










Website Design and Development Occupations

Labor Market Analysis: San Diego County

February 2025

Summary

NEW PROGRAM RECOMMENDATION?	EVIDENCE OF A SUPPLY GAP?	AT OR ABOVE THE LIVING WAGE?	EXPECTED LEVEL OF EDUCATION
 <p>Do Not Proceed with New Program</p>	 	 	<input type="checkbox"/> Doctorate Degree <input type="checkbox"/> Master's Degree <input checked="" type="checkbox"/> Bachelor's Degree <input type="checkbox"/> Associate Degree <input type="checkbox"/> Some College or Certificate <input type="checkbox"/> HS Diploma or Equivalent <input type="checkbox"/> Less Than a HS Diploma <input type="checkbox"/> Apprenticeship
SUPPORT FOR PROGRAM MODIFICATION?	NUMBER OF INSTITUTIONS THAT PROVIDE TRAINING	NUMBER OF ANNUAL JOB OPENINGS	
 	<p>HIGH</p> 	<p>MEDIUM</p> 	

The San Diego & Imperial Center of Excellence (COE) developed this brief to assist the region's community colleges with strategic planning and program development. *Website Design and Development Occupations* include "Web and Digital Interface Designers" and "Web Developers." According to available data, *Website Design and Development Occupations* in San Diego County have a labor market demand of 197 annual job openings (while average demand for a single occupation in San Diego County is 289 annual job openings), and 11 institutions supply 721 awards for these occupations, suggesting that there is an oversupply in the labor market. Employers historically reported to the California Employment Development Department (EDD) and U.S. Bureau of Labor Statistics (BLS) that on average *Website Design and Development Occupations* earned entry-level earnings of \$30.28 per hour, which is above the living wage of \$26.01 per hour in San Diego County. Recent online job postings (2022-2024) also suggest high wages, with entry-level earnings posted between \$46 to \$49 per hour. This brief recommends to not proceed developing a new program but supports a program modification because 1) there is an oversupply in the region, and 2) there is a high number of institutions that train for these occupations.

Introduction

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

- **Web and Digital Interface Designers** (SOC 15-1255): Design digital user interfaces or websites. Develop and test layouts, interfaces, functionality, and navigation menus to ensure compatibility and usability across browsers or devices. May use web framework applications as well as client-side code and processes. May evaluate web design following web and accessibility standards, and may analyze web use metrics and optimize websites for marketability and search engine ranking. May design and test interfaces that facilitate the human-computer interaction and maximize the usability of digital devices, websites, and software with a focus on aesthetics and design. May create graphics used in websites and manage website content and links.
- **Web Developers** (SOC 15-1254): Develop and implement websites, web applications, application databases, and interactive web interfaces. Evaluate code to ensure that it is properly structured, meets industry standards, and is compatible with browsers and devices. Optimize website performance, scalability, and server-side code and processes. May develop website infrastructure and integrate websites with other computer applications.

For the purpose of this report, these occupations are referred to as *Website Design and Development Occupations*.

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.. <https://www.bls.gov/soc/>.

Projected Occupational Demand

Between 2023 and 2028, employers in San Diego County will need to hire 197 workers annually to fill new jobs and backfill jobs in *Website Design and Development Occupations* due to attrition caused by turnover and retirement, for example (Exhibit 1). “Web and Digital Interface Designers” are projected to have the most labor market demand between 2023 and 2028, with 128 annual job openings.

Exhibit 1: Number of Jobs for Website Design and Development Occupations (2023-2028)²

Occupational Title	2023 Jobs	2028 Jobs	2023 – 2028 Net Jobs Change	2023 - 2028 % Net Jobs Change	Annual Job Openings (Demand)
Web and Digital Interface Designers	1,568	1,647	79	5%	128
Web Developers	908	962	54	6%	69
Total	2,476	2,609	133	5%	197

Earnings

According to traditional³ labor market information (LMI), entry-level hourly earnings for *Website Design and Development Occupations* range from \$27.04 to \$33.51 (Exhibit 2).

Exhibit 2: Hourly Earnings for Website Design and Development Occupations in San Diego County⁴

Occupational Title	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Web and Digital Interface Designers	\$33.51	\$48.48	\$70.80
Web Developers	\$27.04	\$41.00	\$58.69

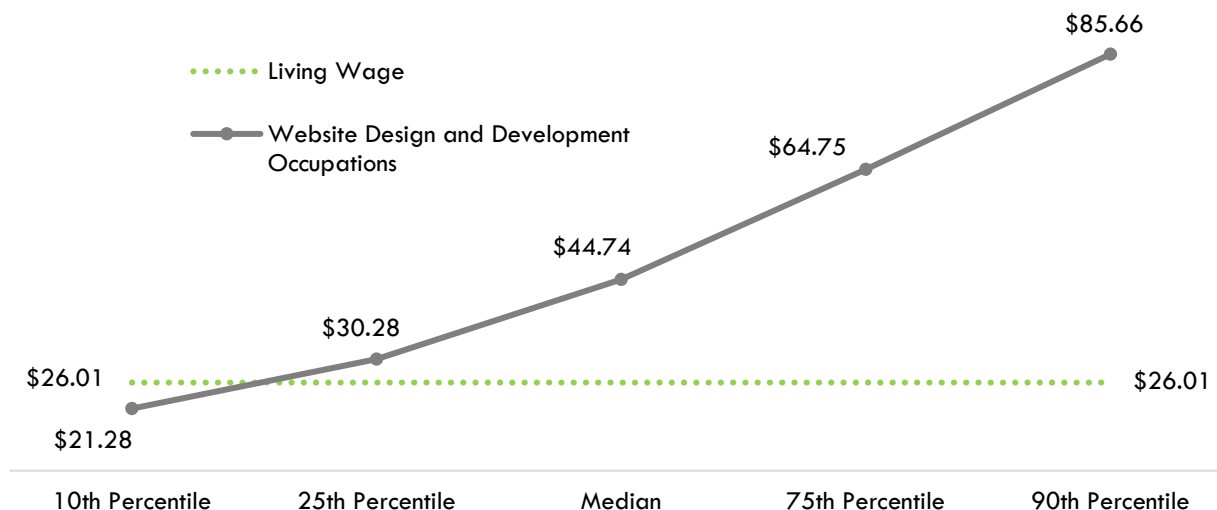
² Lightcast 2024.04; QCEW, Non-QCEW, Self-Employed.

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 Lightcast 2024.04; QCEW, Non-QCEW, Self-Employed.

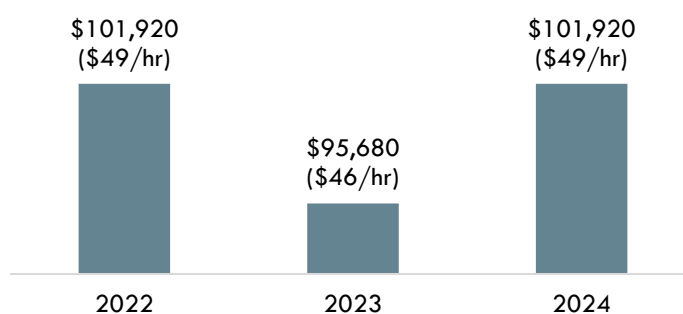
On average, the entry-level hourly earnings are \$30.28—or \$62,982.40 annual salary⁵; this is more than the living wage for a single adult in San Diego County, which is \$26.01 per hour (Exhibit 3).⁶

Exhibit 3: Hourly Earnings⁷ for Website Design and Development Occupations in San Diego County⁸



Between January 1, 2022 and December 30, 2024, employers advertised between \$46 to \$49 per hour in online job postings for Website Design and Development Occupations in San Diego County (Exhibit 4).⁹ This suggests that employers in recent years are increasing wages due to labor market forces that may not be captured by traditional LMI.

Exhibit 4: Entry-Level Advertised Salaries in Online Job Postings for Website Design and Development Occupations in San Diego County (2022-2024)*



*Hourly wages are rounded to the nearest dollar amount.

⁵ Annualized salaries assume a full-time position with 2,080 hours. Multiplying the hourly wage with 2,080 yields the annual salary.

⁶ Center for Women's Welfare, University of Washington. (2024). The self-sufficiency standard for California 2024. selfsufficiencystandard.org/California.

⁷ 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.

⁸ Lightcast 2024.04; QCEW, Non-QCEW, Self-Employed.

⁹ Lightcast 2024.04; "Job Posting Analytics." 2022-2024.

Expected Level of Education

According to traditional LMI, *Website Design and Development Occupations* have a national educational attainment of a [bachelor's degree](#).¹⁰ (Exhibit 5).

Exhibit 5: National Educational Attainment for *Website Design and Development Occupations*¹¹

Occupational Title	Typical Entry-Level Education
Web Developers	Bachelor's degree
Web and Digital Interface Designers	Bachelor's degree

Online job postings between January 1, 2022 and December 31, 2024 in San Diego County had a [bachelor's degree](#) as the most requested educational requirement for *Website Design and Development Occupations*; however, employers also expected the following certifications (Exhibit 6).¹²

Exhibit 6: Top Certifications for *Website Design and Development Occupations* in San Diego County in Online Job Postings (2022-2024)¹³

1. Security Clearance
2. Secret Clearance
3. Top Secret-Sensitive Compartmented Information (TS/SCI Clearance)
4. Top Secret Clearance
5. IAT Level II Certification
6. GIAC Certifications
7. Cisco Certified Network Associate Security (CCNA Security)
8. GIAC Global Industrial Cyber Security Professional
9. CompTIA Cybersecurity Analyst (CySA+) CE
10. CompTIA Security+ CE

¹⁰ Lightcast 2024.04; QCEW, Non-QCEW, Self-Employed.

¹¹ Lightcast 2024.04; QCEW, Non-QCEW, Self-Employed.

¹² Lightcast 2024.04; "Job Posting Analytics." 2022-2024.

¹³ Lightcast 2024.04; "Job Posting Analytics." 2022-2024.

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 are **two** TOP codes and **two** CIP codes related to *Website Design and Development Occupations* (Exhibit 7).

Exhibit 7: Related TOP and CIP Codes for Website Design and Development Occupations¹⁴

TOP or CIP Code	TOP or CIP Program Title
TOP 0614.30	Website Design and Development
TOP 0709.00	World Wide Web Administration
CIP 11.0801	Web Page, Digital/Multimedia and Information Resources Design
CIP 11.1004	Web/Multimedia Management and Webmaster

According to TOP data, **six** community colleges supply the region with awards for these occupations: Cuyamaca College, MiraCosta College, Palomar College, San Diego Continuing Education, San Diego Mesa College, and Southwestern College. According to CIP data, **five** non-community-college institutions supply the region with awards: Ashford University, California Institute of Arts & Technology, California Institute of Arts & Technology-National City, Platt College-San Diego, and San Diego Global Knowledge University (Exhibit 8).

Exhibit 8: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions (Program Year 2019-20 Through Program Year 2022-23 Average)

TOP6 or CIP Code	TOP6 or CIP Program Title	3-Yr Annual Average CC Awards (PY20-21 to PY22-23)	Other Educational Institutions 3-Yr Annual Average Awards (PY19-20 to PY21-22)	Total Average Supply (PY19-20 to PY22-23)
0614.30	Website Design and Development	662	0	662
	Cuyamaca	7	0	
	• Associate Degree	5	0	
	• Certificate 30 < 60 units	1	0	
	• Certificate 16 < 30 units	1	0	

¹⁴ This brief uses a conservative estimate of program supply and only calculates awards from the TOP and CIP codes listed in Exhibit 7.

TOP6 or CIP Code	TOP6 or CIP Program Title	3-Yr Annual Average CC Awards (PY20-21 to PY22-23)	Other Educational Institutions 3-Yr Annual Average Awards (PY19-20 to PY21-22)	Total Average Supply (PY19-20 to PY22-23)
	MiraCosta	7	0	
	• Associate Degree	2	0	
	• Certificate 30 < 60 units	3	0	
	• Certificate 6 < 18 units	2	0	
	Palomar	6	0	
	• Associate Degree	3	0	
	• Certificate 16 < 30 units	3	0	
	San Diego Cont Ed	606	0	
	• Noncredit < 48 hrs	18	0	
	• Noncredit 288 < 480 hrs	26	0	
	• Noncredit 144 < 192 hrs	145	0	
	• Noncredit 96 < 144 hrs	242	0	
	• Noncredit 48 < 96 hrs	175	0	
	San Diego Mesa	17	0	
	• Associate Degree	11	0	
	• Certificate 16 < 30 units	6	0	
	Southwestern	19	0	
	• Associate Degree	3	0	
	• Certificate 16 < 30 units	2	0	
	• Certificate 8 < 16 units	3	0	
	• Certificate 6 < 18 units	11	0	
0709.00	World Wide Web Administration	0	0	0
	Southwestern	0	0	
	• Certificate 6 < 18 units	0	0	

TOP6 or CIP Code	TOP6 or CIP Program Title	3-Yr Annual Average CC Awards (PY20-21 to PY22-23)	Other Educational Institutions 3-Yr Annual Average Awards (PY19-20 to PY21-22)	Total Average Supply (PY19-20 to PY22-23)
11.0801	Web Page, Digital/Multimedia and Information Resources Design	0	59	59
	Ashford University	0	2	
	• Bachelor's degree	0	2	
	California Institute of Arts & Technology	0	1	
	• Certificates > 1 year	0	1	
	California Institute of Arts & Technology-National City	0	0	
	• Certificates > 1 year	0	0	
	Platt College-San Diego	0	0	
	• Certificates > 1 year	0	0	
	San Diego Global Knowledge University	0	56	
	• Certificates > 1 year	0	56	
			Total	721

Demand vs. Supply

Comparing labor demand (annual openings) with labor supply¹⁵ suggests that there is an oversupply for these occupations in San Diego County, with 197 annual openings and 721 awards. Comparatively, there are 3,454 annual openings in California and 1,104 awards, suggesting that there is a supply gap across the state¹⁶ (Exhibit 9).

Exhibit 9: Labor Demand (Annual Openings) Compared with Labor Supply (Average Annual Awards)

	Demand (Annual Openings)	Supply (Annual Awards)	Supply Gap or Oversupply
San Diego	197	721	- 524
California	3,454	1,104	2,350

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.

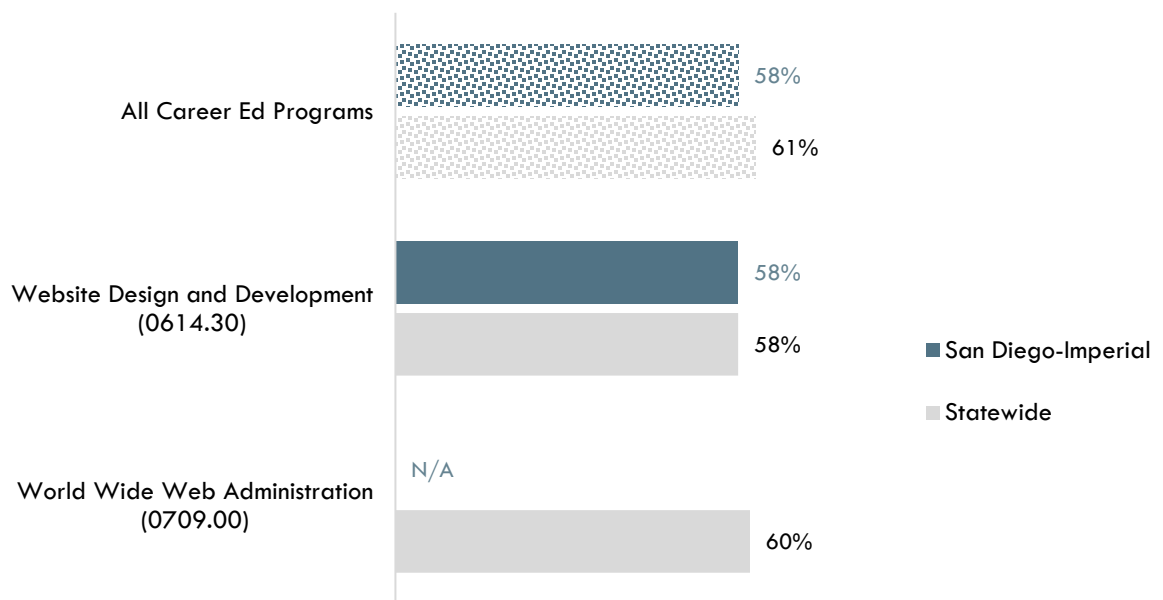
¹⁵ Labor supply can be found from two different sources: Lightcast or the California Community Colleges Chancellor's Office MIS Data Mart. Lightcast uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

¹⁶ "Supply and Demand," Centers of Excellence Student Outcomes, coecc.net/our-resources.

Student Outcomes and Regional Comparisons

According to the California Community Colleges DataVista, **58** percent of students in the San Diego-Imperial region earned a living wage after completing a program related to *Website Design and Development Occupations*, compared to **58** to **60** percent statewide and 61 percent of students in Career Education programs in general across the state (Exhibit 10).¹⁷

Exhibit 10: Percentage of Students Who Earned a Living Wage by Program, PY2021-22¹⁸



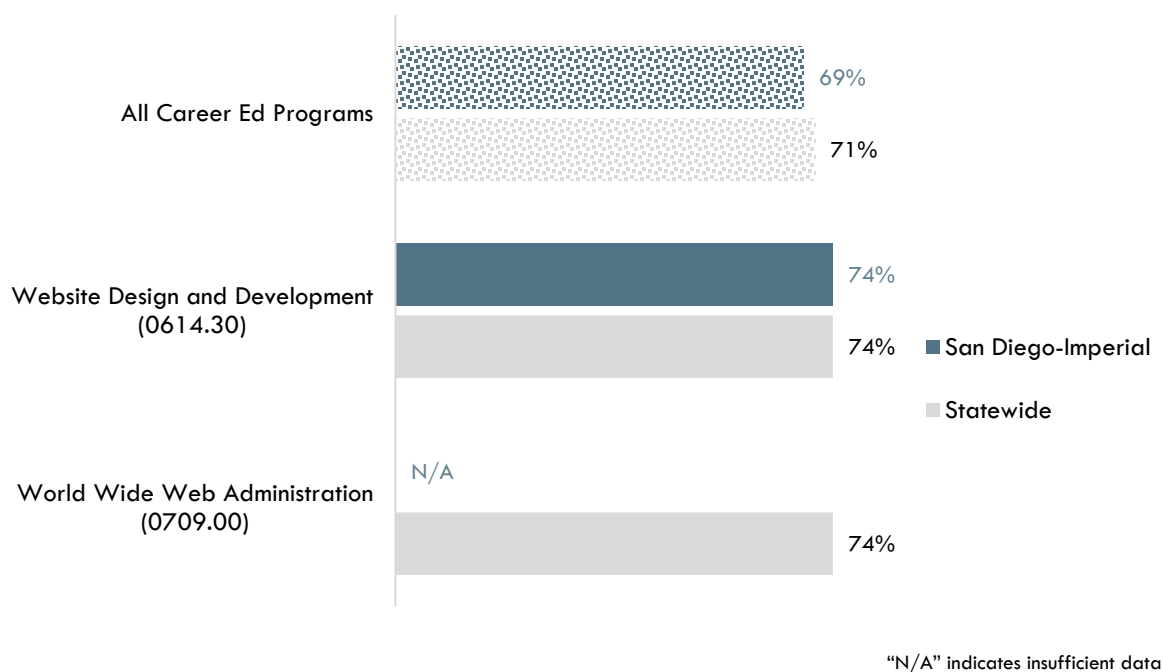
"N/A" indicates insufficient data

¹⁷ DataVista, California Community Colleges, datavista.cccco.edu/.

¹⁸ Most recent year with available data is Program Year 2021-22. Among completers and skills builders who exited, the percentage of students who attained a living wage.

According to the California Community Colleges DataVista, 74 percent of students in the San Diego-Imperial region obtained a job closely related to their field of study after completing a program related to *Website Design and Development Occupations*, compared to 74 percent statewide and 71 percent of students in Career Education programs in general across the state (Exhibit 11).¹⁹

Exhibit 11: Percentage of Students in a Job Closely Related to Field of Study by Program, PY2020-21²⁰



¹⁹ DataVista, California Community Colleges, datavista.cccco.edu/.

²⁰ Most recent year with available data is Program Year 2020-21. Percentage of Students in a Job Closely Related to Field of Study: Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

Employers

Between January 1, 2022 and December 31, 2024, the top five employers in San Diego County for *Website Design and Development Occupations* were [CyberCoders](#), [Jobot](#), [Apple](#), [ServiceNow](#), and [General Atomics](#) based on online job postings (Exhibit 12).

Exhibit 12: Top Employers for Website Design and Development Occupations in San Diego County²¹

Top Employers	
<ul style="list-style-type: none">• CyberCoders• Jobot• Apple• ServiceNow• General Atomics	<ul style="list-style-type: none">• Randstad• Kforce• UnitedHealth Group• Intuit• Amazon

Skills

Exhibit 13 lists the top specialized, soft, and software skills that appeared in online job postings between January 1, 2022 and December 31, 2024.

Exhibit 13: Top Skills for Website Design and Development Occupations in San Diego County²²

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none">• User Experience• Computer Science• Front End• User Interface• Software Engineering• Agile Methodology• Software Development• User Experience Design• Prototyping• Wireframing• Scalability• Debugging• Front End Design• User Interface Design• Project Management	<ul style="list-style-type: none">• Communication• Research• Problem Solving• Management• Leadership• Innovation• Detail Oriented• Writing• Troubleshooting (Problem Solving)• Planning• Self-Motivation• Mentorship• Customer Service• Interpersonal Communications• Operations	<ul style="list-style-type: none">• JavaScript• Cascading Style Sheets• React.js• HyperText Markup Language• Application Programming Interface• Amazon Web Services• Java• Node.js• Git• Angular• Python• TypeScript• RESTful API• SQL• Figma

²¹ Lightcast 2024.04; "Job Posting Analytics." 2022-2024.
²² Lightcast 2024.04; "Job Posting Analytics." 2022-2024.

Prepared by:

Tina Ngo Bartel, Executive Director (tngobartel@miracosta.edu)

John Edwards, Research Analyst (jedwards@miracosta.edu)

San Diego & Imperial Center of Excellence



CENTER OF EXCELLENCE
SAN DIEGO & IMPERIAL

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 Centers of Excellence for Labor Market Research (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.