

LABOR MARKET ANALYSIS

FOR PROGRAM RECOMMENDATION



C·O·E

CENTERS OF EXCELLENCE
FOR LABOR MARKET RESEARCH

MEDICAL OFFICE TECHNOLOGY IN THE GREATER SACRAMENTO REGION

North (Greater Sacramento)
Center of Excellence

DECEMBER 2022

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SUMMARY

The North (Greater Sacramento) of Excellence for Labor Market Research prepared this report to provide a labor market analysis of educational supply and occupational demand for middle-skilled career pathways in the North (Greater Sacramento) subregion. This report aims to determine if demand in the local labor market is unmet by the supply from existing community college programs and other postsecondary training providers.

This report primarily focuses on training that leads to jobs in middle-skilled occupations - jobs that typically require education beyond a high school diploma but less than a bachelor's degree - but may include higher-skilled occupations for training pathways that lead to a bachelor's degree. Lowered skilled occupations are rarely considered in this analysis due to the lessened barriers for entry-level work, such as no formal education and on-the-job training requirements.

Key findings include:

- Medical office technology jobs are projected to grow at the same rate in Greater Sacramento as in California.
- Over the next five years, medical office technology jobs are projected to have 942 annual openings in the North (Greater Sacramento) subregion.
- Wage data shows that medical office technology occupations earn \$3 above the single adult living wage of \$14.53 per hour.
- Postsecondary training providers (including community colleges) conferred an annual average of 108 awards in medical office technology programs over the last three academic years (2018-19 through 2020-21).

Recommendations include:

- The North (Greater Sacramento) Center of Excellence recommends moving forward with new program development and modifying existing programs.

INTRODUCTION

The North (Greater Sacramento) Center of Excellence (COE) was asked to provide labor market information for a proposed program at a regional community college. This report focuses on the following Standard Occupational Classification (SOC) occupations and codes:

- These middle-skill occupations require more education and training beyond a high school diploma but less than a four-year degree:
 - Medical Secretaries and Administrative Assistants (43-6013)

A review of related programs revealed the following Taxonomy of Programs (TOP) title(s) and code(s) are appropriate for inclusion in this report:

- Medical Office Technology (0514.20)
- Administrative Medical Assisting (1208.20)

The corresponding Classification of Instructional Program (CIP) title(s) and code(s) are:

- Medical Administrative/Executive Assistant and Medical Secretary (51.0716)

OCCUPATIONAL DEMAND

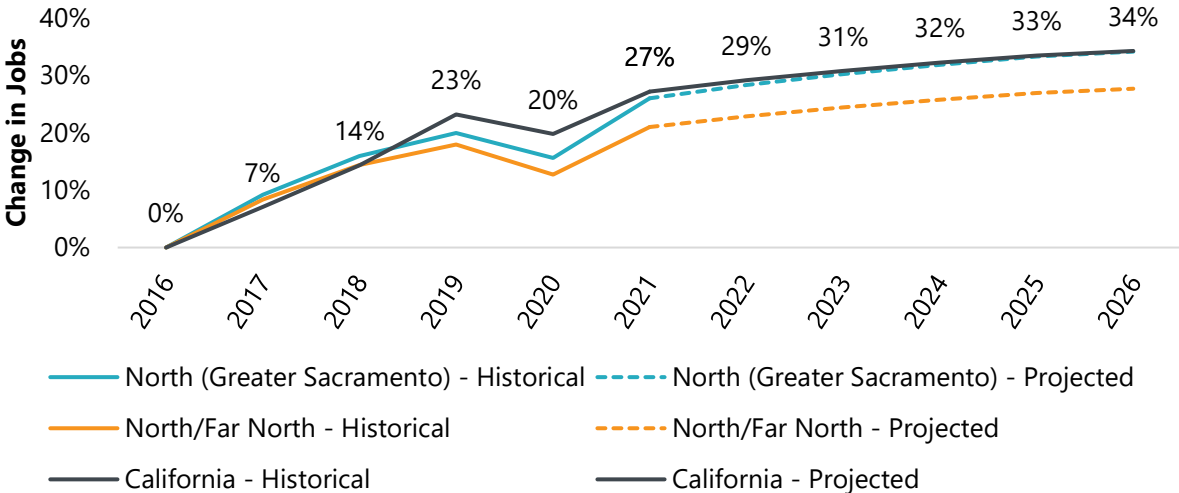
Exhibit 1 summarizes the five-year projected job growth for middle-skill and high-skill occupations in the North, North/Far North, and California.

Exhibit 1. Employment and projected demand, 2021-2026

Occupation	2021 Jobs	2026 Jobs	2021-2026 Change	2021-2026 % Change	2021-2026 Annual Openings
Medical Secretaries and Administrative Assistants	7,641	8,134	493	6%	942
North (Greater Sacramento)	7,641	8,134	493	6%	942
Medical Secretaries and Administrative Assistants	9,668	10,201	533	6%	1,171
North/Far North	9,668	10,201	533	6%	1,171
Medical Secretaries and Administrative Assistants	98,490	103,974	5,484	6%	11,922
California	98,490	103,974	5,484	6%	11,922

Exhibit 2 compares the percent change in jobs between 2016 through 2021 and the projected changes through 2026. The rate of change is indexed to the total number of jobs in 2016.

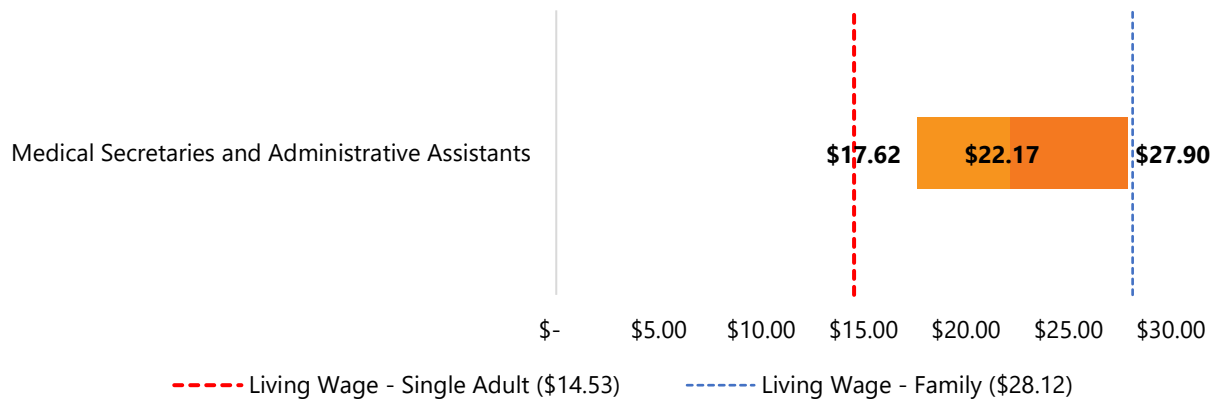
Exhibit 2. Changes in employment, 2016-2026



WAGES

Exhibit 3 compares the entry-level, median, and experienced wages for the selected occupations to the North (Greater Sacramento) living wage¹ for a single adult (\$14.53 per hour) and a small family² (\$28.12 per hour).

Exhibit 3. Comparison of wages by occupation, 2021



JOB POSTINGS

This section analyzes recent data from online job postings (real-time LMI). Online job postings may provide additional insight into recent changes in the labor market that are not captured by historical trends.

The North COE identified 2,593 unique online job postings for the selected occupations in the Greater Sacramento subregion. Job posting data comes from Lightcast (formerly Emsi Burning Glass Labor) and represents new listings posted online within the last year, from November 1, 2021, to October 31, 2022.

Occupations and Job Titles

Exhibit 4 details the number of online job postings for the selected occupations.

¹ Living wage is defined as the level of income a single adult with no children must earn to meet basic needs, including food, housing, transportation, healthcare, taxes, and other miscellaneous basic needs. Please note that the 25th-percentile and 75th-percentile hourly wages are used as proxy for entry-level and experienced-level wages.

² A small family is defined as a single adult and one school aged child (between the ages of 5 and 12 years).

Exhibit 4. Number of job postings by occupation

Occupation	Job Postings	Share of Job Postings
Medical Secretaries and Administrative Assistants	2,593	100%
Total Job Postings	2,593	100%

Exhibit 5 shows the top 10 job titles with the most job postings and the share. All job postings included a job title.

Exhibit 5. Top jobs titles

Job Title	Job Postings	Share of Job Postings
Medical Office Representatives	237	9%
Medical Receptionists	196	8%
Front Desk Receptionists	145	6%
Dental Receptionists	110	4%
Veterinary Receptionists	110	4%
Treatment Coordinators	82	3%
Dental Treatment Coordinators	76	3%
Front Desk Agents	70	3%
Surgery Schedulers	65	3%
Front Office Coordinators	63	2%

Employers

Exhibit 6 shows the top 10 employers with the most job postings for the selected occupations.

Exhibit 6. Employers with the most job postings

Employer	Job Postings	Share of Job Postings
Dignity Health	195	8%

Employer	Job Postings	Share of Job Postings
UC Davis Health	63	2%
UC Davis	48	2%
Marshall Medical Center	40	2%
Aston Carter	38	1%
Pacific Dental Services	32	1%
Elica Health Centers	29	1%
Sutter Health	25	1%
The Joint Chiropractic	22	1%
CommonSpirit Health	21	1%

Certifications, Skills, and Experience

Exhibit 7 shows the most relevant certifications requested by employers for the selected occupations.

Exhibit 7. Most in-demand certifications

Certification	Job Postings	Share of Job Postings
Basic Life Support (BLS) Certification	99	4%
Radiology Certified Coder	21	1%
Typing Certification	20	1%

Exhibit 8 shows the top 10 skills across three categories for the studied occupations: specialized, human-centered, and technical skills.

Exhibit 8. Most in-demand specialized skills

Top 10 Specialized Skills	Top 10 Human-Centered Skills	Top 10 Technical Skills
Medical Terminology	Customer Service	Microsoft Office
Front Office	Communications	Microsoft Excel
Setting Appointments	Scheduling	Microsoft Outlook
Office Equipment	Clerical Works	Microsoft Word
Medical Records	Computer Literacy	Microsoft PowerPoint
Billing	Multitasking	Open Dental
Electronic Medical Record	Detail Oriented	Practice Management Software
Practice Management	Management	Database Software
Treatment Planning	Telephone Skills	Google Workspace
Copayment Collection And Processing	Operations	Management Information Systems

Exhibit 9 shows employers' minimum level of education for job postings for the selected occupations.

Exhibit 9. Employer-preferred minimum education levels

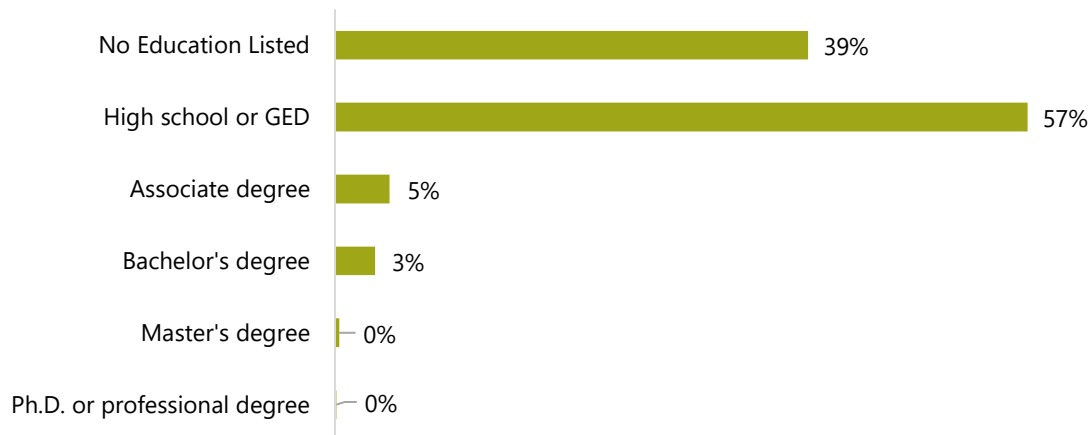
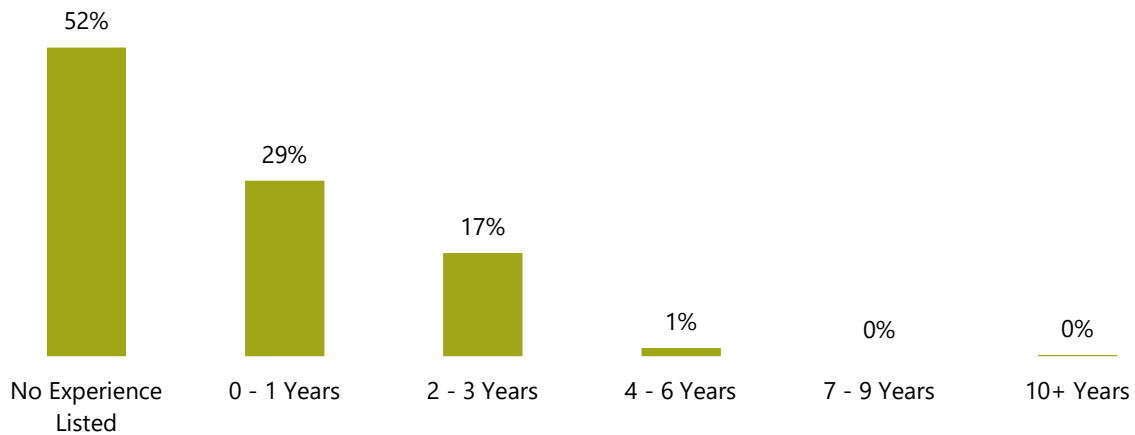


Exhibit 10 shows the experience levels required by employers for job postings for the selected occupations.

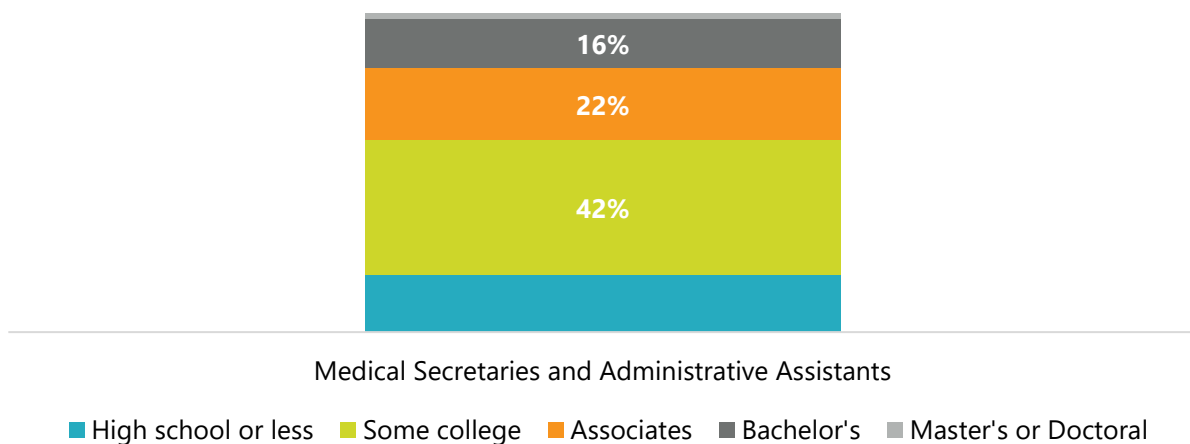
Exhibit 10. Employer-preferred experience levels



EDUCATION AND TRAINING

The U.S. Census Bureau collects education data from workers employed in occupations. Exhibit 11 shows the state-level educational attainment of the current workforce in the selected occupations.

Exhibit 11. California worker educational attainment for selected occupations, 2019



The Bureau of Labor Statistics (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 the BLS publishes projections data. Exhibit 12 shows the selected occupations' entry-level job requirements.

Exhibit 12. Typical education, work experience, and on-the-job training requirements

Occupation	Typical Entry-level Education	Work Experience Required	On-the-job Training Required
Medical Secretaries and Administrative Assistants	High school diploma or equivalent	None	Moderate-term on-the-job training

EDUCATIONAL SUPPLY

Educational supply for an occupation can be estimated by analyzing the number of awards issued in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes. Exhibit 13 shows the TOP and CIP codes for educational programs related to the selected occupations.

Exhibit 13. TOP and CIP codes for training programs related to the selected occupations

TOP Programs and Codes	Aligned CIP Programs and Codes
Medical Office Technology (0514.20) Administrative Medical Assisting (1208.20)	Medical Administrative/Executive Assistant and Medical Secretary (51.0716)

Community College Supply

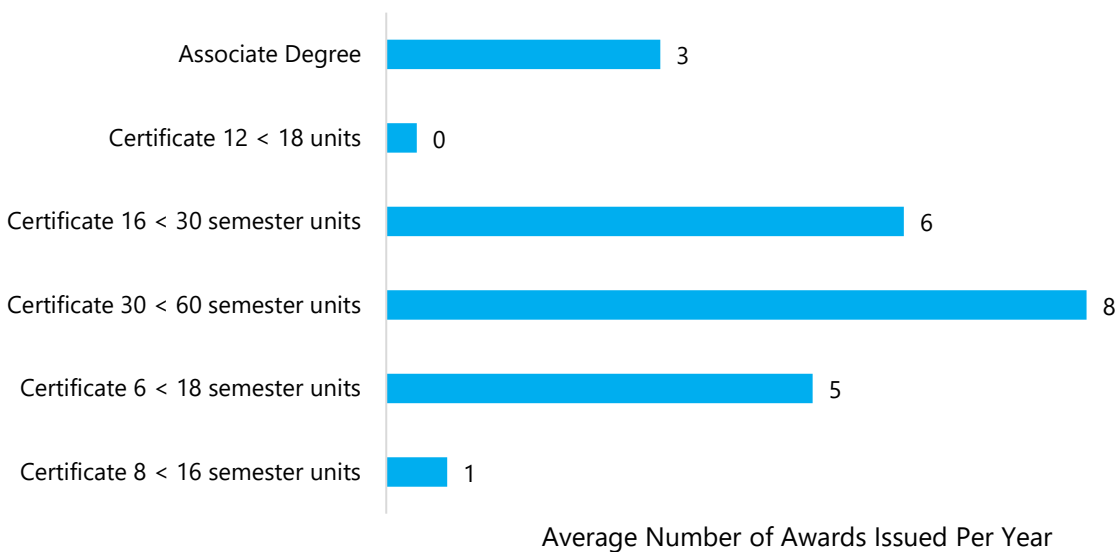
Exhibits 14 and 15 compare the average number of certificates and degrees from selected community college programs over the last three academic years.

Exhibit 14. Annual average community college awards by program, 2018-19 through 2020-21

Program - TOP Code	College	Annual Awards 2018-19	Annual Awards 2019-20	Annual Awards 2020-21	3-Yr Annual Awards Average
Medical Office Technology (0514.20)	Yuba	1	2	0	1

Program - TOP Code	College	Annual Awards 2018-19	Annual Awards 2019-20	Annual Awards 2020-21	3-Yr Annual Awards Average
	Subtotal	1	2	0	1
Administrative Medical Assisting (1208.20)	Cosumnes River	23	8	23	18
	Lake Tahoe	3	1	5	3
	Subtotal	26	9	28	21
	Grand Total	27	11	28	22

Exhibit 15. Annual average community college awards by type, 2018-19 through 2020-21



Other Postsecondary Supply

Exhibit 16 compares the average number of degrees that non-community college training providers conferred in the North (Greater Sacramento) subregion over the last three academic years. Please note that non-community college data lags by one year.

Exhibit 16. Other postsecondary awards by program, 2017-18 through 2019-20

Program - CIP Code	College	Annual Awards 2018-19	Annual Awards 2019-20	Annual Awards 2020-21	3-Yr Annual Awards Average
Medical Administrative/Executive Assistant and Medical Secretary (51.0716)	Carrington College – Sacramento	73	47	81	67
	MTI College	12	20	24	19
	Grand Total	85	67	108	86

FINDINGS

- This report focuses on one occupation in the medical office technology career pathway: medical secretaries and administrative assistants.
- The North (Greater Sacramento) subregion held 7,641 medical office technology jobs in 2021. These jobs are projected to increase by 6% over the next five years, adding 493 new jobs to the subregion by 2026.
- Medical office technology jobs are projected to grow at the same rate in Greater Sacramento as in California.
- Over the next five years, medical office technology jobs are projected to have 942 annual openings in the North (Greater Sacramento) subregion.
- Wage data shows that medical office technology occupations earn \$3 above the single adult living wage of \$14.53 per hour.
- According to real-time labor market information, there were about 2,593 online job postings for medical office technology occupations between November 1, 2021, and October 31, 2022. Employers' most desired specialized skills include medical terminology, front office, scheduling appointments, office equipment, and medical records.
- Sixty-four percent of incumbent workers in the studied occupation have an educational attainment level consistent with community college offerings (some college or associate degrees). Another 16% of workers in this occupation hold a bachelor's degree.
- Three North (Greater Sacramento) community colleges offer degrees and certificates in medical office technology. Together, these programs conferred an annual average of 22 awards (certificates and associate degrees) over the last three academic years (2018-19 through 2020-21).
- Local non-community college postsecondary training providers also offer training related to the studied occupations. Between 2018-19 and 2020-21, non-community college training providers conferred an average of 86 awards in medical administrative programs over the last three years. Please note that non-community college awards data often lags by one year.

RECOMMENDATIONS

- Based on a three-year average of annual awards in North (Greater Sacramento) subregion medical office technology programs and projected yearly openings, the supply gap analysis shows that the region seems to have room for additional training.
 - Community colleges and other postsecondary training providers issued an average of 108 awards over the last three years.
 - There are 942 projected annual openings for medical office technology jobs.
- The North (Greater Sacramento) Center of Excellence recommends moving forward with the program.

New Program Recommendation		
Move forward with the new program	Proceed with caution	A new program is not recommended
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Program Modification	
Move forward with program modifications	Program modifications are not recommended
<input checked="" type="checkbox"/>	<input type="checkbox"/>

APPENDIX A. METHODOLOGY AND SOURCES

This report identified Occupations using the Center of Excellence TOP-to-CIP-to-SOC crosswalk and O*Net OnLine. This report's findings were determined using labor market data from the Bureau of Labor Statistics (BLS), U.S. Census Bureau data from Emsi, and jobs posting data from Burning Glass.

Lightcast (Formerly EMSI/Burning Glass) 2022.3; QCEW Employees, Non-QCEW Employees, and Self-Employed. <https://www.economicmodeling.com/>. *Note: EMSI occupational employment data are based on final EMSI industry data and final EMSI 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).*

Integrated Postsecondary Education Data System (IPEDS). National Center for Education Statistics. U.S. Department of Education. <https://nces.ed.gov/ipeds/>.

Labor Market Information Division. California Employment Development Department. <https://labormarketinfo.edd.ca.gov/>.

Management Information Systems (MIS) Data Mart. California Community Colleges Chancellor's Office. <https://datamart.cccco.edu/>.

O*NET OnLine. U.S. Department of Labor/Employment and Training Administration (DOL ETA). <https://www.onetonline.org/>.

Public Use Microdata Sample (PUMS). U.S. Census Bureau American Community Survey (ACS). <https://www.census.gov/programs-surveys/acs/microdata.html>

Self-Sufficiency Standard Tool for California. The University of Washington. <http://www.selfsufficiencystandard.org/>

"Taxonomy of Programs." California Community Colleges Chancellor's Office. June 2012, 6th Edition. <https://www.cccco.edu/-/media/CCCCO-Website/About-Us/Divisions/Educational-Services-and-Support/Academic-Affairs/What-we-do/Curriculum-and-Instruction-Unit/Files/TOPmanual6200909corrected12513pdf.ashx>

"TOP-CIP-SOC Crosswalk." Centers of Excellence for Labor Market Research. June 2021 Edition. <http://coecc.net/>

APPENDIX B. GLOSSARY OF KEY TERMS

Key Terms	Definition
Occupation	Occupation refers to professions, or careers, in the workforce. Occupations differ from jobs in that jobs show the number of positions held in a given occupation.
Jobs	<p>A job is any position where a worker provides labor for monetary compensation.</p> <p>Job numbers include employees (those who work for businesses) and proprietors (those who work for themselves). Full- and part-time jobs are included and counted equally (i.e., not adjusted to full-time equivalents). Data for jobs, or employment, are annual averages.</p>
Job Change	Job change is the net increase or decrease of jobs over a given timeframe.
Job Openings	<p>Job openings are the projected number of positions available for workers entering an occupation.</p> <p>Openings include growth and replacement jobs. Growth jobs are the positive change in the total number of workers employed. Replacement jobs are the estimates of new workers needed to replace workers permanently leaving the occupation.</p>
Wages	Wages, or compensation, show workers' percentile and average earnings in a given occupation. The 25th-percentile and 75th-percentile hourly wages are used as a proxy for entry-level and experienced-level wages.
Living Wage	The living wage is the level of income a single adult with no children must earn to meet basic needs. The living wage is calculated using basic levels of allowances for food, housing, transportation, healthcare, taxes, and other miscellaneous basic needs.
Educational Attainment	Educational attainment is the level of education achieved by workers in a given occupation. The data includes workers aged 25 years and older.
Typical Entry-level Education	The education level generally required for employment in an occupation. It may differ from the actual educational levels attained by workers in any given occupation.
Work Experience Required	The level of prior experience a worker needs to enter a job in a given occupation.
On-the-job Training Required	The level of on-the-job training a worker needs to obtain competency in a given occupation.
Awards	Awards are the number of certificates and degrees conferred for a specific course of study in a given year. Awards counts "papers" and, as a result, may be greater than the actual number of students who complete a program.

COVID-19 Statement: This report includes employment projection data by EMSI. EMSI's projections are modeled on recorded (historical) employment figures and incorporate several underlying assumptions, including the assumption that the economy during the projection period will be at approximately full employment or potential output. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, they may impact the projections. At this time, it is not possible to quantify the impact of COVID-19 on projections of industry and occupational employment. Other measures such as unemployment rates and monthly industry employment estimates will reflect the most recent information on employment and jobs in the state and, in combination with input from local employers, may help validate current and future employment needs as depicted here.

Important Disclaimer: 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. Efforts have been made to qualify and validate the accuracy of the data and the reported findings; however, neither the Centers of Excellence, COE host District, nor California Community Colleges Chancellor's Office are responsible for applications or decisions made by recipient community colleges or their representatives based upon components or recommendations contained in this study.

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