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COPPER MOUNTAIN COLLEGE

LOCAL WORKFORCE DEMAND ASSESSMENT



A partnership between the
Inland Empire/Desert Centers of Excellence
and the Copper Mountain College Research Team

Strong Workforce Data Analytics
and Alignment Project



TABLE OF CONTENTS

Introduction.....	3
Methodology.....	4
Demographic Composition	5
Industry Employment and Business Activity.....	10
Occupational Employment in the Copper Mountain College Area	12
Copper Mountain College Program Offerings by Career Education Industry Sector.....	13
Arts, Media, and Entertainment Industry Sector	14
Business and Finance Sector	15
Education, Child Development, and Family Services Sector	17
Engineering and Architecture Sector.....	19
Health Science and Medical Technology Sector.....	20
Hospitality, Tourism, and Recreation Sector	22
Information and Communication Technologies Sector.....	23
Public Services Sector	25
Transportation Sector.....	27
Additional Career Education Sectors and Jobs	29
Key Findings and Recommendations	32
Appendix A: Copper Mountain College Area	34
Appendix B: Demographic Composition Reference	35
Appendix C: Industry Reference and Key Term Definitions	36
Appendix D: Occupation and Skills Definitions, and Reference Table with Occupational Demand and Wages	37
Appendix E: CDE-to-CCCCO-Priority-Sector Crosswalk	44
Appendix F: References Cited and Resources	46

COVID-19 Disclaimer

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.

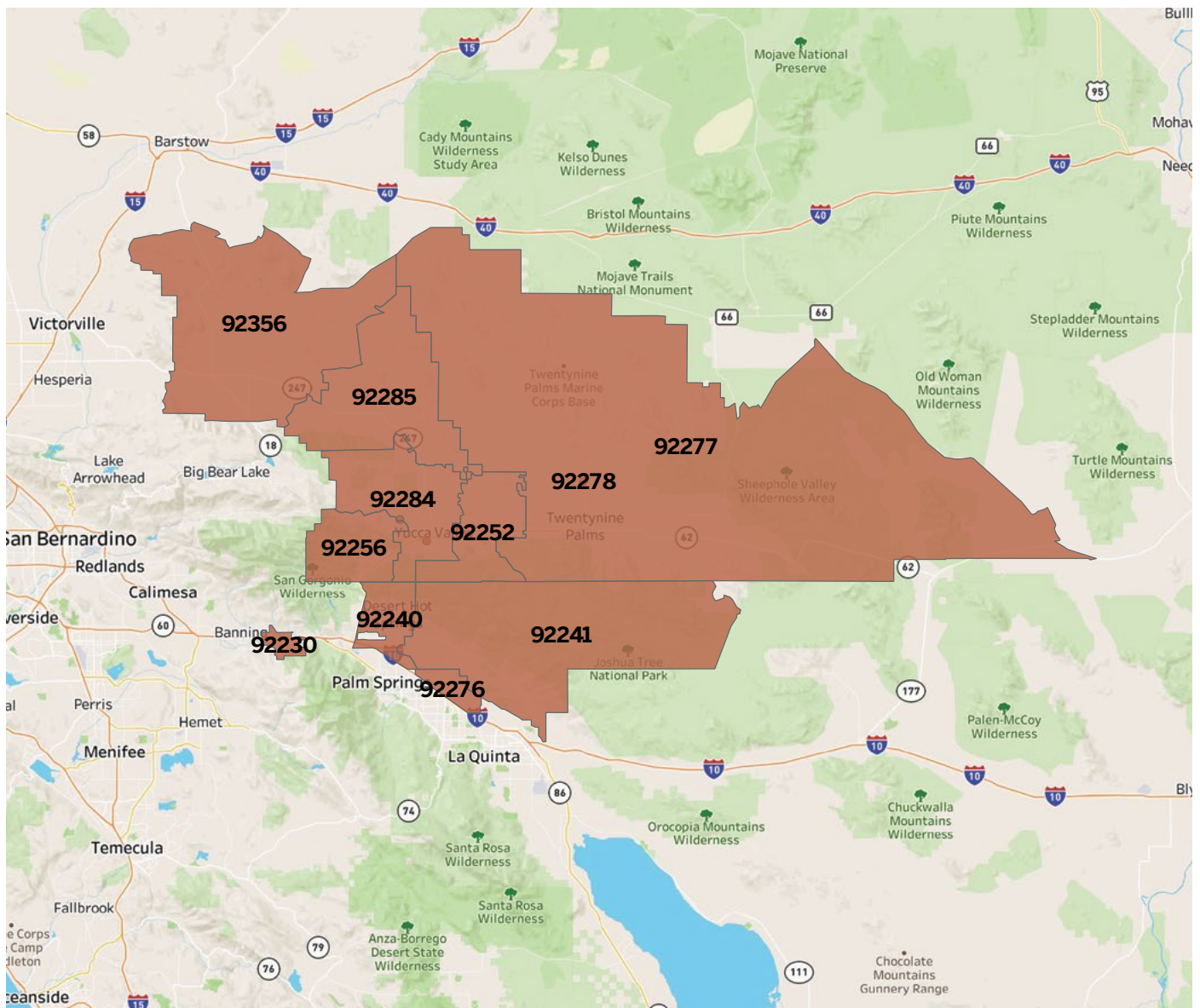
INTRODUCTION

Situated in the High Desert subregion of the Inland Empire/Desert Region, Copper Mountain College serves the cities and communities of Cabazon, Desert Hot Springs, Joshua Tree, Landers, Lucerne Valley, Morongo Valley, Pioneertown, Thousand Palms, Twentynine Palms, and Yucca Valley (Exhibit 1). The college has campus locations in Joshua Tree and Twentynine Palms.

To equitably serve residents and create programs that align with local business needs, community colleges should develop an awareness of their surrounding populations and area employers. With this knowledge, colleges have the ability to effectively serve their communities and build programs that lead to gainful employment opportunities for students after program completion.

This assessment by the Inland Empire/Desert Region Center of Excellence, in partnership with Copper Mountain College's research staff, seeks to illuminate the job opportunities available to students within the area served by Copper Mountain College and determine to what extent the college is meeting local employer demand. Furthermore, this analysis identifies opportunities for the college to create new training programs for in-demand occupations for which no programs currently exist.

Exhibit 1: Area served by Copper Mountain College



Source: Emsi, Tableau

METHODOLOGY

The analysis in this local workforce demand assessment reviews Copper Mountain College's area population, industries, and community college programs aligned to an occupational crosswalk. The area examined in this report may not perfectly align to the college's established service area due to the geographic shape and placement of the selected ZIP codes for analysis. ZIP codes within and beyond the college's established boundaries were examined to fully capture its student population, business partnerships, and nearby job opportunities. Appendix A contains detailed information by ZIP code for the population and the number of middle-skill jobs in 2019. Copper Mountain College's program offerings are organized by the California Department of Education (CDE) sectors. A CDE-to-Taxonomy-of-Programs (TOP) crosswalk, validated by the California Community Colleges Chancellor's Office (CCCCO), was used to link CDE sectors to Copper Mountain College's TOP code offerings. Linking Copper Mountain College's TOP offerings to CDE sectors provides a foundation for aligning local secondary career education (CE) course offerings to community college programs in future studies.

A crosswalk linking TOP codes with the Standard Occupational Classification (SOC) System, developed by the Centers of Excellence for Labor Market Research, was used to identify community college programs that prepare students for related middle-skill and higher-skill occupations. Middle-skill occupations typically require educational attainment greater than a high school diploma, but less than a four-year degree. The higher-skill jobs examined in this study are limited to those that typically require a bachelor's degree to enter employment, providing insight into employment opportunities for community college students who transfer to four-year institutions.

The annual job openings figures presented in this study are representative of the college's geographic boundary, providing a hyper localized view of workforce demand. This study addresses the in-demand and high-wage occupation criteria established by the Perkins V Comprehensive Local Needs Assessment (CLNA) Framework template. For this study, an occupation is **in-demand** if it has at least **100 annual job openings** in the Inland Empire/Desert Region. An occupation is **high-wage** if its **median hourly wage meets or exceeds \$20.86 per hour**, the average median hourly wage for all California occupations. All occupational data is sourced from Emsi 20.2; QCEW, non-QCEW, Self-Employed. Appendix D lists comprehensive occupational demand and wage data for all occupations included in this report. Finally, Appendix E contains a crosswalk linking CDE sectors with CCCCCO sectors.



DEMOGRAPHIC COMPOSITION

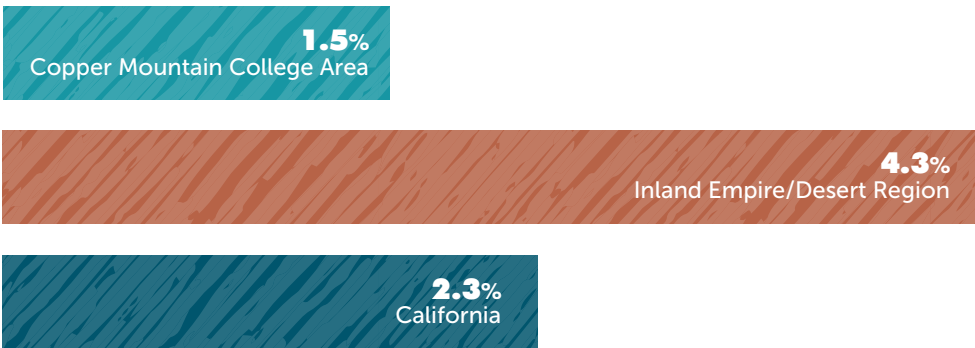
This section analyzes the demographic characteristics of the Copper Mountain College area, including population count, gender, race/ethnicity, age, and educational attainment. Understanding the local area’s composition is essential to ensure the college is serving its population and undertaking appropriate planning for future student cohorts.

Resident Population

The Copper Mountain College area contains 131,240 residents or nearly 2.8% of the Inland Empire/Desert Region’s population, 4,672,608 total residents. The largest city in the college area is Desert Hot Springs, which is the 247th largest city in California with an estimated 29,683 residents in 2019. The city of Twentynine Palms had 28,478 residents in 2019, ranking as the 252nd largest city by population in the state (State of California, Department of Finance). Joshua Tree’s 2019 population counts are not available.

Over the five-year period between 2019 and 2024, the area’s population is projected to increase by 1.5%, adding 1,968 additional residents (Exhibit 2). Population growth in the college area is projected to increase more slowly than that of the region, with 4.3% projected growth, and California overall, with 2.3% projected growth during the five-year timeframe.

Exhibit 2: Five-year population growth, Copper Mountain College area, Inland Empire/Desert Region, and California

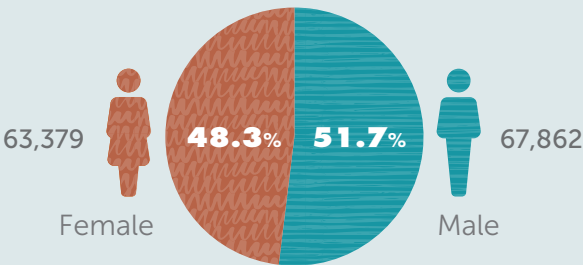


Source: Emsi 20.2

Resident Gender

The Copper Mountain College area has a larger share of male residents (51.7%) compared to the Inland Empire/Desert Region as a whole (49.8%) (Exhibit 3). Appendix B displays gender shares for the college area and the region.

Exhibit 3: 2019 gender population share, Copper Mountain College area

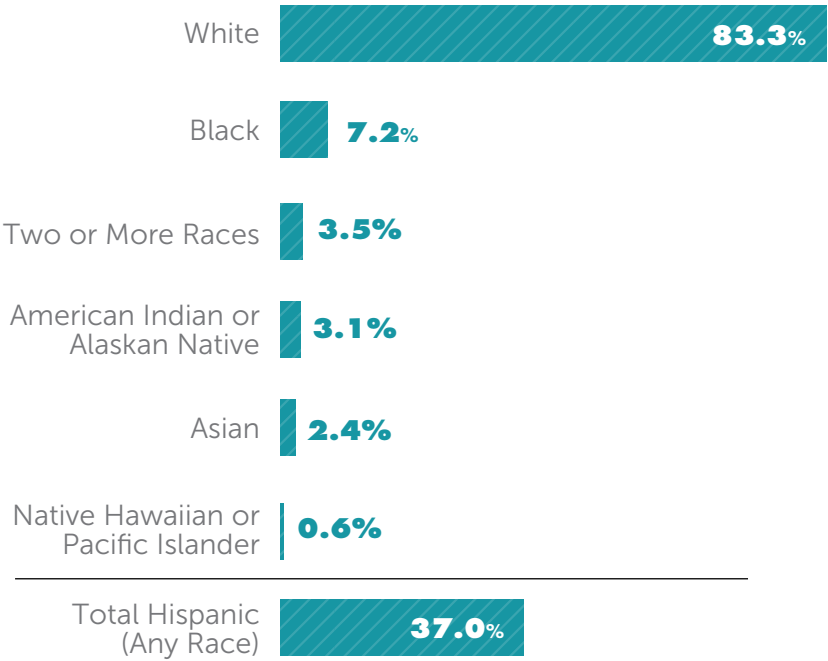


Source: Emsi 20.2

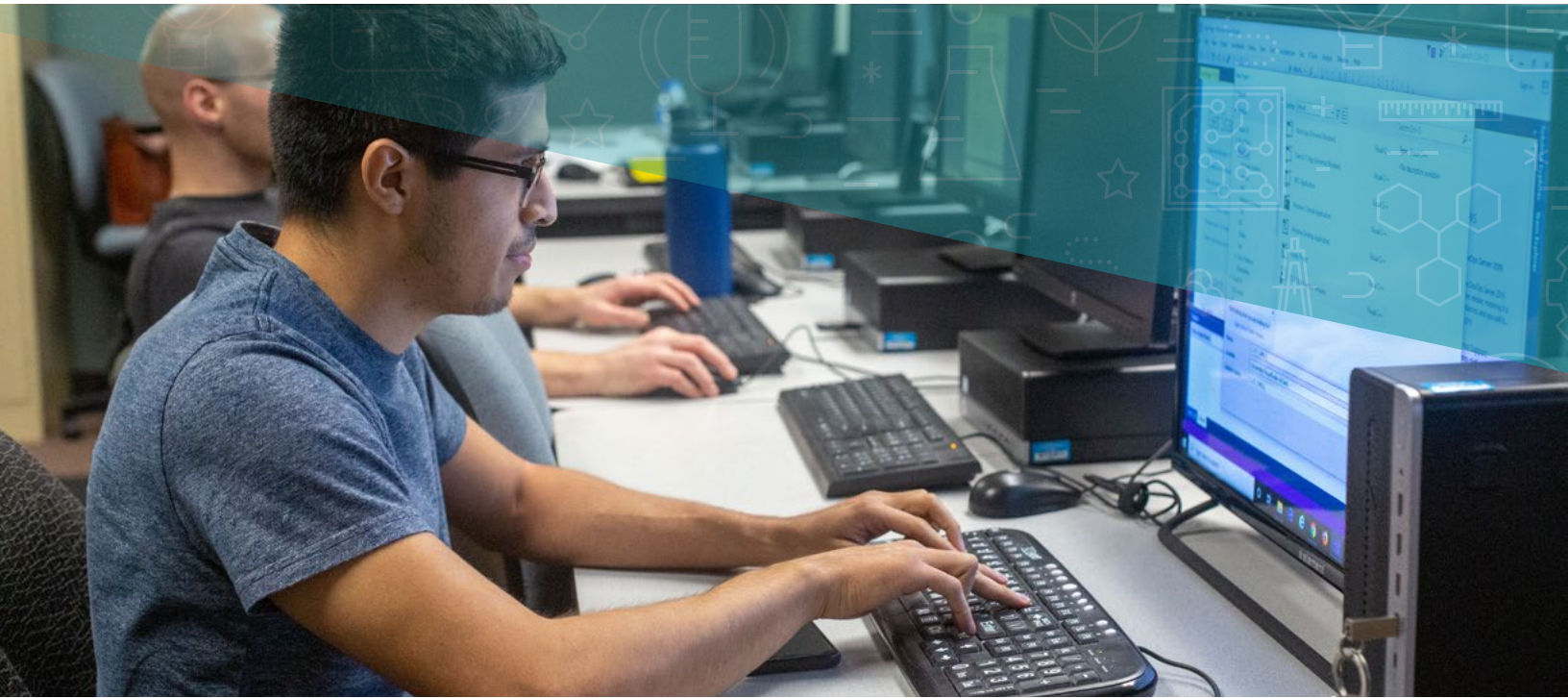
Race and Ethnicity

White residents make up 83% of all residents in the Copper Mountain College area, compared to 78% in the Inland Empire/Desert Region as a whole (Exhibit 4). Black residents in the Copper Mountain College area comprise 7% of the population and 8% of the population in the Inland Empire/Desert Region. The Copper Mountain College area has a smaller proportion of Hispanic residents, 37%, compared to 52% in the Inland Empire/Desert Region. Race and ethnicity demographics for the region are available in Appendix B.

Exhibit 4: 2019 Race and Hispanic population share, Copper Mountain College area



Source: Emsi 20.2



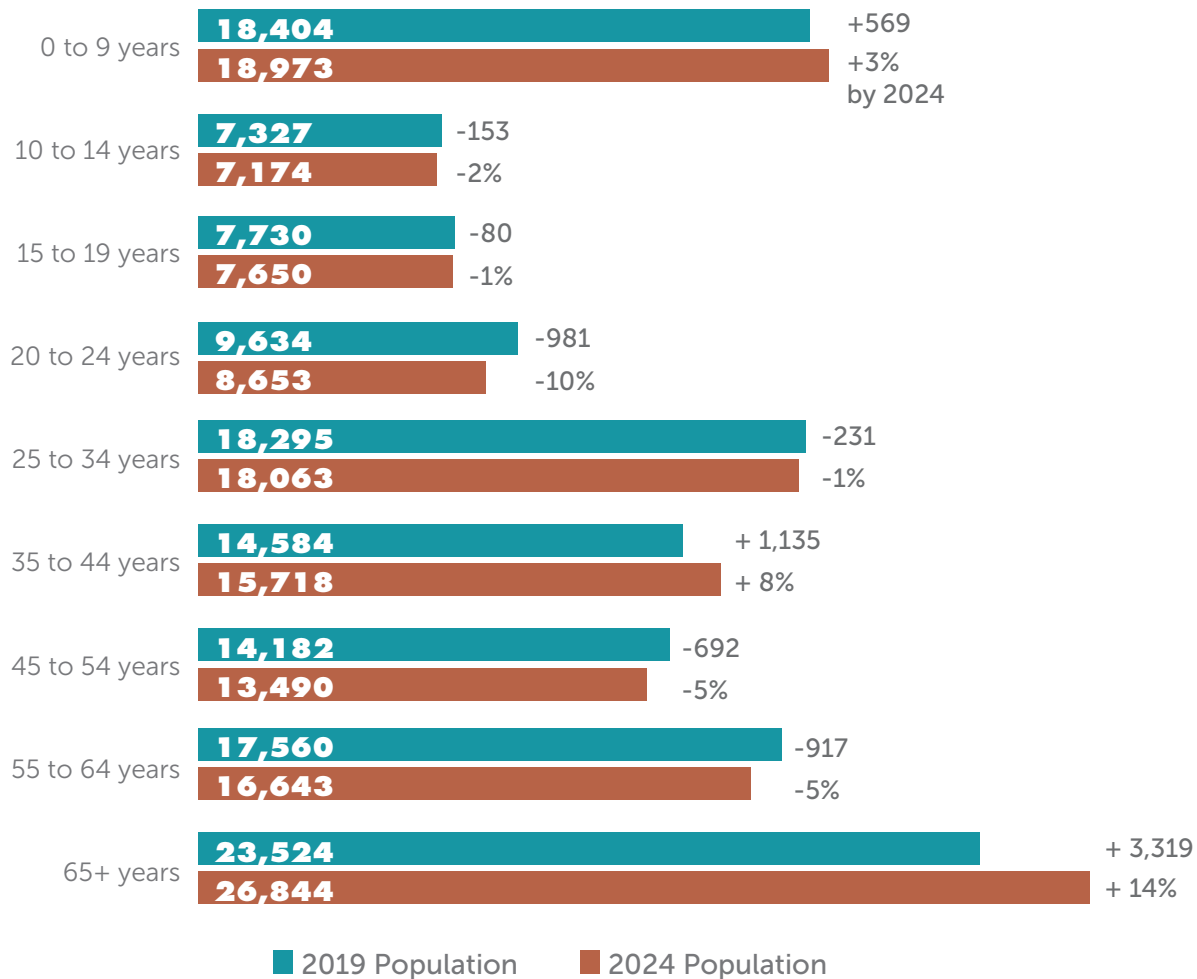
Age

Information on the age of residents informs future enrollment needs in the Copper Mountain College area. In 2019, residents age 9 years and younger represented about 14% of the Copper Mountain College area's population (Exhibit 5). This group is expected to increase by 3% by 2024, twice as fast as the overall population at 1.5%. This may indicate a potential influx of students for the college within the next 20 years. The 10-to-14-year-old age group, those who may enter college in the next six to 10 years, is expected to fall 2% over the next five years. The 15-to-19-year-old age group, representing high school students and recent graduates, represents just under 6% of the population. This group is expected to decrease by 1% through 2024.

The working-age population, ages 25 to 64 years, represented 49.2% of the area's population in 2019, or 56,695 residents. Over the next five years, the working-age population is expected to decline by 705 residents, falling by 1.1%.

The 65-years-and-older age group is projected to increase by 14% over the next five years, rising by 3,319 residents. Residents age 65 and older represent the fastest-growing age group in the Copper Mountain College area. Comparable age demographics for the region are available in Appendix B.

Exhibit 5: Five-year growth, 2019 and 2024 population share by age group, Copper Mountain College area

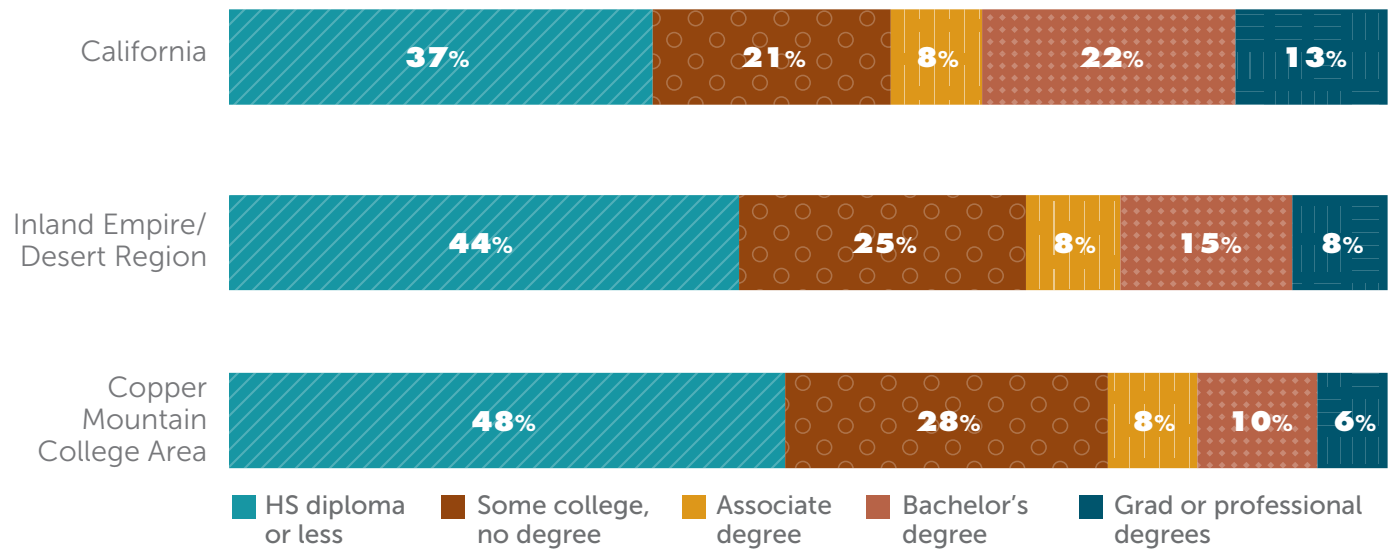


Source: Emsi 20.2

Educational Attainment

Educational attainment refers to the highest level of education that residents age 25 and older have completed. Just under half of the residents in the Copper Mountain College area have a high school diploma or less (48%), higher than the region (44%), and considerably higher than California (37%) (Exhibit 6). The Copper Mountain College area has a larger proportion of residents who are community-college-educated (which encompasses the categories of some college, no degree and associate degree), 36% versus 33% in the Inland Empire/Desert Region. The Copper Mountain College area has a much smaller share of residents with a bachelor’s degree or higher (16%) than the region (23%), and California (35%). The small share of residents with a bachelor’s degree or higher presents an opportunity to increase educational attainment in the area.

Exhibit 6: Highest educational attainment of adults age 25 and older in the Copper Mountain College area, Inland Empire/Desert Region, and California



Source: American Community Survey

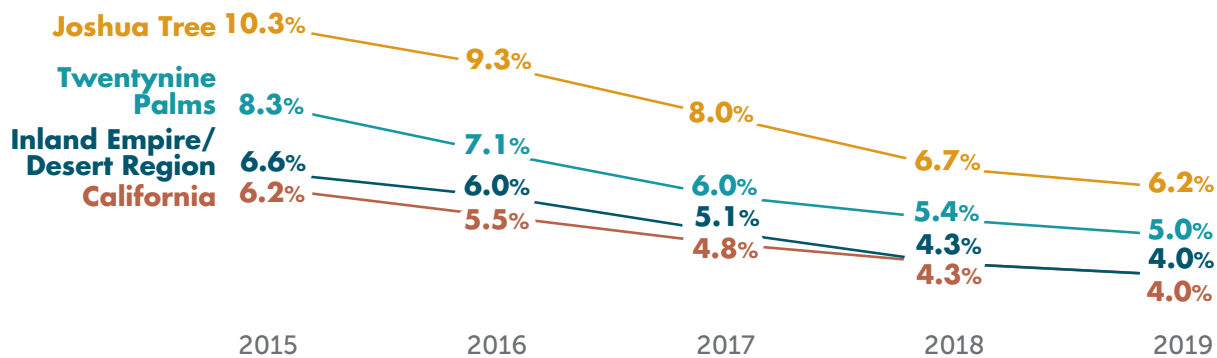


Labor Force and Unemployment Rate

Labor force data reflects the employment status of people by “place of residence.” A person is counted in the labor force by their place of residence, regardless of where their work is located. Over the last five years, the unemployment rates in the cities of Joshua Tree and Twentynine Palms have been historically higher than the region and the state (Exhibit 7). Prior to the COVID-19 pandemic, the unemployment rate had been trending downward since 2010, with the lowest unemployment rates since 1990 occurring in 2018 and 2019.

In 2015, the annual average unemployment rate was 10.3% in Joshua Tree and 8.3% in Twentynine Palms. By 2019, the unemployment rate in Joshua Tree fell to 6.2%, and the unemployment rate in Twentynine Palms fell to 5.0%. These rates were still higher than those seen in the region and state as a whole.

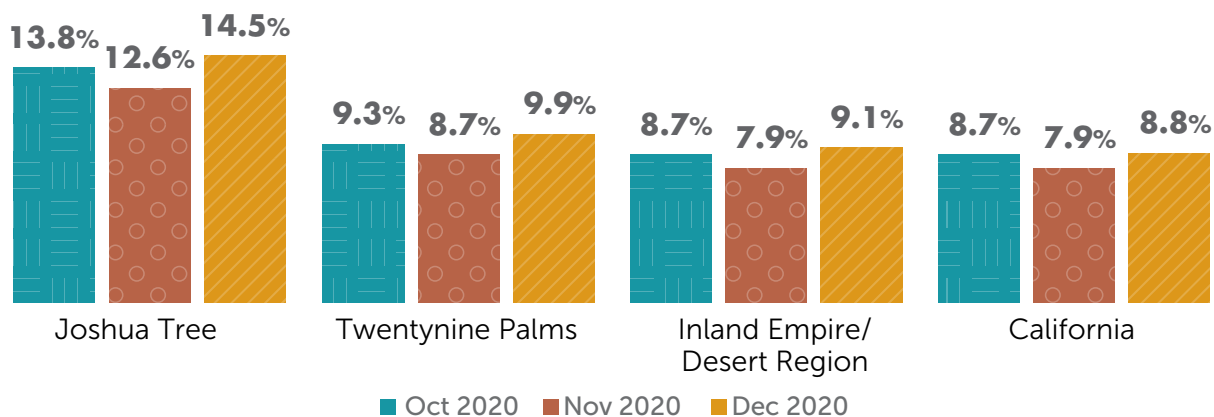
Exhibit 7: Annual average unemployment rates in Joshua Tree, Twentynine Palms, Inland Empire/Desert Region, and California (in percent)



Source: California Employment Development Department, Labor Market Information Division

The COVID-19 pandemic and subsequent economic shutdown in March 2020 resulted in a dramatic increase in the unemployment rate. Exhibit 8 displays the current unemployment rate for the cities of Joshua Tree, Twentynine Palms, the Inland Empire/Desert Region, and California from October 2020 through December 2020. Nearly all areas in California experienced an increase in the unemployment rate in December 2020 due to the ongoing pandemic. Appendix B contains unemployment rate data for 2019 (as an annual average) and the last three available months in 2020 for each community in the Copper Mountain College area.

Exhibit 8: Unemployment rates in Joshua Tree, Twentynine Palms, the Inland Empire/Desert Region, and California October-December 2020



Source: California Employment Development Department, Labor Market Information Division

INDUSTRY EMPLOYMENT AND BUSINESS ACTIVITY

In 2019, there were 42,987 jobs in the Copper Mountain College area, accounting for 2.4% of total regional employment (Exhibit 9). Over the next five years, employment in the Copper Mountain College area is projected to grow by 4.8%, adding 2,077 jobs by 2024. At a rate of 4.8%, employment in the college area is projected to grow more slowly than the region, 8.4%, and California, 6%.

Exhibit 9: Five-year industry employment projections for the Copper Mountain College area, the Inland Empire/Desert Region, and California

	Copper Mountain College Area	Inland Empire/ Desert Region	California
2019 Jobs	42,987	1,747,341	20,003,848
2024 Jobs	45,064	1,893,522	21,200,103
Jobs Change	2,077	146,181	1,196,255
2019-2024 % Jobs Change	4.8%	8.4%	6.0%

Source: Emsi 20.2

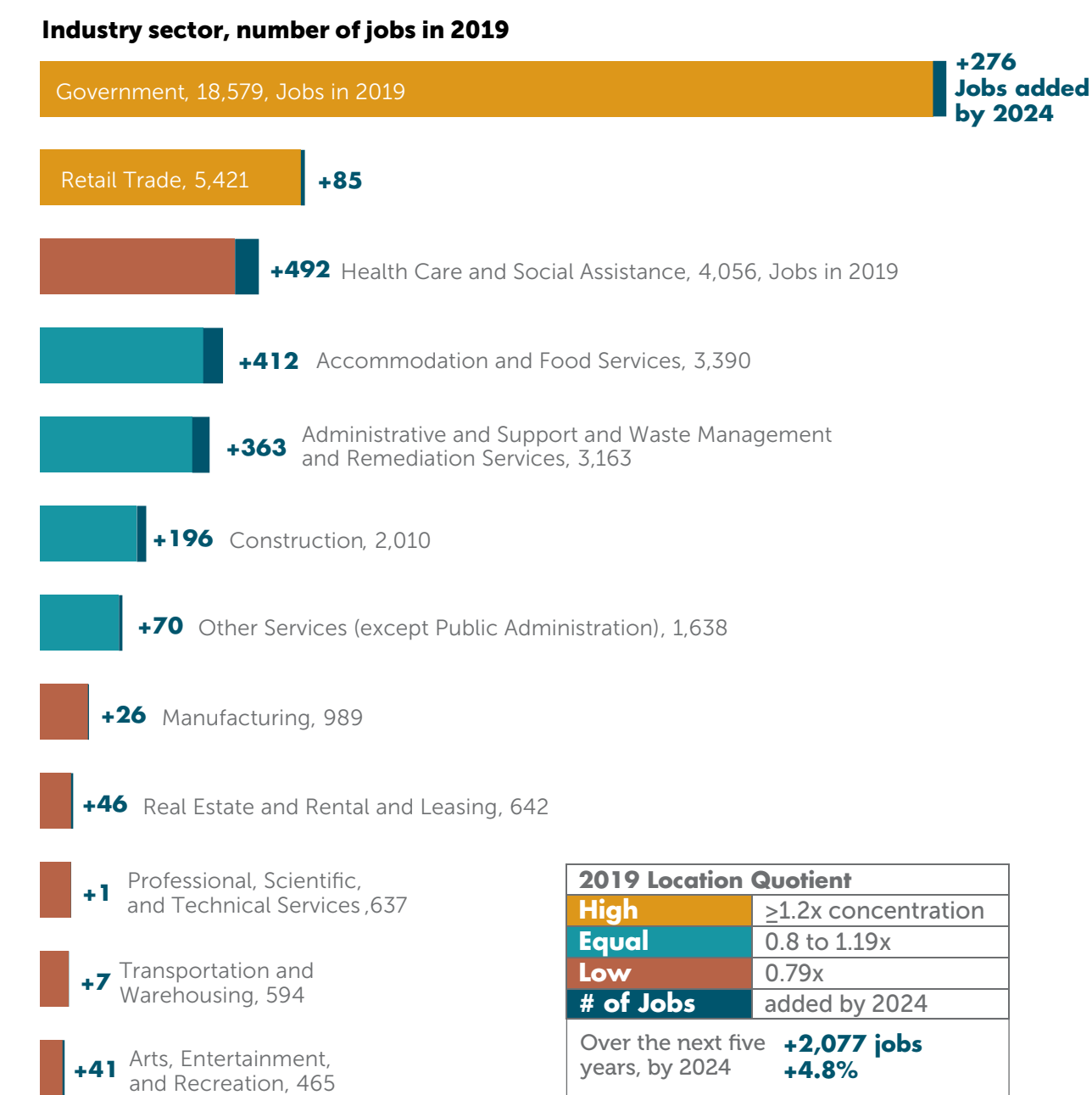
Using the North American Industry Classification System (NAICS), major industries were ranked by their 2019 job count and projected job growth through 2024 (Exhibit 10). Government employment represented about 43% of the jobs (18,579 jobs) in the Copper Mountain College area. The next largest industries by job count were retail trade (5,421 jobs), health care and social assistance (4,056 jobs), and accommodation and food services (3,390 jobs). Industries projected to add the most jobs through 2024 are health care and social assistance (492 jobs), accommodation and food services (412 jobs), administrative and support and waste management (363 jobs), and government (276 jobs).

Exhibit 10 also displays the 2019 location quotient for each industry, which quantifies its concentration in the regional economy compared to the nation. A high location quotient (1.2 or greater) reveals industries that are particularly important to the area's economy. Conversely, industries with a low location quotient (0.79 or less) are less concentrated in the region than the national average, indicating that job seekers are more likely to find jobs in these industries elsewhere.

The top three major industries in terms of overall employment represent nearly two-thirds (65%) of total jobs in the area (28,056 jobs out of 42,987 total jobs).

Major industry groups with less than 450 jobs, along with key industry terms are displayed in Appendix B.

Exhibit 10: Major industries in the Copper Mountain College area, number of jobs in 2019, and number of jobs added by 2024



Source: Emsi 20.2

OCCUPATIONAL EMPLOYMENT IN THE COPPER MOUNTAIN COLLEGE AREA

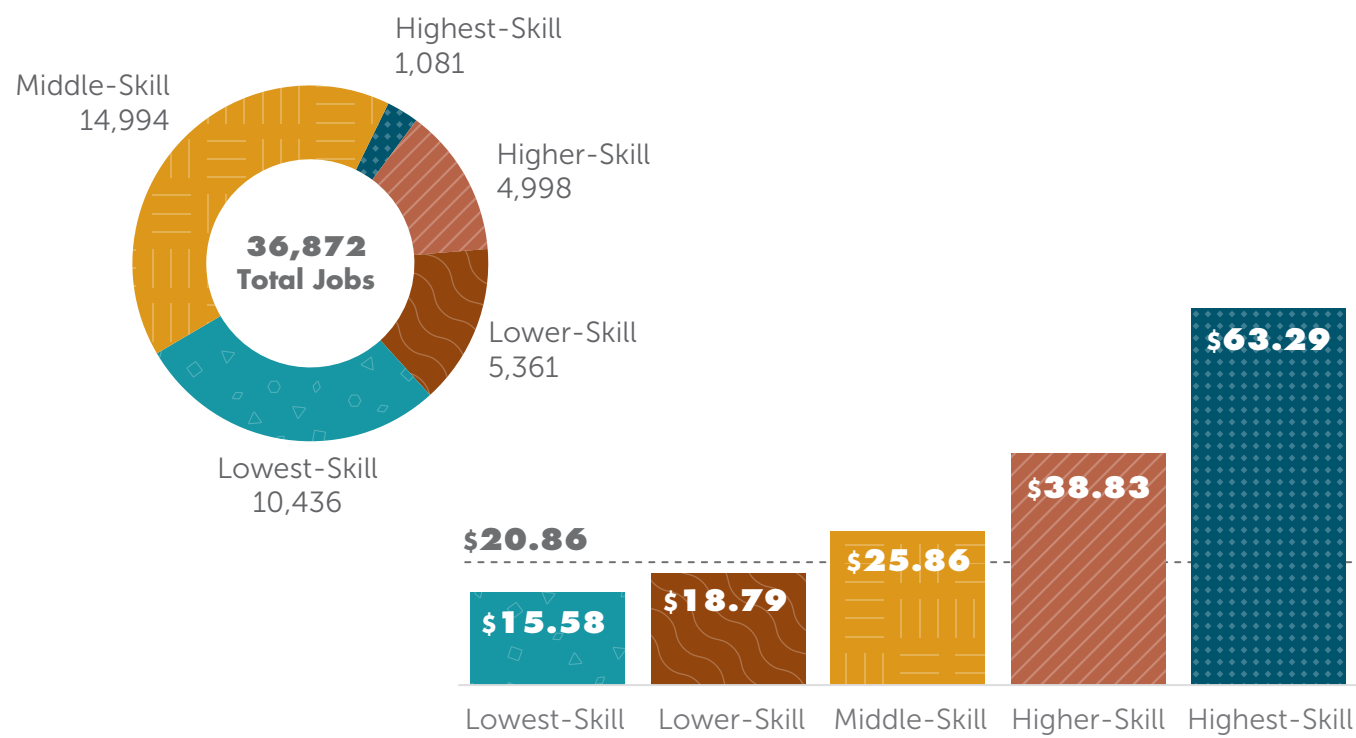
Occupational employment in the area was analyzed in terms of five skill levels: lowest-, lower-, middle-, higher-, and highest-skill. The California Community Colleges provide education and training that generally prepares workers to enter middle-skill jobs. Middle-skill occupations are those that typically require an education beyond a high school diploma, but less than a four-year degree. Most middle-skill jobs offer a higher pay rate than lower-skill jobs, making them an excellent fit for community college students on a CE pathway toward in-demand careers that pay a living wage.

Higher-skill jobs, for this study, are those that require a bachelor’s degree. Focusing on higher-skill jobs demonstrates the types of jobs available to students after completion of a transfer program to a four-year postsecondary institution. This assessment does not include occupations that typically require an education beyond a bachelor’s degree, such as physicians, lawyers, and most scientists. Definitions for each occupational skill level are available in Appendix C.

To further refine the types of jobs available in the Copper Mountain College area, military-specific occupations were removed from further analysis (-6,115 jobs). Of the 36,872 remaining jobs in the Copper Mountain College area in 2019, approximately 28% were lowest-skill, 15% were lower-skill, 41% were classified as middle-skill jobs, 14% were higher-skill, and 3% were highest-skill (Exhibit 11). Through 2024, employers expect to have a 4,892 annual job openings to fill newly created positions as well as existing jobs that workers are permanently vacating (due to occupational transfers and retirements). While the majority of these opportunities will be in lower- and lowest-skill occupations, 1,712 middle-skill openings are expected annually in the Copper Mountain College area through 2024.

Community colleges also should ensure that their training programs lead to occupations with adequate annual job openings and self-sustaining earnings. For this study, an occupation is considered **in-demand** if it has **100 annual job openings** or more over the next five years in the Inland Empire/Desert Region, even if the job openings are lower in the Copper Mountain College area. Occupations are considered **high-wage** if the median hourly wage **meets or exceeds \$20.86 per hour**. Exhibit 11 displays a breakdown of total jobs by skill level and average hourly wage for each skill-level category.

Exhibit 11: Breakdown of total jobs in the Copper Mountain College area by skill level with the associated median wage



Source: COE, Emsi 20.2

COPPER MOUNTAIN COLLEGE PROGRAM OFFERINGS BY CAREER EDUCATION INDUSTRY SECTOR

The California Department of Education (CDE) developed CE Model Curriculum Standards for grades 7 through 12 that categorize courses and programs into 15 sectors. The CE model sectors are not to be confused with the North American Industry Classification System (NAICS) employment sectors in the previous section. The CE model provides a useful way to classify postsecondary CE offerings and connect career pathways from high school to college.

Copper Mountain College currently offers programs in nine CDE industry sectors:

- Arts, Media, and Entertainment
- Business and Finance
- Education, Child Development, and Family Services
- Engineering and Architecture
- Health Science and Medical Technology
- Hospitality, Tourism, and Recreation
- Information and Communications Technologies
- Public Service
- Transportation

The following sections include the results of a CDE sector analysis that provides details on each CDE sector, including local and regional job openings and median wages for each occupation. Occupations are separated into middle- and higher-skill job opportunities. Employment opportunities for both middle- and higher-skill jobs within each CDE sector that Copper Mountain College does not currently offer training for are provided at the end of each sector or pathway section. Appendix D displays key terms, as well as annual job openings and in-depth wage categories for each occupation in the Copper Mountain College area and Inland Empire/Desert Region.

This analysis details employment opportunities for **79 unique occupations**, yielding **826 annual job openings** within the Copper Mountain College area. Two-thirds of these job opportunities are middle-skill, totaling 554 annual job openings. While there are fewer higher-skill opportunities available in the local area, these openings typically offer a higher wage.

There are additional employment opportunities in the Copper Mountain College area for which there are currently no relevant training programs being offered. With the appropriate level of education and training, the Copper Mountain College area's resident population could potentially explore an additional 400 job openings.

Exhibits 12 through 43 display annual job openings for the Copper Mountain College area (college area) and the total two-county Inland Empire/Desert Region (Riverside and San Bernardino counties). All occupational data is sourced from Emsi 20.2 and a CDE to TOP to occupation crosswalk developed by the Centers of Excellence for Labor Market Research. Appendix D displays job openings for each occupation featured in this report.



ARTS, MEDIA, AND ENTERTAINMENT INDUSTRY SECTOR

Arts, media, and entertainment coursework provides students with the necessary skills to function in the media-rich 21st century (Edmonds and Mitchel). Students enrolled in these programs will learn skills that lead to creative, audio/video, and performance occupations. These opportunities may require that students move or travel outside the region for work.

Design, Visual, and Media Arts Pathway

The design, visual, and media arts programs provide training for those occupations that use visual art, digital media, and web-based tools and materials as the primary means of communication and expression. This career pathway requires the development of knowledge and skills in both visual art concepts as well as new and emerging digital processes by which individuals are able to create and communicate complex concepts in a broad range of occupations and professions.

Copper Mountain College program:

- Graphic Design Technology

Exhibit 12: Design, visual, and media arts middle-skill occupation

Middle-skill Occupation	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Graphic Designers	24	3	255	\$20.71

Additional Arts, Media, and Entertainment Training Opportunity

Future program development by Copper Mountain College related to arts, media, and entertainment may focus on the following occupation related to production and managerial arts. This occupation is expected to have two annual job openings in the college area, but is expected to have 100 annual job openings in the region and offers a high-wage that exceeds \$20.86 per hour.

Exhibit 13: Arts, media, and entertainment training opportunity

Arts, Media, and Entertainment Training Opportunity, Higher-skill	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Art Directors	14	2	100	\$24.62





BUSINESS AND FINANCE SECTOR

Students participating in business and finance programs gain skills that are applicable to nearly every employer, career path, and industry sector (McCabe, Ferrier, and Yates). These programs prepare students for multiple pathways, including business management, financial services (such as accounting, banking, and investing), and careers in international business.

Business Management Pathway

Copper Mountain College offers several business management programs under the broad business administration umbrella. The CDE pathways linked to business administration TOP codes are business management and financial services, depending on the concentration. The business management pathway provides entrepreneurship, goal setting, and resource allocation skills for students entering the workforce. Additionally, these programs support managers and supervisors looking to boost their management techniques. Programs in this pathway train students to enter nine occupations that have a combined total of 187 annual job openings in the Copper Mountain College area.

Copper Mountain College programs:

- General Business
- Business Administration
- Office Assistant

Exhibit 14: Business management middle-skill occupations

Middle-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	407	47	2,760	\$18.58
First-Line Supervisors of Office and Administrative Support Workers	269	29	1,750	\$26.41
Administrative Services Managers	77	7	259	\$47.33
Executive Secretaries and Executive Administrative Assistants	62	7	397	\$28.13

Exhibit 15: Business management higher-skill occupations

Higher-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
General and Operations Managers	424	43	2,162	\$48.54
Managers, All Other	340	29	920	\$34.61
Management Analysts	125	14	679	\$37.83
Market Research Analysts and Marketing Specialists	59	7	591	\$26.18
Chief Executives	55	4	204	\$78.12

Financial Services Pathway

Students participating in these pathway programs will gain knowledge of industry standards, financial services skills, and the ability to formulate and interpret financial information. In the Copper Mountain College area, there are opportunities for employment after a community college education and with continued education for a bachelor's degree. Programs in this pathway prepare students to enter six middle-skill occupations that have a combined total of 60 annual job openings in the Copper Mountain College area.

Copper Mountain College programs:

- Accounting
- Bookkeeping

Exhibit 16: Financial services middle-skill occupations

Middle-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Bookkeeping, Accounting, and Auditing Clerks	294	36	2,079	\$19.60
Claims Adjusters, Examiners, and Investigators	160	14	341	\$12.97
Bill and Account Collectors	26	3	261	\$18.60
Loan Officers	31	3	224	\$26.98
Tax Preparers	27	3	123	\$16.73
Loan Interviewers and Clerks	<10	1	103	\$19.92

Exhibit 17: Financial services higher-skill occupations

Higher-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Accountants and Auditors	173	17	934	\$33.75
Financial Managers	85	8	421	\$53.14
Personal Financial Advisors	23	2	122	\$36.52
Financial Specialists, All Other	35	3	99	\$25.03
Financial Analysts	13	1	89	\$37.97



EDUCATION, CHILD DEVELOPMENT, AND FAMILY SERVICES SECTOR

Education and training in this CDE sector provides students with the skills needed to pursue a career in childcare, family, or social services, or to become a teacher (Heuvel and Ford). Students enrolled in these programs will be qualified to enter the occupations listed below, many of which are higher-skill, in-demand careers. This industry sector has four pathways: child development, consumer services, education, and family and human services.

Child Development and Education Pathways

The child development pathway provides students with the training needed to enter middle-skill childcare jobs. The education pathway prepares teachers; many of these jobs will require a four-year postsecondary degree and a state credential to enter employment. Community college programs provide foundational training for future educators. Programs in this pathway prepare students to enter three middle-skill occupations that have a combined total of 87 annual job openings. Most job opportunities in this pathway are higher-skill occupations.

Copper Mountain College programs:

- Qualified Early Childhood Educator Certificate (Associate Teacher)
- Qualified Early Childhood Educator Certificate (Teacher)
- Early Childhood Education

Exhibit 18: Child development and education middle-skill occupations

Middle-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Childcare Workers	296	44	2,008	\$12.04
Teacher Assistants	301	35	2,469	\$16.84
Preschool Teachers, Except Special Education	77	8	413	\$14.36

Exhibit 19: Child development and education higher-skill occupations

Higher-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Substitute Teachers	259	32	1,788	\$18.05
Elementary School Teachers, Except Special Education	306	26	1,962	\$42.88
Teachers and Instructors, All Other	169	20	615	\$16.79
Secondary School Teachers, Except Special and Career/Technical Education	164	14	1,034	\$40.49
Middle School Teachers, Except Special and Career/Technical Education	47	5	352	\$39.99
Education, Training, and Library Workers, All Other	34	3	217	\$18.94
Special Education Teachers, Kindergarten and Elementary School	31	3	203	\$37.82
Kindergarten Teachers, Except Special Education	17	2	144	\$34.17
Special Education Teachers, Secondary School	17	2	114	\$43.18

Continued

Higher-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Education Administrators, All Other	20	2	86	\$52.01

Additional Education, Child Development, and Family Service Training Opportunities

Future program development at Copper Mountain College may focus on the following occupations related to the consumer services and family and human services pathways. While there is only one middle-skill occupation in this pathway offering 4 annual job openings in the Copper Mountain College services area, 100 annual job openings are available to students willing to commute within the region.

Exhibit 20: Education, child development, and family service training opportunities

Education, Child Development, and Family Service Training Opportunities, Middle-skill, unless noted	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Substance Abuse, Behavioral Disorder, and Mental Health Counselors (Higher-skill)	84	11	532	\$21.24
Child, Family, and School Social Workers (Higher-skill)	33	4	234	\$25.85
Interpreters and Translators	36	4	100	\$26.11





ENGINEERING AND ARCHITECTURE SECTOR

Students enrolled in coursework related to engineering and architecture focus on career awareness, exploration, and preparation in four pathways that emphasize real-world, occupationally relevant experiences of significant scope and depth: architectural design, engineering technology, engineering design, and environmental engineering (McCabe, Dunn).

Architectural Design Pathway

The architectural design pathway provides learning opportunities for students interested in preparing for careers in such areas as architecture, industrial design, and civil engineering. The architectural design pathway provides training related to seven middle-skill occupations that have a collective total of 15 annual job openings in the Copper Mountain College area and 543 annual job openings in the Inland Empire/Desert Region.

Copper Mountain College program:

- Computer-Aided Design and Drafting (CADD) Technician

Exhibit 21: Architectural design middle-skill occupations

Middle-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Engineering Technicians, Except Drafters, All Other	34	4	86	\$34.76
Civil Engineering Technicians	31	3	67	\$29.74
Electrical and Electronics Engineering Technicians	29	3	107	\$29.45
Surveying and Mapping Technicians	13	2	59	\$28.15
Architectural and Civil Drafters	11	1	123	\$27.44
Mechanical Drafters	<10	1	53	\$24.37
Industrial Engineering Technicians	<10	1	48	\$29.48

Exhibit 22: Architectural design higher-skill occupations

Higher-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Civil Engineers	86	8	285	\$52.01
Engineers, All Other	45	3	64	\$45.24
Mechanical Engineers	24	2	123	\$40.53
Architectural and Engineering Managers	23	2	101	\$70.20
Electronics Engineers, Except Computer	19	1	58	\$53.83
Architects, Except Landscape and Naval	<10	1	102	\$35.82



HEALTH SCIENCE AND MEDICAL TECHNOLOGY SECTOR

Students enrolled in coursework related to the health science and medical technology CDE sector will gain technical skills and effective methods for the safe delivery of health care (McCabe and Beck). The six pathways in this sector are biotechnology; patient care; health care administrative services; health care operational support services; public and community health; and mental and behavioral health.

Patient Care Pathway

The patient care pathway provides training in the prevention, treatment, and management of illness, including mental health and physical well-being. Programs offered by Copper Mountain College prepare students for employment in four middle-skill occupations that have a combined total of 112 annual job openings in the Copper Mountain College area and 5,731 annual job openings in the Inland Empire/Desert Region.

Copper Mountain College programs:

- Home Health Aide
- Nurse Assistant
- Vocational Nursing
- Registered Nursing

Exhibit 23: Patient care middle-skill occupations

Middle-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Registered Nurses	651	45	2,616	\$47.45
Nursing Assistants	177	26	1,311	\$15.62
Home Health Aides	94	22	995	\$16.01
Licensed Practical and Licensed Vocational Nurses	197	19	809	\$25.10

Additional Health Science and Medical Technology Training Opportunities

Future program development by Copper Mountain College may focus on occupations related to patient care; biotechnology; health care administrative services; health care operational support services; public and community health; and mental and behavioral health pathways. Additional health science and medical technology training occupations will offer a total of 28 middle-skill annual openings in the college area and 1,449 annual openings in the region. One occupation is higher-skill.

Exhibit 24: Health science and medical technology training opportunities

Health Science and Medical Technology Training Opportunities, Middle-skill, unless noted	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Medical and Health Services Managers (Higher-skill)	95	9	401	\$56.33
Healthcare Support Workers, All Other	42	5	208	\$21.26
Clinical Laboratory Technologists and Technicians	62	5	194	\$24.72
Dental Hygienists	26	3	186	\$45.41

Continued

Health Science and Medical Technology Training Opportunities, Middle-skill, unless noted	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Medical Records and Health Information Technicians	46	3	184	\$22.44
Respiratory Therapists	33	2	150	\$35.39
Psychiatric Technicians	38	4	149	\$34.62
Radiologic Technologists	36	2	140	\$36.03
Surgical Technologists	20	2	135	\$27.39
Physical Therapist Assistants	11	2	103	\$34.61





HOSPITALITY, TOURISM, AND RECREATION SECTOR

This sector prepares students for career pathways in food science, dietetics, and nutrition; food service and hospitality; and hospitality, tourism, and recreation. Preparation for employment in this CDE sector includes traditional classroom learning and integrates hands-on projects, work-based instruction, and leadership development.

Food Service and Hospitality Pathway

In this pathway, students are introduced to the hospitality industry and the major aspects of food service. Instruction is delivered via hands-on experiences with an emphasis on sanitation, management, customer service, and more. The culinary arts program in this pathway prepares students for employment in three middle-skill occupations that have a combined total of 62 annual job openings in the Copper Mountain College area.

Copper Mountain College program:

- Culinary Arts

Exhibit 25: Food service and hospitality middle-skill occupations

Middle-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
First-Line Supervisors of Food Preparation and Serving Workers	214	42	1,908	\$14.94
Food Service Managers	103	14	653	\$20.87
Chefs and Head Cooks	39	6	252	\$20.24

Additional Hospitality, Tourism, and Recreation Training Opportunities

Future program development by Copper Mountain College may focus on the following occupations related to the food science, dietetics, and nutrition; and hospitality, tourism, and recreation pathways. These occupations will offer a total of five annual openings in the college area and 271 annual openings in the region.

Exhibit 26: Hospitality, tourism, and recreation training opportunities

Hospitality, Tourism, and Recreation Training Opportunities, Middle-skill, unless noted	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
First-Line Supervisors of Gaming Workers	28	3	146	\$27.77
Meeting, Convention, and Event Planners (Higher-skill)	17	2	125	\$22.96



INFORMATION AND COMMUNICATION TECHNOLOGIES SECTOR

Information and communication technologies CDE sector programs prepare students with skills to meet the rapid changes in computer, networking, and software fields. Although employers in this sector often seek candidates with a bachelor's degree, job opportunities also exist for those with a community college education (McCabe and Page). This pathway contains the information support and services; networking, software and systems development; and game and simulation pathways.

Information Support and Services Pathway

This pathway prepares for careers that involve the implementation of computer services and software, support of multimedia products and technical services, and the administration of information and communication systems. This pathway provides skills that prepare students for employment in five occupations with a combined total of 17 annual job openings in the Copper Mountain College area and 976 annual job openings in the Inland Empire/Desert Region.

Copper Mountain College programs:

- Computer Information Systems
- Computer Support Specialist

Exhibit 27: Information support and services middle-skill occupations

Middle-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Computer User Support Specialists	67	6	390	\$26.11
Data Entry Keyers	29	3	199	\$15.26

Exhibit 28: Information support and services higher-skill occupations

Higher-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Computer Systems Analysts	45	4	186	\$39.87
Computer and Information Systems Managers	38	3	152	\$68.15
Database Administrators	<10	1	49	\$46.72



Networking Pathway

The networking pathway educates students in the successful establishment, maintenance, and securing of information and communication technologies infrastructure. With this training, students will be prepared for careers in network analysis and all components of network systems.

Copper Mountain College programs:

- Computer Network Specialist/Net Training
- Computer Network Supervisor
- Computer Security Specialist
- Computer Ethical Hacking Specialist

Exhibit 29: Networking middle-skill occupation

Middle-skill Occupation	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Network and Computer Systems Administrators	58	4	158	\$38.48

Software and Systems Development Pathway

In this pathway, students receive instruction on systems development and programming for support operations in many industries. Specifically, students learn a spectrum of necessary skills for the development, deployment, and management of software and systems.

Copper Mountain College programs:

- Computer Programming
- Web Design

Exhibit 30: Software and systems development middle-skill occupation

Middle-skill Occupation	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Web Developers	12	1	109	\$24.36

Exhibit 31: Software and systems development higher-skill occupations

Higher-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Software Developers, Applications	21	2	237	\$48.70
Software Developers, Systems Software	10	1	118	\$48.83
Computer Programmers	12	1	72	\$40.36



PUBLIC SERVICES SECTOR

In this CDE sector, learning is done through a systematic, standards-based pathway program that includes projects and work-based instruction. Public services coursework includes public safety, emergency response, and legal practices (McCabe and Beck). The following pathways comprise this sector: public safety, emergency response, and legal practices.

Emergency Response Pathway

The emergency response pathway teaches students how to utilize safety procedures and protocols for fire and emergency situations and provides an understanding of emergency response processes within organizations. The program offerings in this pathway prepare students for employment in two occupations that have a combined total of 18 annual job openings in the Copper Mountain College area and 549 in the Inland Empire/Desert Region.

Copper Mountain College programs:

- Emergency Medical Services
- Fire Technology

Exhibit 32: Emergency response middle-skill occupations

Middle-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Emergency Medical Technicians and Paramedics	120	9	280	\$15.49
Firefighters	109	9	269	\$30.40



Public Safety Pathway

This pathway is designed for students who want to pursue a career in law enforcement or related public safety occupations. Copper Mountain offers administration of justice and criminal justice programs within this pathway. In the Copper Mountain College area, occupations trained by these programs are projected to have a combined total of 53 annual job openings.

Copper Mountain College programs:

- Administration of Justice
- Criminal Justice

Exhibit 33: Public safety middle-skill occupations

Middle-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Police and Sheriff's Patrol Officers	424	32	628	\$47.03
Correctional Officers and Jailers	121	11	463	\$38.33
Detectives and Criminal Investigators	61	4	85	\$49.12
First-Line Supervisors of Protective Service Workers, All Other	21	2	154	\$18.18
First-Line Supervisors of Correctional Officers	17	1	45	\$48.36

Exhibit 34: Public safety higher-skill occupation

Higher-skill Occupation	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Probation Officers and Correctional Treatment Specialists	27	3	125	\$38.66

Additional Public Services Training Opportunities

Future program development by Copper Mountain College may focus on occupations related to the legal practices pathway. While there may be few job opportunities in the college area, students should be able to find plenty of jobs in the region that also provide a self-sustainable wage. Additional training in this sector will offer six middle-skill annual openings in the college area and 414 annual openings in the region.

Exhibit 35: Public services middle-skill training opportunities

Public Services Training Opportunities, Middle-skill	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Paralegals and Legal Assistants	41	5	262	\$27.46
Legal Support Workers, All Other	12	1	152	\$25.39



TRANSPORTATION SECTOR

The pathways in the transportation sector emphasize real-world, occupationally relevant experiences of significant scope and depth in three areas: operations, structural repair and refinishing, and systems diagnostics, service, and repair.

Systems Diagnostics, Service, and Repair Pathway

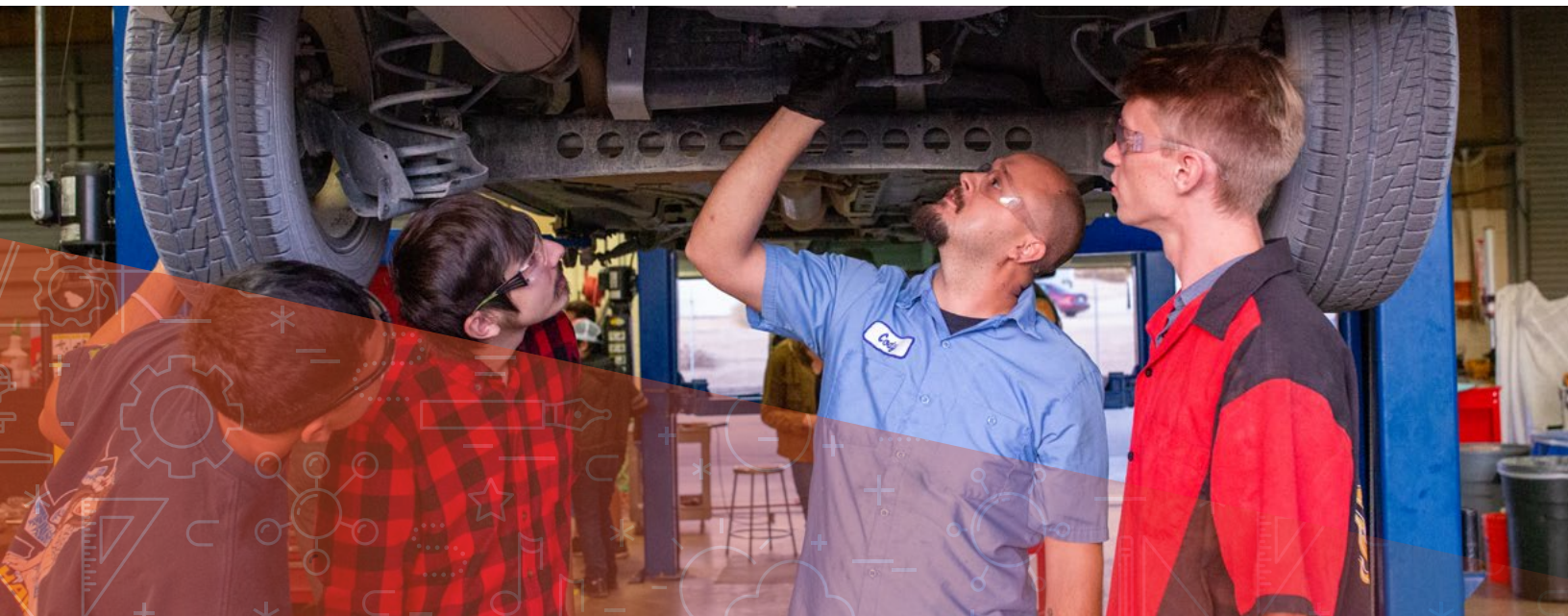
This pathway prepares students for employment in transportation systems including motor vehicles, rail systems, and small-engine equipment. Copper Mountain College's program offerings in this pathway prepare students for employment in four occupations that have a combined total of 43 annual job openings in the Copper Mountain College area and 2,107 annual job openings in the Inland Empire/Desert Region.

Copper Mountain College programs:

- Air Conditioning and Heating and Services Repair
- Alternative Fuel Vehicles
- Automotive Technology
- Engine Performance and Driveability
- Steering and Suspension Service
- Transmission Service, Repair, and Overhaul

Exhibit 36: Systems diagnostics, services, and repair middle-skill occupations

Middle-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Automotive Service Technicians and Mechanics	211	21	1,217	\$19.51
Bus and Truck Mechanics and Diesel Engine Specialists	118	12	483	\$24.05
Mobile Heavy Equipment Mechanics, Except Engines	75	8	240	\$30.12
Automotive Body and Related Repairers	18	2	167	\$18.48

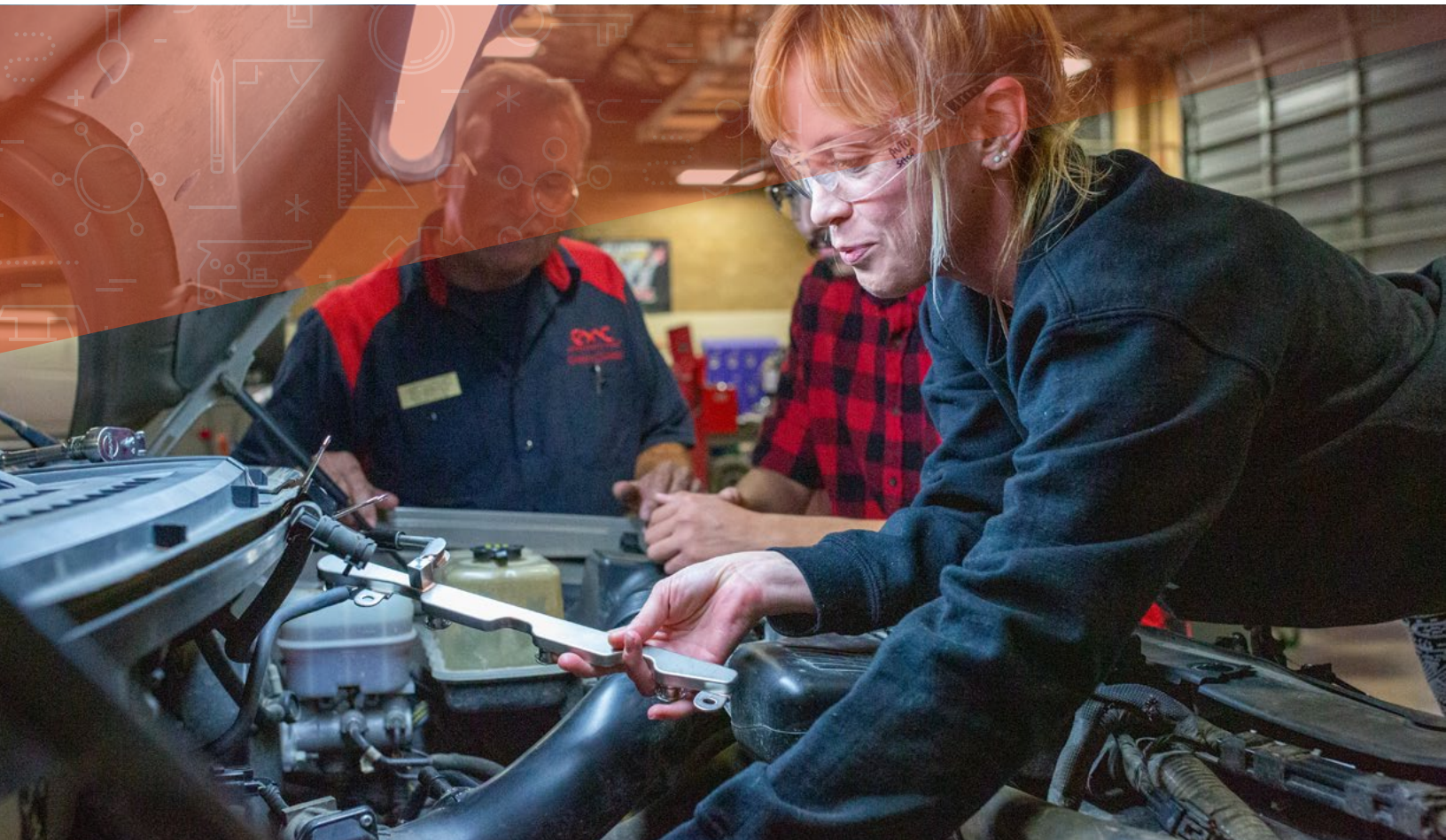


Additional Transportation Training Opportunities

Future program development by Copper Mountain College related to the transportation sector may focus on occupations related to transportation operations and structural repair and refinishing. Additional training in this sector will offer a total of 93 annual openings in the college area and 6,653 annual openings in the region. Four of the occupations listed in Exhibit 37 are related to logistics activity; first-line supervisors of transportation and material moving workers; production, planning, and expediting clerks; transportation, storage, and distribution managers; cargo and freight agents.

Exhibit 37: Transportation training opportunities

Transportation Training Opportunities, Middle-skill	College Area 2019 Jobs	College Annual Openings	Regional Annual Openings	Median Hourly Earnings
Heavy and Tractor-Trailer Truck Drivers	295	36	4,395	\$21.57
Aircraft Mechanics and Service Technicians	387	32	185	\$34.63
First-line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	88	10	1,134	\$27.19
Production, Planning, and Expediting Clerks	66	8	537	\$22.06
Transportation, Storage, and Distribution Managers	69	6	279	\$41.71
Cargo and Freight Agents	<10	1	123	\$23.15



ADDITIONAL CAREER EDUCATION SECTORS AND JOBS

There are six CDE sectors without program offerings at Copper Mountain College. The following are middle- and higher-skill occupations that are in-demand and offer high-wages. Copper Mountain College may choose to consider these occupations as the college expands its CE offerings.

Agriculture and Natural Resources Sector

Agriculture and natural resources students acquire foundational skills and knowledge in agricultural business, mechanics, science, and animal care (Heuvel and Mooney). Additional training in this sector will offer a total of 14 annual openings in the college area and 497 annual openings in the region.

Exhibit 38: Agriculture and natural resources training opportunities

Agriculture and Natural Resources Training Opportunities, Middle-skill	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	103	13	267	\$22.64
Farmers, Ranchers, and Other Agricultural Managers	<10	1	230	\$21.41

Building and Construction Trades Sector

Programs related to the building and construction trades sector equip students with the technical skills needed to transition to postsecondary training or a career in a construction trade (McCabe and Dunn). Additional training in this sector will offer a total of 136 annual openings in the college area and 7,639 annual openings in the region.

Exhibit 39: Building and construction training opportunities

Building and Construction Trades Training Opportunities, Middle-skill	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Carpenters	285	31	2,591	\$22.93
Plumbers, Pipefitters, and Steamfitters	187	29	983	\$24.48
Electricians	188	27	1,365	\$24.28
First-Line Supervisors of Mechanics, Installers, and Repairers	164	17	500	\$33.91
First-Line Supervisors of Construction Trades and Extraction Workers	122	15	1,000	\$32.24
Operating Engineers and Other Construction Equipment Operators	83	11	554	\$38.15
Construction and Building Inspectors	21	3	164	\$40.80
Brickmasons and Blockmasons	22	2	120	\$24.57
Structural Iron and Steel Workers	<10	1	237	\$32.33
Glaziers	<10	0	125	\$29.05

Energy, Environment, and Utilities Sector

Students enrolled in coursework related to the energy, environment, and utilities CDE sector acquire foundational skills in environmental resources, energy and power technology, and telecommunications (McCabe and Yates). Additional training in this sector will offer a total of 20 annual openings in the college area and 876 annual openings in the region.

Exhibit 40: Energy, environment, and utilities training opportunities

Energy, Environment, and Utilities Training Opportunities, Middle-skill	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Telecommunications Equipment Installers and Repairers, Except Line Installers	90	11	403	\$26.71
Water and Wastewater Treatment Plant and System Operators	49	4	146	\$32.87
Telecommunications Line Installers and Repairers	26	3	179	\$25.59
Electrical Power-Line Installers and Repairers	19	2	148	\$35.93

Fashion and Interior Design Sector

Pathways within this CDE sector are fashion design and merchandising, interior design, and personal services. Knowledge and skills are acquired within a sequential, standards-based pathway program that integrates hands-on projects, work-based instruction, and leadership development, such as the education and training programs offered through Family, Career and Community Leaders of America (FCCLA).

The occupations in this pathway typically provide low wages. The occupation with the highest wage in this sector is interior designers. Despite the \$23.58 median hourly wage, this occupation only has 72 annual job openings in the region and is therefore not recommended for program expansion. Please review program offerings from other community colleges and postsecondary education providers to ensure the region is not over saturating the regional labor market with programs training for this occupation.

Manufacturing and Product Development Sector

Coursework related to the manufacturing and product development CDE sector teaches students the hands-on fundamentals of manufacturing processes and systems in California (McCabe and Oliveira). Additional training in this sector will offer a total of 12 annual openings in the college area and 890 annual openings in the region.

Exhibit 41: Manufacturing and product development training opportunities

Manufacturing and Product Development Sector Training Opportunities, Middle-skill	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
First-Line Supervisors of Production and Operating Workers	61	7	589	\$28.35
Industrial Machinery Mechanics	43	5	301	\$27.95

Marketing, Sales, and Services Sector

Marketing, sales, and services coursework is designed to meet the needs of businesses by providing students with communication, marketing, selling, and product management skills (McCabe and Ferrier). The three pathways in this sector are marketing, professional sales, and entrepreneurship/self-employment. Principles of promotion, selling, and communication are vital to this sector. Additional training in this sector will offer a total of 56 annual openings in the college area and 4,284 annual openings in the region.

Exhibit 42: Marketing, sales, and services training opportunities

Marketing, Sales, and Services Training Opportunities, Middle-skill, unless noted	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	104	13	1,777	\$27.77
Real Estate Sales Agents	100	11	476	\$26.42
Sales Managers (Higher-skill)	83	8	559	\$43.00
Buyers and Purchasing Agents	76	8	426	\$27.40
First-Line Supervisors of Non-Retail Sales Workers	46	5	402	\$24.90
Public Relations Specialists (Higher-skill)	33	4	177	\$29.25
Real Estate Brokers	36	4	168	\$37.66
Marketing Managers (Higher-skill)	14	2	130	\$48.04
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products (Higher-skill)	<10	1	169	\$34.64



KEY FINDINGS AND RECOMMENDATIONS

Key findings

Over the next five years, the Copper Mountain College area's resident population is expected to increase nearly three times slower (1.5% growth) than the overall region (4.3%). Despite the college area's slow growth, the college may expect an influx of students in the next 10 to 20 years. In 2019, residents ages 0 to 9 years represented about 14% of the area's population, and this age group is expected to increase 3% over the next five years. The largest age group in the area, residents 65 years and older, is expected to increase by 14% over the next five years. The college should consider focusing on health care training programs to support this age group's medical needs. The health care and social assistance industry sector is the third-largest employer in the college area and is expected to add the most jobs, 492 more jobs by 2024. Job growth in the health care and social assistance sector represents 23.7% of the expected industry job growth in the area over the next five years.

Only 10% of area residents age 25 and older hold a bachelor's degree as their highest educational attainment level. This portion is well below the region, in which 15% are bachelor's degree holders, and significantly less than the state as a whole, 22%. In 2019, higher-skill jobs requiring bachelor's degrees represented about 14% of jobs (a total of 4,998 jobs) in the college area. Copper Mountain College should consider creating transfer programs that will boost bachelor's degree attainment in the area.

Copper Mountain College currently offers programs related to nine CDE sectors. Of these nine sectors, program offerings in six sectors may be expanded for students to gain occupational skills related to middle-skill occupations with 134 annual job openings in the college area that offer a high-wage that exceeds \$20.86 per hour. Five CDE sectors without existing programs account for 223 middle-skill annual job openings in the college area.

The following are sectors with existing programs and their respective annual job openings for middle-skill training opportunities in the college area (in descending order) are:

1. Transportation 93 annual job openings
2. Health Science and Medical Technology 37 annual job openings
3. Public Services 6 annual job openings
4. Hospitality, Tourism, and Recreation 5 annual job openings
5. Education, Child Development and Education 4 annual job openings
6. Arts, Media, and Entertainment 2 annual job openings

Sectors with no existing programs but that demonstrate substantial workforce demand for middle-skill training opportunities in the college area are:

1. Building and Construction Trades 136 annual job openings
2. Marketing, Sales, and Services 41 annual job openings
3. Energy, Environment, and Utilities 20 annual job openings
4. Agriculture and Natural Resources Sector 14 annual job openings
5. Manufacturing and Product Development 12 annual job opening

Recommendations

There are multiple employment opportunities in the Copper Mountain College area with CE training requirements not currently addressed by the college's programs. Furthermore, several sectors for which the college has existing training programs include additional occupations for which training could be expanded. These areas warrant further exploration to determine if it is appropriate for the college to create new programs or expand existing ones. Further research would determine if programs exist at nearby community colleges, private postsecondary institutions, technical colleges, or through other training providers. A conversation with regional employers who hire for these occupations also could reveal the potential of additional community college training programs to meet current and future industry needs.

As a sector that already has existing programs at the college, the transportation sector represents many employment opportunities with high-wages for which programs could be created or expanded. Most of the job openings in this sector are for heavy and tractor-trailer truck drivers (36 annual job openings). However, if the college is not interested in starting a truck driving program, a logistic training program may be warranted. Four of the additional transportation training opportunities occupations are related to logistics activity and are expected to have 25 combined annual job opening in the college area (2,073 annual job openings in the region), each offering a high-wage.

- First-line supervisors of transportation and material moving workers 10 annual job openings
- Production, planning, and expediting clerks 8 annual job openings
- Transportation, storage, and distribution managers 6 annual job openings
- Cargo and freight agents 1 annual job opening

Considering sectors that do not have representation at Copper Mountain College, the building and construction trades CDE sector is a likely candidate for further exploration. Construction industry employers are expected to add middle-skill occupations staffed by this industry sector are expected to have 136 annual job openings through 2024. Three occupations in this sector appear to be investments for future program development due to the relatively high number of job openings in the college area and the high-wages offered by each.

1. Carpenters 31 annual job openings, \$22.93 median hourly wage
2. Electricians 27 annual job openings, \$24.28 median hourly wage
3. Plumbers, pipefitters, and steamfitters 29 annual job openings, \$24.48 median hourly wage

Finally, while the number of occupations and job openings may appear relatively low in the Copper Mountain College area, job openings in the greater region are numerous; this translates to many more job opportunities for students who have the ability and desire to commute outside of the college area for work. The college could market regional job opportunities to students. Some points to consider for opportunities outside the immediate vicinity are:

1. Copper Mountain College may choose to investigate what programs other area community colleges are offering and whether they are providing a sufficient number of workers to fill local job openings.
2. Copper Mountain College may choose to identify employers whose businesses are in close proximity to its campus and determine those employers' near-term need for middle-skills workers.

APPENDIX A: COPPER MOUNTAIN COLLEGE AREA

The Copper Mountain College area contains the 13 ZIP codes displayed in Exhibit A1. All data is derived from Emsi 2020.2; QCEW, non-QCEW, Self-Employed.

Exhibit A1: Population and job counts for ZIP codes in the Copper Mountain College area

ZIP	City/Community	2019 Population	2019 Jobs	Middle-skill Job Count
92230	Cabazon	2,681	3,501	724
92240	Desert Hot Springs	35,773	4,450	1,653
92241	Desert Hot Springs	8,418	585	264
92252	Joshua Tree	9,254	2,900	1,397
92256	Morongo Valley	3,412	358	135
92268	Pioneertown	386	128	31
92276	Thousand Palms	8,077	5,292	1,853
92277	Twentynine Palms	28,991	7,874	3,756
92278	Twentynine Palms	0	4,393	2,432
92284	Yucca Valley	22,574	6,170	2,271
92285	Landers	2,879	112	47
92286	Yucca Valley	2,901	54	13
92356	Lucerne Valley	5,896	1,055	418
TOTAL		131,242	36,872	14,994



APPENDIX B: DEMOGRAPHIC COMPOSITION REFERENCE

Exhibit B1: Gender composition in the Copper Mountain College area and region

Gender	College Area (Percentage)	Regional (Percentage)
Male	51.7%	49.8%
Female	48.3%	50.2%

Exhibit B2: Race and ethnicity in the Copper Mountain College area and region

Race	College Area (Percentage)	College Area Percent Hispanic	Regional (Percentage)	Regional Percent Hispanic
White	83%	38%	78%	60%
Black	7%	14%	8%	14%
Two or More Races	3%	38%	4%	37%
Asian	2%	8%	7%	8%
American Indian or Native Alaskan	3%	77%	2%	78%
Native Hawaiian or Pacific Islander	1%	29%	0.5%	36%
Total Hispanic (All Races)	37%	37%	52%	52%

Exhibit B3: Age groups in the Copper Mountain College area and region

Age Group	College Area 2019 Share	College Area Five year Growth Rate	Regional Share	Regional Region Growth Rate
0-9	14%	3%	14%	7%
10-14	6%	-2%	7%	-3%
15-19	6%	-1%	7%	1%
20-24	7%	-10%	7%	-5%
25-34	14%	-1%	15%	3%
35-44	11%	8%	13%	8%
45-54	11%	-5%	12%	-1%
55-64	13%	-5%	11%	1%
65+	18%	14%	13%	18%

Exhibit B4: Unemployment rate by community

City/Community	Annual Average 2019	October 2020	November 2020	December 2020
Cabazon CDP	3.5%	7.3%	6.5%	7.7%
Desert Hot Springs	5.6%	14.1%	12.6%	14.1%
Joshua Tree CDP	6.2%	13.8%	12.6%	14.5%
Lucerne CDP	2.7%	4.0%	3.9%	4.9%
Morongo Valley CDP	3.5%	8.1%	7.3%	8.5%
Thousand Palms CDP	2.9%	6.0%	5.4%	6.3%
Twentynine Palms	5.0%	9.3%	8.7%	9.9%
Yucca Valley town	5.3%	11.9%	10.8%	12.5%

APPENDIX C: INDUSTRY REFERENCE AND KEY TERM DEFINITIONS

Industry employment is a count of jobs in a given geography. Businesses operating within the same industry produce similar goods and services and share comparable production processes for creating these goods and services. The North American Industry Classification System (NAICS) is the federal system used to classify all business establishments into specific industries. Staffing patterns show the distribution of occupational employment and demand for each industry. For example, Copper Mountain College employs faculty, but the institution also hires a variety of administrators and support staff to maintain the function of the institution. The same is true for most industries. Regional educational institutions should be aware of the types of industries in their area to help inform the needed industry-specific occupational skills that may be required by local employers.

Location Quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region “unique.” High location quotient (1.2 times or greater concentration in the local region compared to the nation) reveals industries that are highly represented and make the area unique. Conversely, industries with a low location quotient employ a smaller share of jobs than the national average, indicating that while job seekers may find work in these industries, they are more likely to find a higher concentration of these jobs elsewhere in the nation.

Major industry sectors with fewer than 450 jobs, along with their 2019 job count and expected five-year job growth are:

- **Information**, 420 jobs in 2019, reduction of two jobs by 2024
- **Finance and insurance**, 273 jobs in 2019, addition of six jobs by 2024
- **Wholesale trade**, 256 jobs in 2019, addition of 19 jobs by 2024
- **Mining, quarrying, and oil and gas extraction**, 146 jobs in 2019, addition of 25 jobs by 2024
- **Educational services**, 126 jobs in 2019, addition of 11 jobs by 2024
- **Utilities**, 102 jobs in 2019, addition of five jobs by 2024
- **Management of companies and enterprises**, 58 jobs in 2019, reduction of four jobs by 2024
- **Agriculture, forestry, fishing, and hunting**, 23 jobs in 2019, no jobs added by 2024



APPENDIX D: OCCUPATION AND SKILLS DEFINITIONS, AND REFERENCE TABLE WITH OCCUPATIONAL DEMAND AND WAGES

An **occupation** is a set of activities or tasks that employees are paid to perform. Employees that perform essentially the same tasks are in the same occupation, whether or not they work in the same industry. Some occupations are concentrated in a few particular industries; other occupations are found in many industries. For example, jobs for registered nurses are concentrated in the healthcare industry sector, but these jobs may also be employed by educational industries. The Standard Occupational Classification (SOC) System classifies 775 detailed occupations according to the tasks and duties of each job.

Skill Level Categories

- Lowest-skill: Occupations that require no formal education.
- Lower-skill: Occupations that require a high school diploma or less.
- Middle-skill: Occupations that mostly require some college, a postsecondary certificate, or an associate degree. These are occupations relevant to community college training.
- Higher-skill: Occupations that mostly require a bachelor's degree. These occupations are mostly trained by four-year colleges and universities.
- Highest-skill: Occupations that typically require education and training beyond a bachelor's degree.

Annual Job Openings are calculated by the sum in projected growth and replacement jobs (Growth + Replacements = Openings). Growth captures the change in the total number of workers employed in an occupation, while replacement jobs are estimates of workers permanently leaving an occupation and needing to be replaced by new hires. A combination of both numbers indicates total openings for the time frame.

Perkins V requirements are used to determine the occupations that are good investments for training resources. In addition to the training program needing to offer an industry recognized degree or certificate, an occupation also needs to meet one (1) of the following criteria to qualify for Perkins V:

1. High-wage, or
2. In-demand

Occupations that meet both criteria are ideal.

Exhibit D1: Occupational demand and wage data for occupations included in this report

Occupation	Skill Level	College Area Annual Openings	Regional Annual Openings	Pct. 25 Hourly Earnings	Median Hourly Earnings	Pct. 75 Hourly Earnings	Perkins V
Accountants and Auditors	Higher-skill	17	934	\$25.84	\$33.75	\$42.91	Both
Administrative Services Managers	Middle-skill	7	259	\$34.42	\$47.33	\$62.97	Both
Aircraft Mechanics and Service Technicians	Middle-skill	32	185	\$27.04	\$34.63	\$48.55	Both
Architects, Except Landscape and Naval	Higher-skill	1	102	\$25.70	\$35.82	\$53.67	Both
Architectural and Civil Drafters	Middle-skill	1	123	\$20.13	\$27.44	\$36.01	Both
Architectural and Engineering Managers	Higher-skill	2	101	\$55.58	\$70.20	\$83.70	Both

Continued

Occupation	Skill Level	College Area Annual Openings	Regional Annual Openings	Pct. 25 Hourly Earnings	Median Hourly Earnings	Pct. 75 Hourly Earnings	Perkins V
Art Directors	Higher-skill	2	100	\$9.39	\$24.62	\$42.06	Both
Automotive Body and Related Repairers	Middle-skill	2	167	\$13.27	\$18.48	\$28.57	Both
Automotive Service Technicians and Mechanics	Middle-skill	21	1,217	\$14.31	\$19.51	\$27.00	In-demand
Bill and Account Collectors	Middle-skill	3	261	\$15.95	\$18.60	\$23.30	In-demand
Bookkeeping, Accounting, and Auditing Clerks	Middle-skill	36	2,079	\$15.76	\$19.60	\$25.17	Both
Brickmasons and Blockmasons	Middle-skill	2	120	\$17.17	\$24.57	\$29.75	Both
Bus and Truck Mechanics and Diesel Engine Specialists	Middle-skill	12	483	\$18.32	\$24.05	\$30.33	Both
Buyers and Purchasing Agents	Middle-skill	8	426	\$20.83	\$27.40	\$35.23	Both
Career/Technical Education Teachers, Secondary School	Higher-skill	1	79	\$35.07	\$39.70	\$45.29	Both
Cargo and Freight Agents	Middle-skill	1	123	\$19.10	\$23.15	\$30.07	Both
Carpenters	Middle-skill	31	2,591	\$16.61	\$22.93	\$29.57	Both
Chefs and Head Cooks	Middle-skill	6	252	\$14.00	\$20.24	\$32.18	Both
Chief Executives	Higher-skill	4	204	\$40.59	\$78.12	\$118.61	Both
Child, Family, and School Social Workers	Higher-skill	4	234	\$20.13	\$25.85	\$33.33	Both
Childcare Workers	Middle-skill	44	2,008	\$9.71	\$12.04	\$15.76	In-demand
Civil Engineering Technicians	Middle-skill	3	67	\$26.41	\$29.74	\$35.59	Both
Civil Engineers	Higher-skill	8	285	\$40.81	\$52.01	\$63.56	Both
Claims Adjusters, Examiners, and Investigators	Middle-skill	14	341	\$11.74	\$12.97	\$32.67	Both
Clinical Laboratory Technologists and Technicians	Middle-skill	5	194	\$19.21	\$24.72	\$35.08	Both
Computer and Information Systems Managers	Higher-skill	3	152	\$52.52	\$68.15	\$82.80	Both
Computer Programmers	Higher-skill	1	72	\$29.41	\$40.36	\$48.42	Both
Computer Systems Analysts	Higher-skill	4	186	\$31.78	\$39.87	\$50.65	Both
Computer User Support Specialists	Middle-skill	6	390	\$19.54	\$26.11	\$34.08	Both
Construction and Building Inspectors	Middle-skill	3	164	\$31.27	\$40.80	\$53.80	Both

Continued

Occupation	Skill Level	College Area Annual Openings	Regional Annual Openings	Pct. 25 Hourly Earnings	Median Hourly Earnings	Pct. 75 Hourly Earnings	Perkins V
Correctional Officers and Jailers	Middle-skill	11	463	\$29.37	\$38.33	\$43.30	Both
Data Entry Keyers	Middle-skill	3	199	\$13.15	\$15.26	\$17.75	In-demand
Database Administrators	Higher-skill	1	49	\$33.88	\$46.72	\$61.31	Both
Dental Hygienists	Middle-skill	3	186	\$40.54	\$45.41	\$50.58	Both
Detectives and Criminal Investigators	Middle-skill	4	85	\$45.11	\$49.12	\$58.20	Both
Education Administrators, All Other	Higher-skill	2	86	\$34.87	\$52.01	\$69.54	Both
Education Administrators, Preschool and Child-care Center/Program	Higher-skill	1	55	\$14.88	\$18.27	\$30.89	Both
Education, Training, and Library Workers, All Other	Higher-skill	3	217	\$13.79	\$18.94	\$25.11	Both
Electrical and Electronics Engineering Technicians	Middle-skill	3	107	\$22.49	\$29.45	\$38.39	Both
Electrical Power-Line Installers and Repairers	Middle-skill	2	148	\$25.84	\$35.93	\$54.40	Both
Electricians	Middle-skill	27	1,365	\$18.07	\$24.28	\$32.53	Both
Electronics Engineers, Except Computer	Higher-skill	1	58	\$42.88	\$53.83	\$60.51	Both
Elementary School Teachers, Except Special Education	Higher-skill	26	1,962	\$33.13	\$42.88	\$48.90	Both
Emergency Medical Technicians and Paramedics	Middle-skill	9	280	\$12.10	\$15.49	\$20.02	In-demand
Engineering Technicians, Except Drafters, All Other	Middle-skill	4	86	\$26.71	\$34.76	\$42.10	Both
Engineers, All Other	Higher-skill	3	64	\$31.96	\$45.24	\$58.81	Both
Executive Secretaries and Executive Administrative Assistants	Middle-skill	7	397	\$23.06	\$28.13	\$34.25	Both
Farmers, Ranchers, and Other Agricultural Managers	Middle-skill	1	230	\$16.19	\$21.41	\$51.02	Both
Financial Analysts	Higher-skill	1	89	\$30.40	\$37.97	\$48.04	Both
Financial Managers	Higher-skill	8	421	\$36.52	\$53.14	\$72.74	Both
Financial Specialists, All Other	Higher-skill	3	99	\$20.16	\$25.03	\$33.59	Both
Firefighters	Middle-skill	9	269	\$25.92	\$30.40	\$37.87	Both
First-Line Supervisors of Construction Trades and Extraction Workers	Middle-skill	15	1,000	\$24.06	\$32.24	\$42.99	Both
First-Line Supervisors of Correctional Officers	Middle-skill	1	45	\$46.59	\$48.36	\$51.21	Both

Continued

Occupation	Skill Level	College Area Annual Openings	Regional Annual Openings	Pct. 25 Hourly Earnings	Median Hourly Earnings	Pct. 75 Hourly Earnings	Perkins V
First-Line Super-visors of Food Preparation and Serving Workers	Middle-skill	42	1,908	\$13.03	\$14.94	\$18.63	In-demand
First-Line Super-visors of Gaming Workers	Middle-skill	3	146	\$20.78	\$27.77	\$33.45	Both
First-Line Super-visors of Landscaping, Lawn Service, and Groundskeeping Workers	Middle-skill	13	267	\$15.42	\$22.64	\$32.54	Both
First-Line Super-visors of Mechanics, Installers, and Repairers	Middle-skill	17	500	\$26.09	\$33.91	\$42.44	Both
First-Line Super-visors of Non-Retail Sales Workers	Middle-skill	5	402	\$15.25	\$24.90	\$37.23	Both
First-Line Super-visors of Office and Administrative Support Workers	Middle-skill	29	1,750	\$20.78	\$26.41	\$33.50	Both
First-Line Super-visors of Production and Operating Workers	Middle-skill	7	589	\$21.56	\$28.35	\$38.26	Both
First-Line Super-visors of Protective Service Workers, All Other	Middle-skill	2	154	\$13.49	\$18.18	\$28.43	Both
First-line Supervisors of Transportation and Mate-rial Moving Workers, Except Aircraft Cargo Handling Supervisors	Middle-skill	10	1,134	\$20.66	\$27.19	\$33.41	Both
Food Service Managers	Middle-skill	14	653	\$15.83	\$20.87	\$29.15	Both
General and Operations Managers	Higher-skill	43	2,162	\$31.34	\$48.54	\$69.84	Both
Glaziers	Middle-skill	-	125	\$17.08	\$29.05	\$55.40	Both
Graphic Designers	Middle-skill	3	255	\$16.44	\$20.71	\$29.83	Both
Healthcare Sup-port Workers, All Other	Middle-skill	5	208	\$18.22	\$21.26	\$24.08	In-demand
Heavy and Tractor-Trailer Truck Drivers	Middle-skill	36	4,395	\$16.43	\$21.57	\$28.71	Both
Home Health Aides	Middle-skill	22	995	\$13.36	\$16.01	\$19.73	In-demand
Industrial Engineering Technicians	Middle-skill	1	48	\$22.43	\$29.48	\$36.74	Both
Industrial Machinery Mechanics	Middle-skill	5	301	\$22.40	\$27.95	\$33.68	Both
Interpreters and Translators	Middle-skill	4	100	\$18.52	\$26.11	\$40.13	Both
Kindergarten Teachers, Except Special Education	Higher-skill	2	144	\$24.89	\$34.17	\$38.76	Both
Legal Support Workers, All Other	Middle-skill	1	152	\$20.73	\$25.39	\$29.28	Both

Continued

Occupation	Skill Level	College Area Annual Openings	Regional Annual Openings	Pct. 25 Hourly Earnings	Median Hourly Earnings	Pct. 75 Hourly Earnings	Perkins V
Licensed Practical and Licensed Vocational Nurses	Middle-skill	19	809	\$20.90	\$25.10	\$29.89	Both
Loan Interviewers and Clerks	Middle-skill	1	103	\$16.65	\$19.92	\$25.01	Both
Loan Officers	Middle-skill	3	224	\$14.26	\$26.98	\$44.08	Both
Management Analysts	Higher-skill	14	679	\$26.81	\$37.83	\$53.36	Both
Managers, All Other	Higher-skill	29	920	\$17.06	\$34.61	\$57.22	Both
Market Research Analysts and Marketing Specialists	Higher-skill	7	591	\$18.54	\$26.18	\$36.30	Both
Marketing Man-agers	Higher-skill	2	130	\$35.55	\$48.04	\$70.92	Both
Mechanical Drafters	Middle-skill	1	53	\$19.70	\$24.37	\$30.60	Both
Mechanical Engineers	Higher-skill	2	123	\$32.57	\$40.53	\$50.53	Both
Medical and Health Services Managers	Higher-skill	9	401	\$43.12	\$56.33	\$70.83	Both
Medical Records and Health In-formation Technicians	Middle-skill	3	184	\$17.09	\$22.44	\$36.36	Both
Meeting, Convention, and Event Planners	Higher-skill	2	125	\$17.25	\$22.96	\$33.04	Both
Middle School Teachers, Except Special and Career/ Technical Education	Higher-skill	5	352	\$31.64	\$39.99	\$45.96	Both
Mobile Heavy Equipment Mechanics, Except Engines	Middle-skill	8	240	\$24.21	\$30.12	\$35.78	Both
Network and Computer Systems Administrators	Middle-skill	4	158	\$30.39	\$38.48	\$50.43	Both
Nursing Assistants	Middle-skill	26	1,311	\$13.07	\$15.62	\$18.45	In-demand
Operating Engineers and Other Construction Equipment Operators	Middle-skill	11	554	\$26.92	\$38.15	\$45.18	Both
Paralegals and Legal Assistants	Middle-skill	5	262	\$22.27	\$27.46	\$35.00	Both
Personal Financial Advisors	Higher-skill	2	122	\$25.86	\$36.52	\$87.10	Both
Physical Therapist Assistants	Middle-skill	2	103	\$30.72	\$34.61	\$38.13	Both
Plumbers, Pipe-fitters, and Steamfitters	Middle-skill	29	983	\$16.81	\$24.48	\$30.10	Both
Police and Sheriff's Patrol Officers	Middle-skill	32	628	\$36.88	\$47.03	\$57.47	Both
Preschool Teachers, Except Special Education	Middle-skill	8	413	\$12.55	\$14.36	\$17.65	In-demand
Probation Officers and Correctional Treatment Specialists	Higher-skill	3	125	\$32.78	\$38.66	\$50.79	Both
Production, Planning, and Expediting Clerks	Middle-skill	8	537	\$17.76	\$22.06	\$27.74	Both

Continued

Occupation	Skill Level	College Area Annual Openings	Regional Annual Openings	Pct. 25 Hourly Earnings	Median Hourly Earnings	Pct. 75 Hourly Earnings	Perkins V
Psychiatric Technicians	Middle-skill	4	149	\$31.98	\$34.62	\$37.58	Both
Public Relations Specialists	Higher-skill	4	177	\$21.09	\$29.25	\$40.28	Both
Radiologic Technologists	Middle-skill	2	140	\$30.62	\$36.03	\$41.78	Both
Real Estate Brokers	Middle-skill	4	168	\$18.25	\$37.66	\$56.98	Both
Real Estate Sales Agents	Middle-skill	11	476	\$15.97	\$26.42	\$44.61	Both
Registered Nurses	Middle-skill	45	2,616	\$38.82	\$47.45	\$58.41	Both
Respiratory Therapists	Middle-skill	2	150	\$29.33	\$35.39	\$41.59	Both
Sales Managers	Higher-skill	8	559	\$27.32	\$43.00	\$71.18	Both
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	Middle-skill	13	1,777	\$18.91	\$27.77	\$39.03	Both
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	Higher-skill	1	169	\$24.30	\$34.64	\$52.10	Both
Secondary School Teachers, Except Special and Career/Technical Education	Higher-skill	14	1,034	\$31.61	\$40.49	\$47.02	Both
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	Middle-skill	47	2,760	\$14.16	\$18.58	\$23.76	In-demand
Software Developers, Applications	Higher-skill	2	237	\$38.82	\$48.70	\$60.83	Both
Software Developers, Systems Software	Higher-skill	1	118	\$37.41	\$48.83	\$62.03	Both
Special Education Teachers, Kindergarten and Elementary School	Higher-skill	3	203	\$29.24	\$37.82	\$47.13	Both
Special Education Teachers, Middle School	Higher-skill	1	46	\$33.38	\$38.72	\$45.60	Both
Special Education Teachers, Secondary School	Higher-skill	2	114	\$37.33	\$43.18	\$47.84	Both
Structural Iron and Steel Workers	Middle-skill	1	237	\$21.97	\$32.33	\$39.40	Both
Substance Abuse, Behavioral Disorder, and Mental Health Counselors	Higher-skill	11	532	\$17.20	\$21.24	\$26.94	Both
Substitute Teachers	Higher-skill	32	1,788	\$16.37	\$18.05	\$21.09	In-demand
Surgical Technologists	Middle-skill	2	135	\$22.87	\$27.39	\$32.60	Both
Surveying and Mapping Technicians	Middle-skill	2	59	\$21.08	\$28.15	\$39.94	Both
Tax Preparers	Middle-skill	3	123	\$11.75	\$16.73	\$31.80	Both
Teacher Assistants	Middle-skill	35	2,469	\$13.79	\$16.84	\$19.75	In-demand

Continued

Occupation	Skill Level	College Area Annual Openings	Regional Annual Openings	Pct. 25 Hourly Earnings	Median Hourly Earnings	Pct. 75 Hourly Earnings	Perkins V
Teachers and Instructors, All Other	Higher-skill	20	615	\$12.71	\$16.79	\$26.42	In-demand
Telecommunications Equipment Installers and Repairers, Except Line Installers	Middle-skill	11	403	\$22.21	\$26.71	\$30.13	Both
Telecommunications Line Installers and Repairers	Middle-skill	3	179	\$17.20	\$25.59	\$35.66	Both
Transportation, Storage, and Distribution Managers	Middle-skill	6	279	\$32.81	\$41.71	\$54.09	Both
Water and Wastewater Treatment Plant and System Operators	Middle-skill	4	146	\$26.25	\$32.87	\$40.77	Both
Web Developers	Middle-skill	1	109	\$16.52	\$24.36	\$36.27	Both



APPENDIX E: CDE-TO-CCCCO-PRIORITY-SECTOR CROSSWALK

Exhibit E1: Crosswalk linking CDE to CCCCCO priority sectors

	CDE Industry Sectors and Pathways	CCCCO Priority and Emerging Sectors
	Agriculture and Natural Resources (ANR) <ul style="list-style-type: none"> • Agricultural Business • Agricultural Mechanics • Agriscience • Animal Science • Forestry and Natural Resources • Ornamental Horticulture • Plant and Soil Science 	Agriculture, Water & Environmental Technology
	Arts, Media, and Entertainment (AME) <ul style="list-style-type: none"> • Design, Visual, and Media Arts • Performing Arts • Production and Managerial Arts • Game Design and Integration 	Information and Communication Technologies/Digital Media
	Building and Construction Trades (BCT) <ul style="list-style-type: none"> • Cabinetry, Millwork, and Woodworking • Engineering and Heavy Construction • Mechanical Systems Installation and Repair • Residential and Commercial Construction 	Energy, Construction & Utilities
	Business and Finance (BF) <ul style="list-style-type: none"> • Business Management • Financial Services • International Business 	Business & Entrepreneurship
	Education, Child Development, and Family Services (ECDFS) <ul style="list-style-type: none"> • Child Development • Consumer Services • Education • Family and Human Services 	Education
	Energy, Environment, and Utilities (EEU) <ul style="list-style-type: none"> • Environmental Resources • Energy and Power Technology • Telecommunications 	Energy, Construction & Utilities
	Engineering and Architecture (EA) <ul style="list-style-type: none"> • Architectural Design • Engineering Technology • Engineering Design • Environmental Engineering 	Agriculture, Water & Environmental Technology
	Fashion and Interior Design (FID) <ul style="list-style-type: none"> • Fashion Design and Merchandising • Interior Design • Personal Services 	Retail/Hospitality/ Tourism
	Health Science and Medical Technology (HSMT) <ul style="list-style-type: none"> • Biotechnology • Patient Care • Health Care Administrative Services • Health Care Operational Support Services • Public and Community Health • Mental and Behavioral Health 	Health Life Sciences & Biotechnology
	Hospitality, Tourism, and Recreation (HTR) <ul style="list-style-type: none"> • Food Science, Dietetics, and Nutrition • Food Services and Hospitality • Hospitality, Tourism, and Recreation 	Retail/Hospitality/ Tourism

Continued

	CDE Industry Sectors and Pathways	CCCCO Priority and Emerging Sectors
	Information and Communication Technologies (ICT) <ul style="list-style-type: none"> • Information Support and Services • Networking • Software and Systems Development • Games and Simulation 	Information and Communication Technologies/ Digital Media
	Manufacturing and Product Development (MPD) <ul style="list-style-type: none"> • Graphic Production Technologies • Machining and Forming Technologies • Welding and Materials Joining • Product Innovation and Design 	Advanced Manufacturing
	Marketing, Sales, and Service (MSS) <ul style="list-style-type: none"> • Marketing • Professional Sales • Entrepreneurship/ Self-Employment 	Business & Entrepreneurship
	Public Services (PS) <ul style="list-style-type: none"> • Public Safety • Emergency Response • Legal Practices 	Public Services
	Transportation (T) <ul style="list-style-type: none"> • Operations • Structural Repair and Refinishing • Systems Diagnostics and Service 	Advanced Transportation & Logistics



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The Centers of Excellence (COE) for Labor Market Research deliver regional workforce research and technical expertise to California Community Colleges for program decision making and resource development. This information has proven valuable to colleges in beginning, revising, or updating economic development and Career Education (CE) programs, strengthening grant applications, assisting in the accreditation process, and in supporting strategic planning efforts.

The Centers of Excellence Initiative is funded in part by the Chancellor's Office, California Community Colleges, Economic and Workforce Development Program. The Centers aspire to be the leading source of regional workforce information and insight for California Community Colleges. More information about the Centers of Excellence is available at www.coecccc.net.

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