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Unit 9, Professional Engineers 2015 Salary Survey

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Overview

This salary survey report is jointly prepared by the Department of Human Resources (Department) and the Professional Engineers in California Government (PECG), as required by the Bargaining Unit (Unit) 9 Memorandum of Understanding (MOU).

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’s maximum base pay for its engineers lags behind the maximum salaries of similar classifications in California public agencies and the University of California. The table below illustrates the lag for each working level.

Table 1: Survey Results

Level of Work	State Lag
Entry Level	3.4%
Journey Level	1.9%
First Level Supervisor	3.0%

Methodology

Memorandum of Understanding Survey Requirement

This salary survey was initiated and completed based on the requirements outlined in Article 3.1 of the Unit 9 MOU effective July 2, 2003 through July 2, 2008. Over time the Department and PEEG met and agreed to a detailed methodology. By the terms of the current MOU¹ (effective July 2, 2013 through July 1, 2015), the surveyed agencies and benchmark comparisons may only be changed upon mutual agreement between the Department and PEEG.

Unit 9 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:

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

¹ Attachment 1 displays Article 3.1 in the current MOU (effective July 2, 2013 through July 1, 2015).

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 and universities.

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 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, 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 Calculation

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 ¹		
State of California Salary	\$5,000		
State Salary Lag	\$232		
State Salary Lag Percent	4.6% ²		

Notes:

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

Lag Calculation Variations

There were two unique variations 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, following the agreed upon methodology, 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 variation 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 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 the incumbent count.

PECG 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 table below for the state’s three surveyed benchmark job classifications.

Table 3: Display of Survey’s Lags*

Level of Work	Entry Level	Journey Level	First Level Supervisor
State Benchmark Classification	Transportation Engineer (Civil) Range B	Transportation Engineer (Civil) Range D	Senior Transportation Engineer, Caltrans
Lag for State	3.4%	1.9%	3.0%

*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.

Considerations

Pursuant to legislation (Chapter 391, Statutes of 2013) and the MOU, the Department is required to jointly complete a salary survey with PEGC comparing three state classifications to similar classifications at 18 public jurisdictions and 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 report does not reflect the actual cost of increasing salaries for Unit 9 employees.

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 2015 Unit 9 Salary Survey**

Organization	Entry Level	Min	Max
STATE OF CALIFORNIA	Transportation Engineer A/B	\$4,760	\$6,819
Alameda County	Junior Engineer	\$5,775	\$6,673
Contra Costa County	Engineer - Entry	\$5,280	\$6,276
Fresno County	Engineer II	\$4,810	\$6,151
Los Angeles County	C.E Assistant Sr. C.E. Assistant	\$5,216 \$5,216	\$6,137 \$6,479
Orange County	Junior Civil Engineer	\$5,500	\$6,295
Riverside County	Junior Engineer Assistant Engineer	\$4,483 \$5,012	\$6,703 \$7,496
Sacramento County	Asst. Civil Eng. Lvl 2	\$5,697	\$7,270
San Bernardino County	A/E Project Manager I	\$4,538	\$6,240
San Diego County	Assistant Engineer	\$5,004	\$6,458
Santa Clara County	Assistant Civil Engineer	\$6,611	\$8,039
SF City/County	Junior Engineer Assistant Engineer	\$6,067 \$6,851	\$7,373 \$8,329
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	\$5,260	\$6,457
City of Riverside	Assistant Engineer	\$5,564	\$6,764
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	\$5,455	\$6,900
University of California, Berkeley	Engineer, Assistant	\$0	\$0
University of California, Davis	Engineer, Assistant	\$4,149	\$7,468
University of California, Irvine	Engineer, Assistant	\$3,983	\$6,848
University of California, Los Angeles	Engineer, Assistant	\$4,038	\$7,978
University of California, Merced	Engineer, Assistant	\$0	\$0
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	\$4,167	\$7,500
University of California, Santa Barbara	Engineer, Assistant	\$4,099	\$7,389
University of California, San Francisco	Engineer, Assistant	\$4,883	\$8,867

**List of Surveyed Organizations and Journey Level
Classifications for 2015 Unit 9 Salary Survey**

Organization	Journey Level	Min	Max
STATE OF CALIFORNIA	Transportation Engineer D	\$7,125	\$8,915
Alameda County	Associate Civil Engineer	\$7,887	\$9,584
Contra Costa County	Engineer - Project	\$7,262	\$8,422
Fresno County	Senior Engineer	\$6,287	\$8,044
Los Angeles County	Assoc. Civil Engineer Civil Engineer	\$6,908 \$7,700	\$8,582 \$9,566
Orange County	Civil Engineer	\$7,597	\$8,705
Riverside County	Associate Civil Engineer	\$5,876	\$8,790
Sacramento County	Associate Civil Engineer	\$7,265	\$8,831
San Bernardino County	A/E Project Manager II	\$5,254	\$7,230
San Diego County	Civil Engineer	\$6,321	\$7,764
Santa Clara County	Associate Civil Engineer	\$7,884	\$9,583
SF City/County	Associate Engineer	\$7,971	\$9,687
City of Fresno	Professional Engineer	\$5,819	\$7,052
City of Los Angeles	Civil Engineer	\$7,731	\$9,607
City of Oakland	Civil Engineer	\$7,103	\$8,721
City of Riverside	Associate Engineer	\$6,428	\$8,614
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	\$6,627	\$8,391
University of California, Berkeley	Engineer, Associate	\$0	\$0
University of California, Davis	Engineer, Associate	\$5,020	\$9,032
University of California, Irvine	Engineer, Associate	\$4,824	\$8,294
University of California, Los Angeles	Engineer, Associate	\$4,885	\$9,630
University of California, Merced	Engineer, Associate	\$0	\$0
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	\$5,142	\$9,258
University of California, Santa Barbara	Engineer, Associate	\$4,958	\$8,919
University of California, San Francisco	Engineer, Associate	\$5,933	\$10,750

List of Surveyed Organizations and First Level Supervisor Classifications for 2015 Unit 9 Salary Survey

Organization	First Level Supervisor	Min	Max
STATE OF CALIFORNIA	Sr. Transportation Engineer	\$8,390	\$10,501
Alameda County	Supervising Civil Engineer	\$9,006	\$10,953
Contra Costa County	Associate Civil Engineer	\$6,423	\$8,428
Fresno County	Supervising Engineer	\$6,916	\$8,846
Los Angeles County	Senior Civil Engineer	\$8,582	\$10,662
Orange County	Senior Civil Engineer	\$8,705	\$9,981
Riverside County	Senior Civil Engineer	\$6,713	\$10,044
Sacramento County	Senior Civil Engineer	\$8,822	\$9,727
San Bernardino County	A/E Project Manager III	\$5,793	\$7,977
San Diego County	Senior Civil Engineer	\$7,308	\$8,984
Santa Clara County	Senior Civil Engineer	\$9,233	\$11,252
SF City/County	Senior Engineer	\$10,680	\$12,981
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	\$8,731	\$10,720
City of Riverside	Principal Engineer	\$8,097	\$11,961
City of Sacramento	Supervising Engineer	\$7,507	\$11,260
City of San Diego	Senior Civil Engineer	\$7,384	\$8,929
City of San Jose	Senior Engineer	\$8,060	\$10,197
University of California, Berkeley	Engineer, Senior	\$0	\$0
University of California, Davis	Engineer, Senior	\$5,518	\$9,932
University of California, Irvine	Engineer, Senior	\$5,305	\$9,167
University of California, Los Angeles	Engineer, Senior	\$5,376	\$10,611
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	\$5,742	\$10,333
University of California, Santa Barbara	Engineer, Senior	\$5,458	\$9,827
University of California, San Francisco	Engineer, Senior	\$6,508	\$11,817

Computation of Weighted Average Salary and Lag for 2015 Unit 9 Salary Survey

May 26, 2015

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	\$6,673	0	\$0	\$9,584	11	\$105,420	\$10,953	6	\$65,718
Contra Costa County	\$6,276	8	\$50,207	\$8,422	2	\$16,844	\$8,428	9	\$75,849
Fresno County	\$6,151	2	\$12,302	\$8,044	7	\$56,308	\$8,846	1	\$8,846
Los Angeles County	\$6,479	112	\$725,648	\$9,566	349	\$3,338,534	\$10,662	97	\$1,034,258
Orange County	\$6,295	0	\$0	\$8,705	69	\$600,645	\$9,981	24	\$239,544
Riverside County	\$7,496	15	\$112,440	\$8,790	23	\$202,170	\$10,044	10	\$100,440
Sacramento County	\$7,270	95	\$687,718	\$8,831	102	\$900,711	\$9,727	57	\$550,524
San Bernardino County	\$6,240	2	\$12,480	\$7,230	3	\$21,689	\$7,977	1	\$7,977
San Diego County	\$6,458	13	\$83,959	\$7,764	43	\$333,835	\$8,984	20	\$179,677
Santa Clara County	\$8,039	9	\$72,351	\$9,583	21	\$201,252	\$11,252	7	\$78,764
SF City/County	\$8,329	223	\$1,853,869	\$9,687	275	\$2,660,774	\$12,981	120	\$1,558,179
City of Fresno	\$4,972	4	\$19,888	\$7,052	13	\$91,676	\$8,011	2	\$16,022
City of Los Angeles	\$7,096	41	\$290,926	\$9,607	77	\$739,701	\$11,296	31	\$350,179
City of Oakland	\$6,457	0	\$0	\$8,721	20	\$174,423	\$10,720	5	\$53,601
City of Riverside	\$6,764	1	\$27,056	\$8,614	5	\$43,070	\$11,961	3	\$107,649
City of Sacramento	\$7,146	10	\$71,460	\$8,674	27	\$234,186	\$11,260	10	\$112,598
City of San Diego	\$5,830	209	\$1,218,470	\$7,737	113	\$874,304	\$8,929	43	\$383,930
City of San Jose	\$6,900	0	\$0	\$8,391	96	\$805,542	\$10,197	34	\$345,481
UC - Berkeley	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0
UC - Davis	\$7,468	0	\$0	\$9,032	10	\$90,322	\$9,932	2	\$19,864
UC - Irvine	\$6,848	0	\$0	\$8,294	0	\$0	\$9,167	1	\$9,167
UC - Los Angeles	\$7,978	24	\$191,460	\$9,630	3	\$28,890	\$10,611	3	\$31,832
UC - Merced	\$0	0	\$0	\$0	0	\$0	\$8,817	0	\$0
UC - Riverside	\$7,543	0	\$0	\$9,128	0	\$0	\$10,270	3	\$30,810
UC - San Diego	\$6,270	3	\$18,810	\$7,896	4	\$31,585	\$10,048	2	\$20,097
UC - Santa Cruz	\$7,500	1	\$7,500	\$9,258	0	\$0	\$10,333	3	\$31,000
UC - Santa Barbara	\$7,389	6	\$44,336	\$8,919	4	\$35,675	\$9,827	1	\$9,827
UC - San Francisco	\$8,867	0	\$0	\$10,750	3	\$32,250	\$11,817	0	\$0
		780	\$5,500,879		1280	\$11,619,804		501	\$5,421,833
Weighted Average			\$7,052			\$9,080			\$10,818
State of California*			\$6,819			\$8,915			\$10,501
State Lag - \$\$\$			\$233			\$165			\$317
State Lag - %			3.4%			1.9%			3.0%

*State of California salaries include July 1, 2015 increases.