



July 25, 2014

## **Unit 9, Professional Engineers 2014 Salary Survey**

**California Department of Human Resources  
Office of Financial Management and Economic Research  
Salary Survey Unit**

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## Overview

This salary survey report is prepared by the Department of Human Resources as required by the Memorandum of Understanding (MOU) between the state and the Professional Engineers in California Government, the Union which represents employees in Bargaining Unit 9.

Pursuant to legislation, the Department has completed the 2014 Unit 9 salary survey. Although the current MOU requires this survey to be completed, it also states that salary increases “shall not be provided during the term of this MOU” to Unit 9 employees as a result of a lag in the survey.

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

**Table 1: Survey Results**

<b>Level of Work</b>	<b>State Lag</b>
Entry Level	7.2%
Journey Level	3.0%
First Level Supervisor	3.7%

## **Methodology**

### **Memorandum of Understanding Survey Requirement**

This salary survey was initiated and completed based on the requirements of the MOU effective July 2, 2003 through July 2, 2008. Article 3.1 of that MOU contained the survey requirements and components to the survey whereby over time the parties had agreed to a specific methodology. Attachment 1 displays Article 3.1 in the current MOU (effective July 2, 2013 through July 1, 2015). By the terms of the current MOU, the surveyed agencies and benchmark comparisons may only be changed upon mutual agreement between the Department and the Union.

MOU, Article 3.1, requires the Department to:

- Annually survey the same 18 public agencies and 10 University of California campuses using the same job classifications in the December 2002 survey.
- Calculate the salary lead or lag based on the weighted average of salaries of employees in the surveyed organizations' classifications.

### **State of California's Benchmark Job Classifications**

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

- Entry Level — Transportation Engineer (Civil) Range B
- Journey Level — Transportation Engineer (Civil) Range D
- First Level Supervisor — Senior Transportation Engineer, Caltrans

### **Surveyed Organizations and Job Classifications**

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

## Survey Lag Computation

There are two parts to the survey lag computation. The first part weights the maximum salary of each surveyed organization (excluding state employee counts) by the total number of engineers in the comparable class in the surveyed organizations. This is done separately for the entry level, journey level and first level supervisor categories. This results in three weighted average maximum salaries for the surveyed organizations; one for entry level, one for journey level, and one for first level supervisor.

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 class. The percentage difference is the salary lag. A separate lag is computed for entry, journey, and first level supervisors.

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

**Table 2: Simplified Illustration of Salary Lag Computation**

Surveyed Organization	Entry Level Maximum Salary A	No. of Engineers in Survey Class B	Product = A x B
Organization A	\$5,346	132	\$705,672
Organization B	\$6,268	26	\$162,968
Total		158	\$826,640
Weighted Average Salary	\$5,232 <sup>1</sup>		
State of California Salary	\$5,000		
State Salary Lag	\$232		
State Salary Lag Percent	4.6% <sup>2</sup>		

**Notes:**

1. Calculation is \$826,640/158
2. Calculation is \$5,232 less 5,000 divided by \$5,000, rounded to one decimal

### **Lag Computation Variations**

There were two unique variations affecting the lag computation. The first item is that some of the surveyed organizations used two classifications for one level (such as entry level).

Attachment 2 illustrates:

- Six surveyed organizations used two classifications for the entry level
- One surveyed organization used two classifications for the journey level

For those organizations using two classifications for a level (such as entry level), the Department combined the incumbent counts for the two classifications, and then weighted the survey using the higher-salaried class by the combined incumbent count.

The second variation affecting the lag computation is the additional pay that some survey organizations provide their engineers for possessing state certification as a registered engineer.

The City of San Diego pays employees an additional 15 percent of salary to its employees in the journey and first level supervisors 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, assuming all were state-certified registered engineers.

The Union and the Department agreed on the application of the two variations for the survey methodology.

## Survey Results

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

Based on the survey data, the results are displayed in the following table for the state's three surveyed benchmark job classifications.

**Table3: Display of Survey's Lags**

<b>Level of Work</b>	<b>Entry Level</b>	<b>Journey Level</b>	<b>First Level Supervisor</b>
<b>State Benchmark Classification</b>	<b>Transportation Engineer (Civil) Range B</b>	<b>Transportation Engineer (Civil) Range D</b>	<b>Senior Transportation Engineer, Caltrans</b>
<b>Lag for State</b>	7.2%	3.0%	3.7%

Attachment 3 provides the detail on the lag computations.

These three lag percentages have not resulted in salary increases. As agreed upon in the current MOU, rank and file civil service job classifications of Bargaining 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.

## Considerations

Pursuant to legislation (Chapter 391, Statutes of 2013) and the MOU, the Department is required to complete a salary survey comparing three state classifications to similar classifications in 28 public jurisdictions, including 10 UC campuses. The MOU states that salary increases based on the survey results will not be provided during the term of this contract. Therefore, this survey does not reflect the actual cost of increasing Unit 9 salaries, and it also does not take into consideration the total impact that such increases would have on the related supervisory and managerial classifications.

Salary Survey Text from  
Unit 9 Memorandum  
Of Understanding  
(2013-2015)

**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 2013 salary survey, the calculation of the salary lead or lag for Unit 9 employees shall be based on weighted average salaries of employees in the classifications in the following surveyed agencies listed in the below chart.

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

**List of Surveyed Organizations and Entry Level  
Classifications for 2014 Unit 9 Salary Survey**

<b>Organization</b>	<b>Entry Level</b>	<b>Min</b>	<b>Max</b>
<b>STATE OF CALIFORNIA</b>	<b>Transportation Engineer A/B</b>	<b>\$4,608</b>	<b>\$6,601</b>
Alameda County	Junior Engineer	\$5,606	\$6,477
Contra Costa County	Engineer - Entry	\$5,077	\$6,034
Fresno County	Engineer II	\$4,810	\$6,151
Los Angeles County	C.E Assistant Sr. C.E. Assistant	\$5,114 \$5,114	\$6,018 \$6,353
Orange County	Junior Civil Engineer	\$5,432	\$6,217
Riverside County	Junior Engineer Assistant Engineer	\$4,395 \$4,914	\$6,229 \$6,967
Sacramento County	Asst. Civil Engineer Lvl 1 Asst. Civil Eng. Lvl 2	\$4,642 \$5,585	\$5,117 \$7,127
San Bernardino County	A/E Project Manager I	\$4,767	\$6,088
San Diego County	Assistant Engineer	\$4,945	\$6,382
Santa Clara County	Assistant Civil Engineer	\$6,099	\$7,416
SF City/County	Junior Engineer Assistant Engineer	\$5,834 \$7,833	\$7,092 \$8,630
City of Fresno	Engineer I	\$4,119	\$4,972
City of Los Angeles	Civil Engineer Associate I	\$5,712	\$7,096
City of Oakland	Assistant Engineer, Lvl 1	\$5,208	\$6,393
City of Riverside	Assistant Engineer	\$5,428	\$6,599
City of Sacramento	Junior Engineer Assistant Civil Engineer	\$4,164 \$5,079	\$5,859 \$7,146
City of San Diego	Junior Engineer Assistant Engineer	\$4,181 \$4,839	\$5,063 \$5,830
City of San Jose	Engineer I	\$5,295	\$6,699
University of California, Berkeley	Engineer, Assistant	N/A	N/A
University of California, Davis	Engineer, Assistant	\$4,024	\$7,243
University of California, Irvine	Engineer, Assistant	\$3,867	\$6,225
University of California, Los Angeles	Engineer, Assistant	\$3,921	\$7,745
University of California, Merced	Engineer, Assistant	N/A	N/A
University of California, Riverside	Engineer, Assistant	\$3,679	\$7,543
University of California, San Diego	Engineer, Assistant	\$3,509	\$6,270
University of California, Santa Cruz	Engineer, Assistant	\$3,917	\$7,050
University of California, Santa Barbara	Engineer, Assistant	\$3,980	\$7,174
University of California, San Francisco	Engineer, Assistant	\$4,742	\$8,442

**List of Surveyed Organizations and Journey Level  
Classifications for 2014 Unit 9 Salary Survey**

<b>Organization</b>	<b>Journey Level</b>	<b>Min</b>	<b>Max</b>
<b>STATE OF CALIFORNIA</b>	<b>Transportation Engineer D</b>	<b>\$6,897</b>	<b>\$8,630</b>
Alameda County	Associate Civil Engineer	\$7,656	\$9,303
Contra Costa County	Engineer - Project	\$6,983	\$8,098
Fresno County	Senior Engineer	\$6,164	\$7,650
Los Angeles County	Assoc. Civil Engineer Civil Engineer	\$6,773 \$7,550	\$8,414 \$9,379
Orange County	Civil Engineer	\$7,504	\$8,597
Riverside County	Associate Civil Engineer	\$5,761	\$8,169
Sacramento County	Associate Civil Engineer	\$7,120	\$8,657
San Bernardino County	A/E Project Manager II	\$5,521	\$7,053
San Diego County	Civil Engineer	\$6,243	\$7,672
Santa Clara County	Associate Civil Engineer	\$7,274	\$8,841
SF City/County	Associate Engineer	\$7,664	\$9,315
City of Fresno	Professional Engineer	\$5,819	\$7,052
City of Los Angeles	Civil Engineer	\$7,731	\$9,607
City of Oakland	Civil Engineer	\$7,033	\$8,635
City of Riverside	Associate Engineer	\$6,271	\$8,404
City of Sacramento	Associate Civil Engineer	\$6,164	\$8,674
City of San Diego	Associate Engineer	\$6,407	\$7,737
City of San Jose	Associate Engineer	\$6,434	\$8,147
University of California, Berkeley	Engineer, Associate	N/A	N/A
University of California, Davis	Engineer, Associate	\$4,866	\$8,759
University of California, Irvine	Engineer, Associate	\$4,683	\$7,540
University of California, Los Angeles	Engineer, Associate	\$4,743	\$9,348
University of California, Merced	Engineer, Associate	N/A	N/A
University of California, Riverside	Engineer, Associate	\$4,451	\$9,128
University of California, San Diego	Engineer, Associate	\$4,227	\$7,896
University of California, Santa Cruz	Engineer, Associate	\$4,792	\$8,625
University of California, Santa Barbara	Engineer, Associate	\$4,814	\$8,659
University of California, San Francisco	Engineer, Associate	\$5,758	\$10,242

**List of Surveyed Organizations and First Level Supervisor Classifications for 2014 Unit 9 Salary Survey**

<b>Organization</b>	<b>First Level Supervisor</b>	<b>Min</b>	<b>Max</b>
<b>STATE OF CALIFORNIA</b>	<b><i>Sr. Transportation Engineer</i></b>	<b>\$8,122</b>	<b>\$10,166</b>
Alameda County	Supervising Civil Engineer	\$8,918	\$10,843
Contra Costa County	Associate Civil Engineer	\$6,176	\$8,104
Fresno County	Supervising Engineer	\$6,779	\$8,411
Los Angeles County	Senior Civil Engineer	\$8,414	\$10,454
Orange County	Senior Civil Engineer	\$8,597	\$9,857
Riverside County	Senior Civil Engineer	\$6,581	\$9,334
Sacramento County	Senior Civil Engineer	\$8,488	\$9,358
San Bernardino County	A/E Project Manager III	\$6,087	\$7,783
San Diego County	Senior Civil Engineer	\$7,225	\$8,878
Santa Clara County	Senior Civil Engineer	\$8,518	\$10,380
SF City/County	Senior Engineer	\$10,268	\$12,480
City of Fresno	Supervising Professional Engineer	\$6,606	\$8,011
City of Los Angeles	Senior Civil Engineer	\$9,092	\$11,296
City of Oakland	Civil Engineer, Supervisor	\$8,645	\$10,614
City of Riverside	Principal Engineer	\$8,057	\$11,901
City of Sacramento	Supervising Engineer	\$7,484	\$11,226
City of San Diego	Senior Civil Engineer	\$7,384	\$8,929
City of San Jose	Senior Engineer	\$7,826	\$9,901
University of California, Berkeley	Engineer, Senior	N/A	N/A
University of California, Davis	Engineer, Senior	\$5,356	\$9,641
University of California, Irvine	Engineer, Senior	\$5,150	\$8,333
University of California, Los Angeles	Engineer, Senior	\$5,221	\$10,301
University of California, Merced	Engineer, Senior	\$4,709	\$8,817
University of California, Riverside	Engineer, Senior	\$4,899	\$10,270
University of California, San Diego	Engineer, Senior	\$5,161	\$10,048
University of California, Santa Cruz	Engineer, Senior	\$5,333	\$9,600
University of California, Santa Barbara	Engineer, Senior	\$5,299	\$9,541
University of California, San Francisco	Engineer, Senior	\$6,317	\$11,250

**Department of Human Resources**  
**Computation of Weighted Average Salary and Lag for 2014 Unit 9 Salary Survey**  
 April 1, 2014

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	\$6,477	0	\$0	\$9,303	10	\$93,028	\$10,843	4	\$43,372
Contra Costa County	\$6,034	0	\$0	\$8,098	4	\$32,392	\$8,104	7	\$56,728
Fresno County	\$6,151	1	\$6,151	\$7,650	7	\$53,550	\$8,411	2	\$16,822
Los Angeles County	\$6,353	93	\$590,829	\$9,379	348	\$3,263,892	\$10,454	98	\$1,024,492
Orange County	\$6,217	0	\$0	\$8,597	36	\$309,492	\$9,857	26	\$256,282
Riverside County	\$6,967	10	\$69,670	\$8,169	8	\$65,352	\$9,334	7	\$65,338
Sacramento County	\$7,127	86	\$612,922	\$8,657	90	\$779,130	\$9,358	47	\$439,826
San Bernardino County	\$6,088	2	\$12,176	\$7,053	3	\$21,159	\$7,783	1	\$7,783
San Diego County	\$6,382	14	\$89,348	\$7,672	42	\$322,224	\$8,878	22	\$195,316
Santa Clara County	\$7,416	9	\$66,744	\$8,841	19	\$167,979	\$10,380	6	\$62,280
SF City/County	\$8,630	213	\$1,838,190	\$9,315	251	\$2,338,065	\$12,480	117	\$1,460,160
City of Fresno	\$4,972	3	\$14,916	\$7,052	14	\$98,728	\$8,011	3	\$24,033
City of Los Angeles	\$7,096	13	\$92,248	\$9,607	63	\$605,241	\$11,296	30	\$338,880
City of Oakland	\$6,393	0	\$0	\$8,635	19	\$164,065	\$10,614	4	\$42,456
City of Riverside	\$6,599	5	\$32,995	\$8,404	5	\$42,020	\$11,901	8	\$95,208
City of Sacramento	\$7,146	10	\$71,460	\$8,674	21	\$182,154	\$11,226	11	\$123,486
City of San Diego	\$5,830	209	\$1,218,470	\$7,737	89	\$688,611	\$8,929	47	\$419,644
City of San Jose	\$6,699	0	\$0	\$8,147	101	\$822,847	\$9,901	26	\$257,426
UC - Berkeley	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0
UC - Davis	\$7,243	0	\$0	\$8,759	3	\$26,277	\$9,641	3	\$28,923
UC - Irvine	\$6,225	0	\$0	\$7,540	0	\$0	\$8,333	1	\$8,333
UC - Los Angeles	\$7,745	13	\$100,685	\$9,348	3	\$28,044	\$10,301	3	\$30,903
UC - Merced	\$0	0	\$0	\$0	0	\$0	\$8,817	0	\$0
UC - Riverside	\$7,543	0	\$0	\$9,128	0	\$0	\$10,270	1	\$10,270
UC - San Diego	\$6,270	1	\$6,270	\$7,896	6	\$47,378	\$10,048	1	\$10,048
UC - Santa Cruz	\$7,050	7	\$49,350	\$8,625	1	\$8,625	\$9,600	8	\$76,800
UC - Santa Barbara	\$7,174	3	\$21,522	\$8,659	3	\$25,977	\$9,541	1	\$9,541
UC - San Francisco	\$8,442	3	\$25,326	\$10,242	1	\$10,242	\$11,250	0	\$0
		695	\$4,919,272		1,147	\$10,196,471		484	\$5,104,351
Weighted Average			\$7,078			\$8,890			\$10,546
<b>State of California</b>			<b>\$6,601</b>			<b>\$8,630</b>			<b>\$10,166</b>
State Lag - \$\$\$			\$477			\$260			\$380
State Lag - %			7.2%			3.0%			3.7%