

Program Endorsement Brief: Construction Inspection

Los Angeles/Orange County Center of Excellence, August 2019

Summary Analysis

The Los Angeles/Orange County Center of Excellence for Labor Market Research (COE) prepared this report to provide regional labor market supply and demand data related to three middle-skill construction occupations: construction managers (11-9021), first-line supervisors of construction trades and extraction workers (47-1011), and construction and building inspectors (47-4011). Middle-skill occupations typically require some postsecondary education, but not a bachelor's degree.¹ 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 program that aligns with relevant occupations.

Based on the available data, it appears that there is a supply gap for construction and building inspectors, construction managers, and first-line supervisors of construction trades and extraction workers in the region. **Therefore, the COE endorses this proposed program for the following reasons:**

Demand:

- Over the next five years, there is projected to be nearly **4,600 jobs available annually** in the region due to new jobs, retirements, and workers leaving the field, **which is more than the 73 awards conferred annually** by community colleges and non-community institutions in the region.

Supply:

- There are **three community colleges** in the region that have programs listed under the civil and construction management technology TOP code (0957.00); and **five community colleges** that have programs listed under construction inspection TOP code (0957.20). Together, these programs conferred **47 awards** annually between 2015 and 2018.
- There are **two non-community institutions** in the region that have programs listed under the construction management CIP code (52.2001), conferring an average of **26 awards** between 2013 and 2016.

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.

Occupational Demand — Exhibit 1 shows the five-year occupational demand projections for construction inspection-related occupations. In Los Angeles/Orange County, the number of construction inspection-related jobs is projected to increase by 5%. There will be nearly 4,600 job openings per year through 2023 (Exhibit 1).

Exhibit 1: Occupational demand in Los Angeles and Orange Counties²

Geography	2018 Jobs	2023 Jobs	2018-2023 Change	2018-2023 % Change	Annual Openings
Los Angeles	31,298	32,386	1,088	3%	2,980
Orange	15,235	16,487	1,252	8%	1,616
Total	46,533	48,873	2,340	5%	4,596

Wages — Typical entry-level wages for construction inspection-related occupations in the region are between \$19.61 and \$34.24. Entry-level wages for the occupations of interest are higher than the California Family Needs Calculator hourly wage for one adult in the region (\$15.04 in Los Angeles County and \$17.36 in Orange County). Wage information, by county, is included in Appendix A.

Job Postings — In the past 12 months, there have been 9,704 online job postings for construction inspection-related occupations. The majority of job postings were for construction managers, construction superintendents, and project managers. Top specialized skills included: project management, scheduling, budgeting, and construction management. The top three employers, by number of job postings, in the region are: CBRE Group, Gulfstream Strategic Placements, and Vanir Construction Management. Of the 9,704 online job postings, 52% list a minimum education requirement.

Educational Attainment — The BLS lists a high school diploma or equivalent as the typical entry-level education for construction and building inspectors and first-line supervisors of construction trades and extraction workers. The typical entry-level education for construction managers is a Bachelor’s degree. The national-level educational attainment data indicates between 33% and 45% of workers in the field have completed some college or an associate degree. Of the 52% of job postings listing a minimum education requirement in Los Angeles/Orange County, 75% (3,763) request Bachelor’s degree or higher, 4% (202) request an associate degree, and 21% (1,044) request a high school diploma or vocational training.

Community College Supply — Exhibit 2 shows the annual and three-year average number of awards conferred by community colleges in civil and construction management technology and construction inspection programs. In the past 12 months, there was one other related program recommendation request from regional community colleges.

² Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

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

TOP Code	Program	College	2015-16 Awards	2016-17 Awards	2017-18 Awards	3-Year Award Average
0957.00	Civil and Construction Management Technology	Fullerton	6	4	11	7
		LA Valley	1	1	5	2
		Mt San Antonio	-	8	3	4
		Subtotal/Average	7	13	19	13
0957.20	Construction Inspection	Coastline	16	5	12	11
		Fullerton	2	7	8	6
		Mt San Antonio	2	-	-	1
		Pasadena	16	13	9	13
		Saddleback	2	6	3	4
		Subtotal/Average	38	31	32	34
		Total/Average	45	44	51	47

Other Postsecondary Institution Supply — Exhibit 3 displays the annual and three-year average number of awards conferred by non-community institutions in Construction Management (52.2001) programs.

Exhibit 3: Regional other postsecondary institution awards, 2013-2016

CIP Code	Program	College	2013-14 Awards	2014-15 Awards	2015-16 Awards	3-Year Award Average
52.2001	Construction Management	Learnet Academy Inc.	-	1	1	1
		San Joaquin Valley College-Visalia	36	18	22	25
		Total/Average	36	19	23	26

Appendix A: Occupational demand and wage data by county

Exhibit 4. 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
First-Line Supervisors of Construction Trades and Extraction Workers (47-1011)	15,872	16,402	530	3%	1,696	\$24.71	\$33.76	\$44.29
Construction Managers (11-9021)	12,518	12,976	458	4%	949	\$19.61	\$34.49	\$57.28
Construction and Building Inspectors (47-4011)	2,908	3,009	101	3%	335	\$34.24	\$43.73	\$52.15
Total	31,298	32,386	1,088	3%	2,980			

Exhibit 5. 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
First-Line Supervisors of Construction Trades and Extraction Workers (47-1011)	8,308	9,077	769	9%	994	\$28.76	\$37.98	\$48.81
Construction Managers (11-9021)	5,825	6,271	446	8%	494	\$26.02	\$46.19	\$67.21
Construction and Building Inspectors (47-4011)	1,102	1,139	37	3%	128	\$32.99	\$42.66	\$50.97
Total	15,235	16,487	1,252	8%	1,616			

Exhibit 6. 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
First-Line Supervisors of Construction Trades and Extraction Workers (47-1011)	24,180	25,478	1,298	5%	2,690	\$26.06	\$35.20	\$45.99
Construction Managers (11-9021)	18,343	19,246	903	5%	1,444	\$21.40	\$38.10	\$60.63
Construction and Building Inspectors (47-4011)	4,010	4,148	138	3%	462	\$33.94	\$43.43	\$51.84
Total	46,533	48,873	2,340	5%	4,596			

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)
- California Family Needs Calculator, Insight Center for Community Economic Development
- Chancellor's Office Curriculum Inventory (COCI 2.0)

For more information, please contact:

Juan Madrigal, Assistant Director
 Center of Excellence, Los Angeles/Orange County Region
jmadrigal@mtsac.edu
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