

**Labor Market Assessment: 0957.00 – Civil and Construction Management Technology
Construction Management (Associate Degree; Certificate)**
Los Angeles Center of Excellence, April 2022

Summary

Program Endorsement:	Endorsed: All Criteria Met <input checked="" type="checkbox"/>	Endorsed: Some Criteria Met <input type="checkbox"/>	Not Endorsed <input type="checkbox"/>
Program Endorsement Criteria			
Supply Gap:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Living Wage: (Entry-Level, 25th)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Education:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Emerging Occupation(s)			
Yes <input type="checkbox"/>		No <input checked="" type="checkbox"/>	

The Los Angeles Center of Excellence for Labor Market Research (LA COE) prepared this report to provide regional labor market supply and demand data related to two middle-skill occupations:

- *Construction managers* (11-9021); and
- *First-line supervisors of construction trades and extraction workers* (47-1011).

Middle-skill occupations typically require some postsecondary education, but less than a bachelor’s degree.¹ Although the occupation, *construction managers*, typically requires a bachelor’s degree, it is considered middle-skill because nearly one-third of workers in the field have completed some college or an associate degree. 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 the relevant occupations.

Based on the available data, there appears to be a supply gap in the region for the two occupations of interest. In addition to both occupations having entry-level wages that exceed the self-sufficiency standard wage in both Los Angeles and Orange counties, nearly one-third of current workers in the field have completed some college or an associate degree as their highest level of education. **Due to all of the criteria being met, the LA COE endorses this proposed program.** Detailed reasons include:

¹ The COE classifies middle-skill jobs as the following:

- All occupations that require an educational requirement of some college, associate degree or apprenticeship;
- All occupations that require a bachelor’s degree, but also have more than one-third of their existing labor force with an educational attainment of some college or associate degree; or
- All occupations that require a high school diploma or equivalent or no formal education, but also require short- to long-term on-the-job training where multiple community colleges have existing programs.

Demand:

- **Supply Gap Criteria** – Over the next five years, there is projected to be **3,973 jobs available annually** in the region due to new job growth and replacements, **which is more than the 395 awards conferred annually** by educational institutions in the region.
- **Living Wage Criteria** – In Los Angeles County, both of these occupations **have entry-level wages above** the self-sufficiency standard hourly wage (\$18.10/hour).²
- **Educational Criteria** – Within the LA/OC region, 53% of the annual job openings for occupations studied in this report typically require a high school diploma or equivalent.
 - National-level educational attainment data indicates that between 30.5% and 32% of workers in the field have completed some college or an associate degree.

Supply:

- Between 2017 and 2020, **16 community colleges** in the LA/OC region issued awards in programs that have historically trained for the occupations of interest, conferring an average of **356 awards**.
- Between 2016 and 2019, non-community college institutions in the region conferred an average of **39 awards**.

² Self-Sufficiency Standard wage data was pulled from The Self-Sufficiency Standard Tool for California. For more information, visit: <http://selfsufficiencystandard.org/california>.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for the two occupations of interest. In the Los Angeles/Orange County region, the number of jobs related to these occupations is projected to increase by 6% through 2025. There will be nearly 4,000 job openings per year through 2025 due to job growth and replacements.

This report includes employment projection data by Emsi which uses EDD information. Emsi's projections are modeled on recorded (historical) employment figures and incorporate several underlying assumptions, including the assumption that the economy, during the projection period, will be at approximately full employment. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, it may impact the projections. At this time, it is not possible to quantify the full impact of COVID-19 on projections of industry and occupational employment. Therefore, the projections included in this report do not take the full impacts of COVID-19 into account.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties³

Geography	2020 Jobs	2025 Jobs	2020-2025 Change	2020-2025 % Change	Annual Openings
Los Angeles	27,868	29,566	1,698	6%	2,741
Orange	12,936	13,549	613	5%	1,232
Total	40,803	43,114	2,311	6%	3,973

Wages

The labor market endorsement in this report considers the hourly wages for the two occupations in Los Angeles County, as they relate to the county's self-sufficiency standard wage. Orange County wages are included below in order to provide a complete analysis of the LA/OC region. Detailed wage information, by county, is included in Appendix A.

Los Angeles County – Both occupations in this report have entry-level wages **above** the self-sufficiency standard wage for one adult (\$18.10 in Los Angeles County). Typical entry-level hourly wages are in a range between \$20.08 and \$26.77; experienced workers can expect to earn wages between \$47.72 and \$65.04.

Orange County – Both occupations in this report have entry-level wages **above** the self-sufficiency standard wage for one adult (\$20.63 in Orange County). Typical entry-level hourly wages are in a range between \$30.22 and \$32.09; experienced workers can expect to earn wages between \$51.97 and \$76.44.

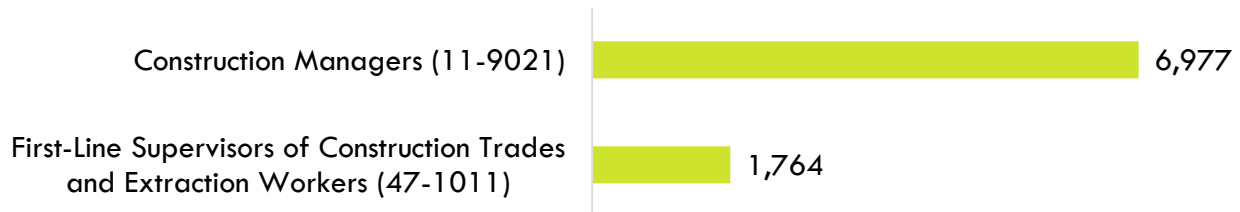
³ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

Job Postings

Over the past 12 months, there have been 8,741 online job postings related to the two occupations of interest. Exhibit 2 displays the number of job postings by occupation. The majority of job postings (80%) were for *construction managers*. The highest number of job postings were for project managers, construction managers, superintendents, construction superintendents, construction managers, project coordinators, and assistant project managers. The top skills were project management, construction management, quality assurance and control, occupational health and safety, estimating, and cost control. The top employers, by number of job postings, in the region were Rosendin Electric Incorporated, Sunrun, Hill International Incorporated, and Cordoba Corporation.

It is important to note that the job postings data included in this section reflects online job postings listed in the past 12 months and does not yet demonstrate the full impact of COVID-19. While employers have generally posted fewer online job postings since the beginning of the pandemic, the long-term effects are currently unknown.

Exhibit 2: Job postings by occupation (last 12 months)



Educational Attainment

The Bureau of Labor Statistics (BLS) lists the following typical entry-level education levels for the occupations in this report:

- **Bachelor's degree:** *construction managers (11-9021)*
- **High school diploma or equivalent:** *first-line supervisors of construction trades and extraction workers (47-1011)*

In the LA/OC region, the majority of annual job openings (53%) typically require a high school diploma or equivalent. National-level educational attainment data indicates that between 30.5% and 32% of workers in the field have completed some college or an associate degree.

Educational Supply

Community College Supply – Exhibit 3 shows the annual and three-year average number of awards conferred by community colleges in programs that have historically trained for the occupations of interest. The colleges with the most completions in the region are Orange Coast, Santa Ana, and LA Southwest.

Exhibit 3: Regional community college awards (certificates and degrees), 2017-2020

TOP Code	Program	College	2017-18 Awards	2018-19 Awards	2019-20 Awards	3-Year Average
0952.00	Construction Crafts Technology	Compton	2	1	-	1
		El Camino	7	11	17	12
		LA Southwest	-	-	152	51
		Long Beach	-	-	60	20
		Pasadena	1	1	1	1
		LA Subtotal	10	13	230	84
		Fullerton	11	14	8	11
		Orange Coast	56	91	37	61
		Santa Ana	12	72	85	56
		OC Subtotal	79	177	130	129
Supply Subtotal/Average			89	190	360	213
0952.10	Carpentry	LA Trade-Tech	38	21	27	29
		LA Subtotal	38	21	27	29
		Fullerton	-	3	-	1
		Santiago Canyon	-	1	2	1
OC Subtotal	-	4	2	2		
Supply Subtotal/Average			38	25	29	31
0957.00	Civil and Construction Management Technology	East LA	-	-	1	0
		LA Valley	5	6	13	8
		Mt San Antonio	3	-	11	5
		LA Subtotal	8	6	25	13
		Fullerton	11	12	11	11
		OC Subtotal	11	12	11	11
Supply Subtotal/Average			19	18	36	24
0957.20	Construction Inspection	Pasadena	9	7	21	12
		LA Subtotal	9	7	21	12

TOP Code	Program	College	2017-18 Awards	2018-19 Awards	2019-20 Awards	3-Year Average
		Coastline	12	15	11	13
		Fullerton	8	11	4	8
		Saddleback	3	10	15	9
		Santiago Canyon	-	-	15	5
		OC Subtotal	23	36	45	35
Supply Subtotal/Average			32	43	66	47
2102.10	Public Works	Citrus	9	27	22	19
		LA Trade-Tech	2	-	-	1
		LA Subtotal	11	27	22	20
		Santiago Canyon	18	19	26	21
		OC Subtotal	18	19	26	21
Supply Subtotal/Average			29	46	48	41
Supply Total/Average			207	322	539	356

Non-Community College Supply – For a comprehensive regional supply analysis, it is important to consider the supply from other institutions in the region that may provide training programs related to construction management. Exhibit 4 displays the annual and three-year average number of awards conferred in relevant programs. Between 2016 and 2019, non-community college institutions in the region conferred an average of 39 awards.

Exhibit 4: Regional non-community college awards, 2016-2019

CIP	Program	Institution	2016-17 Awards	2017-18 Awards	2018-19 Awards	3-Year Average
15.1001	Construction Engineering Technology/Technician	California State Polytechnic University-Pomona	58	58	47	54
		California State University-Long Beach	38	53	52	48
		California State University-Northridge	18	10	15	14
Supply Total/Average			38	40	38	39

Appendix A: Occupational demand and wage data by county

Exhibit 5. Los Angeles County

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Construction Managers (11-9021)	13,988	15,432	1,444	10%	1,328	\$20.08	\$37.34	\$65.04
First-Line Supervisors of Construction Trades and Extraction Workers (47-1011)	13,880	14,134	254	2%	1,413	\$26.77	\$35.87	\$47.72
Total	27,868	29,566	1,698	6%	2,741	-	-	-

Exhibit 6. Orange County

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Construction Managers (11-9021)	5,963	6,413	450	8%	527	\$32.09	\$47.80	\$76.44
First-Line Supervisors of Construction Trades and Extraction Workers (47-1011)	6,973	7,135	162	2%	705	\$30.22	\$39.84	\$51.97
Total	12,936	13,549	613	5%	1,232	-	-	-

Exhibit 7. Los Angeles and Orange Counties

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Typical Entry-Level Education
Construction Managers (11-9021)	19,951	21,845	1,894	9%	1,855	Bachelor's degree
First-Line Supervisors of Construction Trades and Extraction Workers (47-1011)	20,853	21,269	416	2%	2,118	HS diploma or equivalent
Total	40,803	43,114	2,311	6%	3,973	-

Appendix B: Sources

- O*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (Emsi)
- Bureau of Labor Statistics (BLS)
- California Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- Self-Sufficiency Standard at the Center for Women's Welfare, University of Washington
- Chancellor's Office Curriculum Inventory (COCI 2.0)

For more information, please contact:

Luke Meyer, Director
Los Angeles Center of Excellence
Lmeyer7@mtsac.edu



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