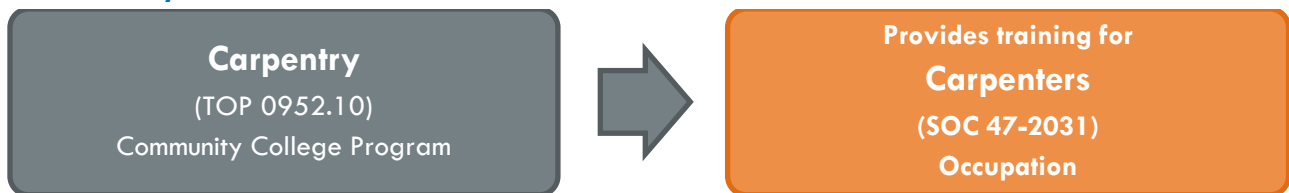


Carpenters

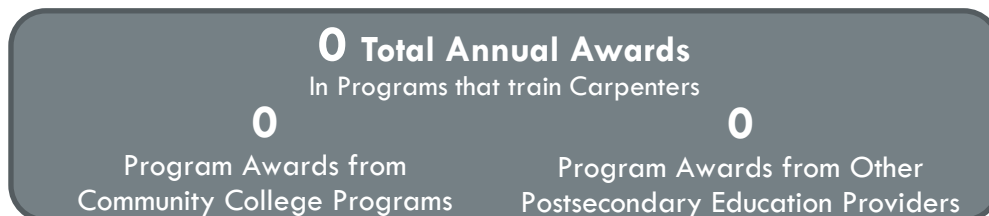
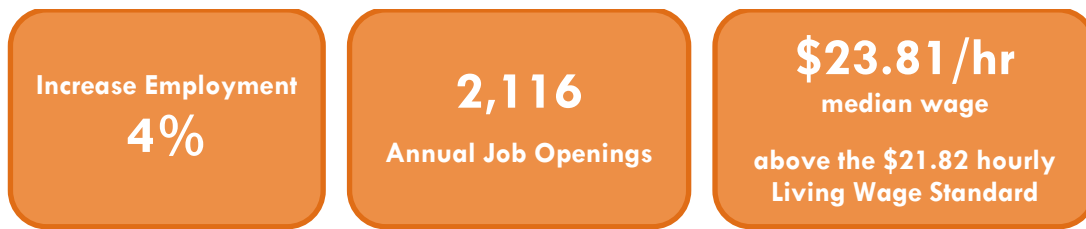
Inland Empire/Desert Region (Riverside and San Bernardino counties)

This workforce demand report uses state and federal job projection data developed before the economic impact of COVID-19. The COE is monitoring the situation and will provide more information as it becomes available. Please consult with local employers to verify their current employment needs.

Summary



Over the next five years (2021-2026), carpenter employment is projected to



The Inland Empire/Desert Centers of Excellence

 **Recommends**

Carpentry Program Expansion
to meet the need for more workers in the region

Introduction

This report provides labor market occupational demand and wage research and postsecondary program outcomes related to carpenter training. California Community College carpentry (TOP 0952.10) programs prepare students for employment through the instruction of the layout, fabrication, erection, and installation of structures using common systems of framing, construction materials, estimating, and blueprint reading (Taxonomy of Programs, 2012). The knowledge, skills, and abilities trained by the community college carpentry programs lead to the carpenters occupation.

Carpenters (SOC 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.

Sample job titles: Assembler, Bridge Carpenter, Bridge Repair Crew Person, Cabinet Maker, Carpenter, Concrete Carpenter, Construction Worker, Form Carpenter, Framer, Rough Carpenter

Entry-Level Educational Requirement: High school diploma or equivalent

Work Experience Required: None

Training Requirement: Apprenticeship

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 25%

Job Counts and Projections

In 2021, there were 20,758 carpenter jobs in the Inland Empire/Desert Region. Employment for this occupation is expected to increase by 4% through 2026, with 2,116 job openings projected annually. Exhibit 1 displays the job counts, five-year projected job growth, annual job openings, and the share of incumbent workers age 55 years and older in the region.

Exhibit 1: Five-year projections, 2021-2026

2021 Jobs	2026 Jobs	5-Yr % Change	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
20,758	21,591	4%	10,581	2,116	25%

Source: Emsi 2022.2

An online job advertisement (ad) search for carpenter jobs was conducted to reveal the employers seeking these workers, including the time it takes to fill positions, earnings information, and in-demand skills. Exhibit 2 shows the number of job ads posted during the last 12 months and the regional and statewide average time to fill this job. On average, employers in the local region fill online job ads for carpenters in 32 days, seven days shorter than the statewide average time to fill. Time to fill information indicates that employers in the region likely face fewer challenges filling open positions than other employers in California.

Exhibit 2: Job ads and time to fill

Job Ads	Regional Average Time to Fill (Days)	Statewide Average Time to Fill (Days)
125	32	39

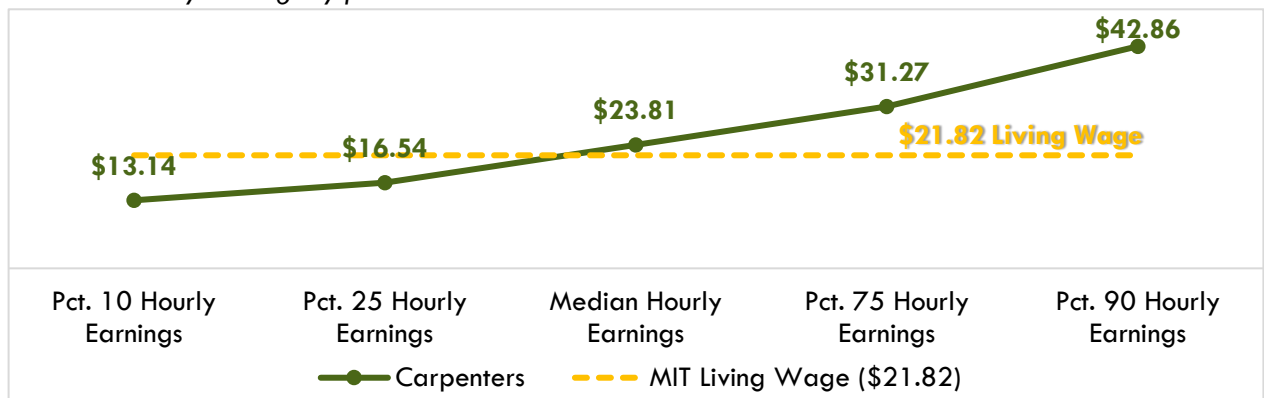
Source: Burning Glass – Labor Insights

Earnings and Benefits

Community colleges should ensure their training programs lead to employment opportunities that provide a living wage. The MIT living wage calculator estimates that an individual must earn \$21.82 per hour or \$45,386 annually in California (Glasmeier, 2022).

Exhibit 3 displays the hourly earnings for carpenters. The median hourly earnings for carpenters exceed the living wage standard, indicating that at least 50% of workers earn a living wage.

Exhibit 3: Hourly earnings by percentile



Source: Emsi 2022.2

Benefits information, provided in the California Labor Market Information Division’s occupational guides, reveals that carpenter benefits depend on union membership. Benefits for union carpenters typically include health, dental, and vision insurance; vacation; and retirement plans. Some non-union shops may also provide benefits (Detailed Occupational Guides, 2022).

Advertised Salary from Online Job Ads

Exhibit 4 displays online job ad salary data for carpenters over the last 12 months. Online job ad salary information reveals that employers are willing to pay carpenters an average annual salary of \$55,000, above the region's \$45,386 annual (\$21.82 hourly) MIT living wage standard. Consider the salary information with caution since only 58% (73 out of 125) of online job ads for this occupation provided salary information. The salary figures are prorated to reflect full-time, annual earnings status.

Exhibit 4: Advertised salary information

Number of job ads	Real-Time Salary Information				Average Annual Salary
	Less than \$35,000	\$35,000 to \$49,999	\$50,000 to \$74,999	More than \$75,000	
73	7%	29%	59%	5%	\$55,000

Source: Burning Glass – Labor Insights

Employers, Skills, Education, and Work Experience

Exhibit 5 displays the employers that posted the most job ads for carpenters in the region over the last 12 months. Showing employer names provides insight into where students may find employment after completing a program. The California Department of Corrections and Rehabilitation posted the most job ads for carpenters in the region over the last 12 months.

Exhibit 5: Employers posting the most job ads for carpenters

Top Employers	Job Ads
California Department of Corrections and Rehabilitation	9
Golden State Home Repair and Renovations	6
ATI Restoration, LLC	6
Rentokil North America	4
Western Exterminator Company	3
Sundt Construction Incorporated	3
EmpireWorks Reconstruction and Painting	3
All other employers	91
Total	125

Source: Burning Glass – Labor Insights

Exhibit 6 lists a sample of specialized and employability skills employers' seek when looking for workers to fill carpenter positions. Specialized skills are occupation-specific skills that employers request for industry or job competency. Employability skills are foundational skills that transcend industries and occupations; this category is often referred to as "soft skills." The skills requested in job ads may be utilized to guide curriculum development.

Exhibit 6: Sample of in-demand skills from employer job ads

Specialized skills (n=111)	Employability skills
<ul style="list-style-type: none"> • Repair • Framing • Drywall • Power Tools • Finish Carpentry 	<ul style="list-style-type: none"> • Physical Abilities • Detail-Oriented • Communication Skills • English • Teamwork/Collaboration

Source: Burning Glass – Labor Insights

Exhibit 7 displays the typical entry-level education, educational attainment, and minimum advertised education requirements for carpenters. According to the Bureau of Labor Statistics, approximately 25% of incumbent workers in this field hold a community college-level of educational attainment; "some college, no degree," and an "associate degree." All of the employers sought carpenters with a high school diploma or vocational training.

Exhibit 7: Typical entry-level education, educational attainment, and minimum advertised education requirements

Typical Entry-Level Education Requirement	CC-Level Educational Attainment*	Number of Job Ads	Real-Time Minimum Advertised Education Requirement		
			High school or vocational training	Associate degree	Bachelor's degree or higher
High school diploma or equivalent	25%	36	100%	-	-

Source: Emsi 2022.2, Burning Glass – Labor Insights

*Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework

Exhibit 8 displays the work experience typically required and the real-time work experience requirements from employer job ads for carpenters. Most employers sought candidates with three to five years of work experience.

Exhibit 8: Work experience required and real-time work experience requirements

Work Experience Typically Required	Number of job ads	Real-Time Work Experience		
		0 – 2 years	3 – 5 years	6+ years
None	74	42%	54%	4%

Source: Emsi 2022.2, Burning Glass – Labor Insights

Student Completions and Programs Outcomes

This section contains completion data for carpentry programs. Carpenters are most likely to be trained by carpentry (TOP 0952.10) programs. However, there are no carpentry programs currently offered in the region. Regional programs related to carpentry currently utilize the construction crafts technology (TOP 0952.00) and construction inspection (0957.20) program codes. Combined, regional programs related to carpentry have not issued awards over the last three academic years. Below are the regional community college program offerings related to carpentry.

- **College of the Desert:** Construction Inspection (TOP 0957.20)
 - Construction Technology Finish Carpentry
 - Construction Technology Framing Carpentry
- **Victor Valley College:** Construction Crafts Technology (TOP 0952.00)
 - Basic Framing and Carpentry

The Classification of Instructional Programs (CIP) carpentry/carpenter (CIP 46.0201) program provides the training most closely related to carpenters. The carpentry/carpenter program prepares individuals to apply technical knowledge and skills to lay out, cut, fabricate, install, and repair wooden structures and fixtures, using hand and power tools. Includes instruction in technical mathematics, framing, construction materials and selection, job estimating, blueprint reading, foundations, and roughing-in, finish carpentry techniques, and applicable codes and standards (CIP, 2022). Other postsecondary education institutions in the region have not issued awards from carpentry/carpenter programs over the last three academic years.

Summary of Findings

Community college carpentry programs provide the knowledge, skills, and abilities that lead to the carpenter occupation. Employment for this occupation is expected to increase by 4% through 2026, with 2,116 job openings available annually. The median hourly earnings for carpenters exceed the living wage standard, indicating that at least 50% of workers earn a living wage.

Carpenters may receive training from three community college programs, including carpentry (TOP 0952.10), construction crafts technology (0952.00), and construction inspection (0957.20) programs. Regional community college programs related to carpentry have not issued awards over the last three academic years.

The Centers of Excellence recommends expanding occupational training for carpenters due to the high demand and good hourly earnings for this occupation. Colleges considering this program should partner with applicable employers to document the skills needed for students to earn self-sustainable earnings after exiting these programs quickly.

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Appendix: Methodology

Job advertisement data is limited to the information provided by employers and the ability of artificial intelligence search engines to identify this information. Additionally, preliminary calculations by Georgetown Center on Education and the Workforce found that "just 30 to 40 percent of openings for candidates with some college or an associate degree, and only 40 to 60 percent of openings for high school diploma holders appear online" (Carnevale et al., 2014). Online job advertisements often do not reveal employers' hiring intentions; it is unknown if employers plan to hire one or multiple workers from a single online job ad or if they are collecting resumes for future hiring needs. A closed job ad may not be the result of a hired worker.

Table 1. 2021 to 2026 job growth, wages, entry-level education, training, and work experience required for carpenters in the Inland Empire/Desert Region (Riverside and San Bernardino counties combined)

Occupation (SOC)	2021 Jobs	5-Year Change	5-Year % Change	Annual Openings (New + Replacement Jobs)	Entry-Experienced Hourly Wage (10 th to 90 th percentile)	Median Hourly Wage (50 th percentile)	Average Annual Earnings	Entry-Level Education & On-The-Job-Training	Work Experience Required
Carpenters (47-2031)	20,758	833	4%	2,116	\$13.14 to \$42.86	\$23.81	\$54,700	High school diploma or equivalent & Apprenticeship	None

Source: Emsi 2022.2