

# LABOR MARKET ANALYSIS

FOR PROGRAM RECOMMENDATION



C·O·E

CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH

## VETERINARY TECHNOLOGY IN THE GREATER SACRAMENTO REGION

North (Greater Sacramento)  
Center of Excellence

MARCH 2022

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## SUMMARY

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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 type of analysis due to the lessened barriers for entry-level work, such as no formal education and on-the-job training requirements.

Key findings include:

- The North (Greater Sacramento) subregion held 1,995 veterinary technology jobs in 2020. Veterinary technology jobs are projected to increase by 9% over the next five years, adding 176 new jobs to the subregion by 2025.
- Over the next five years, veterinary technology occupations are projected to have 289 annual openings in the North (Greater Sacramento) subregion.
- Wage data shows that veterinary technology occupations earn \$0 to \$4 above the subregion's living wage of \$14.53 per hour.
- Awards data analysis shows that North (Greater Sacramento) training providers conferred an average of 67 awards (certificates and associate degrees) in Veterinary Technician (Licensed) programs over the last three academic years.

Recommendations include:

- The North (Greater Sacramento) Center of Excellence recommends moving forward with the program.

# INTRODUCTION

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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:
  - Veterinary Technologists and Technicians (29-2056)
  - Veterinary Assistants and Laboratory Animal Caretakers (31-9096)

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

- Veterinary Technician (Licensed) (0102.10)

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

- Veterinary/Animal Health Technology/Technician and Veterinary Assistant (01.8301)

# OCCUPATIONAL DEMAND

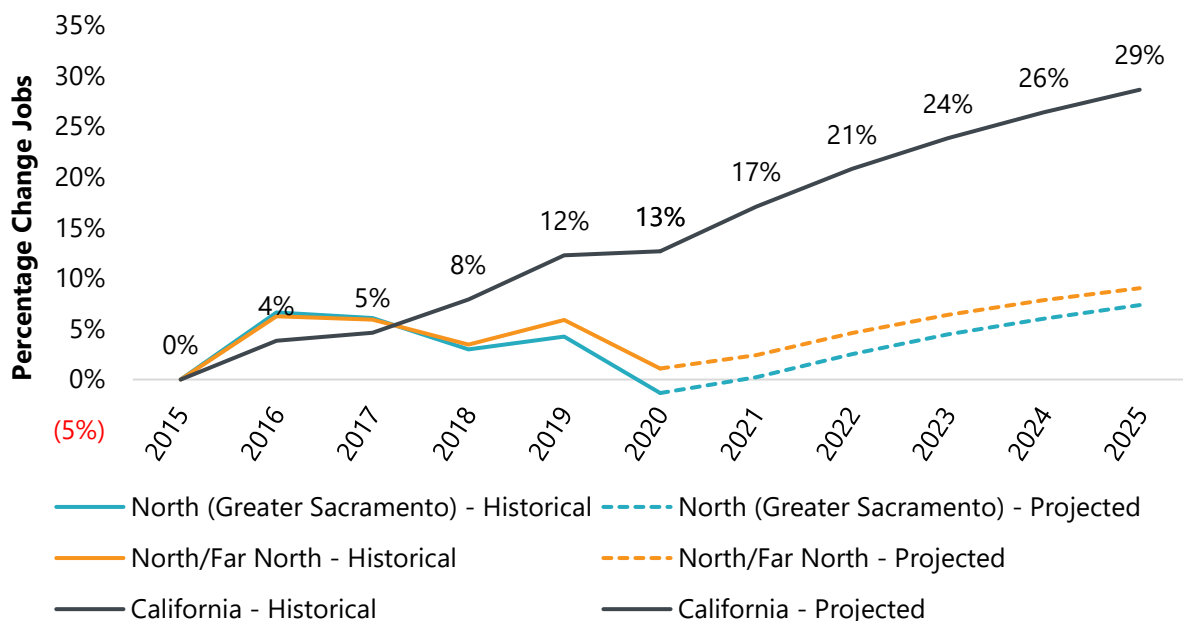
Exhibit 1 summarizes the five-year projected job growth for middle-skill and high-skill occupations in the North, North/Far North, and California.

**Exhibit 1. Employment and projected demand, 2020-2025**

Occupation	2020 Jobs	2025 Jobs	2020-2025 Change	2020-2025 % Change	2020-2025 Annual Openings
Veterinary Technologists and Technicians	848	932	84	10%	80
Veterinary Assistants and Laboratory Animal Caretakers	1,147	1,239	92	8%	209
<b>North (Greater Sacramento)</b>	<b>1,995</b>	<b>2,170</b>	<b>176</b>	<b>9%</b>	<b>289</b>
Veterinary Technologists and Technicians	1,099	1,197	97	9%	102
Veterinary Assistants and Laboratory Animal Caretakers	1,489	1,595	106	7%	268
<b>North/Far North</b>	<b>2,589</b>	<b>2,792</b>	<b>203</b>	<b>8%</b>	<b>370</b>
Veterinary Assistants and Laboratory Animal Caretakers	13,564	15,318	1,754	13%	1,017
Veterinary Technologists and Technicians	9,444	10,947	1,503	16%	2,654
<b>California</b>	<b>23,008</b>	<b>26,265</b>	<b>3,257</b>	<b>14%</b>	<b>3,671</b>

Exhibit 2 compares the percent change in jobs between 2015 through 2020 and the projected changes through 2025. The rate of change is indexed to the total number of jobs in 2015.

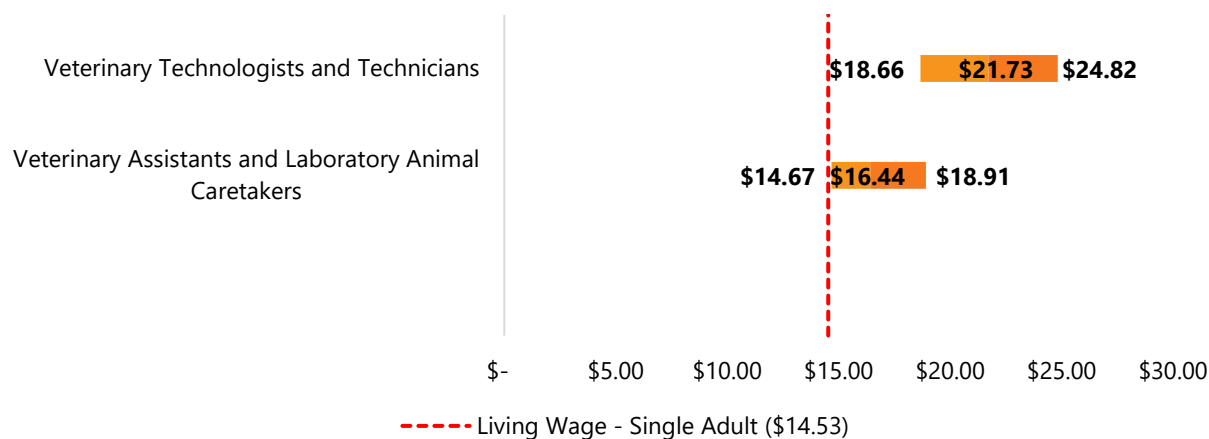
**Exhibit 2. Changes in employment, 2015-2025**



## WAGES

Exhibit 3 compares the entry-level, median, and experienced wages for the selected occupations to the North (Greater Sacramento) living wage for a single adult - \$14.53 per hour.<sup>1</sup>

**Exhibit 3. Comparison of wages by occupation, 2020**



<sup>1</sup> 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. The 25th-percentile and 75th-percentile hourly wages are used as proxy for entry-level and experienced-level wages.

# 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 864 online job postings for the selected occupations in the Greater Sacramento subregion. Job postings data comes from Burning Glass Labor Insights and represents new listings posted online within the last year, from March 1, 2021, to February 28, 2022.

## Occupations and Job Titles

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

### Exhibit 4. Number of job postings by occupation

Occupation	Job Postings	Share of Job Postings
Veterinary Technologists and Technicians	564	65%
Veterinary Assistants and Laboratory Animal Caretakers	300	35%
<b>Total Job Postings</b>	<b>864</b>	<b>100%</b>

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
Veterinary Assistant	161	19%
Veterinary Technician	133	15%
Registered Veterinary Technician	36	4%
Veterinary Technician Assistant	17	2%
Veterinary Technician/Assistant	15	2%
Credentialed Veterinary Technician	10	1%

Job Title	Job Postings	Share of Job Postings
Overnight Veterinary Technician	10	1%
Veterinary Assistant/Receptionist	10	1%
Veterinary Technician- Sign	10	1%
Veterinary Technician/Rvt	10	1%

## Employers

Exhibit 6 shows the top 10 employers with the most job postings for the selected occupations. Ninety-one percent (n = 782) of job postings did not include an employer.

### Exhibit 6. Employers with the most job postings

Employer	Job Postings	Share of Job Postings
VCA Animal Hospitals	133	15%
Banfield Pet Hospital	96	11%
University Of California	80	9%
Ethos Veterinary Health	46	5%
University of California, Davis	26	3%
Sacramento Cat Hospital	13	2%
Mars Incorporated	11	1%
Petco	11	1%
Pets Vets	11	1%
Airport Pet Clinic	9	1%



## Certifications, Skills, and Experience

Exhibit 7 shows the most relevant certifications requested by employers for the selected occupations. Forty-eight percent (n = 416) of job postings did not include certification information.

### Exhibit 7. Most in-demand certifications

Certification	Job Postings	Share of Job Postings
Certified Veterinary Technician	360	42%
Certified Animal Laboratory Technician	48	6%
American Association For Laboratory Animal Science (AALAS)	14	2%
Laboratory Animal Technologist (LATG)	8	1%
OSHA Forklift Certification	6	1%
Board Certified/Board Eligible	5	1%

Exhibit 8 shows the top 10 skills across three categories for the studied occupations: specialized, human-centered, and technical skills. Eighty-five percent (n = 735) of job postings did not include a preferred education level.

### Exhibit 8. Most in-demand specialized skills

Top 10 Specialized Skills	Top 10 Human Skills	Top 10 Technical Skills
Anesthesiology	Communication Skills	Microsoft Excel
Cleaning	Organizational Skills	Microsoft Word
Surgery	Teamwork / Collaboration	Medical Software
Venipuncture	Physical Abilities	Microsoft Outlook
Patient Care	Multi-Tasking	Word Processing
Customer Service	Research	Facebook
Radiology	Detail-Oriented	Java Server Pages (JSP)

Top 10 Specialized Skills	Top 10 Human Skills	Top 10 Technical Skills
X-Rays	Computer Literacy	Microsoft Access
Medical Records Maintenance	Positive Disposition	Practice Management Software
Surveillance	Mentoring	Microsoft Office

Exhibit 9 shows employers' minimum level of education for job postings for the selected occupations. Thirty-nine percent (n = 341) of job postings did not include a preferred education level.

**Exhibit 9. Employer-preferred minimum education levels**

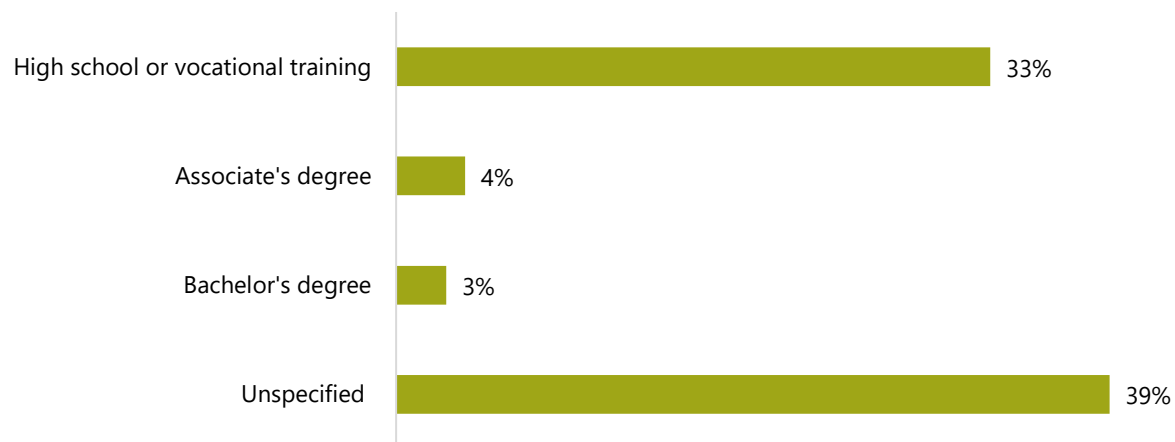
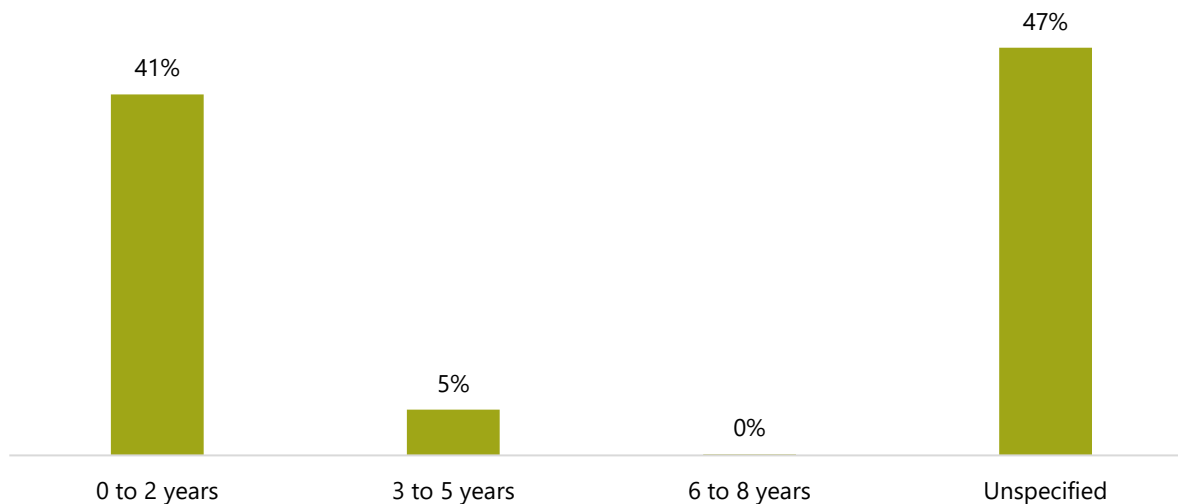


Exhibit 10 shows the experience levels required by employers for job postings for the selected occupations. Forty-seven percent (n = 402) of job postings did not include an employer preferred experience.

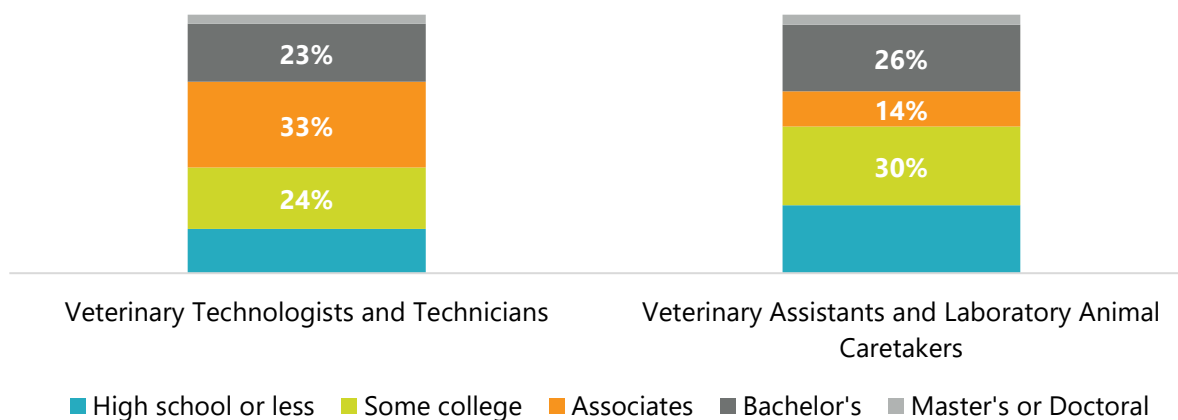
**Exhibit 10. Employer-preferred experience levels**



## EDUCATION AND TRAINING

The U.S. Census Bureau and Bureau of Labor Statistics collected data on education achieved by workers employed in occupations. Exhibit 11 shows the national-level educational attainment of the current workforce in the selected occupations.

**Exhibit 11. National 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 skill level and entry-level job requirements for the selected occupations.

**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
Veterinary Technologists and Technicians	Associate's degree	None	None
Veterinary Assistants and Laboratory Animal Caretakers	High school diploma or equivalent	None	Short-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
Veterinary Technician (Licensed) (0102.10)	Veterinary/Animal Health Technology/Technician and Veterinary Assistant (01.8301)

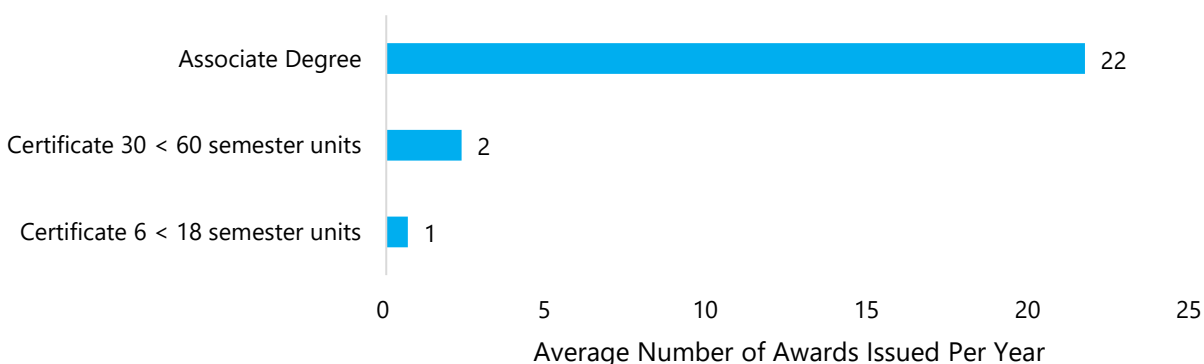
### Community College Supply

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

**Exhibit 14. Annual average community college awards by program, 2017-18 through 2019-20**

Program - TOP Code	College	Annual Awards 2018-19	Annual Awards 2019-20	Annual Awards 2020-21	3-Yr Annual Awards Average
Veterinary Technician (Licensed) (0102.10)	Cosumnes River	12	16	1	11
	Yuba	19	10	16	16
	<b>Subtotal</b>	<b>31</b>	<b>26</b>	<b>17</b>	<b>25</b>

**Exhibit 15. Annual average community college awards by type, 2017-18 through 2019-20**



**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 2017-18	Annual Awards 2018-19	Annual Awards 2019-20	3-Yr Annual Awards Average
Veterinary/Animal Health Technology/Technician and Veterinary Assistant (Previously 51.0808, Now 01.8301)	Carrington College - Citrus Heights	37	0	20	19
	Carrington College - Sacramento	42	--	27	23
Grand Total		79	0	47	42

## FINDINGS

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- This report focuses on two occupations in the veterinary technology, including Veterinary Technologists and Technicians (29-2056) and Veterinary Assistants and Laboratory Animal Caretakers (31-9096).
- The North (Greater Sacramento) subregion held 1,995 veterinary technology jobs in 2020.
- North (Greater Sacramento) veterinary technology jobs are projected to increase by 9% over the next five years, adding 176 new jobs to the subregion by 2025. Jobs for veterinary technology are projected to grow slower in the North (Greater Sacramento) subregion than in California.
- Over the next five years, veterinary technology jobs are projected to have 289 annual openings in the North (Greater Sacramento) subregion.
- Wage data shows that veterinary technology occupations earn \$0 to \$4 above the subregion's living wage of \$14.53 per hour.
- According to real-time labor market information, there were about 864 online job postings for veterinary technology occupations between March 1, 2021, and February 28, 2022.
- Between 44% and 57% of incumbent workers in the studied occupations have educational attainment levels consistent with community college offerings (some college or associate degrees). Another 23% to 26% of workers in these occupations hold a bachelor's degree.
- Two North (Greater Sacramento) community colleges offer degrees and certificates in programs related to veterinary technology. Together, these programs conferred an average of 25 awards (certificates and associate degrees) in veterinary technology programs 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 2017-18 and 2019-20, non-community college training providers conferred an average of 42 awards in Veterinary/Animal Health Technology/Technician and Veterinary Assistant programs over the last three years. Please note that non-community college awards data lags by one year.

## RECOMMENDATIONS

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- Based on a three-year average of annual awards in North (Greater Sacramento) subregion veterinary technology programs and projected yearly openings, the supply gap analysis shows that the region seems to have room for additional training.
  - Together, community colleges and other postsecondary training providers issued an average of 67 awards over the last three years.
  - There are 289 projected annual openings for veterinary technology jobs.
- The North (Greater Sacramento) Center of Excellence recommends comparing the occupational demand and supply, there is an undersupply veterinary technology workers in the subregion.
- The North (Greater Sacramento) Center of Excellence recommends moving forward with the program.

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

## APPENDIX A. METHODOLOGY AND SOURCES

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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.

Cal-PASS Plus LaunchBoard. California Community Colleges Chancellor's Office.

<https://www.calpassplus.org/LaunchBoard/Home.aspx>.

Emsi 2021.4; QCEW Employees, Non-QCEW Employees, and Self-Employed.

<https://www.economicmodeling.com/>. 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).

Educational Attainment for Workers 25 Years and Older by Detailed Occupation, 2016-2017.

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Self-Sufficiency Standard Tool for California. The University of Washington.

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"Taxonomy of Programs." California Community Colleges Chancellor's Office. June 2012, 6<sup>th</sup> 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. November 2015 Edition. <http://coeccc.net/>

**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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