

Program Endorsement Brief: 0952.00/Construction Crafts Technology Construction Estimating Skills

Orange County Center of Excellence, June 2019

Summary

The Orange County Center of Excellence for Labor Market Research (COE) prepared this report to provide Los Angeles/Orange County regional labor market supply and demand data related to construction estimation occupations: cost estimators (SOC 13-1051), first-line supervisors of construction trades and extraction workers (47-1011), and carpenters (47-2031). This report is intended to help determine whether there is demand in the local labor market that is not being met by the supply from community college programs that align with relevant occupations.

The following summarizes key findings from this data brief:

- The number of jobs for occupations related to construction estimation in this report is projected to **increase by 4% through 2023**. More than **7,900 job openings** will be available annually due to new job growth and replacement need.
- In the past 12 months, there were **3,636 online job postings** for construction estimation occupations throughout Los Angeles and Orange Counties.
- The typical entry-level education for these occupations ranges from a high school diploma to a bachelor's degree. The national-level educational attainment data indicates **between 25.9% and 40.8% of workers in the field have completed some college or an associate degree**.
- There are **six community colleges** in the region that have programs related to construction estimation. Of these colleges, three colleges are located in Los Angeles County and three colleges are located in Orange County.
- Between 2015 and 2018, community colleges in the region **conferred an average of 83 awards annually** (associate degrees and certificates) in related training programs under related TOP Codes.
- Between June 2018 and May 2019, **2 related program recommendation requests under the same TOP Code (0952.00)** were received.

Occupational Demand

Exhibit 1, on the following page, shows the five-year occupational demand projections for occupations related to construction estimation. In Los Angeles/Orange County, the number of jobs related to these occupations is projected to increase by 4% through 2023. There will be more than 7,900 job openings per year through 2023.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties¹

Geography	2018 Jobs	2023 Jobs	2018-2023 Change	2018-2023 % Change	Annual Openings
Los Angeles	50,092	51,242	1,150	2%	5,023
Orange	25,909	27,870	1,961	8%	2,909
Total	76,001	79,112	3,111	4%	7,931

Wages—Average entry-level hourly wages for occupations related to construction estimation throughout the region are between \$13.08 and \$16.53.² Average entry-level wages for two of these construction estimation occupations (cost estimators and first-line supervisors of construction trades and extraction workers) are higher than the MIT Living hourly wage for one adult in the region (\$14.36 in Los Angeles County and \$15.85 in Orange County). Typically, experienced workers earn between \$38.20 and \$54.54, which is higher than the living wage estimates for both counties. Regional average wages are below the average statewide wage of \$27.82 for these occupations. Wage information, by county, is included in Appendix A.

Job Postings—There were 3,636 online job postings related to construction estimation listed in the past 12 months. The highest number of job postings were for estimator, carpenter, construction superintendent, and foreman. The top specialized skills were: estimating, scheduling, budgeting, and project management. The top three employers, by number of job postings, in the region were: Gulfstream Strategic Placements, Shawmut Design Construction, and Control Air Conditioning Corporation.

Educational Attainment—The Bureau of Labor Statistics (BLS) lists a high school diploma as the typical entry-level education required for carpenters and first-line supervisors of construction trades and extraction workers, and a bachelor’s degree for cost estimators. The national-level educational attainment data indicates that between 25.9% and 40.8% of workers in the field have completed some college or an associate degree. Of the 16% of job postings listing a minimum education requirement in Los Angeles/Orange County, 85% (511) request a high school diploma or vocational training and 15% (87) request an associate degree.

Community College Supply

Exhibit 2, on the following page, shows the three-year average number of awards conferred by community colleges in the related TOP code: Construction Crafts Technology (0952.00). Orange Coast and Santa Ana have the most completions in the region. Between June 2018 and May 2019, there were two other related program recommendation requests from regional community colleges.

¹ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

² Entry-level wage is defined as the tenth percentile hourly wage. Wages for experienced workers are defined as the ninetieth percentile hourly wage.

Exhibit 2: Regional community college awards (certificates and degrees), 2015-2018

TOP Code	Program	College	2014-15 Awards	2015-16 Awards	2016-2017 Awards	3-Year Award Average
0952.00	Construction Crafts Technology	Compton	0	0	2	1
		El Camino	17	9	7	11
		Fullerton	5	5	11	7
		Orange Coast	35	61	56	51
		Pasadena	0	0	1	0
		Santa Ana	12	17	12	14
		Total/Average	69	92	89	83

Appendix A: Occupational demand and wage data by county

Exhibit 3. Los Angeles County

Occupation (SOC)	2018 Jobs	2023 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Carpenters (47-2031)	30,180	30,730	550	2%	2,907	\$12.49	\$15.42	\$35.13
First-Line Supervisors of Construction Trades and Extraction Workers (47-1011)	13,928	14,335	407	3%	1,493	\$14.73	\$31.01	\$52.24
Cost Estimators (13-1051)	5,984	6,177	193	3%	622	\$16.45	\$29.39	\$49.51
Total	50,092	51,242	1,150	2%	5,023			

Exhibit 4. Orange County

Occupation (SOC)	2018 Jobs	2023 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Carpenters (47-2031)	13,749	14,648	899	7%	1,470	\$14.05	\$21.72	\$42.01
First-Line Supervisors of Construction Trades and Extraction Workers (47-1011)	8,752	9,538	786	9%	1,044	\$16.61	\$36.62	\$56.14
Cost Estimators (13-1051)	3,408	3,683	275	8%	395	\$16.75	\$31.16	\$57.87
Total	25,909	27,870	1,961	8%	2,909			

Exhibit 5. Los Angeles and Orange Counties

Occupation (SOC)	2018 Jobs	2023 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Carpenters (47-2031)	43,929	45,378	1,449	3%	4,377	\$13.08	\$16.53	\$38.20
First-Line Supervisors of Construction Trades and Extraction Workers (47-1011)	22,680	23,873	1,193	5%	2,537	\$14.99	\$33.05	\$54.54
Cost Estimators (13-1051)	9,392	9,861	469	5%	1,018	\$16.53	\$30.20	\$52.21
Total	76,001	79,112	3,111	4%	7,931			

Appendix B: Sources

- O*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (EMSI)
- Bureau of Labor Statistics (BLS)
- Employment Development Department, Labor Market Information Division, OES
- Employment Development Department, Unemployment Insurance Dataset
- Living Insight Center for Community Economic Development
- California Community Colleges Chancellor’s Office Management Information Systems (MIS)
- MIT Living Wage
- Chancellor’s Office Curriculum Inventory (COCI 2.0)

For more information, please contact:

Jesse Crete, Director
 Center of Excellence, Orange County
crete_jesse@rscdd.edu

June 2019

