

Carpenters

Labor Market Analysis: San Diego County

December 2017

Summary

The following list summarizes findings from the labor market analysis below for *Carpenters*:

- Between 2016 and 2021, *Carpenters* are projected to increase by 438 jobs (or four percent) in San Diego County.
- Employers in San Diego County will need to hire 1,180 workers annually to fill new jobs and to backfill jobs due to attrition such as retirement or turnover.
- Between 2010 and 2017, there was an average of 144 online job postings per year for *Carpenters* in San Diego County.
- *Carpenters* earn median hourly earnings of \$18.40, more than the self-sufficiency wage (\$13.09 per hour) for a single adult in San Diego County.
- According to the California Community Colleges Chancellor's Office Management Information System (MIS) Data Mart, one community college supplies the region with an annual average of 99 awards for this occupation: Palomar College.
- Comparing the labor demand (annual openings) with labor supply from the region's community colleges, there is a supply gap for this occupation in San Diego County, with 1,180 annual openings and 99 awards. Comparatively, there are 14,247 annual openings in California and 124 completions.
- Between January 1, 2015 and November 30, 2017, the top five employers in San Diego County for this occupation were Homeadvisor, University of California, Michaels Arts and Crafts, Tuff Shed Incorporated and Human Potential Consultants.
- The typical on-the-job training for this profession is apprenticeship. The typical entry-level education is a high school diploma or equivalent.

Introduction

This report provides labor market information in San Diego County for the following occupational code in the Standard Occupational Classification (SOC)¹ system:

¹ The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. bls.gov/soc.

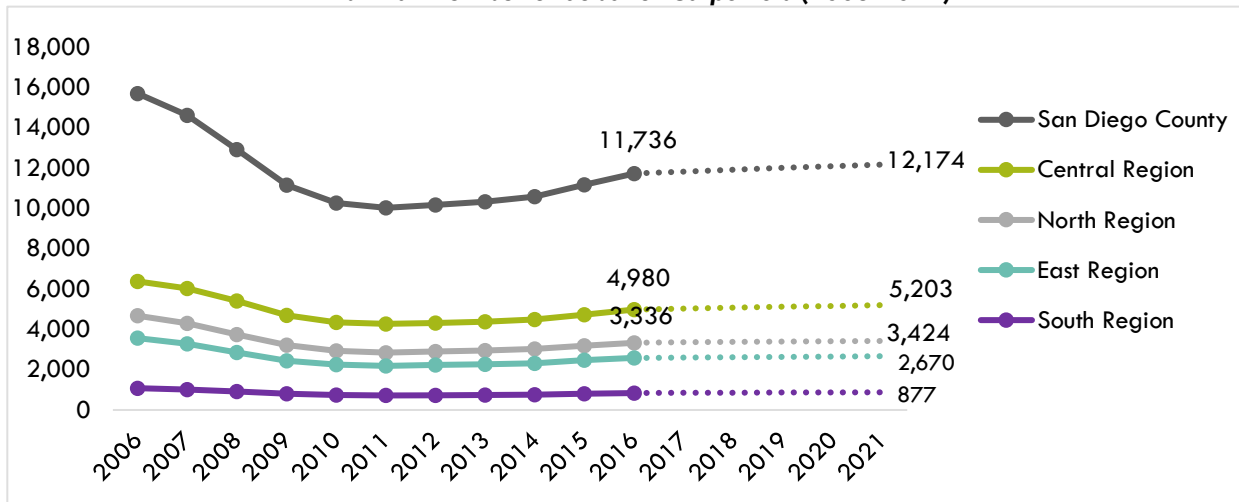
Carpenters (SOC 47-2031): Construct, erect, install or repair structures and fixtures made of wood, such as concrete forms; building frameworks, including partitions, joists, studding and rafters; and wood stairways, window and door frames and hardwood floors. May also install cabinets, siding, drywall and batt or roll insulation. Includes brattice builders who build doors or brattices (ventilation walls or partitions) in underground passageways. Sample reported job titles include:

- Framer
- Production Worker
- Foreman
- Construction Worker
- Construction Superintendent
- Union Carpenter
- Rough Carpenter
- Journeyman Carpenter
- Bridge Carpenter
- Form Carpenter

Projected Occupational Demand

Between 2016 and 2021, *Carpenters* are projected to increase by 438 jobs (or four percent) in San Diego County (Exhibit 1a and Exhibit 1b).²

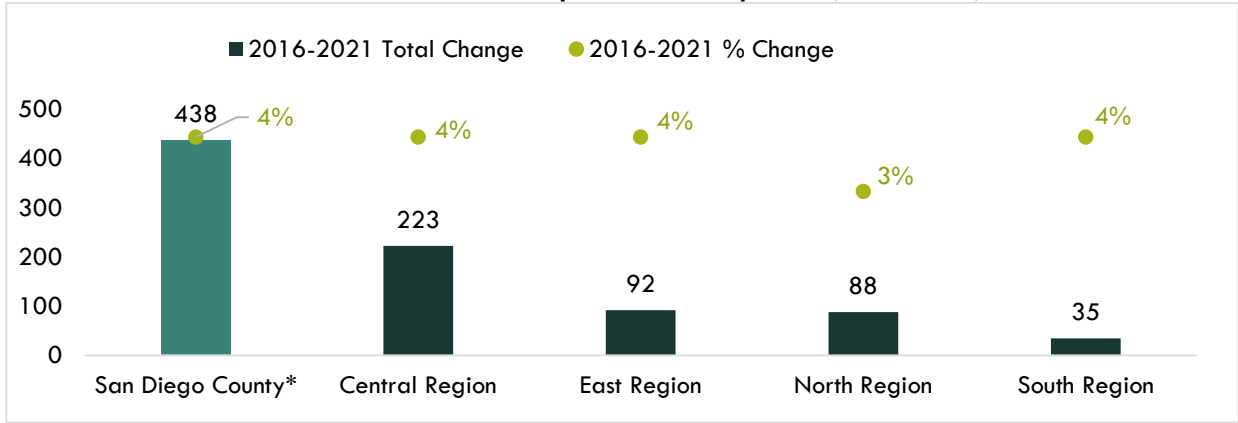
Exhibit 1a: Number of Jobs for Carpenters (2006-2021)³



² South, East, Central and North Regions' ZIP codes in this report are defined by the local Workforce Development Board, the San Diego Workforce Partnership.

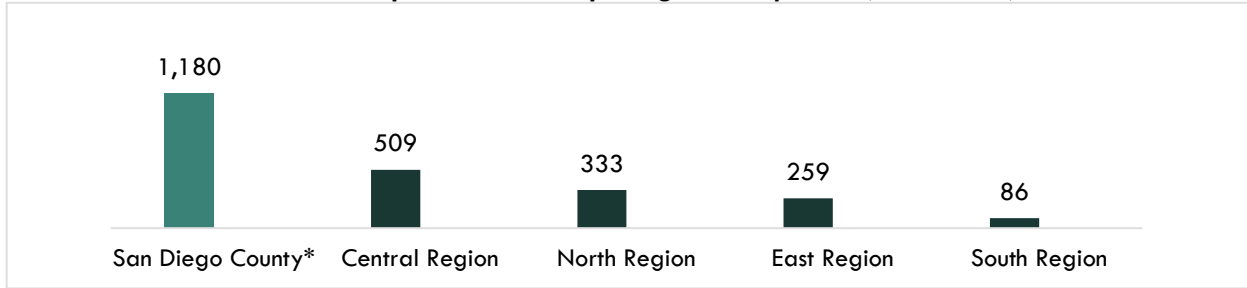
³ EMSI San Diego County (6073). 2017.03 Class of Worker. QCEW + Non-QCEW+ Self-Employed. 2006-2021.

Exhibit 1b: Five-Year Projections for Carpenters (2016-2021)⁴



Employers in San Diego County will need to hire 1,180 workers annually to fill new jobs and backfill jobs due to attrition such as retirement or turnover (Exhibit 2).

Exhibit 2: Projected Annual Openings for Carpenters (2016-2021)⁵



*Total annual openings for the subregions in San Diego County may not add up exactly due to rounding.

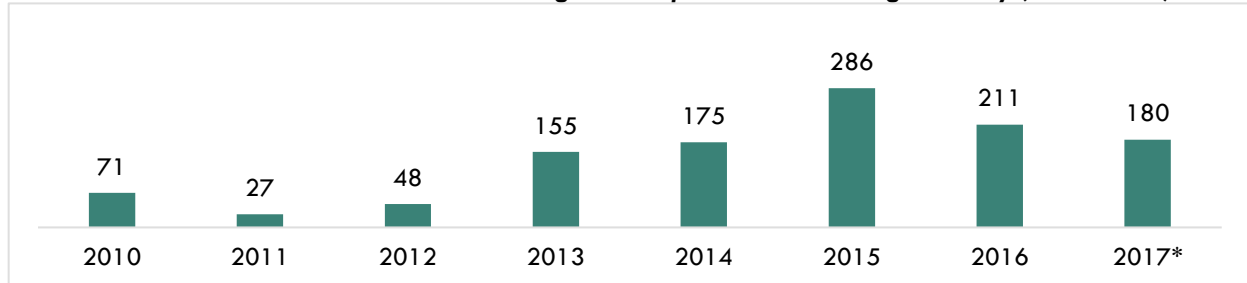
⁴ EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

⁵ EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

Online Job Postings

Between 2010 and 2017, there was an average of 144 online job postings per year for Carpenters in San Diego County (Exhibit 3).

Exhibit 3: Number of Online Job Postings for Carpenters in San Diego County (2010-2017)⁶

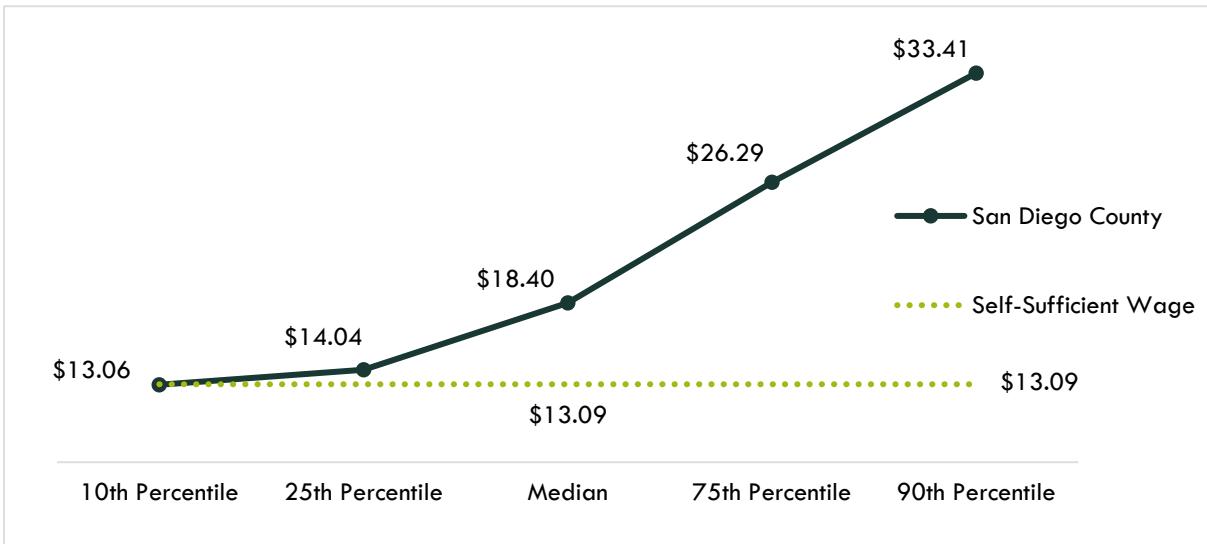


*January 1, 2017 through November 30, 2017

Earnings

Carpenters earn median hourly earnings of \$18.40, more than the self-sufficiency wage (\$13.09 per hour)⁷ for a single adult in San Diego County (Exhibit 4).

Exhibit 4: Hourly Earnings for Carpenters in San Diego County⁸



⁶ Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2010, 2011, 2012, 2013, 2014, 2015 and 2016. Jan.-Nov. 2017.

⁷ The self-sufficiency wage in San Diego for one adult is \$13.09 (insightccd.org/tools-metrics/self-sufficiency-standard-tool-for-california).

⁸ EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of related program completers/graduates/awards in San Diego County. To determine what programs are available, Exhibit 5 lists the Taxonomy of Programs (TOP) code(s) related to the SOC code analyzed.

Exhibit 5: Related TOP Codes in San Diego County

SOC 47-2031: Carpenters

TOP 095210: Carpentry

TOP 095250: Mill and Cabinet Work

According to the California Community Colleges Chancellor's Office Management Information System (MIS) Data Mart, **one** community college supplies the region with an annual average of **99** awards for this occupation: **Palomar College** (Exhibit 6). However, according to Classification of Instructional Programs (CIP) code data there are **43** completions in San Diego County related to this occupation.⁹ Exhibit 6 shows the annual average regional community college awards (associate degrees and certificates) conferred during the three academic years between 2013 and 2016, as well as other awards granted outside the California Community Colleges from 2012 to 2015, with the relevant TOP code.

Please note: An award is not equivalent to a single person in search of a job opening because a student may earn more than one award such as an associate degree in addition to a certificate.

Exhibit 6: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions by Occupation (Program Year 2012-13 through PY2015-16 Average)

TOP06	TOP06 Title	3-Yr Annual Average Supply (PY13-14 to PY15-16)	3-Yr Annual Average CC Awards (PY13-14 to PY15-16)	Other Educational Institutions 3-Yr Annual Average Awards (PY12-13 to PY14-15)
095210	Carpentry	38	38	0
	<ul style="list-style-type: none"> Palomar College 		38	
095250	Mill and Cabinet Work	61	61	0
	<ul style="list-style-type: none"> Palomar College 		61	
TOTAL		99		

⁹ EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

*Total number of awards may not add up exactly due to rounding.

Demand vs. Supply

Comparing the labor demand (annual openings) with labor supply¹⁰ from the region's community colleges, there is a **supply gap** for this occupation in San Diego County, with **1,180** annual openings and **99** awards. Comparatively, there are **14,247** annual openings in California and **124** completions.¹¹

Exhibit 7: Labor Demand (Annual Openings) Compared to Labor Supply (Average Annual Awards)

Community Colleges and Other Postsecondary Educational Institutions	Demand (Annual Openings)	Supply (Total Annual Average Supply)	Supply Gap or Oversupply
San Diego County	1,180	99	1,081
California	14,247	124	14,123

Please note: This is a basic analysis of supply and demand of labor for these occupations. This data should be used to discuss the potential gaps or oversupply of workers for these occupations; however, it should not be the only basis for determining whether or not a program should be developed. Additionally, the data does not include workers who are currently in the labor force who could fill these positions or workers who are not captured by publicly available data.

Student Outcomes

Based on the information available in the CTE LaunchBoard,¹² students who took courses in the related TOP codes exhibited the following outcomes (Exhibit 8).

Exhibit 8: Strong Workforce Program Metrics for TOP 095210 Carpentry vs. All Programs in San Diego-Imperial Region (PY2014-15)

Metric	TOP 095210	All Programs
Number of course enrollments ¹³	1,228	1,009,712
Number of students who got a degree or certificate ¹⁴	37	17,536
Number of students who transferred ¹⁵	0	6,269
Employed in the second fiscal quarter after exit ¹⁶	73%	66%

¹⁰ Labor supply can be found from two different sources: EMSI or the California Community Colleges Chancellor's Office MIS Data Mart. EMSI uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

¹¹ EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

¹² calpassplus.org/LaunchBoard/SWP.aspx.

¹³ The number of enrollments in courses assigned to the TOP code in the selected year.

¹⁴ The number of unduplicated students who earned a locally-issued certificate, Chancellor's Office approved certificate, associate degree, and/or California Community Colleges bachelor's degree in the selected TOP code.

¹⁵ Students who took non-introductory courses or completed a California Community Colleges Chancellor's Office award in the selected TOP code in selected year who subsequently enrolled for the first time in a four-year institution the following year.

¹⁶ Among all exiters with a valid SSN, the percentage who were employed two quarters after exiting California Community Colleges.

Metric	TOP 095210	All Programs
Employed in the fourth fiscal quarter after exit ¹⁷	73%	65%
Job closely related to field of study ¹⁸	N/A	N/A ¹⁹
Median earnings in the second fiscal quarter after exit ²⁰	\$11,927	\$9,134
Median change in earnings ²¹	50%	31%
Attained a living wage ²²	64%	50%

Top Employers

Between January 1, 2015 and November 30, 2017, the top five employers in San Diego County for this occupation were [Homeadvisor](#), [University of California](#), [Michaels Arts and Crafts](#), [Tuff Shed Incorporated](#) and [Human Potential Consultants](#) (Exhibit 9).

Exhibit 9: Top Employers in San Diego County for Carpenters

Top Employers	
<ul style="list-style-type: none"> • Homeadvisor • University of California • Michaels Arts and Crafts • Tuff Shed Incorporated • Human Potential Consultants 	<ul style="list-style-type: none"> • Naval Facilities Engineering Command • CIP Resources Incorporated • Marriott International Incorporated • U.S. Marine Corps • Go Staff

Skills, Education and Certifications

Exhibit 10 indicates the educational attainment for the occupation found currently in the national labor force. The typical on-the-job training for this profession is [apprenticeship](#). The typical entry-level education is a [high school diploma or equivalent](#).²³

¹⁷ Among exiting students with a valid SSN, the percentage who were employed four quarters after exiting California Community Colleges.

¹⁸ Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

¹⁹ Data for this metric has not been released for PY2014-15; however, in PY2013-14, the result was 81%.

²⁰ Among exiting students, the median second-quarter earnings one year after the year in which they exited California Community Colleges.

²¹ Among exiting students with a valid SSN, the percentage change in earnings one year before and one year after exiting California Community Colleges.

²² Among completers and skills-builders who exited, the proportion of students who attained a living wage.

²³ EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

Exhibit 10: National Educational Attainment of Carpenters

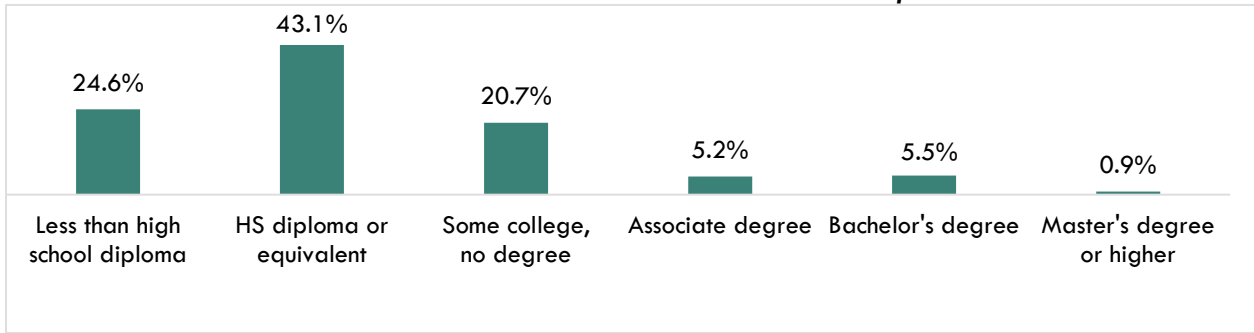


Exhibit 11 lists the top specialized, soft and software skills that appeared in online job postings between January 1, 2015 and November 30, 2017.

Exhibit 11: Top Skills for Carpenters in San Diego County²⁴

Specialized Skills	Soft Skills ²⁵	Software Skills
<ul style="list-style-type: none"> • Carpentry • Repair • Framing • Power Tools • Finish Carpentry 	<ul style="list-style-type: none"> • Physical Demand • Mathematics • Communication Skills • Writing • English 	<ul style="list-style-type: none"> • Microsoft Vista • Microsoft Office • Microsoft Excel • Word Processing • AutoCAD

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²⁴ Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2015 and 2016. Jan.-Nov. 2017.

²⁵ Also known as “Baseline Skills” in Labor Insight, Burning Glass Technologies.