

Construction Management Occupations Labor Market Information Report Foothill College

Prepared by the San Francisco Bay Center of Excellence
for Labor Market Research
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Recommendation

Based on all available data, there appears to be an undersupply of Construction Management workers compared to the demand for this cluster of occupations in the Bay region and in the Silicon Valley sub-region (Santa Clara County). There is a projected annual gap of about 1,078 students in the Bay region and 253 students in the Silicon Valley Sub-Region.

Introduction

This report provides student outcomes data on employment and earnings for TOP 0957.00-Civil and Construction Management Technology programs in the state and region. It is recommended that these data be reviewed to better understand how outcomes for students taking courses on this TOP code compare to potentially similar programs at colleges in the state and region, as well as to outcomes across all CTE programs at Foothill College and in the region.

This report profiles Construction Management Occupations in the 12 county Bay region and in the Silicon Valley sub-region for a proposed new program at Foothill College.

- **Construction Managers (11-9021):** 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.

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: Moderate-term on-the-job training

Percentage of Community College Award Holders or Some Postsecondary Coursework: 32%

Occupational Demand

Table 1. Employment Outlook for Construction Management Occupations in Bay Region

Occupation	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	5-Yr Openings	Average Annual Openings	25% Hourly Wage	Median Hourly Wage
Construction Managers	12,691	13,672	981	8%	5,828	1,166	\$30.50	\$51.61

Source: EMSI 2020.3

Bay Region includes Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties

Table 2. Employment Outlook for Construction Management Occupations in Silicon Valley Sub-Region

Occupation	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	5-Yr Openings	Average Annual Openings	25% Hourly Wage	Median Hourly Wage
Construction Managers	2,779	3,006	227	8%	1,267	253	\$35.34	\$59.09

Source: EMSI 2020.3

Silicon Valley Sub-Region includes Santa Clara County

Job Postings in Bay Region and Silicon Valley Sub-Region

Table 3. Number of Job Postings by Occupation for latest 12 months (October 2019 - September 2020)

Occupation	Bay Region	Silicon Valley Sub-Region
Construction Managers	8,017	2,069

Source: Burning Glass

Table 4a. Top Job Titles for Construction Management Occupations for latest 12 months (October 2019 - September 2020) Bay Region

Common Title	Bay	Common Title	Bay
Construction Project Manager	571	Risk Manager Construction Focus	50
Project Manager	536	Project Manager - Construction	44
Superintendent	374	Project Administrator	40
Construction Manager	346	Project Superintendent	35
Construction Superintendent	264	Project Executive	31
Senior Project Manager	125	Director Of Construction	31
Assistant Project Manager	117	Construction Project Coordinator	31
Project Coordinator	85	Civil Construction Project Manager	30
Senior Superintendent	74	Site Superintendent	28
Contractor	70	Untitled	27
Assistant Superintendent	67	Commercial Construction Project Manager	26
Senior Construction Manager	63	Architectural Interiors Technical Coordinator/Captain	26
Captain	62	Solar Superintendent	25
Electrical Superintendent	52	Senior Construction Project Manager	25

Table 4b. Top Job Titles for Construction Management Occupations for latest 12 months (October 2019 - September 2020) Silicon Valley Sub-Region

Common Title	Silicon Valley	Common Title	Silicon Valley
Project Manager	139	Architectural Captain/Project Coordinator	14
Construction Project Manager	108	Project Superintendent	13
Superintendent	81	Project Administrator	13
Construction Superintendent	74	Superintendent Commercial Ti-Focused General Contractor	12
Construction Manager	57	Project Manager - Commercial Construction	12
Assistant Project Manager	35	Senior Construction Project Manager/Project Executive - Mountain View	11
Senior Project Manager	32	Senior Construction Project Manager - Mountain View	11
Project Coordinator	28	Mep Superintendent	11
Contractor	24	Senior Interior Designer/Interiors Project Manager	10
Senior Superintendent	23	Project Executive	10
Public Content Contractor	23	Commercial Construction Project Manager	10
Captain	20	Solar Superintendent	9
Risk Manager Construction Focus	18	Project Director	9
Project Manager - Construction	17	Senior Construction Manager	8

Source: Burning Glass

Industry Concentration

Table 5. Industries hiring Construction Management Workers in Bay Region

Industry – 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2019)	Jobs in Industry (2024)	% Change (2019-24)	% Occupation Group in Industry (2019)
Residential Remodelers	2,071	2,356	14%	17%
Commercial and Institutional Building Construction	2,085	2,334	12%	17%
New Single-Family Housing Construction (except For-Sale Builders)	1,280	1,316	3%	10%
Electrical Contractors and Other Wiring Installation Contractors	822	867	5%	7%
Plumbing, Heating, and Air-Conditioning Contractors	761	824	8%	6%
All Other Specialty Trade Contractors	597	579	-3%	5%
Site Preparation Contractors	424	409	-4%	3%
Painting and Wall Covering Contractors	364	342	-6%	3%
Drywall and Insulation Contractors	257	276	7%	2%
Local Government, Excluding Education and Hospitals	239	249	4%	2%
Highway, Street, and Bridge Construction	231	240	4%	2%
Water and Sewer Line and Related Structures Construction	197	209	6%	2%
Engineering Services	190	201	6%	1%
Roofing Contractors	180	188	4%	1%
Industrial Building Construction	169	174	3%	1%
Finish Carpentry Contractors	179	171	-4%	1%
Poured Concrete Foundation and Structure Contractors	166	169	2%	1%
Corporate, Subsidiary, and Regional Managing Offices	159	155	-3%	1%
Flooring Contractors	159	153	-4%	1%
Other Heavy and Civil Engineering Construction	151	159	5%	1%
Power and Communication Line and Related Structures Construction	140	181	29%	1%
New Multifamily Housing Construction (except For-Sale Builders)	142	171	20%	1%

Source: EMSI 2020.3

Table 6. Top Employers Posting Construction Management Occupations in Bay Region and Silicon Valley Sub-Region (October 2019 - September 2020)

Employer	Bay	Employer	Bay	Employer	Silicon Valley
Tjg Civil Engineers And Land Planners	149	Balfour Beatty	27	Tjg Civil Engineers And Land Planners	43
cbre	66	Mastec Incorporated	26	cbre	42
Tjg Commercial Construction	63	Battle Consulting And Management	26	Hitt Contracting Incorporated	29
Johnson Construction Management	62	Mccarthy Building Company	25	Emcor Group	28
Tjg Professional Consulting Services	46	Kimmel Associates	25	Johnson Construction Management	20
The Turner Corporation	43	Rosendin Electric Incorporated	24	The Turner Corporation	19
AECOM Technology Corporation	43	Rosendin	24	Google Inc.	17
Emcor Group	39	Jacobs Engineering Group Incorporated	24	XI Construction	15
Vanir Construction Management Incorporated	38	Goliath Construction Consulting	24	Rosendin	15

Tesla	37	Blue Mountain Air Incorporated	24	Gilbane Building Company	15
Pacific Gas and Electric Company	34	Skanska	23	Tjg Professional Consulting Services	14
Lennar Corporation	32	Google Inc.	23	J.E. Dunn Construction	14
Facebook	32	Cal Constructors	23	Equinix Incorporated	14
CDM Smith	31	XI Construction	22	Cal Constructors	14
Kitchell Corporation	30	Amazon	22	Skyline Construction Incorporated	13
Hitt Contracting Incorporated	29	Kaiser Permanente	21	Hitt Contracting	13
Swinerton Builders	28	Skyline Construction	20	Stanford Health Care	12

Source: Burning Glass

Educational Supply

There are five (5) Community colleges in the Bay Region issuing 69 awards on average annually (last 3 years ending 2018-19) on TOP 0957.00-Civil and Construction Management Technology. There are no colleges in the Silicon Valley Sub-Region issuing awards on average annually (last 3 years) on this TOP code.

There is one (1) educational institution in the Bay Region issuing 19 Bachelor's Degrees on average annually (last 3 years ending 2018-19) on TOP 0957.00-Civil and Construction Management Technology. There are no institutions in the Silicon Valley Sub-Region issuing Bachelor's Degrees on average annually (last 3 years) on this TOP code.

Table 7a. Community College Awards on TOP 0957.00-Civil and Construction Management Technology in Bay Region

College	Sub-Region	Associates	Certificate Low Unit	Total
Cabrillo	SC - Monterey	6	16	22
Diablo Valley	East Bay	5	4	9
Hartnell	SC - Monterey	2	0	2
Laney	East Bay	5	6	11
San Francisco	Mid-Peninsula	6	19	25
Total Bay Region		24	45	69
Total Silicon Valley Sub-Region		0	0	0

Source: Data Mart

Note: The annual average for awards is 2016-17 to 2018-19.

Table 7b. Bachelor's Degree Awards on TOP 0957.00-Civil and Construction Management Technology in Bay Region

College	Sub-Region	Bachelor's Degree
California State University-East Bay	East Bay	19
Total Bay Region		19
Total Silicon Valley Sub-Region		0

Source: Data Mart

Note: The annual average for awards is 2014-15 to 2016-17.

Gap Analysis

Based on the data included in this report, there is a labor market gap in the Bay region with 1,166 annual openings for the Construction Management occupational cluster and 88 annual (3-year average) awards for an annual undersupply of 1,078 students. In the Silicon Valley Sub-Region, there is also a gap with 253 annual openings and no annual (3-year average) awards for an annual undersupply of 253 students.

Student Outcomes

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0957.00-Civil and Construction Management Technology

2017-18	Bay All CTE Programs	Foothill College All CTE Programs	State 0957.00	Bay 0957.00	Silicon Valley 0957.00	Foothill College 0957.00
% Employed Four Quarters After Exit	67%	71%	72%	69%	n/a	n/a
Median Quarterly Earnings Two Quarters After Exit	\$11,466	\$16,942	\$13,764	\$14,520	n/a	n/a
Median % Change in Earnings	31%	46%	33%	41%	n/a	n/a
% of Students Earning a Living Wage	53%	72%	74%	68%	n/a	n/a

Source: Launchboard Pipeline (version available on (10/23/20)

Skills, Certifications and Education

Table 9. Top Skills for Construction Management Occupations in Bay Region (October 2019 - September 2020)

Skill	Postings	Skill	Postings	Skill	Postings
Project Management	5,272	Customer Service	707	Residential Construction	410
Budgeting	4,085	Managing Subcontractors	693	Accounting	399
Scheduling	4,064	Civil Engineering	651	Contract Management	387
Construction Management	3,391	Contract Preparation	620	Supervisory Skills	374
Quality Assurance and Control	1,681	Cost Estimation	609	Sales	368
Estimating	1,513	Procure	601	Plumbing	364
Microsoft Project	1,369	Customer Contact	582	Renovation	364
Procurement	1,063	Construction Industry Knowledge	545	Purchasing	362
Cost Control	1,050	Request for Information (RFI)	523	Design-Build	354
Occupational Health and Safety	1,017	Punch List	506	Billing Systems	338
Commercial Construction	963	Business Development	466	Request for Proposal (RFP)	329
Project Planning and Development Skills	847	Building Codes	449	AutoCAD	327
Contract Review	828	Primavera	444	Shop Drawings	325
Staff Management	817	Customer Billing	439	Revit	318
Quality Management	796	Design and Construction	432	Prolog	316

Source: Burning Glass

Table 10. Certifications for Construction Management Occupations in Bay Region (October 2019 - September 2020)

Note: 76% of records have been excluded because they do not include a certification. As a result, the chart below may not be representative of the full sample.

Certification	Postings	Certification	Postings
Driver's License	859	OSHA Safety 30 Hour	42
Project Management Certification	359	National Council of Architectural Registration Boards (NCARB)	39
Certified Construction Manager	199	Security Clearance	32
Project Management Professional (PMP)	195	Architecture License	23
Licensed Professional Engineer	141	Cisco Certified Internetwork Professional (CCIP)	22
Leadership In Energy And Environmental Design (LEED) Certified	123	PMI Certified Associate in Project Management (CAPM)	21

Occupational Safety and Health Administration Certification	107	OSHA Safety 10 Hour	19
LEED AP	107	North American Board of Energy Practitioners (NABCEP)	17
Contractors License	102	Master Electrician License	17
First Aid CPR AED	62	Hazwoper	15
Electrician Certification	56	Safety Trained Supervisor	14
Registered Architect	42	CDL Class C	14

Source: Burning Glass

Table 11. Education Requirements for Construction Management Occupations in Bay Region

Note: 41% of records have been excluded because they do not include a degree level. As a result, the chart below may not be representative of the full sample.

Education (minimum advertised)	Latest 12 Mos. Postings	Percent 12 Mos. Postings
High school or vocational training	745	16%
Associate Degree	169	4%
Bachelor's Degree or Higher	3,813	80%

Source: Burning Glass

Methodology

Occupations for this report were identified by use of skills listed in O*Net descriptions and job descriptions in Burning Glass. Labor demand data is sourced from Economic Modeling Specialists International (EMSI) occupation data and Burning Glass job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CTE Launchboard and CCCCCO Data Mart.

Sources

O*Net Online
Labor Insight/Jobs (Burning Glass)
Economic Modeling Specialists International (EMSI)
CTE LaunchBoard www.calpassplus.org/Launchboard/
Statewide CTE Outcomes Survey
Employment Development Department Unemployment Insurance Dataset
Living Insight Center for Community Economic Development
Chancellor's Office MIS system

Contacts

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