



Construction Management

March 2018

Prepared by the Los Angeles/Orange County Center of Excellence for Labor Market Research

Program Recommendation

This report was compiled by the Los Angeles/Orange County Center of Excellence (COE) to provide regional labor market data for the program recommendation of construction management. This report intends to determine whether there is demand in the local labor market that is not being met by the supply from programs of study.

Based on the data, the COE has determined that there is an unmet need for an additional construction management program in the region. Reasons include:

- In Los Angeles County, only one community college trains students in civil and construction management technology.
- The entry-level hourly earnings for construction managers in Los Angeles County are \$13.60 per hour – slightly higher than the living wage for one adult in the county.
- Construction managers typically require a bachelor’s degree as the entry-level education. However, a third of the existing workforce, has completed some postsecondary coursework.
- In 2017, there were nearly 12,000 ads for construction management related jobs in Los Angeles County.

Occupation Codes and Descriptions

Currently, there is one occupation in the standard occupational classification (SOC) system related to construction management. The occupation title and description, as well as reported job titles are included in Exhibit 1.

Exhibit 1 – Occupation, description, and sample job titles

SOC Code	Title	Description	Sample of Reported Job Titles
11-9021	Construction Managers	Plan, direct, or coordinate, usually through subordinate supervisory personnel, activities concerned with the construction and maintenance of structures, facilities, and systems. Participate in the conceptual development of a construction project and oversee its organization, scheduling, budgeting, and implementation. Includes managers in specialized construction fields, such as carpentry or plumbing.	Concrete Foreman, Construction Area Manager, Construction Foreman, Construction Manager, Construction Superintendent, General Contractor, Job Superintendent, Project Executive, Project Manager, Project Superintendent

Source: O*NET Online

Current and Future Employment

In Los Angeles County, the number of new jobs for construction managers is expected to decrease by 3% over the next five years. However, nearly 800 job opportunities will be available annually for this occupation through 2022 due to replacement need (e.g., retirements). Exhibit 2 contains detailed employment projections data for the occupation.

Exhibit 2 – Five-year projections for construction managers

SOC	Description	2017 Jobs	2022 Jobs	2017 - 2022 Change	2017 - 2022 % Change	Annual Openings
11-9021	Construction Managers	11,408	11,044	(364)	(3%)	779

Source: Economic Modeling Specialists International (EMSI)

Earnings

In Los Angeles County, the entry-level average wage for construction managers is \$13.60 per hour, which is above the MIT Living Wage¹ estimate of \$13.54 per hour for a single adult. The average annual earnings for this occupation in the region is \$66,236 per year, assuming full-time employment.

Exhibit 3 contains hourly wages and annual average earnings for this occupation. Entry-level hourly earnings is represented by the 10th percentile of wages, median hourly earnings is represented by the 50th percentile of wages, and experienced hourly earnings is represented by the 90th percentile of wages, demonstrating various levels of employment.

Exhibit 3 – Earnings for construction managers

SOC	Description	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Earnings	Average Annual Earnings
11-9021	Construction Managers	\$13.60	\$22.82	\$62.85	\$66,236

Source: Economic Modeling Specialists International (EMSI)

¹ MIT Living Wage Calculator. <http://livingwage.mit.edu/>

Employer Job Postings

In this research brief, real-time labor market information is used to provide a more nuanced view of the current job market, as it captures job advertisements for occupations relevant to the field of study. Employer job postings are consulted to understand who is employing in the construction management field, and what they are looking for in potential candidates.

To identify job postings the following job titles were used: project manager, construction manager, assistant project manager, assistant construction manager, superintendent, assistant superintendent, crew supervisor, quality control manager, safety officer, safety inspector, construction inspector, project controls manager, scheduler, cost estimator, contract administrator, construction coordinator, construction logistics manager, construction office manager, document control supervisor, construction management intern, assistant inspector-trainee, and contractor.

In 2017, there were 11,848 employer postings for jobs related to construction management. There were 10,020 job postings for the same occupation in 2016, and 9,765 job postings in 2015.

Top Titles

The most common job titles for employers posting ads for construction management positions are listed in Exhibit 4. Project manager is mentioned in 12% of all relevant job postings (1,371 out of 11,848 postings).

Exhibit 4 –Job titles (n=11,848)

Title	Job Postings, Full Year 2017
Project Manager	1,371
Construction Manager	1,254
Scheduler	692
Construction Superintendent	408
Information Technology Project Manager	387
Senior Project Manager	378
Contract Administrator	346
Technical Project Manager	300
Cost Estimator	159
Assistant Manager	115

Source: Labor Insight/Jobs (Burning Glass)

Top Employers

Exhibit 5 lists the major employers hiring construction management-related workers. Top employers posting job ads included Edison International, Northrop Grumman, and SMCI. The top worksite cities in the region for these job postings were Los Angeles, El Segundo, Pasadena, Long Beach, Torrance, Glendale, Santa Monica, and Burbank.

Exhibit 5 – Top employers (n=6,342)

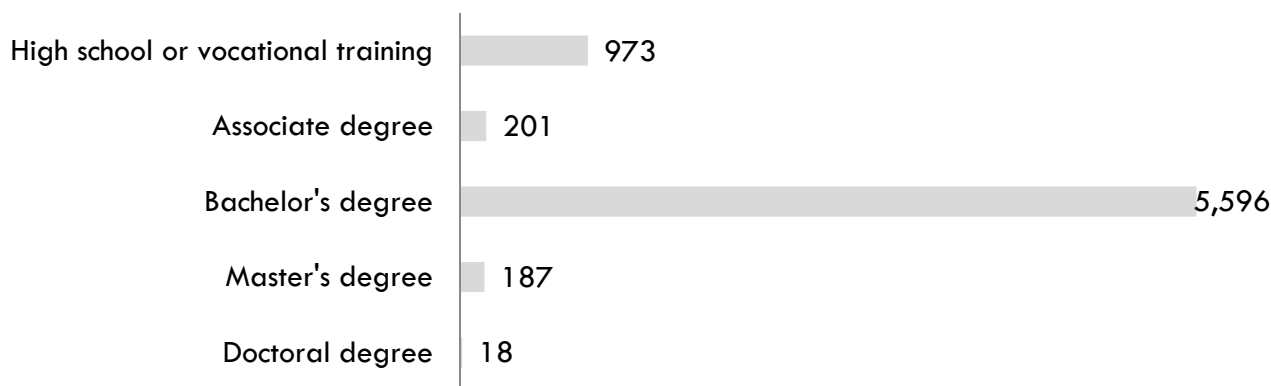
Employer	Job Postings, Full Year 2017
Edison International	244
Northrop Grumman	98
SMCI	92
Jacobs Engineering Group Incorporated	79
CBRE	72
STV Group Inc.	61
Arcadis	49
Vanir Construction Management Inc.	48
Kal Krishnan Consulting Services	42
Parsons Brinkerhoff	41
Shawmut Design and Construction	41
County of Los Angeles	36

Source: Labor Insight/Jobs (Burning Glass)

Advertised Education Levels

Exhibit 6 displays the education level requested by employers in online job ads. The majority of employers were looking for a candidate with a Bachelor's degree. Approximately 41% of job postings did not specify a level of education.

Exhibit 6 – Education requirements for construction managers (n=6,975)



Source: Labor Insight/Jobs (Burning Glass)

Education and Training

Exhibit 7 shows the typical entry-level education requirement for the occupation of interest, along with the typical on-the-job training, and percentage of workers in the field who hold a community college award or have completed some postsecondary courses. A third of the existing workforce, 33%, has completed some community college education as their highest level of education.

Exhibit 7 – Education and training requirements

SOC	Description	Typical entry-level education	Typical on-the-job training	% of Community College Award Holders or Some Postsecondary Coursework
11-9021	Construction Managers	Bachelor's degree	Moderate	33%

Source: Economic Modeling Specialists International, Bureau of Labor Statistics Employment Projections (Educational Attainment)

Currently, one community college in Los Angeles County trains students in civil and construction management technology. Exhibit 8 displays the annual awards conferred for the college training in this field. It is important to note that an award is not equivalent to a single person in search of a job opening, since a student may earn more than one award (e.g. an associate degree and a certificate).

Between 2013 and 2016, the total annual average community college awards conferred was one across one program: Civil and Construction Management Technology (0957.00).

Exhibit 8 – CCC Student Awards (by TOP and College)

TOP Code	Program	College	2013-2016 Annual Average			Total Average CC Awards
			2013-14 Awards	2014-15 Awards	2015-2016 Awards	
0957.00	Civil and Construction Management Technology	LA Valley	0	1	1	1
Total			0	1	1	1

Source: California Community Colleges Chancellor's Office MIS Data Mart

Student Outcomes

The CTE LaunchBoard provides student outcome data on the effectiveness of CTE programs. The following student outcome information was collected from exiters of the Civil and Construction Management Technology Taxonomy of Program (TOP) code (0957.00) in Los Angeles County for the 2015-16 academic year.

- 88% of students are earning a living wage
- 84% of students are employed within six months after completing a program

Source: CTE LaunchBoard

Sources

O*Net Online, Labor Insight/Jobs (Burning Glass), Economic Modeling Specialists International (EMSI), MIT Living Wage Calculator, Bureau of Labor Statistics (BLS) Education Attainment, California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart, CTE LaunchBoard, Statewide CTE Outcomes Survey, Employment Development Department Unemployment Insurance Dataset

Notes

Data included in this analysis represents the labor market demand for positions most closely related to construction management. Standard occupational classification (SOC) codes were chosen based on the national education level required for employment (associate degree and postsecondary certificate) as well as the proportion of current workers who hold a community college award or have had some community college training. This selection process narrows the labor market analysis to the most relevant employment opportunities for students with community college education and/or training.

Traditional labor market information was used to show current and projected employment based on data trends, as well as annual average awards granted by regional community colleges. Real-time labor market information captures job post advertisements for occupations relevant to the field of study and should not be used to establish current job openings, because the numbers may include duplicate job postings or postings intended to gather a pool of applicants. Real-time labor market information can signal demand and show what employers are looking for in potential employees, but is not a perfect measure of the quantity of open positions.