



Labor Market Analysis for Program Review Carpentry Occupations (Report 2) Laney College

Prepared by Bay Regions Center of Excellence for Labor Market Research

September 2024

Recommendation

Based on all available data, there appears to be an “undersupply” of Carpentry workers compared to the demand for this cluster of occupations in the Bay Region and in the East Bay sub-region (Alameda, Contra Costa Counties). There is a projected annual gap of about 10,431 students in the Bay Region and 3,111 students in the East Bay Sub-Region.

Introduction

This report provides student outcomes data on employment and earnings for TOP 0952.10 - Carpentry 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 Laney College and in the region.

This report profiles Carpentry Occupations in the 12 county Bay region and in the East Bay sub-region for District or college program review at Laney College. The educational requirement for these occupations is a high school diploma or equivalent, or no formal education is required.

- **Carpenters (47-2031):** Construct, erect, install, or repair structures and fixtures made of wood and comparable materials, such as concrete forms; building frameworks, including partitions, joists, studding, and rafters; and wood stairways, window and door frames, and hardwood floors. May also install cabinets, siding, drywall, and batt or roll insulation. Includes brattice builders who build doors or brattices (ventilation walls or partitions) in underground passageways.
Entry-Level Educational Requirement: High school diploma or equivalent
Training Requirement: Apprenticeship
Percentage of Community College Award Holders or Some Postsecondary Coursework: 25%
- **Construction Laborers (47-2061):** Perform tasks involving physical labor at construction sites. May operate hand and power tools of all types: air hammers, earth tampers, cement mixers, small mechanical hoists, surveying and measuring equipment, and a variety of other equipment and instruments. May clean and prepare sites, dig trenches, set braces to support the sides of excavations, erect scaffolding, and clean up rubble, debris, and other waste materials. May assist other craft workers.
Entry-Level Educational Requirement: No formal educational credential
Training Requirement: Short-term on-the-job training
Percentage of Community College Award Holders or Some Postsecondary Coursework: 20%
- **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: 41%

- **Maintenance and Repair Workers, General (49-9071):** Perform work involving the skills of two or more maintenance or craft occupations to keep machines, mechanical equipment, or the structure of a building in repair. Duties may involve pipe fitting; HVAC maintenance; insulating; welding; machining; carpentry; repairing electrical or mechanical equipment; installing, aligning, and balancing new equipment; and repairing buildings, floors, or stairs.

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: 36%

- **Helpers--Production Workers (51-9198):** Help production workers by performing duties requiring less skill. Duties include supplying or holding materials or tools, and cleaning work area and equipment.

Entry-Level Educational Requirement: High school diploma or equivalent

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

Percentage of Community College Award Holders or Some Postsecondary Coursework: 19%

Occupational Demand

Table 1. Employment Outlook for Carpentry Occupations in Bay Region

Occupation	2023 Jobs	2028 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Carpenters	32,944	33,359	415	1%	14,633	2,927	\$25	\$34
Construction Laborers	29,130	30,143	1,013	3%	13,962	2,792	\$21	\$27
Construction and Building Inspectors	4,073	4,201	128	3%	2,493	499	\$38	\$52
Maintenance and Repair Workers, General	32,139	34,613	2,474	8%	17,508	3,502	\$22	\$28
Helpers--Production Workers	4,638	4,537	-101	-2%	3,616	723	\$18	\$21
Total	102,924	106,853	3,929	4%	52,212	10,443	\$23	\$30

Source: Lightcast 2024.3

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 Carpentry Occupations in East Bay Sub-region

Occupation	2023 Jobs	2028 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Carpenters	10,923	11,167	245	2%	4,875	975	\$23	\$33
Construction Laborers	9,653	9,830	176	2%	4,349	870	\$21	\$29
Construction and Building Inspectors	1,242	1,268	26	2%	742	148	\$37	\$49
Maintenance and Repair Workers, General	8,350	8,936	586	7%	4,492	898	\$20	\$27
Helpers--Production Workers	1,508	1,447	-61	-4%	1,158	232	\$17	\$20

Occupation	2023 Jobs	2028 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Total	31,676	32,648	972	3%	15,616	3,123	\$22	\$30

Source: Lightcast 2024.3

East Bay Sub-Region includes: Alameda, Contra Costa Counties

Job Postings in Bay Region and East Bay Sub-Region

Table 3. Number of Job Postings by Occupation for latest 12 months (Sep. 2023 - Aug. 2024)

Occupation	Bay Region	East Bay
Maintenance and Repair Workers, General	8,962	3,048
Construction Laborers	1,415	481
Construction and Building Inspectors	916	300
Carpenters	906	252
Helpers--Production Workers	43	13

Source: Lightcast

Table 4a. Top Job Titles for Carpentry Occupations for latest 12 months (Sep. 2023 - Aug. 2024) Bay Region

Title	Bay	Title	Bay
Maintenance Technicians	3,118	Field Technicians	149
Field Service Technicians	862	Lead Maintenance Technicians	139
General Laborers	487	Construction Inspectors	115
Maintenance Mechanics	332	Field Service Engineers	114
Apartment Maintenance Technicians	282	Facilities Technicians	113
Handymen	281	Building Inspectors	111
Carpenters	215	Service Technicians	104
Construction Laborers	210	Restoration Technicians	102
Facilities Maintenance Technicians	198	Finish Carpenters	86

Source: Lightcast

Table 4b. Top Job Titles for Carpentry Occupations for latest 12 months (Sep. 2023 - Aug. 2024) East Bay Sub-Region

Title	East Bay	Title	East Bay
Maintenance Technicians	1,071	Carpenters	62
Field Service Technicians	266	Lead Maintenance Technicians	55
General Laborers	182	Restoration Technicians	49
Handymen	110	Construction Inspectors	42

Title	East Bay	Title	East Bay
Apartment Maintenance Technicians	106	Service Technicians	36
Maintenance Mechanics	101	Maintenance Associates	32
Facilities Maintenance Technicians	77	Field Service Engineers	29
Field Technicians	69	Facilities Maintenance Managers	27
Construction Laborers	66	Building Inspectors	26

Source: Lightcast

Industry Concentration

Table 5. Industries hiring Carpentry Workers in Bay Region

Industry - 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2023)	Jobs in Industry (2028)	% Change (2023-28)	% Occupation Group in Industry (2023)
Residential Remodelers	12,679	13,708	8%	12%
New Single-Family Housing Construction (except For-Sale Builders)	7,412	6,998	-6%	7%
Commercial and Institutional Building Construction	6,971	7,726	11%	7%
Local Government, Excluding Education and Hospitals	5,500	5,709	4%	5%
All Other Specialty Trade Contractors	3,521	3,370	-4%	3%
Site Preparation Contractors	2,701	2,627	-3%	3%
Residential Property Managers	2,269	2,563	13%	2%
Hotels (except Casino Hotels) and Motels	2,081	2,334	12%	2%
Drywall and Insulation Contractors	1,854	1,863	0%	2%
Offices of Real Estate Agents and Brokers	1,844	1,984	8%	2%

Source: Lightcast 2024.3

Table 6. Top Employers Posting Carpentry Occupations in Bay Region and East Bay Sub-Region (Sep. 2023 - Aug. 2024)

Employer	Bay	Employer	East Bay
Aerotek	271	Aerotek	94
Fpi Management	182	Fpi Management	72
PeopleReady	168	AvalonBay Communities	59
Greystar	156	PeopleReady	47

Employer	Bay	Employer	East Bay
AvalonBay Communities	109	Official Pest Prevention	46
Intersolutions	88	Honeywell International	33

Source: Lightcast

Educational Supply

There is one community college in the Bay Region issuing 12 awards on average annually (last 3 years ending 2021-23) on TOP 0952.10 - Carpentry. In the East Bay Sub-Region, there is one community college that issued 12 awards on average annually (last 3 years) on this TOP code.

Table 7. Community College Awards on TOP 0952.10 - Carpentry in Bay Region

College	Subregion	Associate Degree	High unit Certificate	Low unit Certificate	Total
Laney	East Bay	4	5	3	12
Total	-	4	5	3	12

Source: Data Mart

Note: The annual average for awards is 2019-20 to 2021-22.

Gap Analysis

Based on the data included in this report, there is a labor market gap in the Bay region with 10,443 annual openings for the Carpentry occupational cluster and 12 annual (3-year average) awards for an annual undersupply of 10,431 students. In the East Bay Sub-Region, there is also a gap with 3,123 annual openings and 12 annual (3-year average) awards for an annual undersupply of 3,111 students.

Student Outcomes

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0952.10 - Carpentry

Metric Outcomes	Bay All CTE Program	Laney College All CTE Program	State 0952.10	Bay 0952.10	East Bay 0952.10	Laney College 0952.10
Students with a Job Closely Related to Their Field of Study	74%	73%	86%	70%	72%	72%
Median Annual Earnings for SWP Exiting Students	\$53,090	\$47,158	\$71,028	\$50,813	\$43,477	\$43,477
Median Change in Earnings for SWP Exiting Students	24%	15%	83%	9%	12%	12%
Exiting Students Who Attained the Living Wage	54%	54%	73%	46%	50%	50%

Source: Launchboard Strong Workforce Program Median of 2018 to 2021.

Skills, Certifications and Education

Table 9. Job Postings Top Skills for Carpentry Occupations in Bay Region (Sep. 2023 - Aug. 2024)

Skill	Posting	Skill	Posting
Plumbing	3,899	Drywall (Installation and Repair)	1,184

Skill	Posting	Skill	Posting
Carpentry	3,422	Machinery	1,085
Painting	2,936	Facility Repair and Maintenance	1,044
HVAC	2,697	Appliance Repair	900
Construction	2,171	Renovation	828
Preventive Maintenance	1,805	Landscaping	778
Hand Tools	1,457	Property Management	768
Power Tool Operation	1,416	Boilers	761
Field Service Management	1,361	Keys And Locks	689
Swimming Pool Maintenance	1,319	Roofing	668

Source: Lightcast

Table 10. Job Postings Certifications for Carpentry Occupations in Bay Region (Sep. 2023 - Aug. 2024)

Certification	Posting	Certification	Posting
HVAC Certification	313	EPA Universal Certification	89
Certified Apartment Service Technician	246	Certified Welding Inspector	39
Forklift Certification	110	Automotive Service Excellence (ASE) Certification	32
EPA 608 Technician Certification	109		

Source: Lightcast

Table 11. Education Requirements for Carpentry Occupations in Bay Region

Education Level	Job Postings	% of Total
High school or GED	4,379	73%
other	789	13%
Bachelor's degree & higher	826	14%

Source: Lightcast

Note: 58% of records have been excluded because they do not include a degree level. As a result, the chart above may not be representative of the full sample.

Methodology

Occupations for this report were identified by use of job descriptions and skills listed in O*Net. Labor demand data is sourced from Lightcast occupation and job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CCCCO Data Mart and CTE Launchboard.

Sources

O*Net Online

Lightcast

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

For more information, please contact:

- Yumi Huang, Research Analyst, Bay Region Center of Excellence, yhuang@cabrillo.edu or (831) 275-0043
- Marcela Reyes, Director, Research and Center of Excellence, mareyes@cabrillo.edu or (831) 219-8875