

# Construction Building Inspection Occupations Labor Market Information Report Cabrillo 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 Building Inspection workers compared to the demand for this cluster of occupations in the Bay region and in the SC-Monterey sub-region (Monterey, San Benito, and Santa Cruz counties). There is a projected annual gap of about 1,918 students in the Bay region and 103 students in the SC-Monterey Sub-Region.

## Introduction

This report provides student outcomes data on employment and earnings for TOP 0957.20 - Construction Inspection 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 Cabrillo College and in the region.

This report profiles Construction Building Inspection Occupations in the 12 county Bay region and in the SC-Monterey sub-region for a proposed new Construction Building Inspection and Codes program at Cabrillo College.

• First-Line Supervisors of Construction Trades and Extraction Workers (47-1011): Directly supervise and coordinate activities of construction or extraction workers.

Entry-Level Educational Requirement: High school diploma or equivalent

Training Requirement: None

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

• Construction and Building Inspectors (47-4011): Inspect structures using engineering skills to determine structural soundness and compliance with specifications, building codes, and other regulations. Inspections may be general in nature or may be limited to a specific area, such as electrical systems or plumbing.

Entry-Level Educational Requirement: High school diploma or equivalent

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

Percentage of Community College Award Holders or Some Postsecondary Coursework: 46%

## **Occupational Demand**

Table 1. Employment Outlook for Construction Building Inspection Occupations in Bay Region

Occupation	2019 Jobs	2024 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
First-Line Supervisors of Construction Trades and Extraction Workers	16,062	16,084	21	0%	9,405	1,567	\$ 31	\$ 43
Construction and Building Inspectors	3,161	3,292	131	4%	2,281	380	\$ 34	\$ 48

Occupation	2019 Jobs	2024 Jobs	5-yr Change		5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Total	19,223	19,376	153	1%	11,686	1,947	\$31.49	\$43.82

Source: EMSI 2021.2

**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 Building Inspection Occupations in SC-Monterey Sub-region

Occupation	2019 Jobs	2024 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
First-Line Supervisors of Construction Trades and Extraction Workers	836	827	-9	-1%	491	82	\$ 27	\$ 35
Construction and Building Inspectors	182	186	3	2%	130	22	\$ 35	\$ 46
Total	1,018	1,013	-5	0%	621	104	\$28.43	\$36.97

Source: EMSI 2021.2

SC-Monterey Sub-Region includes: Monterey, San Benito and Santa Cruz Counties

Job Postings in Bay Region and SC-Monterey Sub-Region

Table 3. Number of Job Postings by Occupation for latest 12 months (Jun 2020 - May 2021)

Occupation	Bay Region	SC-Monterey
First-Line Supervisors of Construction Trades and Extraction Workers	1,551	58
Construction and Building Inspectors	532	34

Source: Burning Glass

Table 4a. Top Job Titles for Construction Building Inspection Occupations for latest 12 months (Jun 2020 - May 2021) Bay Region

Title	Bay	Title	Bay
Inspector	97	Construction Supervisor	37
Construction Superintendent	97	Building Inspector	30
Foreman	95	Concrete Foreman	29
Electrical Foreman	64	Home Inspector	21
Construction Inspector	59	Assistant Superintendent	21
Construction Foreman	57	Quality Assurance/Qc Leader Construction	19
Superintendent	46	Plumbing Foreman	17
Project Superintendent	40	Senior Superintendent	15

Title	Вау	Title	Bay
Solar Foreman	38	ICC Certified Senior Building Inspector	15

Source: Burning Glass

Table 4b. Top Job Titles for Construction Building Inspection Occupations for latest 12 months (Jun 2020 - May 2021) SC-Monterey Sub-Region

Title	SC-Monterey	Title	SC-Monterey
Inspector	7	Celery Foreman	3
Lead Construction & Engineering	4	Senior Construction Inspector	2
Building Inspector II	4	Resort Home Inspector	2
Solar Foreman	3	Ranch Foreman	2
Public Works Specialist	3	Project Superintendent	2
Foreman - Lettuce	3	Multifamily Lead Superintendent	2
Crew Lead I Foreman	3	Foreman	2
Construction Superintendent	3	Earth And Planetary Science Hydrogeology Laboratory/Field Specialist	2
Code Compliance Inspector II	3	Crew Foreman	2

Source: Burning Glass

# **Industry Concentration**

Table 5. Industries hiring Construction Building Inspection 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)
Commercial and Institutional Building Construction	2,072	2,084	1%	10%
Local Government, Excluding Education and Hospitals	1,891	1,923	2%	10%
Residential Remodelers	1,738	1,817	5%	9%
Electrical Contractors and Other Wiring Installation Contractors	1,484	1,667	12%	8%
Plumbing, Heating, and Air-Conditioning Contractors	1,145	1,181	3%	6%
New Single-Family Housing Construction (except For-Sale Builders)	1,224	1,087	-11%	6%
Engineering Services	692	762	10%	4%
All Other Specialty Trade Contractors	699	616	-12%	4%
Site Preparation Contractors	539	502	-7%	3%

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)
Painting and Wall Covering Contractors	500	468	-6%	3%

Source: EMSI 2021.2

Table 6. Top Employers Posting Construction Building Inspection Occupations in Bay Region and SC-Monterey Sub-Region (Jun 2020 - May 2021)

Employer	Bay	Employer	SC-Monterey
Tesla	47	Dole Food	6
Kaiser Permanente	46	Vanir Construction Management Incorporated	3
Pacific Gas and Electric Company	40	University Of California	3
Sunrun	38	Organicgirl	3
Maloney Construction	38	County Monterey	3
Vivint Solar	23	Solar Technologies	2
Cablecom Llc	22	Rtc Incorporated	2
Municipal Plan Check Services, Inc	15	Pajaro Dunes Resort	2
Mcguire Hester	13	Mountain Bikers Of Santa Cruz	2
HDR Incorporated	11	Monterey County California	2

Source: Burning Glass

# **Educational Supply**

There are five (5) community colleges in the Bay Region issuing 29 awards on average annually (last 3 years ending 2018-19) on TOP 0957.20 - Construction Inspection. In the SC-Monterey Sub-Region, there is one (1) community colleges that issued one (1) award on average annually (last 3 years) on this TOP code.

Table 7. Community College Awards on TOP 0957.20 - Construction Inspection in Bay Region

College	Subregion	Associate	Certificate Low	Total
Alameda	East Bay	0	4	4
Cabrillo	SC-Monterey	0	1	1
Diablo Valley	East Bay	2	3	5
Laney	East Bay	0	16	16
San Mateo	Mid-Peninsula	1	2	3
Total		3	26	29

Source: Data Mart

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

# **Gap Analysis**

Based on the data included in this report, there is a large labor market gap in the Bay region with 1,947 annual openings for the Construction Building Inspection and Codes occupational cluster and 29 annual (3-year average) awards for an annual undersupply of 1,918 students. In the SC-Monterey Sub-Region, there is also a gap with 104 annual openings and 1 annual (3-year average) awards for an annual undersupply of 103 students.

### **Student Outcomes**

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0957.20 - Construction Inspection

Metric Outcomes	Bay All CTE Program	Cabrillo All CTE Program	State 0957.20	Bay 0957.20	SC- Monterey 0957.20	Cabrillo 0957.20
Students with a Job Closely Related to Their Field of Study	75%	78%	86%	87%	N/A	N/A
Median Annual Earnings for SWP Exiting Students	\$44 <b>,</b> 575	\$39,206	\$54,838	\$84,840	N/A	N/A
Median Change in Earnings for SWP Exiting Students	31%	45%	25%	33%	N/A	N/A
Exiting Students Who Attained the Living Wage	52%	58%	74%	77%	N/A	N/A

Source: Launchboard Strong Workforce Program from version 2017-18.

# Skills, Certifications and Education

Table 9. Top Skills for Construction Building Inspection Occupations in Bay Region (Jun 2020 - May 2021)

Skill	Posting	Skill	Posting
Scheduling	805	Personal Protective Equipment (PPE)	190
Construction Management	711	Supervisory Skills	161
Project Management	526	Carpentry	150
Budgeting	498	Hand Tools	148
Occupational Health and Safety	487	Electrical Work	133
Quality Assurance and Control	386	Project Planning and Development Skills	123
Repair	291	Conflict Management	120
Plumbing	229	Wiring	119
Customer Service	226	Commercial Construction	115
Building Codes	210	Staff Management	115
Construction Inspection	209	Power Tools	113
Microsoft Project	209	Cleaning	112
Quality Management	207	Procore	111

Skill	Posting	Skill	Posting
Estimating	191	Cost Control	110

Source: Burning Glass

Table 10. Certifications for Construction Building Inspection Occupations in Bay Region (Jun 2020 - May 2021)

Certification	Posting	Certification	Posting
Driver's License	764	Certified Building Inspector	19
First Aid Cpr Aed	45	OSHA Safety 30 Hour	18
Electrical Certification	37	OSHA Safety 10 Hour	18
Electrician Certification	36	CDL Class A	13
Welding Certification	29	Department of Transportation (DOT) Certified	12
Cdl Class C	29	The American Society For Nondestructive Testing (ASNT) Certification	11
Occupational Safety and Health Administration Certification	27	Radiation Safety Certification	11
Certified Welding Inspector (CWI)	20	Passive Intermodulation Testing (PIM)	11
Project Management Certification	19	Master Electrician License	10
Contractors License	19	Certified General Contractor	10

Source: Burning Glass

Note: 53% 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.

Table 11. Education Requirements for Construction Building Inspection Occupations in Bay Region

Education (minimum advertised)	Latest 12 Mos. Postings	Percent 12 Mos. Postings
High school or vocational training	749	70%
Associate's degree	33	3%
Bachelor's degree and higher	307	27%

Source: Burning Glass

Note: 48% 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.

# 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 CCCCO 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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