2008. Over time the Department and PEGC agreed to a detailed methodology. By the terms of the current MOU ¹(effective July 1, 2020 through July 1, 2022), the surveyed agencies and benchmark comparisons may only be changed upon mutual agreement between the Department and PEGC.

MOU, Article 3.1, 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 organizations' previously agreed upon classifications.²

State of California's Benchmark Job Classifications

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



¹ Attachment 1 displays Article 3.1 in the current MOU (effective July 1, 2020 through July 1, 2022).

² 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 (excluding state employee counts) 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 ¹		
State of California Salary	\$6,900		
State Salary Lag	\$334		
State Salary Lag Percent	4.8% ²		

¹ Calculation is \$1,157,500/160

² Calculation is \$7,234 less \$6,900 divided by \$7,234, 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	2.6%	6.7%	4.6%

*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
(2020-2022)

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 2021 Unit 9 Salary Survey**

Organization	Entry Level	Min	Max
STATE OF CALIFORNIA	Transportation Engineer A/B	\$5,540	\$7,937
Alameda County	Junior Engineer	\$6,961	\$8,046
Contra Costa County	Engineer - Entry	\$6,429	\$7,642
Fresno County	Engineer II	\$6,253	\$7,600
Los Angeles County	C.E Assistant	\$6,353	\$7,681
	Sr. C.E. Assistant	\$6,353	\$8,109
Orange County	Junior Civil Engineer	\$6,503	\$7,443
Riverside County	Junior Engineer	\$5,072	\$7,357
	Assistant Engineer	\$5,668	\$8,228
Sacramento County	Asst. Civil Eng. Lvl 2	\$6,833	\$8,719
San Bernardino County	Capital Improvement Project Manager I	\$5,108	\$7,023
San Diego County	Assistant Engineer	\$5,852	\$7,552
Santa Clara County	Assistant Civil Engineer	\$8,028	\$9,762
SF City/County	Junior Engineer	\$6,916	\$9,107
	Assistant Engineer	\$7,812	\$10,285
City of Fresno	Engineer I	\$5,746	\$6,907
City of Los Angeles	Civil Engineer Associate I	\$7,009	\$8,709
City of Oakland	Assistant Engineer, Lvl 1	\$6,405	\$7,863
City of Riverside	Assistant Engineer	\$6,528	\$7,936
City of Sacramento	Junior Engineer	\$4,781	\$6,728
	Assistant Civil Engineer	\$5,832	\$8,207
City of San Diego	Junior Engineer	\$4,461	\$5,402
	Assistant Engineer	\$5,164	\$6,221
City of San Jose	Engineer I	\$6,647	\$8,410
University of California, Berkeley	Engineer, Assistant	N/A	N/A
University of California, Davis	Engineer, Assistant	N/A	N/A
University of California, Irvine	Engineer, Assistant	N/A	N/A
University of California, Los Angeles	Engineer, Assistant	\$4,400	\$8,733
University of California, Merced	Engineer, Assistant	N/A	N/A
University of California, Riverside	Engineer, Assistant	N/A	N/A
University of California, San Diego	Engineer, Assistant	N/A	N/A
University of California, Santa Cruz	Engineer, Assistant	N/A	N/A
University of California, Santa Barbara	Engineer, Assistant	N/A	N/A
University of California, San Francisco	Engineer, Assistant	N/A	N/A

List of Surveyed Organizations and Journey Level Classifications
for 2021 Unit 9 Salary Survey

Organization	Journey Level	Min	Max
STATE OF CALIFORNIA	Transportation Engineer D	\$8,293	\$10,377
Alameda County	Associate Civil Engineer	\$9,507	\$11,553
Contra Costa County	Engineer - Project	\$8,843	\$10,255
Fresno County	Senior Engineer	\$7,399	\$8,993
Los Angeles County	Assoc. Civil Engineer	\$8,414	\$10,742
	Civil Engineer	\$9,379	\$11,972
Orange County	Civil Engineer	\$8,982	\$10,293
Riverside County	Associate Civil Engineer	\$6,643	\$9,647
Sacramento County	Associate Civil Engineer	\$8,542	\$10,383
San Bernardino County	Capital Improvement Project Manager II	\$6,020	\$8,287
San Diego County	Civil Engineer	\$7,393	\$9,079
Santa Clara County	Associate Civil Engineer	\$9,574	\$11,637
SF City/County	Associate Engineer	\$9,848	\$11,971
City of Fresno	Professional Engineer	\$7,482	\$9,067
City of Los Angeles	Civil Engineer	\$8,058	\$11,780
City of Oakland	Civil Engineer	\$8,650	\$10,621
City of Riverside	Associate Engineer	\$7,543	\$10,107
City of Sacramento	Associate Civil Engineer	\$7,079	\$9,961
City of San Diego	Associate Engineer	\$6,837	\$8,257
City of San Jose	Associate Engineer	\$8,039	\$10,178
University of California, Berkeley	Engineer, Associate	N/A	N/A
University of California, Davis	Engineer, Associate	N/A	N/A
University of California, Irvine	Engineer, Associate	N/A	N/A
University of California, Los Angeles	Engineer, Associate	\$5,325	\$10,533
University of California, Merced	Engineer, Associate	N/A	N/A
University of California, Riverside	Engineer, Associate	N/A	N/A
University of California, San Diego	Engineer, Associate	N/A	N/A
University of California, Santa Cruz	Engineer, Associate	N/A	N/A
University of California, Santa Barbara	Engineer, Associate	N/A	N/A
University of California, San Francisco	Engineer, Associate	N/A	N/A

**List of Surveyed Organizations and First Level Supervisor Classifications
for 2021 Unit 9 Salary Survey**

Organization	First Level Supervisor	Min	Max
STATE OF CALIFORNIA	Sr. Transportation Engineer	\$9,766	\$12,223
Alameda County	Supervising Civil Engineer	\$10,975	\$13,348
Contra Costa County	Associate Civil Engineer	\$7,819	\$10,516
Fresno County	Supervising Engineer	\$8,140	\$9,893
Los Angeles County	Senior Civil Engineer	\$10,454	\$13,344
Orange County	Senior Civil Engineer	\$10,293	\$11,801
Riverside County	Senior Civil Engineer	\$7,590	\$11,024
Sacramento County	Senior Civil Engineer	\$10,477	\$11,550
San Bernardino County	Capital Improvement Project Manager III	\$6,633	\$9,138
San Diego County	Senior Civil Engineer	\$8,570	\$10,537
Santa Clara County	Senior Civil Engineer	\$11,212	\$13,664
SF City/County	Senior Engineer	\$13,199	\$16,042
City of Fresno	Supervising Professional Engineer	\$8,600	\$10,428
City of Los Angeles	Senior Civil Engineer	\$9,474	\$13,850
City of Oakland	Civil Engineer, Supervisor	\$10,633	\$13,055
City of Riverside	Principal Engineer	\$9,226	\$13,631
City of Sacramento	Supervising Engineer	\$9,568	\$12,553
City of San Diego	Senior Civil Engineer	\$7,881	\$9,527
City of San Jose	Senior Engineer	\$9,662	\$12,220
University of California, Berkeley	Engineer, Senior	N/A	N/A
University of California, Davis	Engineer, Senior	N/A	N/A
University of California, Irvine	Engineer, Senior	N/A	N/A
University of California, Los Angeles	Engineer, Senior	\$5,867	\$11,608
University of California, Merced	Engineer, Senior	N/A	N/A
University of California, Riverside	Engineer, Senior	N/A	N/A
University of California, San Diego	Engineer, Senior	N/A	N/A
University of California, Santa Cruz	Engineer, Senior	N/A	N/A
University of California, Santa Barbara	Engineer, Senior	N/A	N/A
University of California, San Francisco	Engineer, Senior	N/A	N/A

Computation of Weighted Average Salary and Lag
for 2021 Unit 9 Salary Survey

A	Entry Level			Journey Level			First Level Supervisor		
	B	C	D	E	F	G	H	I	J
Jurisdiction	Salary Maximum	# of Inc.	Cal. Of Weighted Avg. Max =B*C	Salary Maximum	# of Inc.	Cal. Of Weighted Avg. Max =E*F	Salary Maximum	# of Inc.	Cal. Of Weighted Avg. Max =H*I
Alameda County	\$8,046	0	\$0.00	\$11,553	9	\$103,974	\$13,348	5	\$66,742
Contra Costa County	\$7,642	8	\$61,137	\$10,255	1	\$10,255	\$10,516	6	\$63,096
Fresno County	\$7,600	7	\$53,200	\$8,993	4	\$35,972	\$9,893	5	\$49,465
Los Angeles County	\$8,109	149	\$1,208,241	\$11,972	431	\$5,159,932	\$13,344	111	\$1,481,154
Orange County	\$7,443	2	\$14,886	\$10,293	32	\$329,361	\$11,801	18	\$212,410
Riverside County	\$8,228	25	\$205,700	\$9,647	17	\$163,999	\$11,024	18	\$198,432
Sacramento County	\$8,719	95	\$828,321	\$10,383	102	\$1,059,023	\$11,550	53	\$612,154
San Bernardino County	\$7,023	3	\$21,070	\$8,287	4	\$33,148	\$9,138	4	\$36,553
San Diego County	\$7,552	39	\$294,533	\$9,079	38	\$345,010	\$10,537	29	\$305,571
Santa Clara County	\$9,762	8	\$78,096	\$11,637	13	\$151,282	\$13,664	9	\$122,975
SF City/County	\$10,285	258	\$2,653,530	\$11,971	201	\$2,406,138	\$16,042	104	\$1,668,368
City of Fresno	\$6,907	1	\$6,907	\$9,067	12	\$108,804	\$10,428	5	\$52,140
City of Los Angeles	\$8,709	94	\$818,615	\$11,780	109	\$1,283,993	\$13,850	44	\$609,415
City of Oakland	\$7,863	8	\$62,903	\$10,621	15	\$159,313	\$13,055	6	\$78,332
City of Riverside	\$7,936	2	\$15,872	\$10,107	7	\$70,749	\$13,631	12	\$163,572
City of Sacramento	\$8,207	19	\$155,933	\$9,961	19	\$189,259	\$12,553	12	\$150,636
City of San Diego	\$6,221	330	\$2,052,930	\$8,257	92	\$759,644	\$9,527	64	\$609,702
City of San Jose	\$8,410	0	\$0	\$10,178	142	\$1,445,295	\$12,220	43	\$525,460
UC - Berkeley	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0
UC - Davis	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0
UC - Irvine	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0
UC - Los Angeles	\$8,733	7	\$61,133	\$10,533	5	\$52,667	\$11,608	2	\$23,217
UC - Merced	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0
UC - Riverside	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0
UC - San Diego	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0
UC - Santa Cruz	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0
UC - Santa Barbara	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0
UC - San Francisco	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0
		1,055	\$8,593,007		1,253	\$13,867,817		550	\$7,029,392
Weighted Average			\$8,145			\$11,068			\$12,781
State of California			\$7,937			\$10,377			\$12,223
State Lag - \$\$\$			\$208			\$691			\$558
State Lag - %			2.6%			6.7%			4.6%