

# Unit 9, Professional Engineers 2022 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 2022 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          | 3.8%      |
| First Level Supervisor | 1.7%      |

# Methodology

## Memorandum of Understanding Survey Requirement

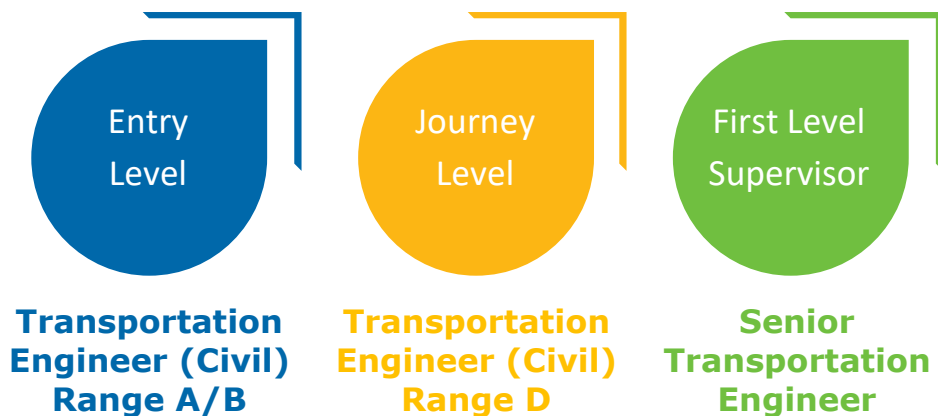
This salary survey was initiated and completed based on the requirements outlined in Article 3.1 of the MOU effective July 2, 2003 through July 2, 2008. Over time the Department and PEGC agreed to a detailed methodology. By the terms of the current MOU<sup>1</sup> (effective July 1, 2022 through June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

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 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 June 30, 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 (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<br>A | No. of Engineers in Survey Class<br>B | Product<br>= 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 \$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%                                      | 3.8%                                    | 1.7%                                     |

\*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 2022 Unit 9 Salary Survey**

| Organization                            | Entry Level                           | Min            | Max            |
|-----------------------------------------|---------------------------------------|----------------|----------------|
| <b>State of California</b>              | <b>Transportation Engineer A/B</b>    | <b>\$5,849</b> | <b>\$8,380</b> |
| Alameda County                          | Junior Engineer                       | \$7,205        | \$8,327        |
| Contra Costa County                     | Engineer - Entry                      | \$6,622        | \$7,871        |
| Fresno County                           | Engineer II                           | \$6,441        | \$7,830        |
| Los Angeles County                      | C.E Assistant                         | \$6,353        | \$7,681        |
|                                         | Sr. C.E. Assistant                    | \$6,353        | \$8,109        |
| Orange County                           | Junior Civil Engineer                 | \$6,666        | \$7,628        |
| Riverside County                        | Junior Engineer                       | \$6,130        | \$7,504        |
|                                         | Assistant Engineer                    | \$7,018        | \$8,851        |
| Sacramento County                       | Asst. Civil Eng. Level 2              | \$6,969        | \$8,893        |
| San Bernardino County                   | Capital Improvement Project Manager I | \$5,236        | \$7,199        |
| San Diego County                        | Assistant Engineer                    | \$5,996        | \$7,741        |
| Santa Clara County                      | Assistant Civil Engineer              | \$8,269        | \$10,055       |
| SF City/County                          | Junior Engineer                       | \$7,796        | \$9,475        |
|                                         | Assistant Engineer                    | \$8,803        | \$10,701       |
| 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, Level 1           | \$6,598        | \$8,099        |
| 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                       | \$5,105        | \$6,180        |
|                                         | Assistant Engineer                    | \$5,908        | \$7,117        |
| City of San Jose                        | Engineer I                            | \$6,864        | \$8,684        |
| University of California, Berkeley      | Professional Engineer 3               | N/A            | N/A            |
| University of California, Davis         | Professional Engineer 3               | \$5,683        | \$11,408       |
| University of California, Irvine        | Professional Engineer 3               | \$6,167        | \$11,917       |
| University of California, Los Angeles   | Professional Engineer 3               | \$5,558        | \$14,225       |
| University of California, Merced        | Professional Engineer 3               | \$5,867        | \$10,783       |
| 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               | \$6,142        | \$11,292       |
| 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 2022 Unit 9 Salary Survey

| Organization                            | Journey Level                          | Min            | Max             |
|-----------------------------------------|----------------------------------------|----------------|-----------------|
| <b>State of California</b>              | <b>Transportation Engineer D</b>       | <b>\$8,756</b> | <b>\$10,956</b> |
| Alameda County                          | Associate Civil Engineer               | \$9,840        | \$11,957        |
| Contra Costa County                     | Engineer - Project                     | \$9,108        | \$10,563        |
| Fresno County                           | Senior Engineer                        | \$7,776        | \$9,451         |
| Los Angeles County                      | Assoc. Civil Engineer                  | \$8,414        | \$10,742        |
|                                         | Civil Engineer                         | \$9,379        | \$11,972        |
| Orange County                           | Civil Engineer                         | \$9,207        | \$10,549        |
| Riverside County                        | Associate Civil Engineer               | \$8,035        | \$10,067        |
| Sacramento County                       | Associate Civil Engineer               | \$8,712        | \$10,590        |
| San Bernardino County                   | Capital Improvement Project Manager II | \$6,171        | \$8,495         |
| San Diego County                        | Civil Engineer                         | \$7,576        | \$9,306         |
| Santa Clara County                      | Associate Civil Engineer               | \$9,861        | \$11,986        |
| SF City/County                          | Associate Engineer                     | \$10,246       | \$12,454        |
| City of Fresno                          | Professional Engineer                  | \$7,482        | \$9,067         |
| City of Los Angeles                     | Civil Engineer                         | \$8,058        | \$11,780        |
| City of Oakland                         | Civil Engineer                         | \$8,910        | \$10,939        |
| 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                     | \$7,822        | \$9,445         |
| City of San Jose                        | Associate Engineer                     | \$8,301        | \$10,509        |
| University of California, Berkeley      | Professional Engineer 4                | N/A            | N/A             |
| University of California, Davis         | Professional Engineer 4                | \$6,150        | \$12,992        |
| University of California, Irvine        | Professional Engineer 4                | \$6,717        | \$13,567        |
| University of California, Los Angeles   | Professional Engineer 4                | \$6,125        | \$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                | \$6,800        | \$12,717        |
| University of California, Santa Barbara | Professional Engineer 4                | \$6,083        | \$13,425        |
| University of California, San Francisco | Professional Engineer 4                | \$6,142        | \$15,625        |

## List of Surveyed Organizations and First Level Supervisor Classifications for 2022 Unit 9 Salary Survey

| Organization                            | First Supervisory Level                 | Min             | Max             |
|-----------------------------------------|-----------------------------------------|-----------------|-----------------|
| <b>State of California</b>              | <b>Sr. Transportation Engineer</b>      | <b>\$10,311</b> | <b>\$12,905</b> |
| Alameda County                          | Supervising Civil Engineer              | \$11,333        | \$13,782        |
| Contra Costa County                     | Associate Civil Engineer                | \$8,054         | \$10,831        |
| Fresno County                           | Supervising Engineer                    | \$8,554         | \$10,397        |
| Los Angeles County                      | Senior Civil Engineer                   | \$10,454        | \$13,344        |
| Orange County                           | Senior Civil Engineer                   | \$10,549        | \$12,095        |
| Riverside County                        | Senior Civil Engineer                   | \$8,597         | \$11,244        |
| Sacramento County                       | Senior Civil Engineer                   | \$10,687        | \$11,782        |
| San Bernardino County                   | Capital Improvement Project Manager III | \$6,800         | \$9,367         |
| San Diego County                        | Senior Civil Engineer                   | \$8,786         | \$10,800        |
| Santa Clara County                      | Senior Civil Engineer                   | \$11,549        | \$14,074        |
| SF City/County                          | Senior Engineer                         | \$13,732        | \$16,688        |
| 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              | \$10,952        | \$13,447        |
| City of Riverside                       | Principal Engineer                      | \$9,226         | \$13,631        |
| City of Sacramento                      | Supervising Engineer                    | \$9,902         | \$12,993        |
| City of San Diego                       | Senior Civil Engineer                   | \$9,017         | \$10,899        |
| City of San Jose                        | Senior Engineer                         | \$9,975         | \$12,617        |
| University of California, Berkeley      | Professional Engineer 5                 | N/A             | N/A             |
| University of California, Davis         | Professional Engineer 5                 | \$6,608         | \$14,808        |
| University of California, Irvine        | Professional Engineer 5                 | \$7,242         | \$15,458        |
| University of California, Los Angeles   | Professional Engineer 5                 | \$6,742         | \$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                 | \$7,533         | \$14,317        |
| University of California, Santa Barbara | Professional Engineer 5                 | \$6,617         | \$15,242        |
| University of California, San Francisco | Professional Engineer 5                 | \$6,875         | \$17,491        |

**Computation of Weighted Average Salary and Lag  
for 2022 Unit 9 Salary Survey**

|                       | Entry Level    |           |                                | Journey Level  |           |                                | First Supervisory Level |           |                                |
|-----------------------|----------------|-----------|--------------------------------|----------------|-----------|--------------------------------|-------------------------|-----------|--------------------------------|
| A                     | 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        | \$8,327        | 2         | \$16,654                       | \$11,957       | 6         | \$71,739                       | \$13,782                | 3         | \$41,345                       |
| Contra Costa County   | \$7,871        | 7         | \$55,100                       | \$10,563       | 1         | \$10,563                       | \$10,831                | 7         | \$75,820                       |
| Fresno County         | \$7,830        | 4         | \$31,320                       | \$9,451        | 4         | \$37,804                       | \$10,397                | 5         | \$51,985                       |
| Los Angeles County    | \$8,109        | 148       | \$1,200,132                    | \$11,972       | 446       | \$5,339,512                    | \$13,344                | 111       | \$1,481,154                    |
| Orange County         | \$7,628        | 0         | \$0                            | \$10,549       | 50        | \$527,454                      | \$12,095                | 21        | \$253,999                      |
| Riverside County      | \$8,851        | 31        | \$274,381                      | \$10,067       | 17        | \$171,139                      | \$11,244                | 15        | \$168,660                      |
| Sacramento County     | \$8,893        | 79        | \$702,560                      | \$10,590       | 81        | \$857,763                      | \$11,782                | 48        | \$565,512                      |
| San Bernardino County | \$7,199        | 2         | \$14,397                       | \$8,495        | 5         | \$42,475                       | \$9,367                 | 5         | \$46,835                       |
| San Diego County      | \$7,741        | 42        | \$325,125                      | \$9,306        | 30        | \$279,188                      | \$10,800                | 30        | \$324,012                      |
| Santa Clara County    | \$10,055       | 11        | \$110,602                      | \$11,986       | 12        | \$143,834                      | \$14,074                | 10        | \$140,736                      |
| SF City/County        | \$10,701       | 252       | \$2,696,652                    | \$12,454       | 202       | \$2,515,708                    | \$16,688                | 100       | \$1,668,767                    |
| City of Fresno        | \$6,907        | 2         | \$13,814                       | \$9,067        | 9         | \$81,603                       | \$10,428                | 6         | \$62,568                       |
| City of Los Angeles   | \$8,709        | 53        | \$461,559                      | \$11,780       | 130       | \$1,531,368                    | \$13,850                | 32        | \$443,211                      |
| City of Oakland       | \$8,099        | 34        | \$275,360                      | \$10,939       | 20        | \$218,789                      | \$13,447                | 7         | \$94,129                       |
| 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        | 17        | \$169,337                      | \$12,993                | 11        | \$142,920                      |
| City of San Diego     | \$7,117        | 339       | \$2,412,663                    | \$9,445        | 92        | \$868,935                      | \$10,899                | 69        | \$752,000                      |
| City of San Jose      | \$8,684        | 28        | \$243,152                      | \$10,509       | 145       | \$1,523,834                    | \$12,617                | 39        | \$492,060                      |
| UC - Berkeley         | \$0            | 0         | \$0                            | \$0            | 0         | \$0                            | \$0                     | 0         | \$0                            |
| UC - Davis            | \$11,408       | 7         | \$79,858                       | \$12,992       | 5         | \$64,958                       | \$14,808                | 0         | \$0                            |
| UC - Irvine           | \$11,917       | 1         | \$11,917                       | \$13,567       | 1         | \$13,567                       | \$15,458                | 1         | \$15,458                       |
| UC - Los Angeles      | \$14,225       | 5         | \$71,125                       | \$16,042       | 0         | \$0                            | \$18,058                | 0         | \$0                            |
| UC - Merced           | \$10,783       | 1         | \$10,783                       | \$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       | \$11,292       | 1         | \$11,292                       | \$12,717       | 1         | \$12,717                       | \$14,317                | 0         | \$0                            |
| UC - Santa Barbara    | \$0            | 0         | \$0                            | \$13,425       | 0         | \$0                            | \$15,242                | 0         | \$0                            |
| UC - San Francisco    | \$13,942       | 2         | \$27,883.34                    | \$15,625       | 1         | \$15,625                       | \$17,491                | 0         | \$0                            |
|                       |                | 1,072     | \$9,218,134                    |                | 1,285     | \$14,608,661                   |                         | 532       | \$6,984,743                    |
|                       |                |           |                                |                |           |                                |                         |           |                                |
| Weighted Average      |                |           | \$8,599                        |                |           | \$11,3691                      |                         |           | \$13,129                       |
| State of California   |                |           | \$8,380                        |                |           | \$10,956                       |                         |           | \$12,905                       |
| State Lag - \$\$\$    |                |           | \$219                          |                |           | \$413                          |                         |           | \$224                          |
| State Lag - %         |                |           | 2.6%                           |                |           | 3.8%                           |                         |           | 1.7%                           |