CENTER OF EXCELLENCE
SAN DIEGO & IMPERIAL

Welders, Cutters, Solderers, and Brazers

Labor Market Analysis: San Diego County **October 2026**

Summary

NEW PROGRAM RECOMMENDATION?	EVIDENCE OF A SUPPLY GAP?	AT OR ABOVE THE LIVING WAGE?	EXPECTED LEVEL OF EDUCATION
Proceed with Caution	☑	☐	☐ Doctorate Degree ☐ Master's Degree ☐ Bachelor's Degree ☐ Associate Degree ☐ Some College or Certificate ☑ HS Diploma or Equivalent ☐ Less Than a HS Diploma ☐ Apprenticeship
SUPPORT FOR PROGRAM MODIFICATION?	**NUMBER OF INSTITUTIONS THAT PROVIDE TRAINING**	**NUMBER OF ANNUAL JOB OPENINGS**	
☑	MEDIUM	HIGH	

The San Diego & Imperial Center of Excellence (COE) developed this brief to assist the region's community colleges with strategic planning and program development. According to available data, Welders, Cutters, Solderers, and Brazers have a labor market demand of 326 annual job openings in San Diego County (while average demand for a single occupation in San Diego County is 271 annual job openings), and four institutions supply 309 awards, suggesting a supply gap. Entry-level wages are below the living wage, while median wages are above it. This brief recommends proceeding with caution when developing a new program and supports a program modification because 1) there is a small supply gap; 2) a high number of annual job openings exists for this occupation; however, 3) entry-level wages are below the living wage. Additionally, colleges should note that the expected level of 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:

Welders, Cutters, Solderers, and Brazers (SOC 51-4121): Use hand-welding, flame-cutting, hand-soldering, or brazing equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products. Sample reported job titles include:

- Assembly Line Brazer
- Fabrication Welder
- Maintenance Welder
- MIG Welder
- TIG Welder
- Welder Fitter
- Wirer

Projected Occupational Demand

Between 2025 and 2030, *Welders, Cutters, Solderers, and Brazers* are projected to increase by eight net jobs or zero percent (Exhibit 1). Employers in San Diego County will need to hire 326 workers annually to fill new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.

Exhibit 1: Number of Jobs for Welders, Cutters, Solderers, and Brazers (2025–2030)[2]

Occupational Title	2025 Jobs	2030 Jobs	2025–2030 Net Jobs Change	2025–2030 % Jobs Change	Annual Job Openings (Demand)
Welders, Cutters, Solderers, and Brazers	3,344	3,352	8	0%	326

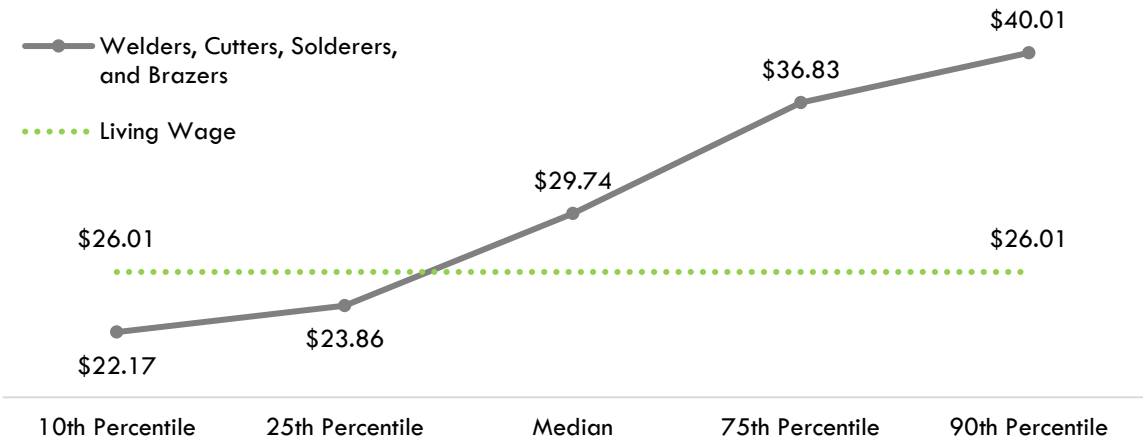
[1] The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. bls.gov/soc

[2] Lightcast Q3 2026; QCEW, Non-QCEW, Self-Employed.

Earnings

According to traditional[3] labor market information (LMI), *Welders, Cutters, Solderers, and Brazers* have entry-level hourly earnings of $23.86, or approximately $49,627 annually[4]. This is below the living wage of $26.01 per hour for a single adult in San Diego County (Exhibit 2).[5]

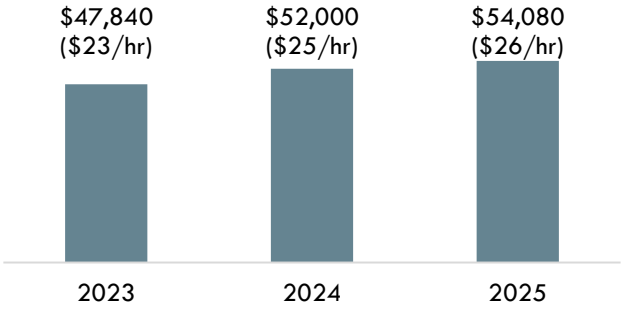
Exhibit 2: Hourly Earnings[6] for Welders, Cutters, Solderers, and Brazers in San Diego County[7]



[3] Traditional LMI is generally historical data captured by the U.S. Bureau of Labor Statistics (BLS) or the California Employment Development Department (EDD). It does not account for recent technological, economic, or legislative changes that may affect labor market demand and wages.
[4] Annualized salaries assume a full-time position with 2,080 work hours. Multiplying the hourly wage by 2,080 yields the annual salary.
[5] Center for Women's Welfare, University of Washington. (2024). The self-sufficiency standard for California 2024. selfsufficiencystandard.org/california
[6] 10th and 25th percentiles could be considered entry-level wages, and 75th and 90th percentiles could be considered experienced wages for individuals who may have been in the occupation longer, received more training than others, etc.
[7] Lightcast Q3 2026; QCEW, Non-QCEW, Self-Employed.

In online job postings, employers advertised between $23 and $26 per hour between January 1, 2023 and December 31, 2025 for *Welders, Cutters, Solderers, and Brazers* in San Diego County (Exhibit 3).[8] This suggests that employer-advertised wages in recent years are both below and above traditional Bureau of Labor Statistics (BLS) entry-level estimates.

Exhibit 3: Entry-Level Advertised Salaries in Online Job Postings for Welders, Cutters, Solderers, and Brazers in San Diego County (2023–2025)*



*Hourly wages are rounded to the nearest dollar amount.

Expected Level of Education

According to traditional LMI (data reported to the California Employment Development Department (EDD) and BLS), *Welders, Cutters, Solderers, and Brazers* typically require high school diploma or equivalent (Exhibit 4).[9]

Exhibit 4: Typical Entry-Level Education for Welders, Cutters, Solderers, and Brazers[10]

Occupational Title	Typical Entry-Level Education
Welders, Cutters, Solderers, and Brazers	High school diploma or equivalent

[8] Lightcast Q3 2026; Job Posting Analytics, January 2023 through December 2025.
[9] Lightcast Q3 2026; QCEW, Non-QCEW, Self-Employed.
[10] Lightcast Q3 2026; QCEW, Non-QCEW, Self-Employed.

Similarly, online job postings between January 1, 2023 and December 31, 2025 in San Diego County have high school diploma or equivalent as the most requested educational requirement for *Welders, Cutters, Solderers, and Brazers*; however, employers also expect the following certifications (Exhibit 5).[11]

Exhibit 5: Top Certifications for Welders, Cutters, Solderers, and Brazers in San Diego County in Online Job Postings (2023–2025)[12]

1. Security Clearance
2. Secret Clearance
3. American Welding Society Certification
4. Hazardous Materials Certification
5. 10-Hour OSHA General Industry Card

Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of awards in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes. There is one TOP code and two CIP codes related to *Welders, Cutters, Solderers, and Brazers* (Exhibit 6).

Exhibit 6: Related TOP and CIP Codes for Welders, Cutters, Solderers, and Brazers

TOP or CIP Code	TOP or CIP Program Title
TOP 0956.50	Welding Technology
CIP 15.0614	Welding Engineering Technology/Technician
CIP 48.0508	Welding Technology/Welder

[11] Lightcast Q3 2026; Job Posting Analytics, January 2023 through December 2025.
[12] Lightcast Q3 2026; Job Posting Analytics, January 2023 through December 2025.

According to TOP data, two community colleges supply San Diego County with awards for this occupation: Palomar College and San Diego College of Continuing Education. According to CIP data, two non-community-college institutions supply the county with awards: Escondido Adult School and CET-San Diego. Combined, these four institutions confer an average of 309 awards annually (Exhibit 7).[13]

Exhibit 7: Number of Awards Conferred by Postsecondary Institutions, PY2022–23 to PY2024–25 Average

TOP or CIP Code	TOP or CIP Program Title	3-Yr Annual Average CC Awards (2022–25)	Other Institutions 3-Yr Average Awards (2022–25)	Total Average Supply (2022–25)
0956.50	Welding Technology	**204**	**0**	**204**
	Palomar College	**44**	**0**	
	• Associate degree	10	0	
	• Certificate 30 < 60 units	13	0	
	• Certificate 6 < 18 units	21	0	
	SD College of Cont. Ed.	**160**	**0**	
	• Noncredit 480 < 960 hrs	21	0	
	• Noncredit 288 < 480 hrs	139	0	
15.0614	Welding Engineering Technology/Technician	**0**	**20**	**20**
	Escondido Adult School	**0**	**20**	
	• Certificate < 12 weeks	0	20	
48.0508	Welding Technology/Welder	**0**	**85**	**85**
	CET-San Diego	**0**	**85**	
	• Certificate 1 < 2 years	0	85	
	Total	**204**	**105**	**309**

[13]California Community Colleges Chancellor's Office MIS DataMart and National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), PY2022–23 through PY2024–25; retrieved October 14, 2026. IPEDS 2023 and 2024 revised files and 2025 provisional file. Includes credit and noncredit awards; excludes community colleges from IPEDS to prevent double counting. PY2025–26 DataMart is excluded because reporting completeness is not verified. Totals sum rounded award-level averages.

Demand vs. Supply

Comparing labor demand (annual openings) with labor supply[14] suggests that there is a supply gap for this occupation in San Diego County, with 326 annual openings and 309 awards. Comparatively, there are 3,017 annual openings in California and 3,359 awards, suggesting that there is an oversupply across the state[15] (Exhibit 8).

Exhibit 8: Labor Demand (Annual Openings) Compared with Labor Supply (Average Annual Awards)

	Demand (Annual Openings)	Supply (Total Annual Average Supply)	Supply Gap or Oversupply
San Diego	326	309	**17**
California	3,017	3,359	**-342**

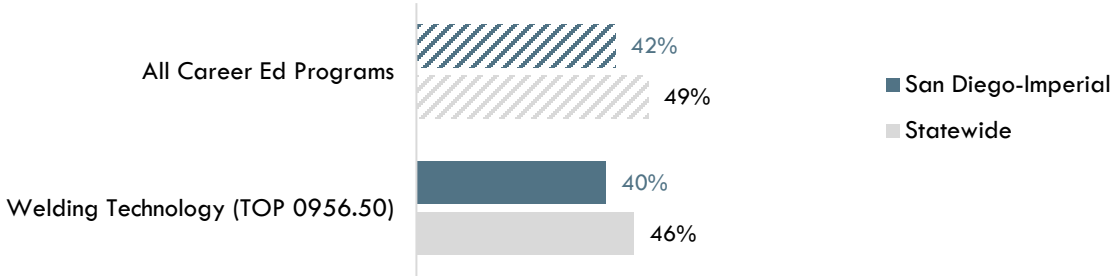
Please note: This is a basic analysis of supply and demand of labor. The data does not include workers currently in the labor force who could fill these positions or workers who are not captured by publicly available data. This data should be used to discuss the potential gaps or oversupply of workers;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

[14] Labor supply can be found from two different sources: Lightcast or the California Community Colleges Chancellor's Office MIS Data Mart. Lightcast uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.
[15] "Supply and Demand," Centers of Excellence Student Outcomes, coeccc.net/our-resources.

Student Outcomes and Regional Comparisons

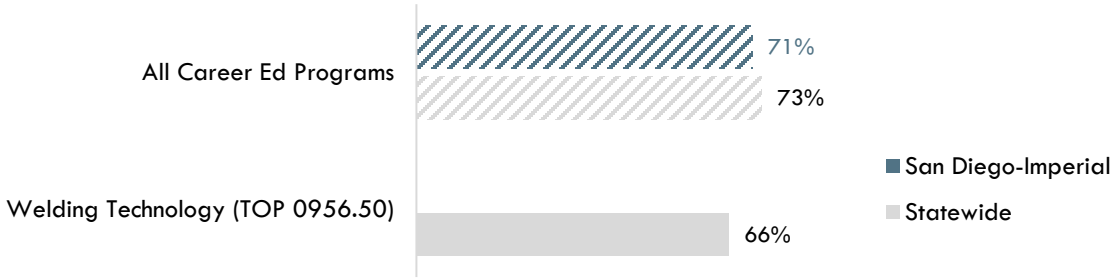
According to the California Community Colleges DataVista, 40 percent of students in the San Diego-Imperial region who studied Welding Technology (TOP 0956.50) attained the living wage after exiting higher education, compared to 46 percent statewide. In comparison, 42 percent of students in Career Education programs in the region and 49 percent statewide attained the living wage (Exhibit 9).[16]

Exhibit 9: Attained Living Wage in a Welding Technology (TOP 0956.50) Program, PY2023–24[17]



According to the California Community Colleges DataVista, 66 percent of students statewide who studied Welding Technology (TOP 0956.50) reported a job closely related to their field of study; regional data are insufficient. In comparison, 71 percent of students in Career Education programs in the region and 73 percent statewide reported a job closely related to their field of study (Exhibit 10).[18]

Exhibit 10: Job Closely Related to Field of Study in a Welding Technology (TOP 0956.50) Program, PY2022–23[19]



N/A indicates insufficient data

[16] California Community Colleges DataVista. datavista.cccco.edu

[17] Most recent year with available data is Program Year 2023–24. The measure reports nontransferring exiters with California wage records whose annualized earnings in the second fiscal quarter after the academic year of exit meet the single-adult living wage for the district's county. It is not a completers-only measure.

[18] California Community Colleges DataVista. datavista.cccco.edu

[19] Most recent year with available data is Program Year 2022–23. The measure reports nontransferring Career and Technical Education Outcomes Survey respondents whose job is very close or close to their field of study. No regional Welding Technology result is published for this year; its earlier result is not substituted.

Employers

Between January 1, 2023 and December 31, 2025, the top five employers in San Diego County for *Welders, Cutters, Solderers, and Brazers* are General Dynamics, Epsilon Systems Solutions, Delphinus Engineering, On Premise Products, and Solar Turbines, based on online job postings (Exhibit 11).[20]

Exhibit 11: Top Employers for Welders, Cutters, Solderers, and Brazers in San Diego County

Top Employers	
• General Dynamics • Epsilon Systems Solutions • Delphinus Engineering • On Premise Products • Solar Turbines	• International Marine and Industrial Applicators (IMIA) • TriMas • Austal • Chromalloy • M.C. Dean

Skills

Exhibit 12 lists the top specialized, soft, and software skills that appeared in online job postings between January 1, 2023 and December 31, 2025.[21]

Exhibit 12: Top Skills for Welders, Cutters, Solderers, and Brazers in San Diego County

Specialized Skills	Soft Skills	Software Skills
• Welding • Gas Tungsten Arc Welding • Flux-Cored Arc Welding • Metal Inert Gas (MIG) Welding • Welding Equipment • Hand Tools • Gas Metal Arc Welding • Fabrication • Aluminum • Blueprinting	• Operations • Communication • English Language • Detail Oriented • Mathematics	• N/A

[20] Lightcast Q3 2026; Job Posting Analytics, January 2023 through December 2025.

[21] Lightcast Q3 2026; Job Posting Analytics, January 2023 through December 2025. Skills must populate in at least 10% of job postings to be listed.

Prepared by:
Tina Ngo Bartel, Executive Director (tngobartel@miracosta.edu)
John Edwards, Research Analyst (jedwards@miracosta.edu)

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Important Disclaimers

All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. This study examines the most recent data available at the time of the analysis; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and the report findings; however, neither the California Community Colleges Centers of Excellence (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.