Labor Market Analysis for: 1230.10 Registered Nursing

Inland Empire/Desert Center of Excellence, Jan 2025

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Summary
Program LMI Endorsement

Program LMI Endorsement		All LMI Criteria Met		Criteria Met vith Caution)	LMI Criteria NOT Met
			` \	/	
	F	Program LMI Endorseme	nt Criteria		
Supply Gap	Yes ✓		No □		
	Comments: There is projected to be 2,704 annual job openings throughout the Inland Empire/Desert regio which is more than the 1,959 annual average awards conferred by educational institutions over the last years. Supply data includes both community college awards (535) and non-community college awards (1,42)				stitutions over the last 3
Living Wage	age Yes ✓				No □
	Comments: All (100%) of annual job openings for this occupation have entry-level hourly wages above the IE/D living wage of 20.42. ¹				
Education		Yes □			No 🗸
	Comments: Most job post (52%). See Exhibits 8 and 9		ons require a b	pachelor's degre	e or higher degree

The Inland Empire/ Desert (IE/D) Center of Excellence for Labor Market Research (IE/D COE) reviewed the following occupations to prepare this report:

- Above Middle-Skill (typically require a bachelor's degree)
 - Registered Nurses (29-1141)

Summary of findings

Demand

- The number of jobs related to the assessed occupation is projected to increase 13% through 2028, with 2,704 annual job openings (new and replacement jobs).
- Hourly entry-level wages for all occupations are above living wage at the 25th percentile hourly wage, estimated to be \$50.59 in IE/D.
- There were 12,445 online job postings from 976 employers over the past 12 months with the highest postings for registered nurses and home health registered nurses.
- Most job postings for target occupations require a bachelor's degree (46%), followed by an associate degree (39%), high school diploma or equivalent (9%), and above a bachelor's degree (6%).

Supply

- On average, there were 1,959 annual awards conferred by educational institutions over the last 3 years in related fields: 535 from community colleges and 1,424 from other institutions (e.g., 4-year universities, private schools).
- IE/D community college students that exited these programs in the 2021-22 academic year earned a median annual wage of \$72,973 (\$35.08 per hour).
- 96% of students that exited their program in 2021-22 reported that they are working in a job closely related to their field of study.
- Community college programs play an important role diversifying the talent pipeline in these occupations. Most IE/D professionals in registered nursing occupations are White or Asian (65%), "mid-career" age category (51%), and female (87%). Most community college students in related programs are Hispanic/Latino (55%), "early career" or "mid-career" age category (75%), and female (80%).

¹ The <u>UW self-sufficiency standard</u> is currently used by the CO and other COEs, the self-sufficiency standard was last updated by UW in 2024. To provide an alternative perspective, the COE will provide an alternative living wage calculation from MIT in the analysis below as an additional reference point. MIT estimates, the living wage for an adult with no kids living in 2024 is \$26.30 in Riverside County and \$25.17 in San Bernadino County.

Introduction

California Community College Registered Nursing (TOP 1230.10) prepares students in programs leading to licensure by the Board of Registered Nursing. Includes nursing care in specialty areas (Taxonomy of Programs, 2023). The knowledge, skills, and abilities trained by Registered Nursing programs lead to employment in occupations related to registered nursing.

Job Demand

In 2023, there were 32,322 jobs in occupations related to registered nursing in the IE/D region. Regional employment for this occupation group is projected to increase by 13% through 2028 with 2,704 job openings projected annually. Exhibit 1 displays the job count, five-year projected job growth, and job openings in the region.

Exhibit 1. Five-year projections for occupations related to registered nursing, IE/D Region, 2023-2028

Occupation	SOC	2023 Jobs	2028 Jobs	2023 - 2028 % Change	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)
Registered Nurses	29-1141	32,322	36,581	13%	13,522	2,704

SOURCE: LIGHTCAST 2024.3

Job Postings

The following analysis for occupations related to registered nursing using online job posting data.

Important note: The data produced in this section were generated by leveraging online job posting data sourced from Lightcast, which is the labor market analytics software tool COEs use to produce these briefs. The job posting data is collected from scraping online job boards such as LinkedIn, Indeed, Glassdoor and many others. The process Lightcast uses to assemble this data does have some limitations due to methods that recruitment professionals sometimes use (e.g., posting one job to fill multiple positions). For example, the number of jobs posted is not necessarily the same as the number of job vacancies.² While not perfect, Lightcast leverages machine learning and other AI technologies to enrich, deduplicate and aggregate this information to make it a meaningful dataset.

Exhibit 2 displays the number of job ads posted for occupations related to registered nursing over the last 12 months and the median posting duration. Over the previous 12 months, there were 12,445 unique job postings for occupations related to registered nursing in the region from 976 employers.

Exhibit 2. Job ads and posting duration, IE/D Region, Jan 2024 - Dec 2024

Job Title	Job Ads ▼	Median Posting Duration
Registered Nurses	12,445	26 days

² "Job Postina Analytics (JPA) Methodology." Lightcast Knowledge Base, https://kb.lightcast.io/en/articles/6957446-job-posting-analytics-jpa-methodology

Earnings

\$90

\$70

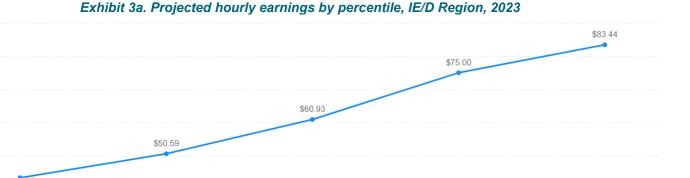
\$50

\$40

\$43.34

Pct. 10 Hourly Earnings

Exhibit 3a displays the hourly earnings for registered nurses and Exhibit 3b displays the hourly earnings for job postings of the same occupation and compares both to the UW Self-Sufficiency Standard for the IE/D of \$20.42³ and the MIT IE/D living wage of \$25.73.⁴ The living wage criteria is determined by using the data in Exhibit 3a but Exhibit 3b is also shown to provide regional context using job posting data.

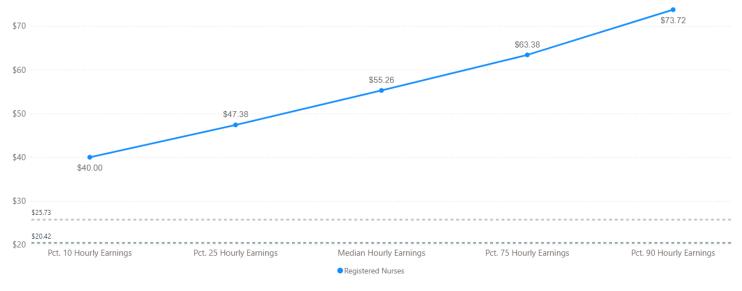


Median Hourly Earnings Pct. 75 Hourly Earnings Pct. 90 Hourly Earnings

Source: Lightcast 2024.2

Pct. 25 Hourly Earnings

Exhibit 3b. Hourly earnings of job postings by percentile, IE/D Region, Jan 2024 - Dec 2024



Source: Lightcast 2024.2

All projected entry-level earnings (that is, the earnings of the lowest paid 25% of employees in the IE/D) were above the UW Self-Sufficiency Standard for the IE/D (see Exhibit 3a). The occupation was also above the MIT living wage for an adult with no children (\$25.73) in projected entry-level earnings (see Exhibit 3a).

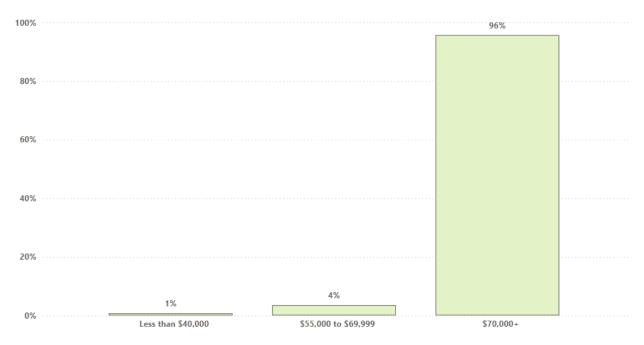
³ The <u>UW self-sufficiency standard</u> is currently used by the CO and other COEs, the self-sufficiency standard was last updated by UW in 2024. To provide an alternative perspective, the COE will provide an alternative living wage calculation from MIT in the analysis below as an additional reference point. MIT estimates, the living wage for an adult with no kids living in 2024 is \$26.30 in Riverside County and \$25.17 in San Bernadino County.

⁴ ibid.

Advertised Salary from Online Job Ads

Exhibit 4 displays the regional online advertised salaries for the occupations related to registered nursing over the last 12 months. The salary information of online job ad data suggests most employers (96%) advertise an annual salary greater than \$70,000 (\$33.65 per hour).

Exhibit 4. Online advertised salaries for registered nursing, IE/D Region, Jan 2024 - Dec 2024



Source: LIGHTCAST 2024.3

Online Job Advertisements: top job titles, skills, education & work experience.

Exhibit 5 displays the job titles most frequently used in job postings for the occupations related to registered nursing over the last 12 months. Assessing the top advertised job titles may provide insight into the types of positions sought by employers.

> Exhibit 5. Job titles most frequently used in job ads, IE/D Region, Jan 2024 - Dec 2024

Job Title	Unique Postings
Registered Nurses	1284
Home Health Registered Nurses	434
Registered Nurse Case Managers	333
Emergency Room Registered Nurses	292
ICU Registered Nurses	286
Medical Surgical Registered Nurses	273
Hospice Registered Nurses	232
Telemetry Registered Nurses	231
Labor and Delivery Registered Nurses	191

Exhibit 6 displays the employers posting the most job ads for this occupational group during the last 12 months. Showing employer names can provide insight into where students may find employment after completing a program and may inform job development and other employer engagement targets for faculty and staff involved in related programs. "Kaiser Permanente" and "Loma Linda University Health" had the highest unique job posts for this occupational group in the last 12 months. Posting intensity is the ratio of total job posts to unique job posts which are deduplicated. A higher posting intensity can represent the level of effort and activity the organization is putting into hiring for that position. The following report comes directly from Lightcast's Job Posting Analytics dashboard.

Exhibit 6. Employers posting the most job ads, IE/D Region, Jan 2024 - Dec 2024

Company	Total/Unique (Dec 2023 - Nov 2024)	Posting Intensity	Median Posting Duration
Kaiser Permanente	3,909 / 964	4:1	24 days
Loma Linda University Health	3,512 / 621	6:1	20 days
Sharp Healthcare	754 / 345	2:1	15 days
Universal Health Services	1,138 / 286	4:1	24 days
County Of Riverside	582 / 245	2:1	42 days
HCA Healthcare	1,811 / 232	8:1	22 days
Eisenhower Health	511 / 180	3:1	27 days
Desert Regional Medical Center	807 / 162	5:1	27 days
Providence	839 / 142	6:1	23 days
Redlands Community Hospital	1,247 / 126	10:1	27 days

Source: Lightcast 2024.3

Exhibit 7 displays the top common, specialized and computer skills that were included in the job postings over the last 12 months. Today's demand is an important indicator of which skills employers are looking for in the current market. Analyzing skills from a historical perspective as well as projecting the future needs of employers may provide insight into how the job posting skills demand compares to the market as a whole. Rapidly growing skills are those that are increasing in demand at a faster rate than the market as a whole. ⁵

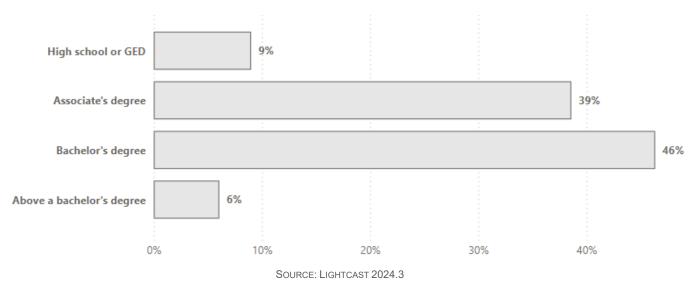
Exhibit 7. Top 10 in-demand skills from employer job ads, IE/D Region, Jan 2024 - Dec 2024

Common skills	Total Postings ▼	Skill Growth Relative to Market
Communication	3,142	Lagging
Management	2,779	Stable
Planning	2,749	Growing
Leadership	2,056	Stable
Customer Service	1,779	Stable
Critical Thinking	1,751	Rapidly Growing
Problem Solving	1,625	Growing
Accountability	1,487	Growing
Operations	1,471	Stable
Teaching	1,429	Growing
Specialized skills	Total Postings	Skill Growth Relative to Market
Nursing	8,172	Rapidly Growing
Nursing Care	3,202	Growing
Nursing Process	2,434	Rapidly Growing
Medical Records	1,697	Growing
Discharge Planning	1,690	Growing
Home Health Care	1,635	Growing
Clinical Practices	1,631	Growing
Medication Administration	1,598	Growing
Acute Care	1,461	Growing
Patient Education And Counseling	1,268	Growing
Computer Skills	Total Postings	Skill Growth Relative to Market
Microsoft Outlook	645	Rapidly Growing
Microsoft Excel	635	Growing
Microsoft PowerPoint	528	Rapidly Growing
Microsoft Word	178	Stable
Microsoft Office	158	Growing
Epic EMR	127	Growing
Spreadsheets	49	Rapidly Growing
Patient Management Software	47	Growing
eClinicalWorks (ECW)	35	Rapidly Growing
Clinic Management Systems	24	Growing

⁵ "What are Lightcast Skill Projects", Lightcast Knowledge base, https://kb.lightcast.io/en/articles/8496296-what-are-lightcast-skill-projections

Exhibit 8 includes the minimum educational requirements from job postings for this occupational group with bachelor's degree (46%) greater than associate degree (39%) or High school diploma or equivalent (9%) or above a bachelor's degree (6%).

Exhibit 8 Minimum educational requirements in job postings for this occupational group, IE/D Region, Jan 2024 - Dec 2024



For registered nurses, the Bureau of Labor Statistics (BLS) education attainment data in Exhibit 9 for current professionals in the occupation of interest indicates that approximately 32% of workers have completed some college or an associate degree as their highest level of education.

Exhibit 9 National-level Education Attainment for Occupations

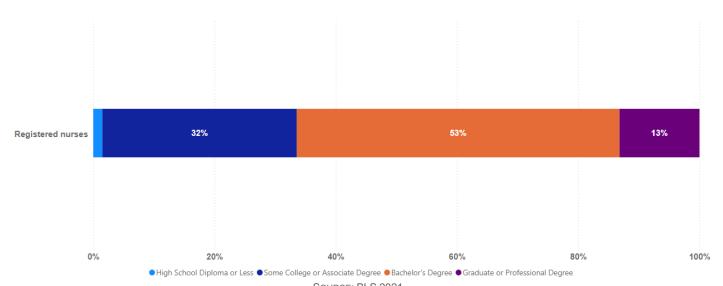
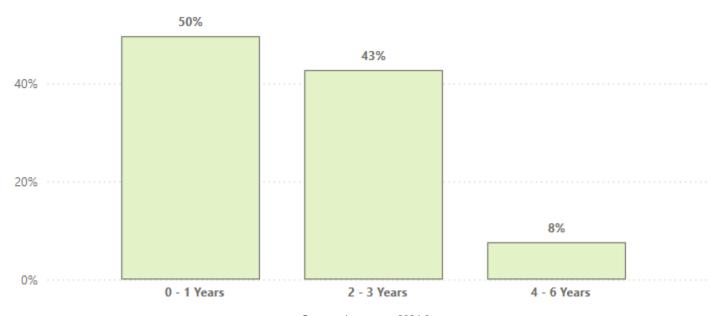


Exhibit 10 displays the work experience typically required from employer job ads for this occupational group. The majority (50%) of employers listing minimum experience requirements sought candidates with 0-1 years of previous work experience.

Exhibit 10 Work experience requirements, IE/D Region, Jan 2024 - Dec 2024



Student Completions and Program Outcomes

Exhibit 11 displays student completions for the Registered Nursing (TOP 1230.10) programs over the last three academic years (2020-2023). In the previous three academic years, seven regional community colleges issued an average of 535 awards in relevant programs.

Exhibit 11 Annual average community college awards for Registered Nursing (TOP 1230.10), IE/D, 2020-2023

Top Code	Program	College	2020-2021 Awards	2021-2022 Awards	2022-2023 Awards	3-Year Award Average
1230.10	Registered Nursing	Riverside	166	153	166	162
1230.10	Registered Nursing	Victor Valley	77	155	85	106
1230.10	Registered Nursing	San Bernardino	99	86	80	88
1230.10	Registered Nursing	College of the Desert	40	64	83	62
1230.10	Registered Nursing	Chaffey	36	57	64	52
1230.10	Registered Nursing	Mt. San Jacinto	56	21	44	40
1230.10	Registered Nursing	Copper Mountain	22	21	30	24
Total			496	557	552	535

SOURCE: MIS DATA MART

Non-Community College Supply

Exhibit 12a and Exhibit 12b displays award completion data available for this IE/D non-community college program: Registered Nursing/Registered Nurse (CIP 51.3801).

Exhibit 12a shows programs that prepares non-nurses, without prior healthcare experience, to become registered nurses by teaching them the knowledge and clinical skills needed to pass the National Council Licensure Examination (NCLEX-RN), also referred to as "pre-licensure" programs.

Exhibit 12b shows programs for students that have an Associate Degree in Nursing (ADN) to earn a Bachelor of Science in Nursing (BSN), also referred to as "ADN to BSN" programs.

Exhibit 12a Annual average non-community college awards for registered nursing programs, Only Pre-Licensure Programs, IE/D, 2019-2022

CIP	Program	College	2019-2020 Awards	2020-2021 Awards	2021-2022 Awards	3-Year Award Average
51.3801	Registered Nursing/Registered Nurse	California Baptist University	212	236	245	231
51.3801	Registered Nursing/Registered Nurse	California State University-San Bernardino	115	162	122	133
51.3801	Registered Nursing/Registered Nurse	Loma Linda University	228	200	208	212
51.3801	Registered Nursing/Registered Nurse	San Joaquin Valley College- Ontario	36	27	34	32
51.3801	Registered Nursing/Registered Nurse	West Coast University-Ontario	534	698	842	691
Total			1,125	1,323	1,451	1,300

Source: IPEDS

Exhibit 12a Annual average non-community college awards for registered nursing programs, Only ADN to BSN Programs, IE/D, 2019-2022

CIP	Program	College	2019-2020 Awards	2020-2021 Awards	2021-2022 Awards	3-Year Award Average
51.3801	Registered Nursing/Registered Nurse	University of Phoenix- California	203	118	52	124

Source: IPEDS

Added together, in the previous three academic years, six regional non-community college institutions issued an average of 1,424 awards in relevant programs. Note: while the San Joaquin Valley College-Ontario program is an associate degree program, the other programs are bachelor's degree or higher education level.

Note: IED community college faculty have noted that there are additional active programs in the region, including programs at Arizona College of Nursing - Ontario, Pacific College - Nursing School, and Smith Chason College School of Nursing. However, supply data was not available for programs at these institutions in the time period and/or data sources used by the California COE.

Strong Workforce Program Outcomes

California SWP program outcome data may provide useful insight into the likelihood of success for the proposed program. Community college student outcome information based on the selected TOP code and region is provided in Exhibit 13.

Exhibit 13 Registered Nursing strong workforce program outcomes, IE/D & California, most recent academic year

Program metric title	Inland Empire/Desert	Statewide
Attained a living wage (completers and skills-builders)	85%	72%
Completed 9+ career education units in one year	70%	57%
Job closely related to the field of study	96%	95%
Median annual earnings (all exiters)	\$72,972	\$63,028
Students who attained a noncredit workforce milestone in a year	95%	39%
Students who earned a degree, certificate, or attained apprenticeship	481	4,421
Unduplicated count of enrolled students	1,540	18,373

SOURCE: LAUNCHBOARD

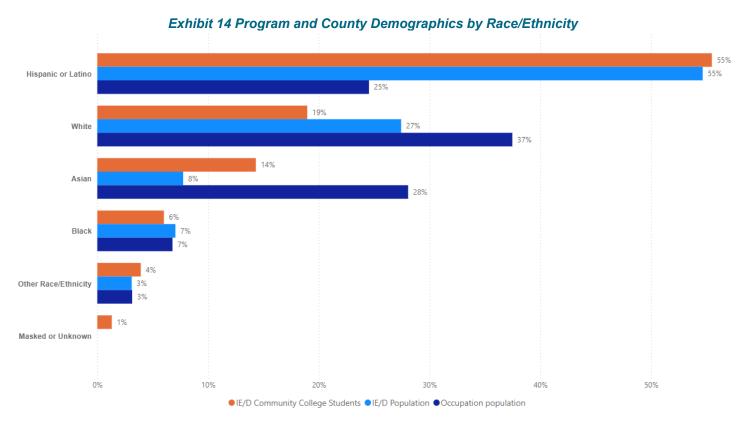
Building an Inclusive Economy

This section examines demographic data for IE/D community college students in Registered Nursing programs compared to the IE/D population. We also include demographics for related occupation data for registered nursing. This analysis can be used to:

- Understand the community college system's current or potential role supporting a diverse talent pipeline into the occupations of interest.
- Inform students (and the faculty and staff working with them) the extent to which individuals from similar demographic groups are over or underrepresented in the professions related to their field of study.
- Inform employers of the diverse talent pipeline coming from the community college system for the occupations analyzed.

Exhibit 14 compares the race/ethnicity of IE/D community college students enrolled in Registered Nursing programs compared to the IE/D population.

Notably, 55% of students enrolled in Registered Nursing programs are Hispanic/Latino, which is significantly higher than Hispanic/Latino workers in occupations related to registered nursing in the IE/D region (25%). Additionally, 37% of the IE/D population that are employed in occupations related to registered nursing are White, which is significantly higher than both IE/D community college students (19%) and IE/D population (27%). Though 28% of the workers employed in occupations related to registered nursing are Asian, only 14% students in Registered Nursing programs and 8% of the IE/D population are Asian.

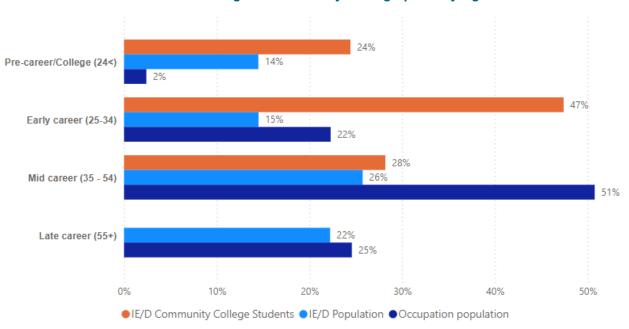


SOURCE: LIGHTCAST 2024.3 AND LAUNCHBOARD

Exhibit 15 compares the age of IE/D community college students enrolled in Registered Nursing programs compared to the IE/D population.

The majority of students enrolled in Registered Nursing programs are either in the "early career" category (47%) or "midcareer" category (28%) as compared to IE/D population (15%; 26%) and workforce (22%; 51%) in this occupation related to registered nursing. These programs are an important entry point for young registered nursing professionals.

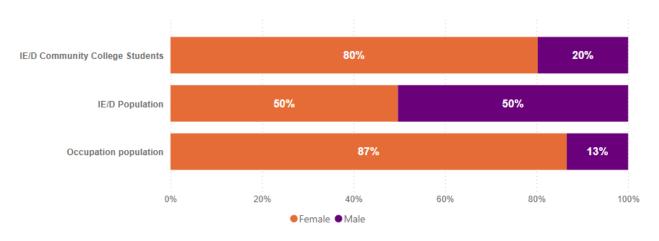
Exhibit 15 Program and County Demographics by Age



SOURCE: LIGHTCAST 2024.3 AND LAUNCHBOARD

Exhibit 16 compares the gender of IE/D Region community college students enrolled in Registered Nursing programs compared to the IE/D population. We also include demographics for related occupation data for the registered nurses to identify potential diversity and equity issues addressable by community college programs.

Exhibit 16 Program and County Demographics by Gender



SOURCE: LIGHTCAST 2024.3 AND LAUNCHBOARD

Most IE/D professionals in registered nursing occupations are White or Asian (65%), "mid-career" age category (51%), and female (87%). Most community college students in related programs are Hispanic/Latino (55%), "early career" or "mid-career" age category (75%), and female (80%). Major takeaways:

- Community colleges are an important talent source for employers committed to greater racial/ethnic diversity, especially Hispanic/Latino professionals.
- College programs may want to consider strategies to engage more men into these programs.

Appendix: Methodology

Exhibit 13 displays the average annual California Community College (CCC) awards conferred during the three academic years between 2020 and 2023 from the California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart. Awards are the combined total during the timeframe, divided by three in this case to calculate an annual average. This is done to minimize the effect of atypical variations that might be present in a single year.

Community college student outcome information is from LaunchBoard and based on the selected TOP code and region. These metrics are based on records submitted to the California Community Colleges Chancellor's Office Management Information Systems (MIS) by community colleges, which come from self-reported student information from CCC Apply and the National Student Clearinghouse. Employment and earnings metrics are sourced from California's Employment Development Department's Unemployment Insurance database. When available, outcomes for completers are reported to demonstrate the impact that earning a degree or certificate can have on employment and earnings. For more information on the types of students included for each metric, please see the web link for LaunchBoard's Strong Workforce Program Metrics Data Element Dictionary in the References section (LaunchBoard, 2023a). Finally, employment in a job closely related to the field of study comes from self-reported student responses on the CTE Employment Outcomes Survey (CTEOS) administered by Santa Rosa Junior College (LaunchBoard, 2023a).

Appendix: References

Type of Data	Source
Occupational Projections, Wages, and Job Postings	Traditional labor market information data is sourced from Lightcast, a labor market analytics firm. Lightcast occupational employment data are based on final Lightcast industry data and final Lightcast staffing patterns. Wage estimates are based on Occupational Employment. https://lightcast.io/
Living Wage (UW)	Center for Women's Welfare, University of Washington. (2024). The self-sufficiency standard for California 2024. http://www.selfsufficiencystandard.org/ .
	This calculation measures the income necessary for an individual of family to afford basic expenses. The data assesses the cost of housing, food, childcare, health care, transportation, and taxes. The living wage for one adult in San Bernardino County is \$20.07 per hour (\$42,392 annually). The living wage for one adult in Riverside County is \$20.76 per hour (\$43,854 annually). The average living wage to represent Inland Empire/Desert is \$20.42 per hour (\$43,123 annually).
Living Wage (MIT)	The living wage is derived from MITs Living Wage Calculator, which measures the income necessary for an individual of family to afford basic expenses. The data assesses the cost of housing, food, childcare, health care, transportation, and taxes. For more information, see: https://livingwage.mit.edu/pages/methodology The living wage for one adult in San Bernardino County is \$25.17 per hour (\$52,353.60 annually). The living wage for one adult in Riverside County is \$26.30 per hour (\$54,704 annually). The average living wage to represent Inland Empire/Desert is \$25.74 per hour (53,539.20 annually)
Typical Education and Training Requirements, and Educational Attainment	The Bureau of Labor Statistics (BLS) provides information about education and training requirements for hundreds of occupations. BLS uses a system to assign categories for entry-level education, work experience in a related occupation, and typical on-the-job training to each occupation for which BLS publishes projections data. For more information, see https://www.bls.gov/emp/documentation/education/tech.htm
Educational Supply	The CCCCO Data Mart provides information about students, courses, student services, outcomes and faculty and staff. For more information, see: https://datamart.ccco.edu The National Center for Education Statistics (NCES) Integrated Postsecondary Integrated Data System (IPEDS) collects data on the number of postsecondary awards earned (completions). For more information, see https://nces.ed.gov/ipeds/use-the-data/survey-components/7/completions

Student Metrics and Demographics	LaunchBoard, a statewide data system supported by the California Community Colleges Chancellor's Office and hosted by Cal-PASS Plus, provides data on progress, success, employment, and earnings
	outcomes for California community college students. For more
	information, see:
	https://www.calpassplus.org/LaunchBoard/Home.aspx