

# LABOR MARKET ANALYSIS

FOR PROGRAM RECOMMENDATION



C·O·E

CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH

## Respiratory Therapist IN THE FAR NORTH

Far North  
Center of Excellence

February 2022

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## SUMMARY

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The Far North Center 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 Far North 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 Far North subregion held 465 respiratory therapist jobs in 2020. Respiratory therapist jobs are projected to increase by 10% over the next five years, adding 32 new jobs to the subregion by 2025.
- Over the next five years, respiratory therapists jobs are projected to have 32 annual openings in the Far North subregion.
- Wage data shows that respiratory therapists occupations earn \$22 to \$35, above the subregion's living wage of \$12.74 per hour.
- Awards data analysis shows that Far North training providers conferred an average of 55 awards (certificates and associate degrees) in respiratory therapists programs over the last three academic years.

Recommendations include:

- The North/Far North Center of Excellence recommends moving forward with the program.

# INTRODUCTION

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- The Far North 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) occupation and code:
- This middle-skill occupation requires more education and training beyond a high school diploma but less than a four-year degree:
  - Respiratory Therapist (29-1126)

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

- Respiratory Care/ Therapy (1210.00)

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

- Respiratory Therapy Technician/Assistant (51.0812)
- Respiratory Care Therapy/Therapist (51.0908)

# OCCUPATIONAL DEMAND

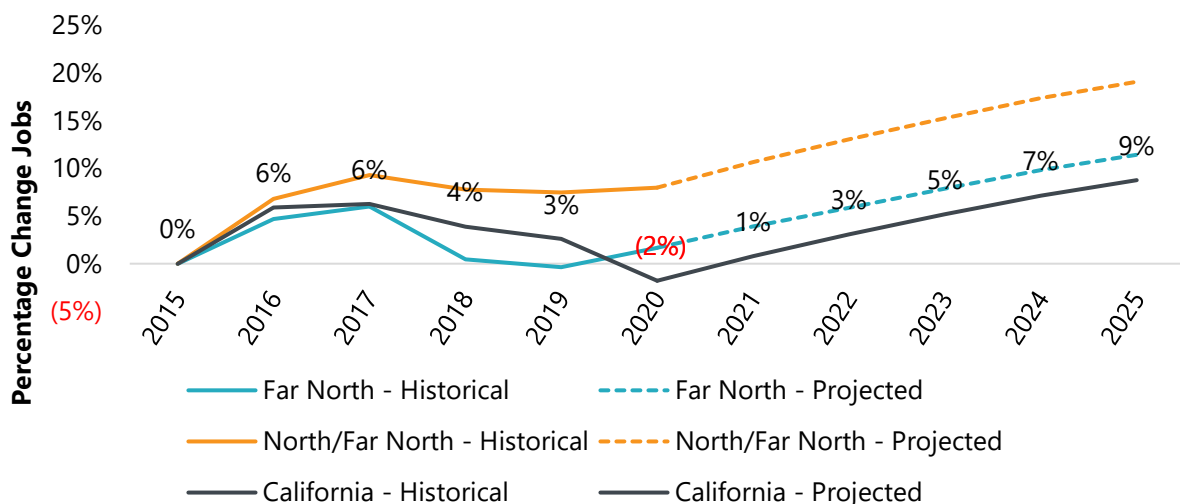
Exhibit 1 summarizes the five-year projected job growth for middle-skill and high-skill occupations in the Far North, North/Far North, and California.

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

Occupation	2020 Jobs	2025 Jobs	2020-2025 Change	2020-2025 % Change	2020-2025 Annual Openings
Respiratory Therapists	465	510	45	10%	32
<b>Far North</b>	<b>465</b>	<b>510</b>	<b>45</b>	<b>10%</b>	<b>32</b>
Respiratory Therapists	1,563	1,724	161	10%	109
<b>North/Far North</b>	<b>1,563</b>	<b>1,724</b>	<b>161</b>	<b>10%</b>	<b>109</b>
Respiratory Therapists	15,945	17,659	1,715	11%	1,129
<b>California</b>	<b>15,945</b>	<b>17,659</b>	<b>1,715</b>	<b>11%</b>	<b>1,129</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.

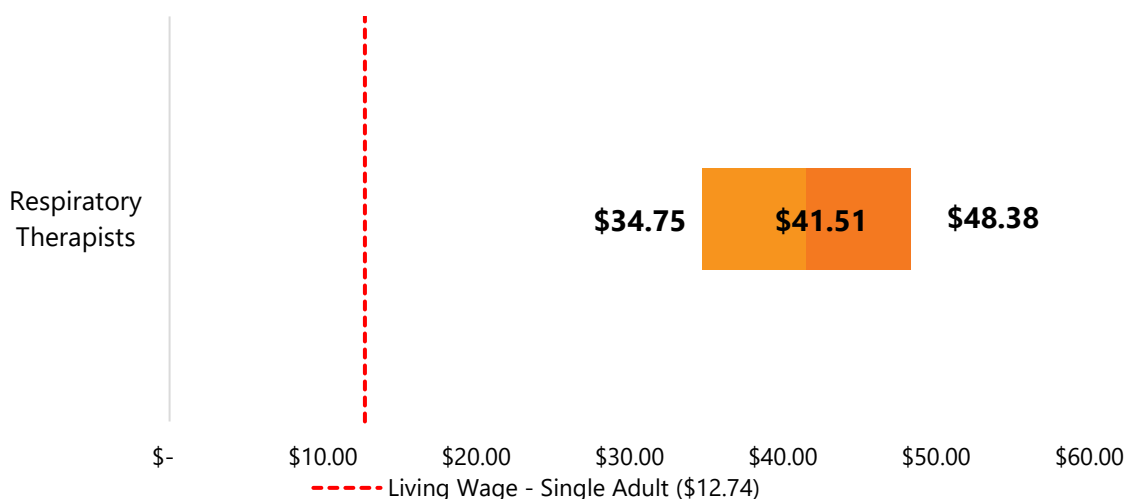
**Exhibit 2. Changes in employment, 2015-2025**



# WAGES

Exhibit 3 compares the entry-level, median, and experienced wages for the selected occupations to the Far North living wage for a single adult - \$12.74 per hour.<sup>1</sup>

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



# JOB POSTINGS

This section of the report 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 Far North COE identified 202 online job postings for the selected occupation in the Far North subregion. Job postings data comes from Burning Glass Labor Insights and represents new listings posted online within the last year, from February 1, 2021, to January 31, 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
Respiratory Therapists	202	100%
<b>Total Job Postings</b>	<b>202</b>	<b>100%</b>

<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.

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

#### Exhibit 5. Top jobs titles

Job Title	Job Postings	Share of Job Postings
Respiratory Therapist	19	9%
Respiratory Care Practitioner	17	8%
Registered Respiratory Therapist Rrt /Respiratory Therapy	12	6%
Respiratory Therapist II	8	4%
Registered Respiratory Therapist	6	3%
Respiratory Therapist - Rt	6	3%
Respiratory Therapist/Rrt	6	3%
Respiratory Therapist III	5	2%
Travel Registered Respiratory Therapist Rrt	5	2%
Travel Respiratory Therapist	5	2%

#### Employers

Exhibit 6 shows the top 10 employers with the most job postings for the selected occupation. Thirty-seven percent (n = 75) of job postings did not include an employer.

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

Employer	Job Postings	Share of Job Postings
Dignity Health	17	8%
Adventist Health	12	6%
Asante	11	5%
Apria	7	3%
Genesis Healthcare Corporation	7	3%

Employer	Job Postings	Share of Job Postings
Prime Healthcare Services	7	3%
Banner Health System	6	3%
Covenant Health	6	3%
Psc Point Pleasant	5	2%
Sutter Health	5	2%

### Certifications, Skills, and Experience

Exhibit 7 shows the most relevant certifications requested by employers for the selected occupation. Thirteen percent (n = 26) of job postings did not include certification information.

#### Exhibit 7. Most in-demand certifications

Certification	Job Postings	Share of Job Postings
Advanced Cardiac Life Support (ACLS) Certification	115	65%
Registered Respiratory Therapist	108	57%
Respiratory Care Practitioner (RCP)	98	53%
Neonatal Resuscitation Program (NRP)	60	49%
Basic Life Saving (BLS)	50	30%
Certified Respiratory Therapist	28	25%

Exhibit 8 shows the top 5 skills across three categories for the studied occupations: specialized, human-centered, and technical skills. Eighty-six percent (n = 173) of job postings did not include most in demand skills.



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

Top 5 Specialized Skills	Top 5 Human Skills	Top 5 Technical Skills
Respiratory Therapy	Critical Thinking	Microsoft Excel
Advanced Cardiac Life Support (ACLS)	Teamwork / Collaboration	Microsoft Office
Patient Care	English	Word Processing
Acute Care	Communication Skills	Veritas NetBackup
Treatment Planning	Planning	Microsoft Word

Exhibit 9 shows the minimum level of education required by employers for job postings for the selected occupation. Sixty-nine percent (n = 140) of job postings did not include a preferred education level.

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

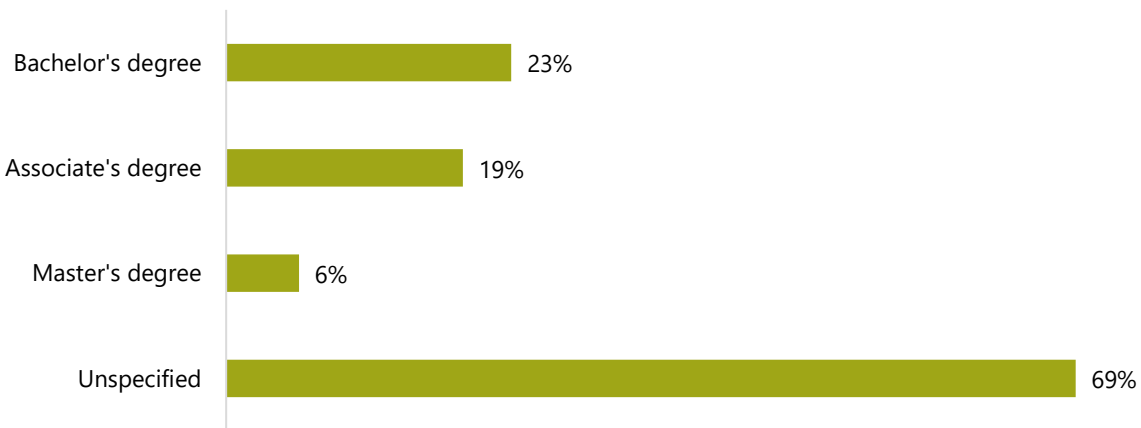
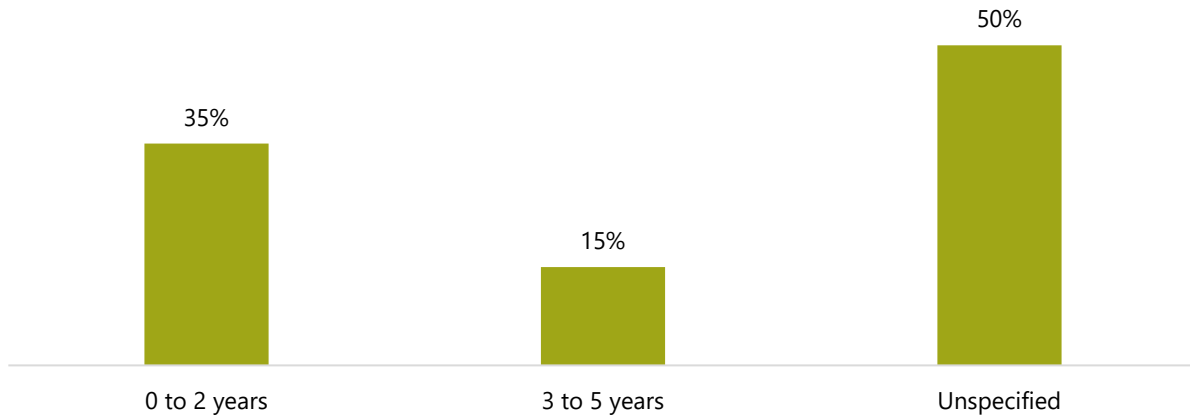


Exhibit 10 shows the experience levels required by employers for job postings for the selected occupation. Fifty percent (n = 101) of job postings did not include a preferred experience level.

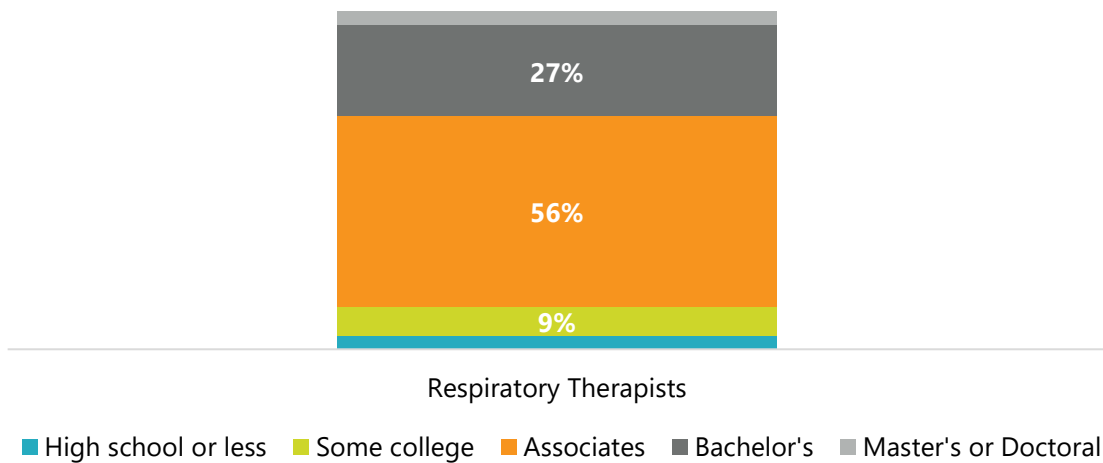
**Exhibit 10. Employer-preferred experience levels**



## EDUCATION AND TRAINING

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

**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
Respiratory Therapists	Associate's degree	None	None

**State and Industry Certifications**

Exhibit 13 summarizes the credentials of the certification organization.

**Exhibit 13. State- and industry-recognized certifications**

• Certification Organization	• Certifications Offered	• Notes
<ul style="list-style-type: none"> <li>• <a href="#">Respiratory Care Board of California</a></li> </ul>	<ul style="list-style-type: none"> <li>• Respiratory Care Practitioner (RCP) license</li> </ul>	<ul style="list-style-type: none"> <li>• All applicants to receive a license have to complete a respiratory program that is accredited by Commission on Accreditation of Allied Health Education Programs. <a href="#">List of accredited programs</a></li> </ul>
<ul style="list-style-type: none"> <li>• <a href="#">The National Board for Respiratory Care</a></li> </ul>	<ul style="list-style-type: none"> <li>• Certified Respiratory Therapist (CRT)</li> <li>• Registered Respiratory Therapist (RRT)</li> <li>• Certified Pulmonary Function Technologist (CPFT)</li> <li>• Registered Pulmonary Function Technologist (RPFT)</li> </ul>	<ul style="list-style-type: none"> <li>• The PFT exam consists of two cut scores. When individuals receive a low score on the cut they receive a CPFT credential.</li> <li>• To achieve a RPFT credential the individual must score high on the cut score.</li> </ul>

## 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 occupation.

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

TOP Programs and Codes	Aligned CIP Programs and Codes
Respiratory Care/Therapy (1210.00)	Respiratory Therapy Technician/Assistant (51.0812)
	Respiratory Care Therapy/Therapist (51.0908)

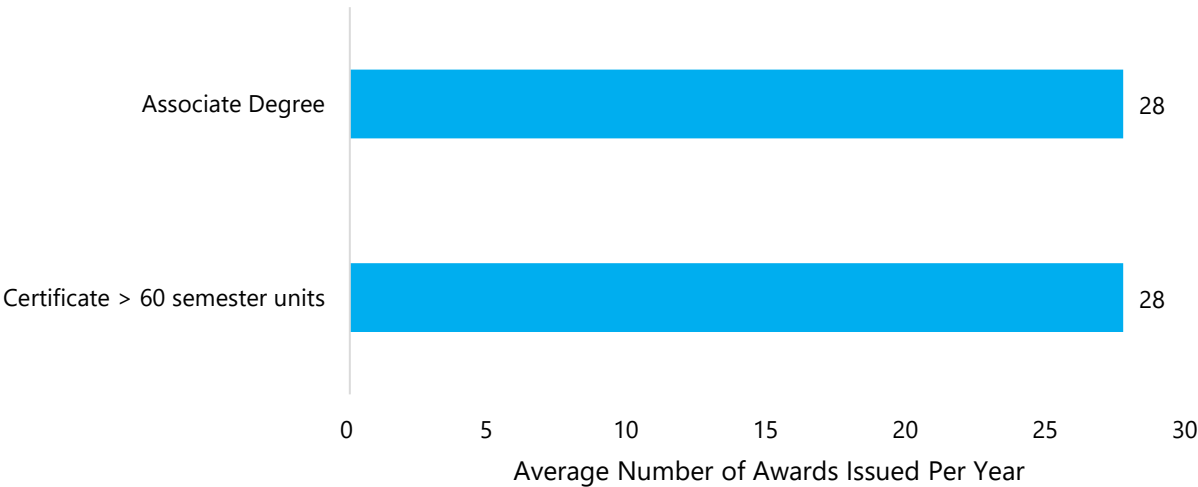
### Community College Supply

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
Respiratory Care/Therapy (1210.00)	Butte	54	58	54	55
	<b>Subtotal</b>	<b>54</b>	<b>58</b>	<b>54</b>	<b>55</b>
	<b>Grand Total</b>	<b>54</b>	<b>58</b>	<b>54</b>	<b>55</b>

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



## FINDINGS

- The Far North subregion held 465 respiratory therapists jobs in 2020.
- Far North respiratory therapists jobs are projected to increase by 10% over the next five years, adding 45 new jobs to the subregion by 2025. Jobs for respiratory therapists are projected to grow at slower rate in the Far North subregion than in California.
- Over the next five years, respiratory therapist jobs are projected to have 32 annual openings in the Far North subregion.
- Wage data shows that respiratory therapists earn \$22 to \$35 above the subregion's living wage of \$12.74 per hour.
- According to real-time labor market information, there were 202 online job postings for respiratory therapists between February 1, 2021, and January 31, 2022. Fifty percent (n = 101) of job postings did not include a preferred experience level. In job postings that did provide a preferred experience level, 69% requested 0 to 2 years of experience.
- Sixty-five percent of incumbent respiratory therapists have educational attainment levels consistent with community college offerings (some college or associate degrees). Another 25% of workers in these occupations hold a bachelor's degree.
- As of winter 2022, one Far North community college- Butte- offers degrees and certificates in a program related to respiratory therapists. This program conferred an

average of 55 awards (certificates and associate degrees) over the last three academic years (2018-19 through 2020-21).

## RECOMMENDATIONS

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- Although the three-year average of annual awards for respiratory therapist programs (n= 55) is greater than projected yearly openings (n=32), the Far North subregion has a huge geographic distribution, and program supply from Butte college likely has little impact on the demand in areas along the coast.
- Based on geographic distribution of Far North colleges, 10% projected growth over the next five years, and wages well above the living wage of the region, the Far North Center of Excellence recommends moving forward with the program.

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

# APPENDIX A. METHODOLOGY AND SOURCES

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Occupations in this report were identified 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.

Bureau of Labor Statistics. <https://www.bls.gov/emp/tables/educational-attainment.htm#>.

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

"Labor Insight Real-Time Labor Market Information Tool." Burning Glass Technologies.

<http://www.burning-glass.com>.

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/>.

Occupational Employment Statistics (OES). Bureau of Labor Statistics.

<https://www.bls.gov/oes/home.htm>.

O\*NET OnLine. U.S. Department of Labor/Employment and Training Administration (DOL ETA).

<https://www.onetonline.org/>.

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, 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.aspx](https://www.coecc.net/Us/Divisions/Educational-Services-and-Support/Academic-Affairs/What-we-do/Curriculum-and-Instruction-Unit/Files/TOPmanual6200909corrected12513pdf.aspx)

"TOP-CIP-SOC Crosswalk." Centers of Excellence for Labor Market Research. November 2015 Edition. <http://coecc.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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Centers of Excellence for Labor Market Research, Economic and  
Workforce Development Program



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