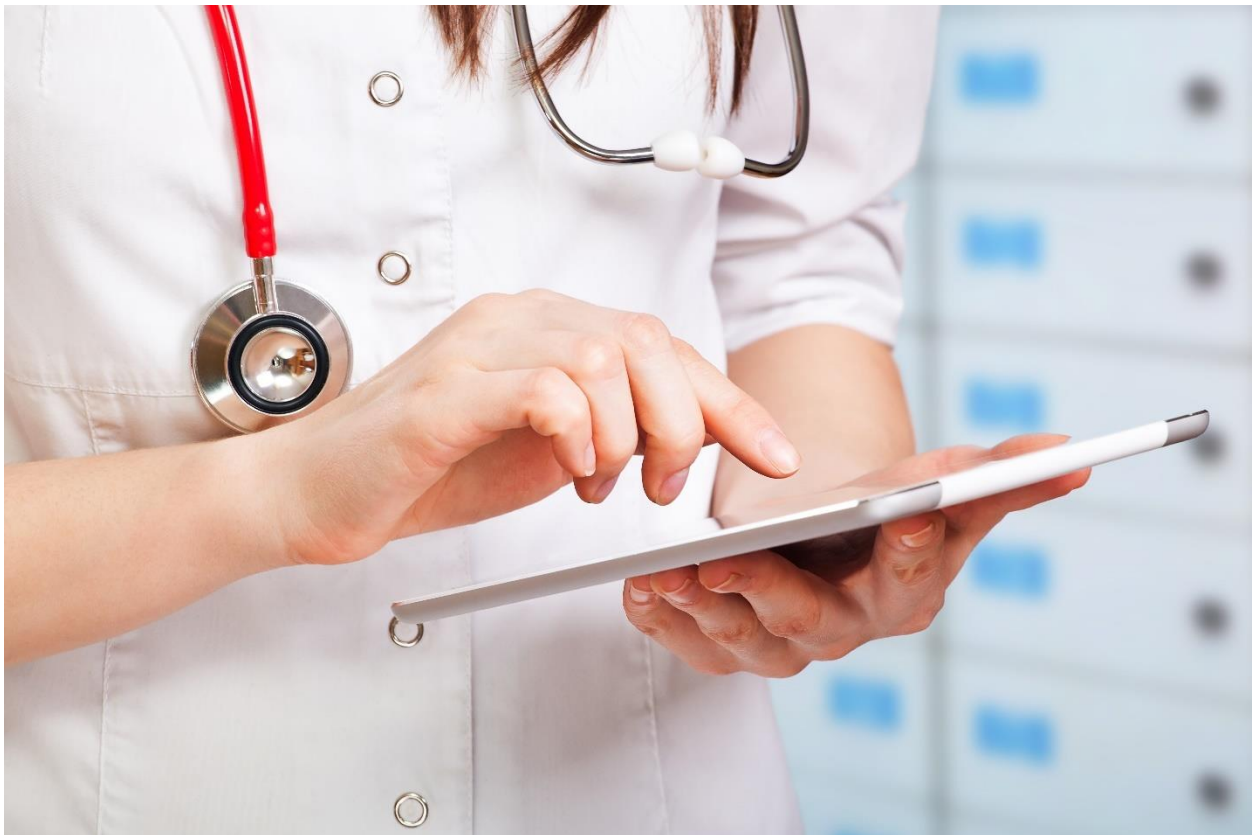


November 2023

Labor Market Analysis

Health Information Technology/ Medical Coding



Prepared by Central Valley/Mother Lode Center of Excellence



POWERED BY



Table of Contents

Summary	2
Key Findings	2
Recommendation	2
Introduction	3
Employment	4
Wages	5
Job Postings.....	7
Top Employers.....	7
Top Job Titles	8
Salaries.....	8
Education	9
Baseline, Specialized, and Software Skills	9
Certifications.....	9
Education, Work Experience, & Training.....	10
Supply	11
Recommendation.....	13
Appendix: Methodology & Data Sources	14

If for any reason this document is not accessible or if you have specific needs for readability, please contact us and we will do our utmost to accommodate you with a modified version. To make a request, contact Nora Seronello by phone at (209) 575-6894 or by email seronellon@mjc.edu.

Summary

The Central Valley/Mother Lode Center of Excellence developed this report for Bakersfield College to determine whether there is demand in the local labor market that is not being met by the supply from postsecondary programs. This report summarizes labor market demand, wages, skills, and postsecondary supply for *Health Information Technology/Medical Coding*, which includes:

- Medical Records Specialists (SOC 29-2072)
- Health Information Technologists and Medical Registrars (SOC 29-9021)
- Medical Secretaries and Administrative Assistants (SOC 43-6013)
- Insurance Claims and Policy Processing Clerks (SOC 43-9041)

Key Findings

- **Occupational Demand** — Occupations related to for *Health Information Technology/Medical Coding* have a labor market demand of 1,042 annual job openings in the South Central Valley/Southern Mother Lode (SCV/SML) subregion. Between 2022 and 2027, *Medical Secretaries and Administrative Assistants* are projected to have the most demand with 822 annual job openings – 9% growth in the SCV/SML region.
- **Wages** — Collectively, the four occupations analyzed in this report have an average entry-level wage of \$19.15/hour, which is higher than the living wage in the SCV/SML subregion (\$11.91/hour for a single adult).¹ *Health Information Technologists and Medical Registrars* earn the highest entry-level wage, \$24.32/hour.
- **Employers and Job Titles** — Employers in the SCV/SML subregion include Aston Carter, Saint Agnes Medical Center, and Adventist Health. The most common job title is Medical Receptionists.
- **Skills and Certifications** — The top baseline skill is communications, the top specialized skill is medical records, and the top software skill is Microsoft Office. The most in-demand certification is Basic Life Support (BLS).
- **Education** — A postsecondary nondegree award is typically required for *Medical Records Specialists* and *Health Information Technologists and Medical Registrars*, while a high school diploma or equivalent is typically required for *Medical Secretaries and Administrative Assistants* and *Insurance Claims and Policy Processing Clerks*.
- **Supply and Demand Analysis** — Based on 1,042 annual openings (i.e., demand) and 268 postsecondary degrees awarded (i.e., supply), an analysis of supply and demand suggests there is an undersupply of 774 workers in the SCV/SML subregion. In the CVML region, 280 awards were conferred suggesting an undersupply of 1,316 workers (based on 1,596 annual openings in the CVML region).

Recommendation

Based on a comparison of demand and supply, there is an undersupply of trained workers in the SCV/SML subregion and the CVML region. The Center of Excellence recommends that Bakersfield College work with the regional directors, the college's advisory board, and local industry in the development or expansion of programs to address the shortage of skilled workers.

¹ The term "living wage" in Center of Excellence reports is calculated by averaging the self-sufficiency wages from the Insight Center's California Family Needs Calculator for each county in the subregion: <https://insightccd.org/tools-metrics/self-sufficiency-standard-tool-for-california/>.

Introduction

The Central Valley/Mother Lode Center of Excellence developed this report to provide Bakersfield College with labor market information for *Health Information Technology/Medical Coding*. The geographical focus for this report is the South Central Valley/Southern Mother Lode (SCV/SML) subregion, but regional demand and supply data has been included for broader applicability and use. Analysis of the program and occupational data related to *Health Information Technology/Medical Coding* is included in the report. The Standard Occupational Classification (SOC) System codes and occupational titles used in this report from the Bureau of Labor Statistics and O*NET OnLine are shown below.

Medical Records Specialists (SOC 29-2072)

- **Job description:** Compile, process, and maintain medical records of hospital and clinic patients in a manner consistent with medical, administrative, ethical, legal, and regulatory requirements of the healthcare system. Classify medical and healthcare concepts, including diagnosis, procedures, medical services, and equipment, into the healthcare industry's numerical coding system. Includes medical coders.
- **Knowledge:** N/A
- **Skills:** N/A

Health Information Technologists and Medical Registrars (SOC 29-9021)

- **Job description:** Apply knowledge of healthcare and information systems to assist in the design, development, and continued modification and analysis of computerized healthcare systems. Abstract, collect, and analyze treatment and follow-up information of patients. May educate staff and assist in problem solving to promote the implementation of the healthcare information system. May design, develop, test, and implement databases with complete history, diagnosis, treatment, and health status to help monitor diseases.
- **Knowledge:** N/A
- **Skills:** N/A

Medical Secretaries and Administrative Assistants (SOC 43-6013)

- **Job description:** Perform secretarial duties using specific knowledge of medical terminology and hospital, clinic, or laboratory procedures. Duties may include scheduling appointments, billing patients, and compiling and recording medical charts, reports, and correspondence.
- **Knowledge:** Customer and Personal Service, English Language, Administrative, Medicine and Dentistry, Computers and Electronics
- **Skills:** Speaking, Active Listening, Service Orientation, Reading Comprehension, Complex Problem Solving

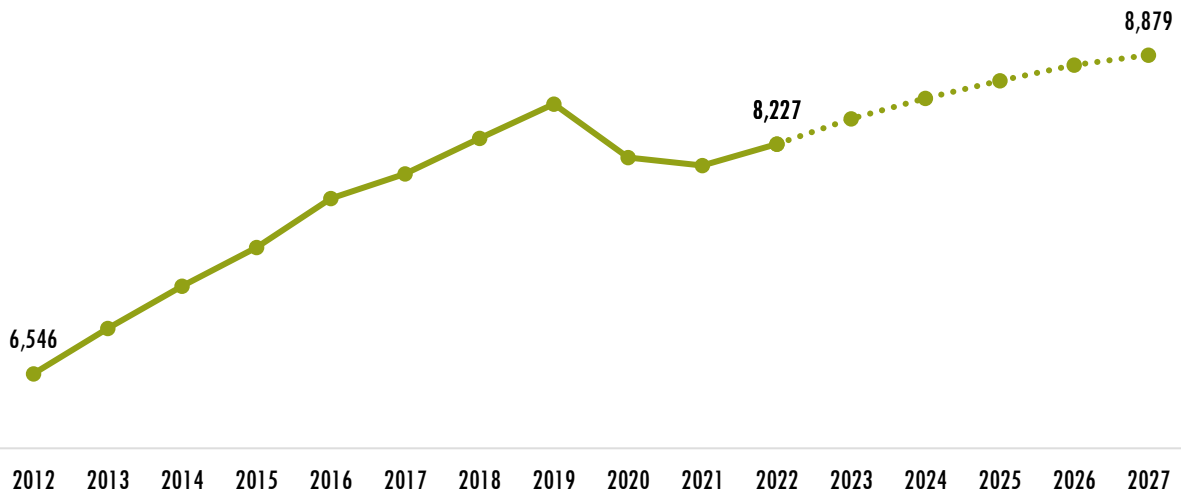
Insurance Claims and Policy Processing Clerks (SOC 43-9041)

- **Job description:** Process new insurance policies, modifications to existing policies, and claims forms. Obtain information from policyholders to verify the accuracy and completeness of information on claims forms, applications and related documents, and company records. Update existing policies and company records to reflect changes requested by policyholders and insurance company representatives.
- **Knowledge:** Customer and Personal Service, Administrative, English Language, Computers and Electronics
- **Skills:** Reading Comprehension, Time Management, Speaking, Active Listening, Critical Thinking

Employment

Exhibit 1a shows trends for *Health Information Technology/Medical Coding* occupations in the SCV/SML subregion. Between 2022 to 2027, the number of jobs for occupations related to *Health Information Technology/Medical Coding* is projected to increase by 652, growing by 8%.

Exhibit 1a. Historical employment and projected occupational demand for occupations related to *Health Information Technology/Medical Coding* in the SCV/SML subregion, 2012-2027



Occupations related to *Health Information Technology/Medical Coding* in the SCV/SML subregion employed 8,227 workers in 2022 (Exhibit 1b). *Medical Secretaries and Administrative Assistants* are projected to have the largest annual openings, 822.

Exhibit 1b. Current employment and projected occupational demand for occupations related to *Health Information Technology/Medical Coding* in the SCV/SML subregion, 2022-2027

Occupation	2022 Jobs	2027 Jobs	5-Year Change	5-Year % Change	Annual Openings
Medical Records Specialists	1,329	1,421	92	7%	117
Health Information Technologists and Medical Registrars	172	201	29	17%	18
Medical Secretaries and Administrative Assistants	5,940	6,474	533	9%	822
Insurance Claims and Policy Processing Clerks	786	783	(3)	(0%)	85
TOTAL	8,227	8,879	652	8%	1,042

Wages

The average living wage for a single adult in the SCV/SML subregion is \$11.91/hour.² Exhibit 2a shows the hourly wages for the four occupations studied in this report. *Health Information Technologists and Medical Registrars* has the highest entry-level wage, \$24.32/hour.³

Exhibit 2a. Hourly wages for occupations related to *Health Information Technology/Medical Coding* in the SCV/SML subregion

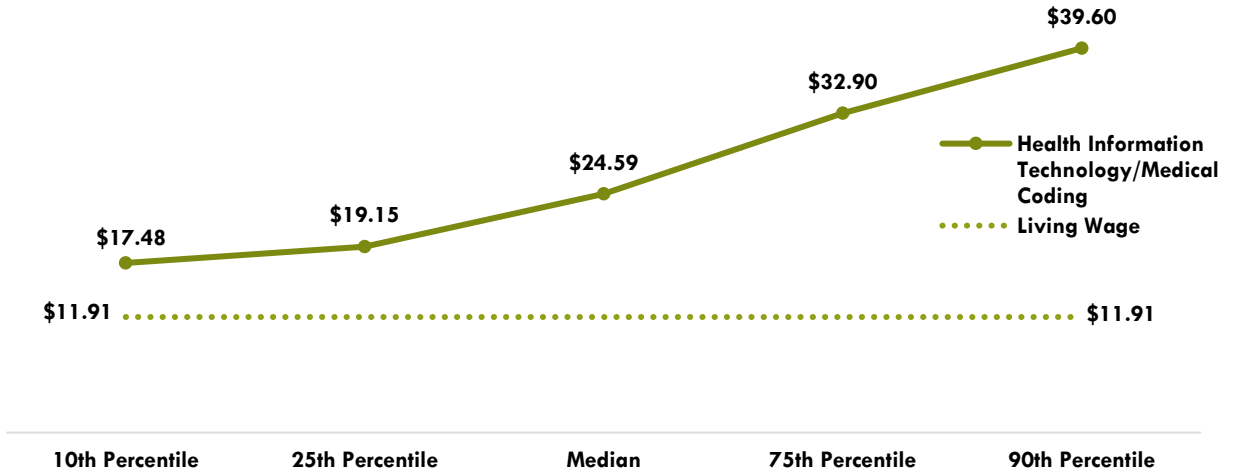
Occupation	25 th Percentile Hourly Earnings	Median Hourly Earnings	75 th Percentile Hourly Earnings
Medical Records Specialists	\$17.78	\$21.64	\$28.62
Health Information Technologists and Medical Registrars	\$24.32	\$37.17	\$55.05
Medical Secretaries and Administrative Assistants	\$16.98	\$17.99	\$22.34
Insurance Claims and Policy Processing Clerks	\$17.52	\$21.56	\$25.59

² The term "living wage" in Center of Excellence reports is calculated by averaging the self-sufficiency wages from the Insight Center's California Family Needs Calculator for each county in the subregion: <https://insightccd.org/tools-metrics/self-sufficiency-standard-tool-for-california/>.

³ Note: 10th and 25th percentiles are considered entry-level wages while 75th and 90th are considered experienced wages, which may be obtained through long-term employment or extra training, etc.

Exhibit 2b shows the average hourly wages for *Health Information Technology/Medical Coding* occupations; all four average wages are above the living wage for the SCV/SML subregion.

Exhibit 2b. Average hourly wages for occupations related to *Health Information Technology/Medical Coding* in the SCV/SML subregion



Job Postings

There were 1,084 unique job postings for occupations related to *Health Information Technology/Medical Coding* in the SCV/SML subregion from May to October 2023.⁴

Top Employers

The top employers with the most job postings are listed in Exhibit 3. The top employers in online job postings were Aston Caster, Saint Agnes Medical Center, and Adventist Health.

Exhibit 3. Top employers of *Health Information Technology/Medical Coding* in job postings

Employer
Aston Carter
Saint Agnes Medical Center
Adventist Health
Valley Children's Hospital
CTG
United Health Centers of the San Joaquin Valley
Valley Children's Healthcare
Clinica Sierra Vista
Kaweah Health
CommonSpirit Health

⁴ Other than occupational titles and job titles, the categories below can be counted one or multiple times per job posting, and across several areas in a single posting. For example, a skill can be counted in two different skill types, and an employer can indicate more than one education level.

Top Job Titles

Exhibit 4 shows the most common job titles for *Health Information Technology/Medical Coding* occupations in the SCV/SML subregion.

Exhibit 4. Top job titles in job postings for *Health Information Technology/Medical Coding* occupations

Job Title
Medical Receptionists
Medical Billers
Front Desk Receptionists
Medical Billing Specialists
Medical Records Clerks
Dental Receptionists
Front Office Representatives
Medical Scribes
Referral Coordinators
Schedulers

Salaries

Exhibit 5 shows the “Market Salaries” for *Health Information Technology/Medical Coding* occupations. These are calculated by Lightcast using a machine learning model built from millions of job postings every year. This accounts for adjustments based on location, industry, skills, experience, education, among other variables.

Exhibit 5. Market salaries for *Health Information Technology/Medical Coding* occupations

Market Salary	Job Postings
\$28,000.00-\$31,999.00	7
\$32,000.00-\$35,999.00	176
\$36,000.00-\$39,999.00	214
\$40,000.00-\$43,999.00	152
\$44,000.00-\$47,999.00	106
\$48,000.00-\$51,999.00	27
\$52,000.00-\$55,999.00	40
\$56,000.00-\$59,999.00	9
\$60,000.00-\$295,000.00	100

Education

Of the 1,084 unique job postings, 844 listed a preferred or minimum educational requirement for the position being filled. Among those, 54% requested a high school diploma or GED, 10% requested an associate degree, and 12% requested a bachelor's degree (Exhibit 6).

Exhibit 6. Education levels requested in job postings for Health Information Technology/Medical Coding

Education Level	Job Postings	% of Job Postings
High school or GED	586	69%
Associate degree	110	13%
Bachelor's degree	128	15%
Master's degree	10	1%
Ph.D. or professional degree	10	1%

Baseline, Specialized, and Software Skills

Exhibit 7 depicts the top baseline, specialized, and software skills in job postings. The most requested baseline skill is communications. The most requested specialized skill is medical records. The most requested software skill is Microsoft Office.

Exhibit 7. In-demand baseline, specialized, and software skills for Health Information Technology/Medical Coding in job postings

Baseline Skills	Specialized Skills	Software Skills
Communications	Medical Records	Microsoft Office
Customer Service	Billing	EPIC EMR
Detail Oriented	Medical Terminology	Spreadsheets
Scheduling	Front Office	Dentrix
Clerical Works	Electronic Medical Record	Clinic Management Systems

Certifications

Of the job postings listing a certification, 18% indicated a need for Basic Life Support (BLS) Certification (Exhibit 8).

Exhibit 8. Top Health Information Technology/Medical Coding certifications requested in job postings

Certifications	% of Job Postings
Basic Life Support (BLS) Certification	18%
Release of Information (ROI)	12%

Education, Work Experience, & Training

A postsecondary nondegree award is typically required for *Medical Records Specialists* and *Health Information Technologists and Medical Registrars*, while a high school diploma or equivalent is typically required for *Medical Secretaries and Administrative Assistants* and *Insurance Claims and Policy Processing Clerks* (Exhibit 9).

Exhibit 9. Education, work experience, training, and Current Population Survey results for occupations related to Top Health Information Technology/Medical Coding ⁵

Occupation	Typical Entry-level Education	Work Experience Required	Typical On-The-Job Training	CPS
Medical Records Specialists	Postsecondary nondegree award	None	None	58%
Health Information Technologists and Medical Registrars	Postsecondary nondegree award	None	None	22%
Medical Secretaries and Administrative Assistants	High school diploma or equivalent	None	Moderate-term on-the-job training	52%
Insurance Claims and Policy Processing Clerks	High school diploma or equivalent	None	Moderate-term on-the-job training	46%

⁵ "Labor Force Statistics from the Current Population Survey," Bureau of Labor Statistics, <https://www.bls.gov/cps/>.

Supply

An analysis of program data from the Integrated Postsecondary Education Data System (IPEDS) for the last three program years shows that, on average, 268 awards were conferred in the SCV/SML subregion (Exhibits 10 and 11).

Exhibit 10. TOP and CIP codes for Health Information Technology/Medical Coding-related Programs

TOP Titles	CIP Titles
	51.0707 - Health Information/Medical Records Technology/Technician
1223.00 – Health Information Technology	51.0709 - Medical Office Computer Specialist/Assistant
1223.10 – Health Information Coding	51.0713 - Medical Insurance Coding Specialist/Coder
	51.0714 - Medical Insurance Specialist/Medical Biller

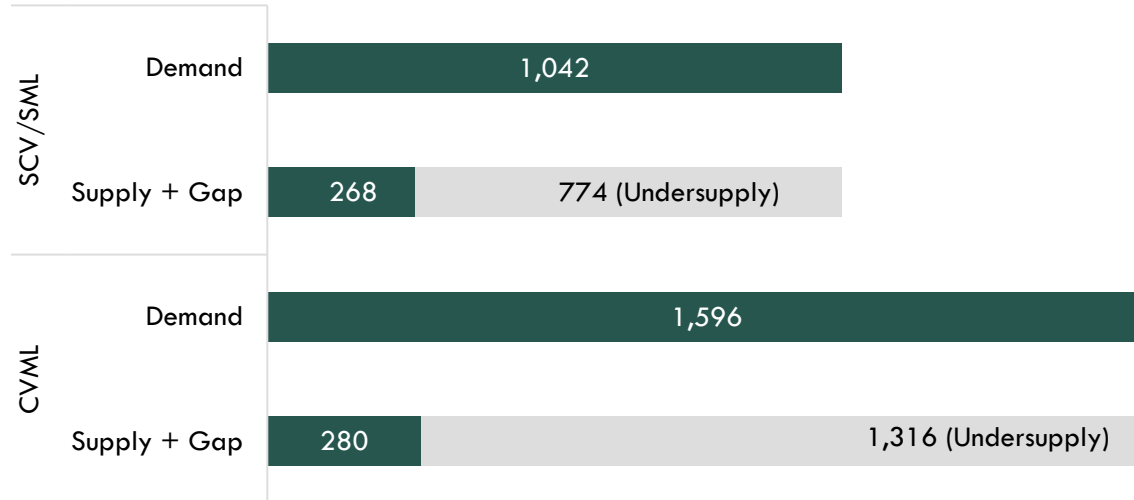
Exhibit 11. Postsecondary supply for Health Information Technology/Medical Coding-related Programs, Academic Years 2019-20 through 2021-22

TOP/CIP Code- Title	College	Certificates of at least 1 but less than 2 years	Associate Degree	Certificate 16 < 30 Semester Units	TOTAL
1223.00 – Health Information Technology	Bakersfield		5		5*
	Fresno City		12		12*
1223.10 – Health Information Coding	Fresno City			9	9*
51.0713 – Medical Insurance Coding Specialist/Coder	San Joaquin Valley College – Visalia	116	44		160*
	UEI College – Bakersfield	69			69*
	UEI College – Fresno	10			10*
51.0714 – Medical Insurance Specialist/Medical Biller	Carrington College – Stockton	12			12
	Santa Barbara Business College – Bakersfield		3		3*
SCV/ SML TOTAL		195	64	9	268
CVML TOTAL		207	64	9	280

*SCV/SML awards

There is an undersupply of 774 *Health Information Technology/Medical Coding* workers in the SCV/SML subregion and an undersupply of 1,316 workers in the CVML region (Exhibit 12).

Exhibit 12. *Health Information Technology/Medical Coding* workforce demand (annual job openings), postsecondary awards (supply), and additional students needed to fill gap in the SCV/SML subregion and region



Recommendation

This report suggests there is a shortage of 774 workers in the SCV/SML subregion and a shortage of 1,316 workers in the CVML region for *Health Information Technology/Medical Coding*. Based on these findings, it is recommended that Bakersfield College work with the regional directors, the college's advisory board, and local industry in the development or expansion of programs to address the shortage of workers in the region.

Appendix: Methodology & Data Sources

Data Sources

Labor market and educational supply data compiled in this report derive from a variety of sources. Data were drawn from external sources, including the Economic Modeling Specialists, Inc., the California Community Colleges Chancellor’s Office Management Information Systems Data Mart and the National Center for Educational Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS). Below is the summary of the data sources found in this study.

Data Type	Source
Labor Market Information/Population Estimates and Projections/Educational Attainment	Economic Modeling Specialists, Intl. (Lightcast). Lightcast occupational employment data are based on final Lightcast industry data and final Lightcast staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level Lightcast earnings by industry: economicmodeling.com.
Typical Education Level and On-the-job Training	Bureau of Labor Statistics (BLS) uses a system to assign categories for entry-level education and typical on-the-job training to each occupation for which BLS publishes projections data: https://www.bls.gov/emp/tables/educational-attainment.htm .
LaunchBoard	Chancellor’s LaunchBoard. https://www.calpassplus.org/LaunchBoard/SWP.aspx
Labor Force, Employment and Unemployment Estimates	California Employment Development Department, Labor Market Information Division: labormarketinfo.edd.ca.gov .
Job Posting and Skills Data	Lightcast: https://lightcast.io/ .
Additional Education Requirements/ Employer Preferences	The O*NET Job Zone database includes over 900 as well as information on skills, abilities, knowledge, work activities and interests associated with specific occupations: onetonline.org .

Key Terms and Concepts

Annual Job Openings: Annual openings are calculated by dividing the number of years in the projection period by total job openings.

Education Attainment Level: The highest education attainment level of workers age 25 years or older.

Employment Estimate: The total number of workers currently employed.

Employment Projections: Projections of employment are calculated by a proprietary Economic Modeling Specialists, Intl. (LIGHTCAST) formula that includes historical employment and economic indicators along with national, state and local trends.

LaunchBoard (Attained the Living Wage): Among SWP students who exited college and did not transfer to any postsecondary institution, the proportion who attained the district county living wage for a single adult measured immediately following academic year of exit.

LaunchBoard (Median Annual Earnings): Among SWP students who exited the community college system and who did not transfer to any postsecondary institution, median earnings following the academic year of exit.

LaunchBoard (Median Change in Earnings): Among SWP students who exited and who did not transfer to any postsecondary institution, median change in earnings between the second quarter prior to the beginning of the academic year of entry and the second quarter after the end of the academic year of exit from the last college attended.

LaunchBoard (Job Closely Related to Field of Study): Among SWP students who responded to the CTE Outcomes Survey and did not transfer to any postsecondary institution, the proportion who reported that they are working in a job very closely or closely related to their field of study.

Living Wage: The cost of living in a specific community or region for one adult and no children. The cost increases with the addition of children.

Occupation: An occupation is a grouping of job titles that have a similar set of activities or tasks that employees perform.

Percent Change: Rate of growth or decline in the occupation for the projected period; this does not factor in replacement openings.

Replacements: Estimate of job openings resulting from workers retiring or otherwise permanently leaving an occupation. Workers entering an occupation often need training. These replacement needs, added to job openings due to growth, may be used to assess the minimum number of workers who will need to be trained for an occupation.

Total Job Openings (New + Replacements): Sum of projected growth (new jobs) and replacement needs. When an occupation is expected to lose jobs, or retain the current employment level, number of openings will equal replacements.

Typical Education Requirement: represents the typical education level most workers need to enter an occupation.

Typical On-The-Job Training: indicates the typical on-the-job training needed to attain competency in the skills needed in the occupation.