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MT. SAN JACINTO COLLEGE LOCAL WORKFORCE DEMAND ASSESSMENT



A partnership between the
Inland Empire/Desert Centers of Excellence
and the Mt. San Jacinto Research Team

Strong Workforce Data Analytics
and Alignment Project



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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.

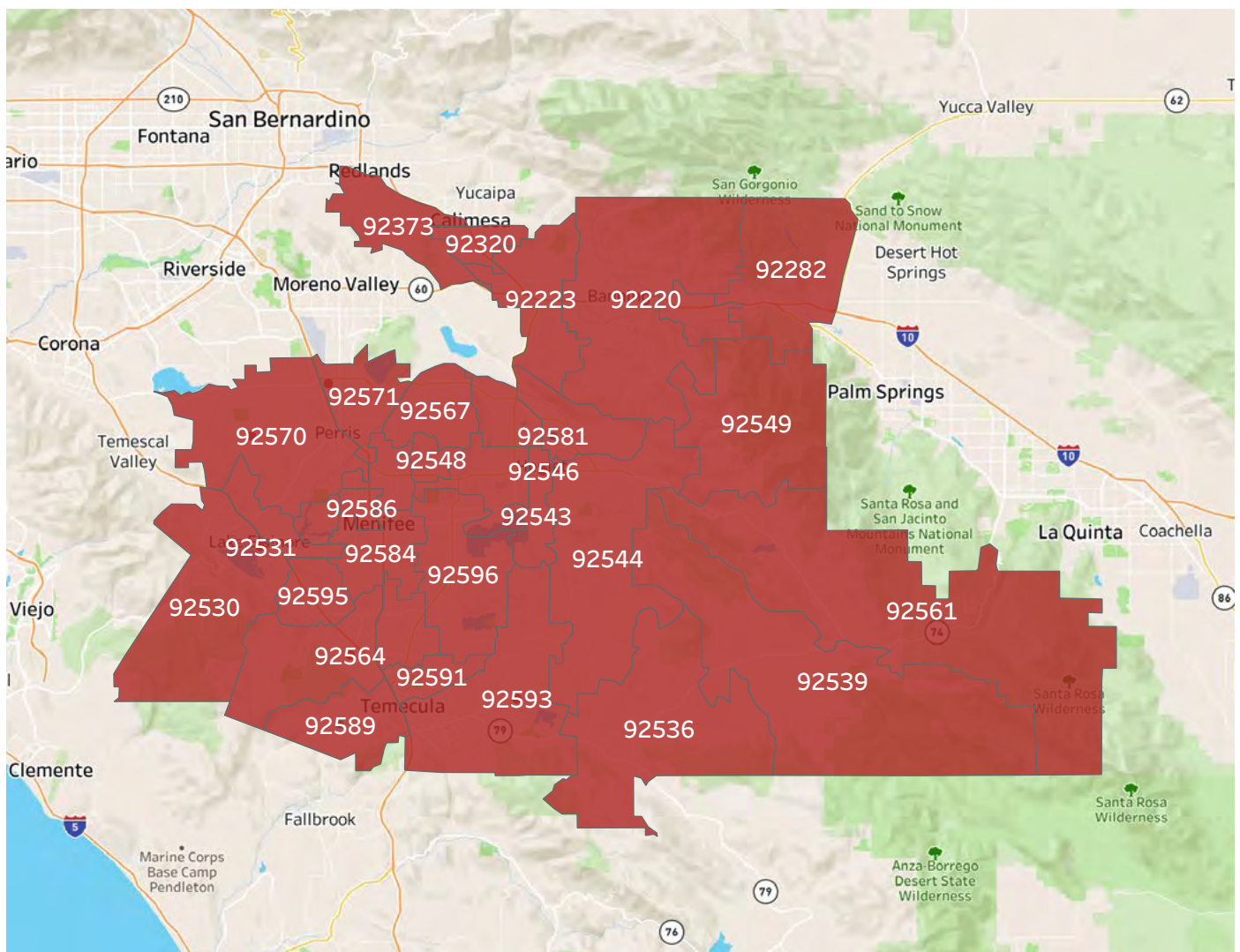
INTRODUCTION

Situated in the Southwestern Riverside County subregion, Mt. San Jacinto Community College serves the cities of Banning, Beaumont, Lake Elsinore, Hemet, Menifee, Murrieta, San Jacinto, and Temecula (Exhibit 1). The college has physical campus locations in San Jacinto, Menifee, San Geronio Pass, and Temecula Valley.

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 Mt. San Jacinto College's research staff, seeks to illuminate the job opportunities available to students within the area served by Mt. San Jacinto 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 Mt. San Jacinto College



Source: Emsi, Tableau

METHODOLOGY

The analysis in this local workforce demand assessment reviews Mt. San Jacinto 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 area ZIP code for the population and the number of middle-skill jobs in 2019. Mt. San Jacinto College's program offerings are organized by the California Department of Education (CDE) industry sectors. A CDE-to-Taxonomy-of-Programs (TOP) crosswalk, validated by the California Community Colleges Chancellor's Office, was used to link CDE sectors to Mt. San Jacinto College's TOP code offerings. Linking Mt. San Jacinto 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 only a bachelor's degree to enter employment, providing insight into employment opportunities for community college students who transfer to four-year colleges and universities.

The number of annual job openings for occupations 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 Need 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 the crosswalk linking CDE sectors with the California Community Colleges Chancellor's Office (CCCCO) sectors.



DEMOGRAPHIC COMPOSITION

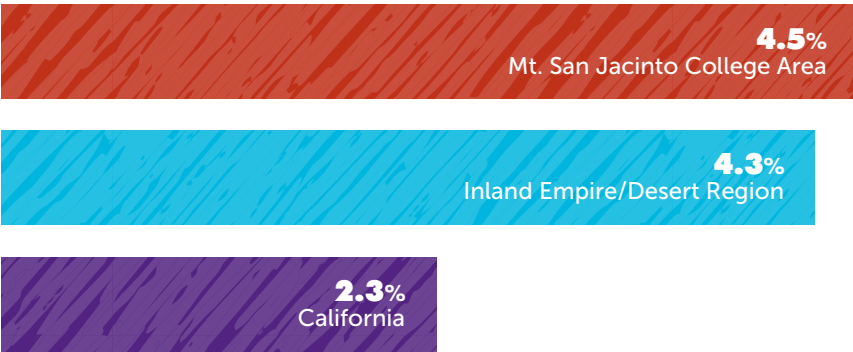
This section analyzes the demographic characteristics of the Mt. San Jacinto College area, including population count, gender, race/ethnicity, age, and educational attainment. Understanding the local area’s composition is essential to ensure the college is serving its population and undertaking appropriate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

Resident Population

The Mt. San Jacinto College area contains 1,019,632 residents or approximately 22% of the Inland Empire/Desert Region population. The largest city in the area is Murrieta, which is the 55th largest city in California with an estimated 114,193 residents in 2019. San Jacinto, the location of Mt. San Jacinto College’s main campus, is the 176th largest city in the state, with 50,431 residents in 2019, according to the California Department of Finance.

Over the five-year period between 2019 and 2024, the area’s population is projected to increase by 4.5%, adding 45,557 additional residents (Exhibit 2). Local growth is slightly higher than the region overall, which is projected to increase by 4.3% during the same five-year timeframe.

Exhibit 2: Five-year population growth, Mt. San Jacinto College area, Inland Empire/Desert Region, and California

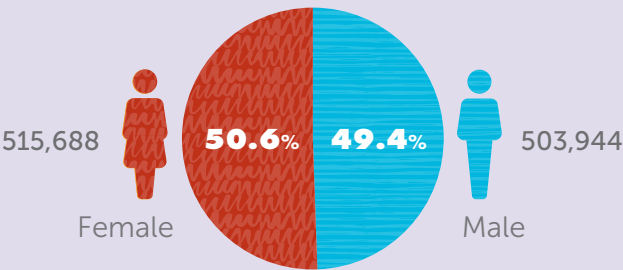


Source: Emsi 20.2

Resident Gender

The Mt. San Jacinto College area has slightly more female residents than male residents, with women representing 50.6% of the population and men representing 49.4% (Exhibit 3). Gender figures for the Inland Empire/Desert Region are available in Appendix B.

Exhibit 3: 2019 gender population share, Mt. San Jacinto College area

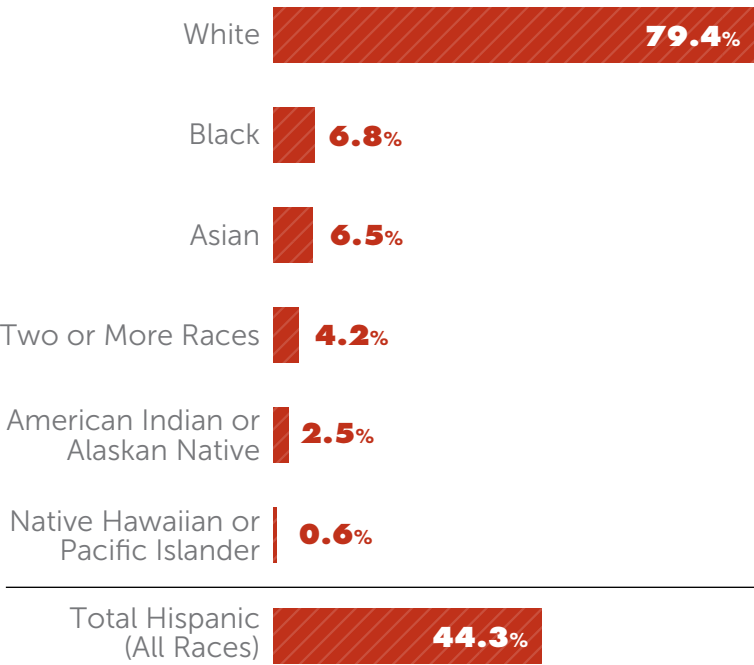


Source: Emsi 20.2

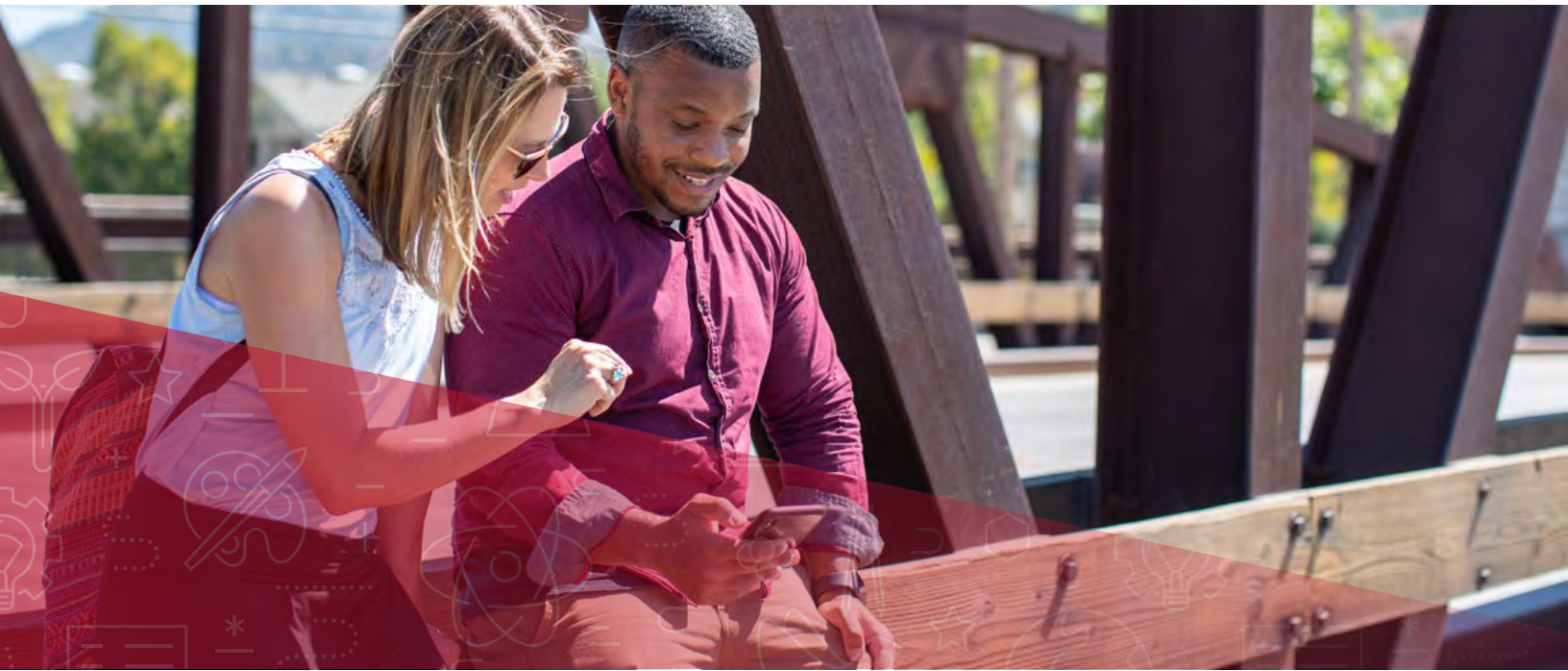
Race and Ethnicity

White residents make up 79.4% of all residents in the Mt. San Jacinto College area, similar to the 78.2% share of the population in the Inland Empire/Desert Region (Exhibit 4). There is a slightly smaller share of Black residents in the college area, 6.8% versus 8.3% in the region. There is also a smaller share of Hispanic residents in the Mt. San Jacinto College area, 44.3% versus 52.1% in the region. Race and ethnicity figures and shares for the Inland Empire/Desert Region are available in Appendix B.

Exhibit 4: 2019 Race and Hispanic population share, Mt. San Jacinto College area



Source: Emsi 20.2



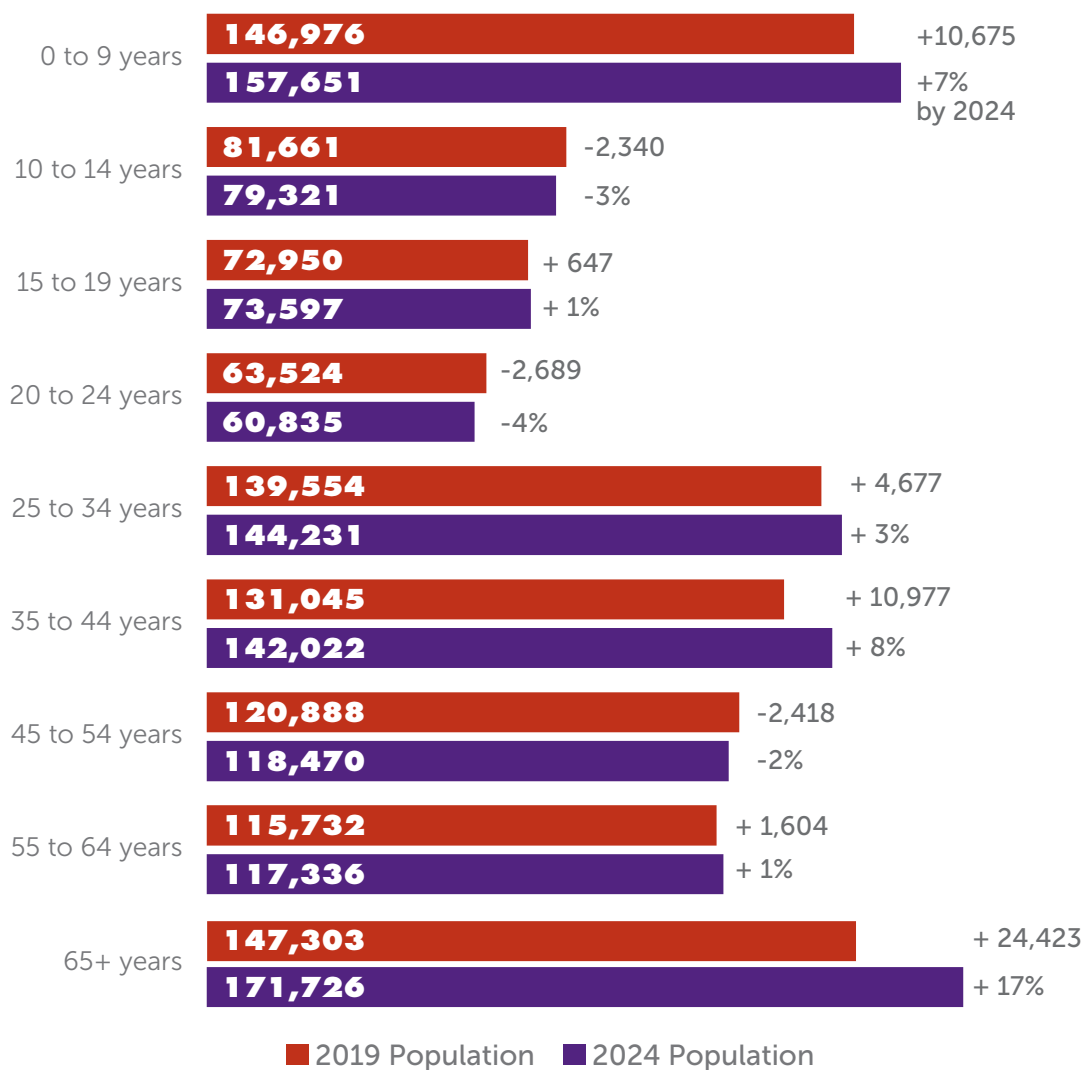
Age

Information on the age of residents helps indicate future enrollment needs in the Mt. San Jacinto College area. In 2019, residents age 9 and younger represented about 14.4% of the Mt. San Jacinto College area's population (Exhibit 5). This group is expected to increase by 7% by 2024, faster than the overall population at 4%. The 10-to-14-year-old age group, those who may enter college in the next six to 10 years, is expected to fall 3% over the next five years. The 15-to-19-year-old age group, representing high school students and recent graduates, represents just over 7% of the population. This population group is expected to increase by 1% through 2024.

The working-age population, ages 25 to 64, represents 49.7% of the area's population in 2019. Over the next five years, the working-age population is expected to increase by 14,840 residents, growing by 3%.

The age group comprised of residents age 65 and older is projected to rise by 17% over the next five years, representing the addition of 24,423 residents. This is the fastest-growing age group in the Mt. San Jacinto College area.

Exhibit 5: Five-year growth, 2019 and 2024 population share by age group, Mt. San Jacinto College area

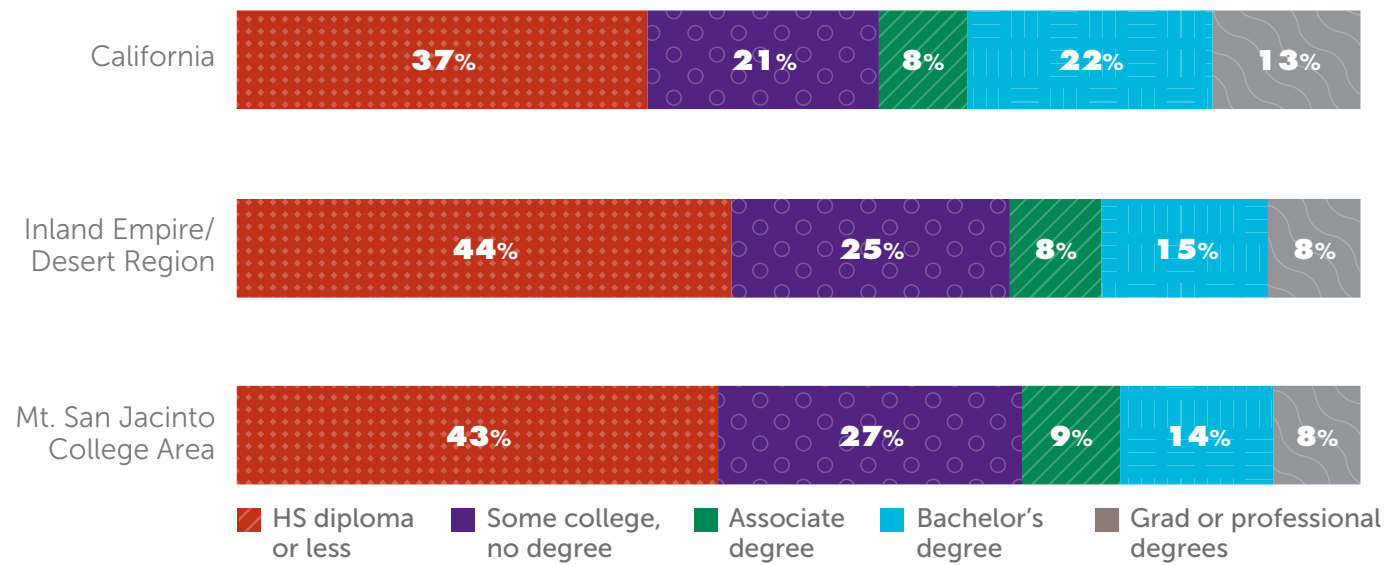


Source: Emsi 20.2

Educational Attainment

Educational attainment refers to the highest level of education that residents age 25 and older have completed. Approximately 43% of residents in the Mt. San Jacinto College area have a high school diploma or less, on par with the region (44%), and considerably higher than California (37%) (Exhibit 6). Within the college area, 36% of residents have completed some form of a community college education (some college, no degree or an associate degree). This is higher than the region (33%) and the state (29%). The share of residents in the area with a bachelor’s degree (14%) is slightly lower than the Inland Empire/Desert Region (15%), and significantly lower than California overall (22%), representing an opportunity to increase the educational attainment of bachelor’s degrees in the area.

Exhibit 6: Highest educational attainment of adults age 25 and older in the Mt. San Jacinto College area, Inland Empire/Desert Region, and California



Source: American Community Survey

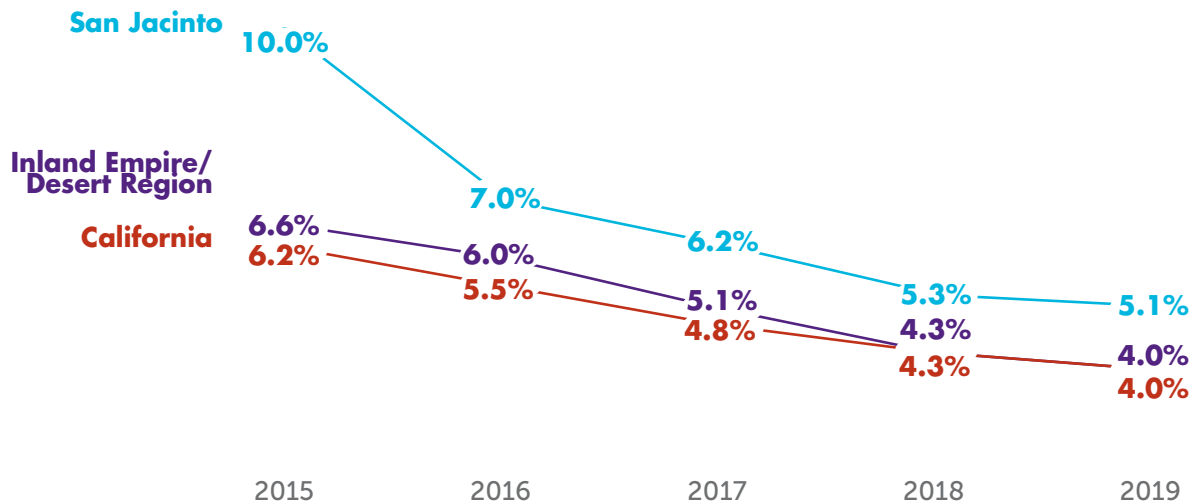


Labor Force and Unemployment Rate

Labor force data reflects the employment status of people by “place of residence.” A person is counted in the labor force by their residence, regardless of where their work is located. Over the last five years, the unemployment rate in the city of San Jacinto has been historically higher than the region and 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 in San Jacinto was 10.0%, or 1,800 residents. By 2019, the unemployment rate fell to 5.1%, with the number of unemployed residents dropping to 1,000.

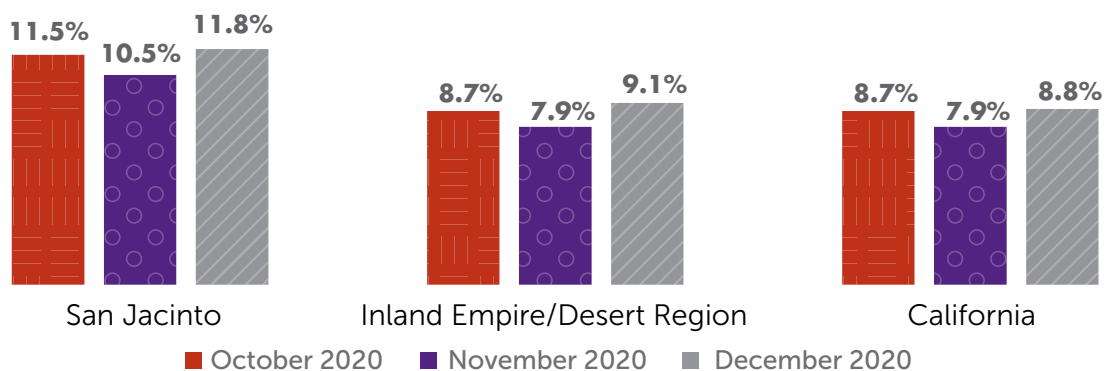
Exhibit 7: Annual average unemployment rate in San Jacinto, Inland Empire/Desert Region, and California (in percent)



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 San Jacinto, the Inland Empire/Desert Region, and California from October 2020 through December 2020. The current unemployment rates for other communities in the Mt. San Jacinto College area are available in Appendix B.

Exhibit 8: Unemployment Rate in San Jacinto, 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 281,352 jobs in the Mt. San Jacinto College area, accounting for approximately 16% of the total regional employment (Exhibit 9). Over the next five years, employment in the Mt. San Jacinto College area is projected to grow by 8.7%, adding 24,398 jobs by 2024. The Mt. San Jacinto College area is projected to grow slightly faster than the region overall at 8.4%, and California at 6%.

Exhibit 9: Five-year industry employment projections for the Mt. San Jacinto College area, the Inland Empire/Desert Region, and California

	Mt. San Jacinto College Area	Inland Empire/ Desert Region	California
2019 Jobs	281,352	1,747,341	20,003,848
2024 Jobs	305,750	1,893,522	21,200,103
Jobs Change	24,398	146,181	1,196,255
2019-2024 % Change	8.7%	8.4%	6.0%

Source: Emsi 20.2

Using the North American Industry Classification System (NAICS), industries were ranked by their 2019 job count and projected job growth through 2024 (Exhibit 10). In 2019 the five major industries with the most jobs accounted for approximately two-thirds (66.5%) of total jobs in the college area:

- Government (55,393 jobs)
- Retail trade (38,667 jobs)
- Health care and social assistance (37,905 jobs)
- Accommodation and food services (27,782 jobs)
- Construction (27,258 jobs)

Over the next five years, area employers are expected to increase employment by 24,398 jobs, or 8.7%. The following five major industries are projected to contribute 77% of the job growth in the area:

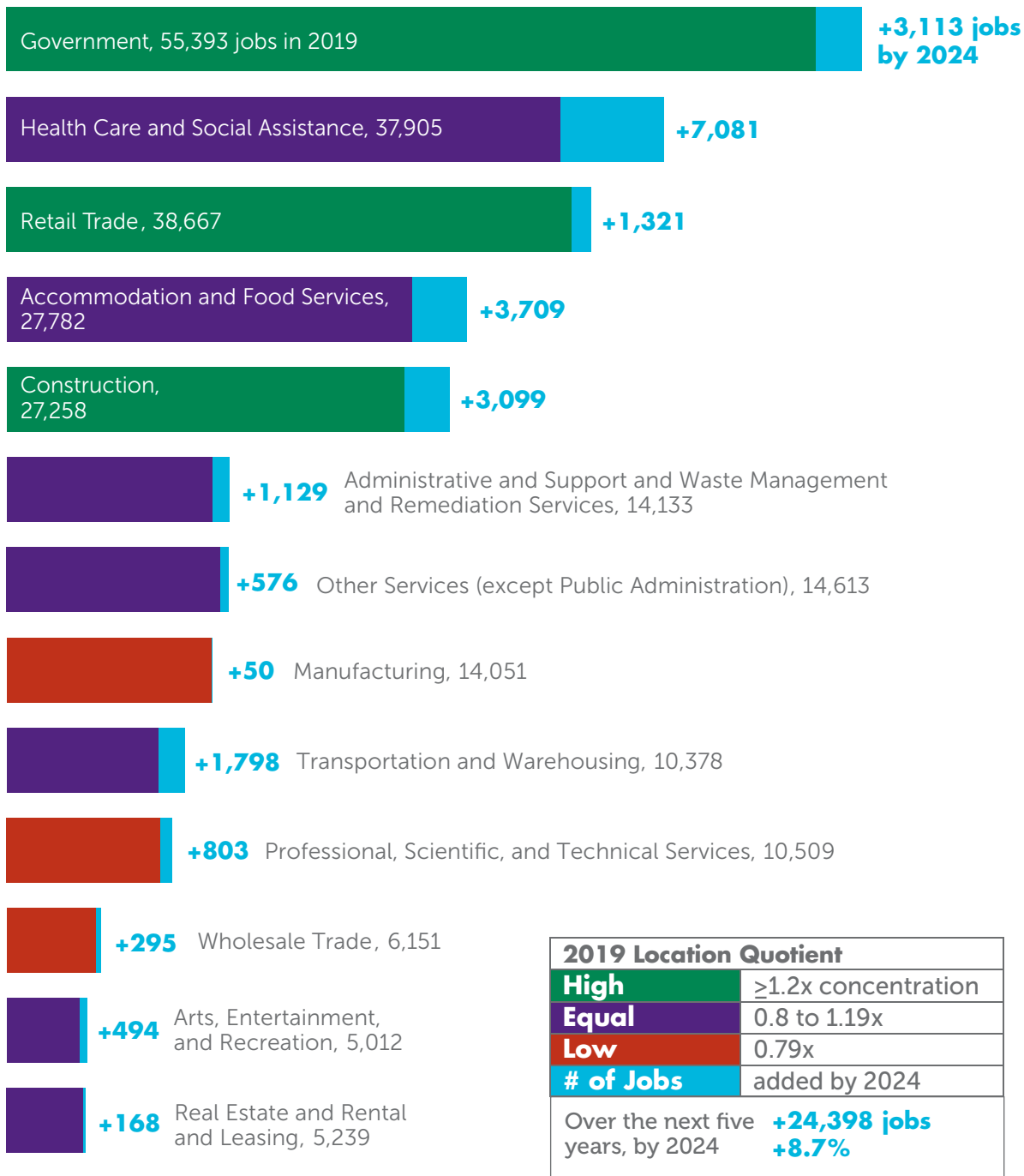
- Health care and social assistance (7,081 jobs added)
- Accommodation and food services (3,709 jobs)
- Government (3,113 jobs)
- Construction (3,099 jobs)
- Transportation and warehousing (1,798)

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 five industries in terms of overall employment also have industry concentrations that are greater or equal to the national average, representing 66% of total jobs in the area (187,005 jobs out of 281,352 total jobs).

Major industry groups with fewer than 5,000 jobs, along with key industry terms are displayed in Appendix C.

Exhibit 10: Major industries in the Mt. San Jacinto College area, number of jobs in 2019, and number of jobs added by 2024



Source: Emsi 20.2

OCCUPATIONAL EMPLOYMENT IN THE MT. SAN JACINTO AREA

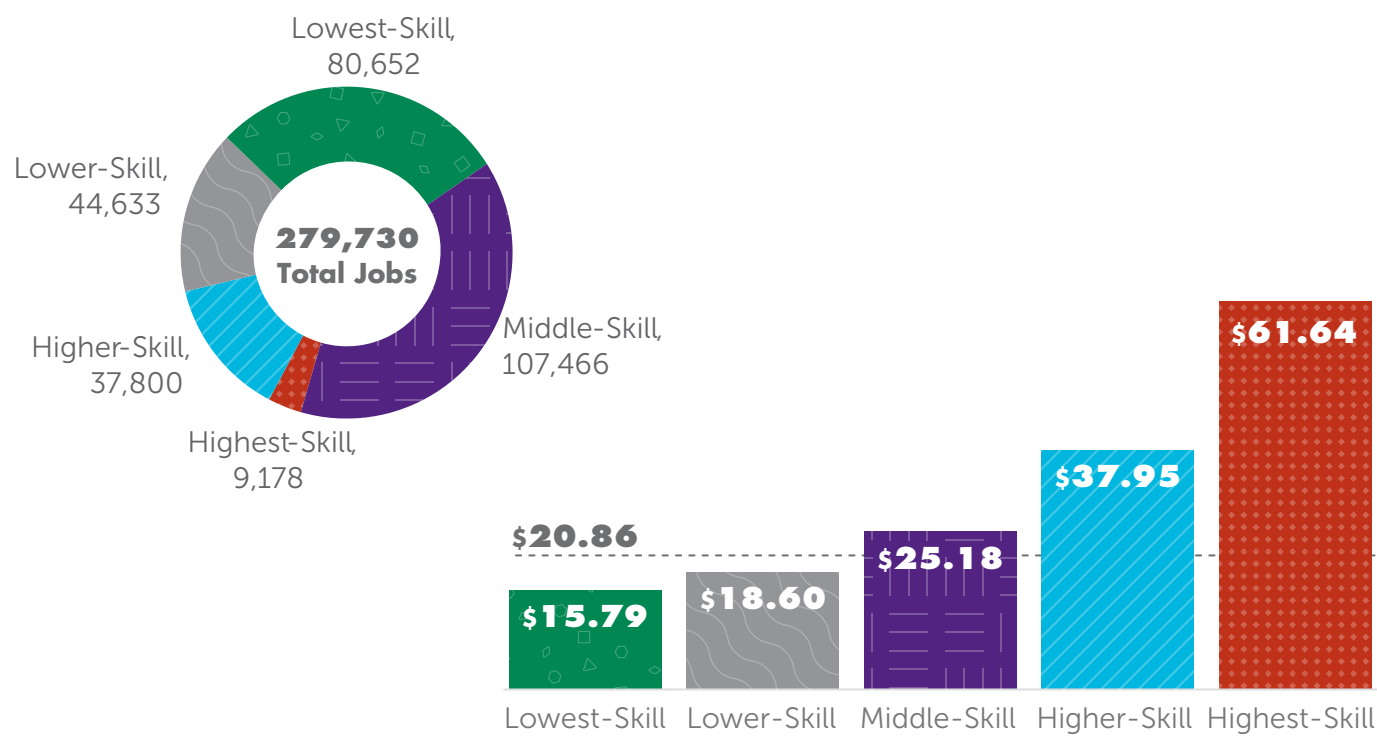
Occupational employment in the area was analyzed in terms of skill level. The California Community Colleges provide education and training that generally prepares workers to enter middle-skill jobs. Middle-skill occupations typically require educational attainment beyond a high school diploma, but less 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 careers in high demand 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 completing a transfer program to a four-year college or university. This assessment does not include occupations that typically require an education beyond a bachelor’s degree, such as physicians, lawyers, and most scientists. Military-specific occupations in the Mt. San Jacinto College area were removed from further analysis (-1,622 jobs).

Of the 279,730 jobs in the Mt. San Jacinto College area in 2019, approximately 38% were classified as middle-skill jobs, 29% were lowest-skill, 16% were lower-skill, 14% were higher-skill, and 3% were highest-skill (Exhibit 11). Through 2024, employers expect to have 39,647 job openings to fill newly created positions as well as existing jobs that workers are permanently vacating (due to occupational transfers and retirements). Approximately one-third of the annual job openings (13,454 annual job openings) in the college-area are for middle-skill occupations.

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 Mt. San Jacinto College area. Occupations are considered high-wage if the median hourly wage meets or exceeds \$20.86 per hour. Exhibit 11 displays occupations by skill level and average hourly wage for each skill-level category.

Exhibit 11: Breakdown of total jobs in the Mt. San Jacinto College area by skill level with the associated median wage



Source: COE, Emsi 20.2

MT. SAN JACINTO 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 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.

Mt. San Jacinto College currently offers programs within 13 of the 15 CDE sectors:

- Agriculture and Natural Resources
- Arts, Media, and Entertainment
- Building and Construction Trades
- Business and Finance
- Education, Child Development, and Family Services
- Energy, Environment, and Utilities
- Engineering and Architecture
- Health Science and Medical Technology
- Hospitality, Tourism, and Recreation
- Information and Communication Technologies
- Marketing, Sales, and Services
- Public Services
- Transportation

Exhibits 12 through 60 display local and regional annual job openings and regional median wages for each CDE sector. All occupational data is sourced from Emsi 20.2 and a crosswalk linking CDE sectors, TOP codes, and occupations developed by the Centers of Excellence for Labor Market Research. The occupations are separated into middle- and higher-skill employment opportunities. At the end of each CDE sector discussion, middle- and higher-skill job opportunities for which the college does not currently offer training programs are provided. Appendix D displays job openings for each occupation featured in this report.

This analysis details employment opportunities for **104 unique occupations**, yielding **8,509 annual job openings** within the Mt. San Jacinto College area. Approximately two-thirds of these job opportunities are middle-skill, totaling 5,659 annual job openings. While there are fewer higher-skill opportunities available in the area, these openings typically offer a higher wage.

There are additional employment opportunities in the Mt. San Jacinto College area for which there are currently no relevant training programs being offered. With the appropriate level of education and training, the Mt. San Jacinto College area's resident population could potentially explore an additional 3,103 job openings.





AGRICULTURE AND NATURAL RESOURCES SECTOR

Pathways in the Agriculture and Natural Resources CDE sector integrate academic and technical preparation and focus on career awareness, career exploration, and skill preparation. These seven pathways emphasize real-world, occupationally relevant experiences of significant scope and depth in agricultural business, agricultural mechanics, agriscience, animal science, forestry and natural resources, ornamental horticulture, and plant and soil science (Heuvel & Mooney).

Agricultural Business Pathway

The agricultural business pathway prepares students for agricultural business operation and management employment through instruction related to accounting, finance, economics, business organization, marketing, and sales. This pathway provides training for two middle-skill occupations, each offering a high-wage, with a combined total 88 annual job openings in the college area and 656 annual job openings in the region.

Mt. San Jacinto College program:

- Wine Hospitality and Salesmanship Employment Concentration

Exhibit 12: Agricultural business middle-skill occupations

Middle-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Buyers and Purchasing Agents	562	59	426	\$27.40
Farmers, Ranchers, and Other Agricultural Managers	297	29	230	\$21.41



Ornamental Horticulture Pathway

The ornamental horticulture pathway prepares students for careers in the nursery, landscaping, and floral industries. Topics include plant identification, plant physiology, soil science, plant reproduction, nursery reproduction, and floriculture, as well as landscaping design, installation, and maintenance. This pathway provides training for three occupations (two middle skill and one higher skill) with a combined total of 46 annual job openings in the college area and 330 annual job openings in the region.

Mt. San Jacinto College programs:

- Golf and Grounds Concentration Employment Concentration
- Irrigation Technician Concentration Employment Concentration
- Landscaping Operation Concentration Employment Concentration
- Turf and Landscape Management
- Viticulture, Enology, and Winery Technology Concentration Employment Concentration

Exhibit 13: Ornamental horticulture 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 Landscaping, Lawn Service, and Groundskeeping Workers	299	37	267	\$22.64
Pesticide Handlers, Sprayers, and Applicators, Vegetation	19	3	23	\$16.20

Exhibit 14: Ornamental horticulture higher-skill occupation

Higher-skill Occupation	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Landscape Architects	64	6	40	\$33.68





ARTS, MEDIA, AND ENTERTAINMENT SECTOR

Arts, media, and entertainment coursework provides students with the necessary skills to function in the media-rich 21st century (Edmonds & 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 of the region for work.

Design, Visual, and Media Arts Pathway

The design, visual, and media arts pathway includes those occupations that use visual art, digital media, and web-based tools and materials as the primary means of communication and expression. In addition to an understanding of current workplace practice, 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. Three middle-skill occupations and one higher-skill occupation will offer a total of 114 annual job openings in the college area and 537 annual job openings in the region.

Mt. San Jacinto College programs:

- Digital Communication
- Digital Media
- Digital Media Employment Concentration
- Digital Visual Effects Employment Concentration
- Graphic Design Employment Concentration
- Photography
- Visual Communication

Exhibit 15: Design, visual, and media arts middle-skill occupations

Middle-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Graphic Designers	447	52	255	\$20.71
Photographers	271	29	146	\$20.05
Multimedia Artists and Animators	89	10	36	\$15.36

Exhibit 16: Design, visual, and media arts higher-skill occupation

Higher-skill Occupation	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Art Directors	184	23	100	\$24.62

Production and Managerial Arts Pathway

The production and managerial arts pathway focuses on both the technical skills and the organizational and managerial knowledge necessary to bring arts, media, and entertainment to the public. Two middle-skill occupations and three higher-skill occupations will offer a total of 47 annual job openings in the college area and 272 annual job openings in the region.

Mt. San Jacinto College programs:

- Audio Technology
- Film, Television, and Electronic Media
- Journalism
- Technical Theater
- Video Production Employment Concentration

Exhibit 17: Production and managerial arts middle-skill occupations

Middle-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Audio and Video Equipment Technicians	107	14	87	\$18.65
Sound Engineering Technicians	34	4	17	\$15.10

Exhibit 18: Production and managerial arts higher-skill occupations

Higher-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Music Directors and Composers	146	18	85	\$22.59
Producers and Directors	72	8	58	\$30.34
Film and Video Editors	23	3	25	\$40.40





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 construction trade (McCabe & Dunn).

Residential and Commercial Construction Pathway

This pathway is geared toward students who have an interest in construction and building design, performance, and sustainability. Students learn about building standards, and how residential and commercial structures are designed and built. In the Mt. San Jacinto College area, two middle-skill occupations are projected to provide 300 annual job openings; in the region, these occupations are projected to offer 1,482 annual openings.

Mt. San Jacinto College program:

- Construction Technology

Exhibit 19: Residential and commercial construction 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 Construction Trades and Extraction Workers	1,541	202	1,000	\$32.24
Construction Managers	1,060	98	482	\$32.46

Additional Building and Construction Trades Training Opportunities

Future program development by Mt. San Jacinto College may focus on the following occupations related to building and construction trades. Training opportunities in the building and construction trades are projected to offer a total of 1,298 annual openings in the college area and 6,900 annual openings in the region in 10 middle-skill occupations.

Exhibit 20: Building and construction trades 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	4,228	522	2,591	\$22.93
Electricians	1,363	211	1,365	\$24.28
Plumbers, Pipefitters, and Steamfitters	1,356	209	983	\$24.48
Operating Engineers and Other Construction Equipment Operators	798	110	554	\$38.15
First-Line Supervisors of Mechanics, Installers, and Repairers	707	80	500	\$33.91
Sheet Metal Workers	330	48	261	\$24.15
Structural Iron and Steel Workers	289	45	237	\$32.33
Construction and Building Inspectors	215	31	164	\$40.80
Brickmasons and Blockmasons	156	18	120	\$24.57
Glaziers	154	24	125	\$29.05



BUSINESS AND FINANCE SECTOR

Students participating in business and finance programs gain skills that apply to nearly every type of employer, career path, and industry sector (McCabe, Ferrier, & Yates). These programs prepare students for multiple pathways, including business management, financial services (such as accounting, banking, and investing), and international business careers. Programs in this sector provide training for 15 unique middle- and higher-skill occupations with a combined total of 2,088 annual job openings in the college area.

Business Management Pathway

Mt. San Jacinto College offers several business management programs under the broad business administration umbrella. 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. There are many related occupations in this pathway that allow students to pursue areas of specialization within business management. Four middle-skill occupations are projected to offer 829 annual job openings in the college area and 5,166 annual job openings in the region. An additional five higher-skill occupations will offer 671 annual job openings in the college area and 4,001 annual job openings in the region.

Mt. San Jacinto College programs:

- Business Administration
- Business, Clerical
- Business, Office Administration Technician
- Business Information Analysis Employment Concentration
- Management/Supervision
- Microsoft Applications Concentration Employment Concentration
- Office Administration
- Project Management Concentration Employment Concentration
- Small Business/Entrepreneurship

Exhibit 21: 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	3,786	449	2,760	\$18.58
First-Line Supervisors of Office and Administrative Support Workers	2,338	274	1,750	\$26.41
Executive Secretaries and Executive Administrative Assistants	577	65	397	\$28.13
Administrative Services Managers	395	41	259	\$47.33

Exhibit 22: 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	3,082	339	2,162	\$48.54
Managers, All Other	1,760	166	920	\$34.61
Management Analysts	1,140	126	679	\$37.83
Chief Executives	449	35	204	\$78.12
Operations Research Analysts	50	5	36	\$41.45

Financial Services Pathway

Students participating in these programs will gain knowledge of industry standards, financial services skills, and the ability to formulate and interpret financial information. This pathway trains students to enter four middle-skill and two higher-skill occupations that have a combined total of 588 annual job openings in the college area and 3,672 annual job openings in the region. By far, bookkeeping, accounting, and auditing clerks will offer the most substantial number of annual openings in the college area and region.

Mt. San Jacinto College program:

- Accounting

Exhibit 23: 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	2,624	333	2,079	\$19.60
Bill and Account Collectors	653	41	261	\$18.60
Payroll and Timekeeping Clerks	308	36	238	\$22.56
Tax Preparers	173	22	123	\$16.73

Exhibit 24: 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	1,379	153	934	\$33.75
Budget Analysts	29	3	37	\$33.17

Additional Business and Finance Training Opportunities

Future program development by Mt. San Jacinto College may focus on the following occupations related to business and finance. Business and finance training opportunities are projected to have a total of 491 annual openings in the college area and 3,197 annual openings in the region in one middle-skill occupation and seven higher-skill occupations.

Exhibit 25: Business and finance training opportunities

Business and Financial Services Training Opportunities, Middle-skill, Unless Noted	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Business Operations Specialists, All Other (Higher-skill)	1,586	177	1,143	\$31.18
Human Resources Specialists (Higher-skill)	689	82	607	\$29.60
Financial Managers (Higher-skill)	668	66	421	\$53.14
Loan Officers (Higher-skill)	433	37	224	\$26.98
Training and Development Specialists (Higher-skill)	326	44	290	\$27.60
Personal Financial Advisors (Higher-skill)	317	27	122	\$36.52
Payroll and Timekeeping Clerks	308	36	238	\$22.56
Human Resources Managers (Higher-skill)	217	22	152	\$54.47





EDUCATION, CHILD DEVELOPMENT, AND FAMILY SERVICES SECTOR

The child development pathway provides students with the training needed to enter middle-skill childcare jobs. This pathway provides foundational training for future educators, many of whom will require a four-year degree and a state credential to enter employment. Students enrolled in these programs will be qualified to enter the occupations listed below, many of which are higher skill and in demand. This CDE 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 provides foundational training for future educators, many of whom will require a four-year degree and a state credential to enter employment. Programs in this pathway train students to enter four middle-skill occupations that have a combined total of 999 annual job openings in the college area and 4,941 annual job openings in the region. There are nine higher-skill occupations associated with this pathway with a combined total of 1,402 annual job openings in the college area and 6,347 annual job openings in the region.

Mt. San Jacinto College programs:

- Associate Teacher
- California Preschool Foundations and Framework
- Child and Adolescent Development
- Early Childhood Education
- Early Intervention and Inclusion
- Elementary Teacher Education
- Infant Toddler Teacher
- Teacher

Exhibit 26: 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
Teacher Assistants	4,291	530	2,469	\$16.84
Childcare Workers	2,556	379	2,008	\$12.04
Preschool Teachers, Except Special Education	713	80	413	\$14.36
Special Education Teachers, Preschool	106	10	51	\$12.07

Exhibit 27: 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
Elementary School Teachers, Except Special Education	4,768	440	1,962	\$42.88
Substitute Teachers	2,975	388	1,788	\$18.05
Secondary School Teachers, Except Special and Career/Technical Education	2,560	233	1,034	\$40.49
Teachers and Instructors, All Other	939	129	615	\$16.79
Middle School Teachers, Except Special and Career/Technical Education	753	80	352	\$39.99
Special Education Teachers, Kindergarten and Elementary School	477	45	203	\$37.82
Kindergarten Teachers, Except Special Education	259	32	144	\$34.17
Special Education Teachers, Middle School	95	10	46	\$38.72

Family and Human Services Pathway

The family and human services pathway provides students with management skills, such as positive guidance, professional behavior and standards, and laws and regulations related to the field. Programs in this pathway train students to enter two middle-skill occupations that have a combined total of 133 annual job openings in the college area and 813 annual job openings in the region.

Mt. San Jacinto College program:

- Interpreter Preparation

Exhibit 28: Family and human services middle-skill occupations

Middle-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Social and Human Service Assistants	749	116	713	\$17.90
Interpreters and Translators	139	17	100	\$26.11

Additional Education, Child Development, and Family Service Training Opportunities

Future program development by Mt. San Jacinto College may focus on the following occupations related to the family and human services pathway. Programs related to this pathway train for occupations that offer family assistance. Two higher-skill occupations will offer a total of 74 annual openings in the college area and 399 annual openings in the region.

Exhibit 29: Education, child development, and family services training opportunities

Education, Child Development, and Family Services Training Opportunities, Higher-skill	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Child, Family, and School Social Workers	357	45	234	\$25.85
Community and Social Service Specialists, All Other	215	29	165	\$23.93





ENERGY, ENVIRONMENT, AND UTILITIES SECTOR

This sector's pathways emphasize real-world, occupationally relevant knowledge, skills, and experiences of significant scope and depth in environmental resources, energy and power technology, and telecommunications (McCabe & Page).

Environmental Resources Pathway

The environmental resources pathway prepares students for employment, postsecondary education, and/or training in a variety of environmental industries. Students who complete work in the water technology program will be prepared for employment as water and wastewater treatment plant and system operators. There is one middle-skill occupation related to this pathway, with 29 annual job openings in the college area and 146 annual job openings in the region.

Mt. San Jacinto College program:

- Water Technology

Exhibit 30: Environmental resources middle-skill occupation

Middle-skill Occupation	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Water and Wastewater Treatment Plant and System Operators	307	29	146	\$32.87

Additional Energy, Environment, and Utilities Training Opportunities

Future program development by Mt. San Jacinto College may focus on the following occupations related to energy, environment, and utilities. Energy, environment, and utilities training opportunities are projected to have a total of 126 annual openings in the college area and 730 annual openings in the region in three middle-skill occupations.

Exhibit 31: Energy, environment, and utilities training opportunities

Energy, Environment, and Utilities, 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	563	66	403	\$26.71
Telecommunications Line Installers and Repairers	244	33	179	\$25.59
Electrical Power-Line Installers and Repairers	239	27	148	\$35.93



ENGINEERING AND ARCHITECTURE SECTOR

Pathways related to this sector provide a foundation in engineering and architecture. Related programs integrate academic and technical preparation and focus on career awareness, career exploration, and career 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 & Page).

Engineering Technology Pathway

The engineering technology pathway provides learning opportunities for students who are preparing for careers in the design, production, or maintenance of mechanical, electrical, electronics, and computer and electromechanical systems and products. Mt. San Jacinto College's engineering technologist program provides students with experience in various fields of engineering, such as electrical, computer integrated manufacturing, civil, and architectural. Three programs offered by the college prepare students to enter four middle-skill occupations and two higher-skill occupations with a combined total of 94 annual job openings in the college area and 590 annual job openings in the region.

Mt. San Jacinto College programs:

- Engineering Technologist Support
- Geographic Information Science
- Geographic Information Science Employment Concentration

Exhibit 32: Engineering technology middle-skill occupations

Middle-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Architectural and Civil Drafters	152	20	123	\$27.44
Engineering Technicians, Except Drafters, All Other	117	12	86	\$34.76
Surveying and Mapping Technicians	64	9	59	\$28.15
Drafters, All Other	27	3	21	\$20.09

Exhibit 33: Engineering technology higher-skill occupations

Higher-skill Occupation	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Civil Engineers	474	47	285	\$52.01
Cartographers and Photogrammetrists	32	3	16	\$30.41

Additional Engineering and Architecture Training Opportunities

Future program development by Mt. San Jacinto College may focus on the following occupations related to engineering and architecture. Engineering and architecture training opportunities are projected to have a total of 31 annual openings in the college area and 203 annual openings in the region in two higher-skill occupations.

Exhibit 34: Engineering and architectural training opportunities

Engineering and Architectural Training Opportunities, Higher-skill	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Architects, Except Landscape and Naval	149	16	102	\$35.82
Architectural and Engineering Managers	169	15	101	\$70.20





HEALTH SCIENCE AND MEDICAL TECHNOLOGY SECTOR

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

Health Care Administrative Services Pathway

Programs in the health care administrative services pathway prepare students for employment as site administrators, managers, attorneys, receptionists, secretaries, billing and coding specialists, health informatics technicians, accountants, managers, and other knowledge workers who support the process of patient care. The medical assisting program at Mt. San Jacinto College prepares students for employment as medical assistants, an occupation with 222 annual job openings in the college area and 1,287 job openings in the region.

Mt. San Jacinto College program:

- Medical Assisting Preparation Employment Concentration

Exhibit 35: Health care administrative services middle-skill occupation

Middle-skill Occupation	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Medical Assistants	1,478	222	1,287	\$15.23



Patient Care Pathway

The patient care pathway provides training in the prevention, treatment, and management of illness, including mental health and physical well-being. Four programs offered by Mt. San Jacinto College prepare students for four related middle-skill occupations, with 599 annual job openings in the college area and 3,630 annual job openings in the region, as well as one higher-skill occupation with 98 annual job openings in the college area and 532 annual job openings in the region.

Mt. San Jacinto College programs:

- Diagnostic Medical Sonography
- Dual Diagnosis Employment Concentration
- Nursing
- Nursing: Registered Nursing

Exhibit 36: 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	4,983	429	2,616	\$47.45
Licensed Vocational Nurses	1,306	138	809	\$25.10
Psychiatric Technicians	238	22	149	\$34.62
Diagnostic Medical Sonographers	99	10	56	\$39.30

Exhibit 37: Patient care higher-skill occupation

Higher-skill Occupation	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Substance Abuse, Behavioral Disorder, and Mental Health Counselors	715	98	532	\$21.24



Public and Community Health Pathway

The public and community health pathway prepares students for occupations that are primarily involved in environmental health, community health and health education, epidemiology, disaster management, and geriatrics. There are three occupations related to the pathway with a combined total of 65 annual job openings in the college area and 403 annual job openings in the region.

Mt. San Jacinto College program:

- Public Health Science

Exhibit 38: Public and community health middle-skill occupation

Middle-skill Occupation	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Community Health Workers	94	14	82	\$23.48

Exhibit 39: Public and community health higher-skill occupations

Higher-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Social and Community Service Managers	291	38	249	\$30.62
Health Educators	82	13	72	\$40.78

Additional Health Science and Medical Technology Sector Training Opportunities

Future program development by Mt. San Jacinto College may focus on the following occupations related to health science and medical technology. Health science and medical technology training opportunities are projected to have a total of 272 annual openings in the college area and 1,517 annual openings in the region.

Exhibit 40: 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)	543	69	401	\$56.33
Dental Hygienists	330	37	186	\$45.41
Clinical Laboratory Technologists and Technicians	297	33	194	\$24.72
Respiratory Therapists	284	25	150	\$35.39
Healthcare Support Workers, All Other	270	37	208	\$21.26
Radiologic Technologists	258	24	140	\$36.03
Surgical Technologists	174	23	135	\$27.39
Physical Therapist Assistants	112	24	103	\$34.61



HOSPITALITY, TOURISM, AND RECREATION SECTOR

Coursework aligned with the hospitality, tourism, and recreation sector prepares students to enter food service, recreation, and hospitality employment (Heuvel & Wright).

Food Science, Dietetics, and Nutrition Pathway

Programs in the food science, dietetics, and nutrition pathway offer instruction related to industry awareness; food safety and sanitation; workforce and organizational management; food, fitness, and wellness; nutritional requirements and processes; food chemistry and technology; research and product development; and marketing and public relations. There are three occupations related to this pathway, with 27 annual job openings in the college area and 153 annual job openings in the region.

Mt. San Jacinto College program:

- Nutrition and Dietetics

Exhibit 41: Food science, dietetics, and nutrition middle-skill occupation

Middle-skill Occupation	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Dietetic Technicians	83	9	47	\$15.27

Exhibit 42: Food science, dietetics, and nutrition higher-skill occupations

Higher-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Dietitians and Nutritionists	156	16	85	\$34.97
Food Scientists and Technologists	15	2	21	\$31.13

Food Service and Hospitality Pathway

The food service and hospitality pathway prepares students for employment through programs that have in-depth, hands-on experiences that emphasize industry awareness; sanitation and safe food handling; food and beverage production; nutrition; food service management; and customer service. Three middle-skill occupations are projected to offer a combined total of 533 annual job openings in the college area and 2,813 annual job openings in the region.

Mt. San Jacinto College program:

- Culinary Arts

Exhibit 43: 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
Chefs and Head Cooks	286	46	252	\$20.24
First-Line Supervisors of Food Preparation and Serving Workers	1,820	359	1,908	\$14.94
Food Service Managers	930	128	653	\$20.87

Additional Hospitality, Tourism, and Recreation Training Opportunities

Future program development by Mt. San Jacinto College may focus on the following occupations related to hospitality, tourism, and recreation. Two potential hospitality, tourism, and recreation occupations are projected to have a total of 54 annual job openings in the college area and 271 job annual openings in the region.

Exhibit 44: 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	274	33	146	\$27.77
Meeting, Convention, and Event Planners (Higher-skill)	145	21	125	\$22.96





INFORMATION AND COMMUNICATION TECHNOLOGIES SECTOR

Information and communication technologies sector programs prepare students 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 & Page). This pathway contains information support and services; networking, software, and systems development; and games and simulation.

Information Support and Services Pathway

This pathway prepares students 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 to enter employment in five middle- and higher-skill occupations. There are five occupations related to this pathway, four of which are higher skill, offering a combined total of 129 annual job openings in the college area and 808 annual job openings in the region.

Mt. San Jacinto College programs:

- Computer Forensics Employment Concentration
- Computer Information Systems
- Computer Science
- Cybersecurity Employment Concentration

Exhibit 45: Information support and services middle-skill occupation

Middle-skill Occupation	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Computer User Support Specialists	577	61	390	\$26.11

Exhibit 46: 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	318	30	186	\$39.87
Computer and Information Systems Managers	241	25	152	\$68.15
Database Administrators	86	8	49	\$46.72
Information Security Analysts	40	5	31	\$55.09

Networking Pathway

The networking pathway prepares students for careers that involve network analysis, planning, and implementation, including the design, installation, maintenance, and management of network systems. The successful establishment, maintenance, and securing of information and communication technologies infrastructure is critical to the success of every 21st century organization. There are three occupations related to this pathway with a combined total of 48 annual job openings in the college area and 305 annual job openings in the region.

Mt. San Jacinto College program:

- Networking

Exhibit 47: Networking middle-skill occupations

Middle-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Computer Network Support Specialists	165	17	108	\$28.00
Computer Network Architects	70	6	39	\$49.65

Exhibit 48: Networking higher-skill occupation

Higher-skill Occupation	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Network and Computer Systems Administrators	282	25	158	\$38.48

Software and Systems Development Pathway

This pathway prepares students for computer science jobs that design and develop software systems to maintain the operations of an organization. Occupations related to this pathway are projected to offer a combined total of 97 annual job openings in the college area and 536 annual job openings in the region.

Mt. San Jacinto College programs:

- Internet Authoring
- Internet Authoring Apprenticeship Employment Concentration
- Programming

Exhibit 49: 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	196	20	109	\$24.36

Exhibit 50: 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	370	45	237	\$48.70
Software Developers, Systems Software	209	19	118	\$48.83
Computer Programmers	164	13	72	\$40.36



MARKETING, SALES, AND SERVICES SECTOR

The marketing, sales, and services sector is designed to align career-path coursework with current and projected employment opportunities. The pathways in this sector are marketing, professional sales, and entrepreneurship/self-employment. They emphasize training related to communication, small business, self-employment, advertising, marketing strategies, product and service management, and promotion and selling concepts (McCabe & Page).

Marketing Pathway

The marketing pathway includes both creative and systems processes, as well as marketing concepts and principles and their practical application in marketing and management. Subject matter includes market research, economics, marketing budgets, creative development and design, and marketing foundations/functions with an emphasis on public relations, advertising, branding, promotion, product/service management, pricing, and distribution. Specialized programs of study in this field may include sports marketing, hospitality marketing, advertising, or market research. This pathway provides skills that prepare students for employment in five middle-skill and higher-skill occupations. These occupations are expected to have a combined total of 554 annual job openings in the college area and 3,570 annual job openings in the region.

Mt. San Jacinto College program:

- Social Media Specialist Employment Concentration

Exhibit 51: Marketing middle-skill occupation

Middle-skill Occupation	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Customer Service Representatives	2,767	403	2,658	\$17.44

Exhibit 52: Marketing higher-skill occupations

Higher-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Market Research Analysts and Marketing Specialists	727	96	591	\$26.18
Public Relations Specialists	232	31	177	\$29.25
Marketing Managers	185	21	130	\$48.04
Advertising and Promotions Managers	15	3	14	\$44.58

Professional Sales Pathway

This pathway provides the knowledge, skills, and abilities for a career selling products, developing sales goals, and interacting and understanding consumer behavior. Mt. San Jacinto's professional sales program focuses on real estate. Four middle-skill occupations are related to this pathway with 216 annual job openings in the college area and 997 annual job openings in the region.

Mt. San Jacinto program:

- Real Estate

Exhibit 53: Professional sales middle-skill occupations

Middle-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Real Estate Sales Agents	1,096	110	476	\$26.42
Property, Real Estate, and Community Association Managers	655	56	289	\$30.43
Real Estate Brokers	372	37	168	\$37.66
Appraisers and Assessors of Real Estate	161	13	64	\$28.30





PUBLIC SERVICES SECTOR

This sector encompasses three pathways: public safety, emergency response, and legal practices (McCabe & Beck).

Emergency Response Pathway

The emergency response pathway prepares students to enter several careers in this field and provides a foundation for further professional education and training at a postsecondary level, leading to certification and employment. Students gain critical knowledge and skills through in-class and job-site experiences, simulations, and other learning modalities. Career areas include fire services, emergency medical services, wildland services, and emergency management. Programs in this sector train three middle-skill occupations with a combined total of 123 annual job openings in the college area and 573 annual job openings in the region.

Mt. San Jacinto College programs:

- Emergency Medical Technician (EMT) Advanced Employment Concentration
- Emergency Medical Technician (EMT) Employment Concentration
- Fire Academy Preparation Employment Concentration
- Fire Technology

Exhibit 54: 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	695	63	280	\$15.49
Firefighters	637	55	269	\$30.40
First-Line Supervisors of Fire Fighting and Prevention Workers	52	5	24	\$45.26



Legal Practices Pathway

The legal practices pathway prepares students with a broad-based foundation of knowledge pertaining to the various types of law and legal practice and provides a foundation of basic skills necessary at all levels in the legal professions. Three middle-skill occupations related to this pathway are projected to offer 69 annual job openings in the college area and 465 annual job openings in the region.

Mt. San Jacinto program:

- Legal Assistant

Exhibit 55: Legal practices middle-skill occupations

Middle-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Legal Secretaries	201	23	152	\$25.39
Paralegals and Legal Assistants	276	38	262	\$27.46
Legal Support Workers, All Other	84	8	51	\$25.83

Public Safety Pathway

This pathway is designed for students who want to pursue a career in law enforcement or public safety. In the college area, six middle-skill public safety occupations are expected to have 270 annual job openings, and one higher-skill occupation is expected to have 25 annual job openings. In the region, 1,413 annual job openings are projected for the same six middle-skill occupations; an additional 125 annual job openings are projected for the one higher-skill occupation (probation officers and correctional treatment specialists).

Mt. San Jacinto College programs:

- Administration of Justice
- Corrections Employment Concentration
- Private Security and Loss Prevention Employment Concentration

Exhibit 56: 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	1,475	128	628	\$47.03
Correctional Officers and Jailers	988	91	463	\$38.33
Detectives and Criminal Investigators	215	17	85	\$49.12
First-Line Supervisors of Protective Service Workers, All Other	149	17	154	\$18.18
First-Line Supervisors of Correctional Officers	120	9	45	\$48.36
First-Line Supervisors of Police and Detectives	78	8	38	\$72.60

Exhibit 57: 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	252	25	125	\$38.66



TRANSPORTATION SECTOR

The pathways in the transportation CDE 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. The five programs offered in this pathway prepare students for employment in two middle-skill occupations with a combined total of 94 annual job openings in the college area and 650 annual job openings in the region.

Mt. San Jacinto College programs:

- Automotive/Transportation Technology
- Light-Duty Automotive Service
- Engine Performance Technician Employment Concentration
- General Certification Technician Employment Concentration
- General Technician Employment Concentration

Exhibit 58: Systems diagnostic, service, and repair middle-skill occupations

Middle-skill Occupations	College Area 2019 Jobs	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
Bus and Truck Mechanics and Diesel Engine Specialists	537	62	483	\$24.05
Automotive Body and Related Repairers	270	32	167	\$18.48

Additional Transportation Training Opportunities

Future program development by Mt. San Jacinto College may focus on the following occupations related to transportation. Transportation training opportunities are projected to have a total of 622 annual openings in the college area and 6,893 annual openings in the region across seven middle-skill occupations.

Exhibit 59: 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	2,495	356	4,395	\$21.57
First-line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	775	109	1,134	\$27.19
Production, Planning, and Expediting Clerks	505	64	537	\$22.06
Mobile Heavy Equipment Mechanics, Except Engines	313	37	240	\$30.12
Transportation, Storage, and Distribution Managers	253	27	279	\$41.71
Aircraft Mechanics and Service Technicians	206	20	185	\$34.63
Cargo and Freight Agents	51	9	123	\$23.15

ADDITIONAL CDE SECTORS AND CAREER OPPORTUNITIES

There are two CDE sectors for which Mt. San Jacinto College does not offer programs. The following are middle- and higher-skill occupations that are in demand and provide high wages in the college area. Mt. San Jacinto College may choose to consider providing training for these occupations as the college expands its CE offerings.

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 \$37.87 median hourly wage, this occupation only has 18 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 oversaturating 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). There are three middle-skill occupations related to this sector, offering a combined total of 135 annual job openings in the college area and 997 annual job openings in the region.

Exhibit 60: Manufacturing and product development training opportunities

Manufacturing and Product Development Training Opportunities, Middle-skill	College Area	College Area Annual Job Openings	Regional Annual Job Openings	Regional Median Wage
First-Line Supervisors of Production and Operating Workers	666	76	589	\$28.35
Industrial Machinery Mechanics	370	42	301	\$27.95
Electrical and Electronics Engineering Technicians	169	17	107	\$29.45



KEY FINDINGS AND RECOMMENDATIONS

Key findings

The area served by Mt. San Jacinto College is expected to add 45,557 residents over the next five years, increasing the population by 4.5%. The college area population is expected to grow faster than the region (4.3% growth) and the state as a whole (2.3% growth). Nearly 54% of the growth (represented by the addition of 24,423 residents) is expected to be adults age 65 and older, the fastest growing population group in the college area over the next five years. This age group's projected rapid increase may indicate an increased need for health care services for an aging population and increased demand for leisure activities.

Residents ages 10-24 typically represent potential enrollment growth for the college over the next eight years. However, this age group is expected to decline by 4,382 residents over the next five years, which may impact future college enrollment over the next eight years. The number of residents age 9 and younger is expected to increase by 7%, or 10,675 residents by 2024. Growth in this age group suggests a potential long-term influx of college students within the next 20 years and presents an opportunity for educational providers in the area. Targeted outreach and communication about the college's program offerings to the local K-12 education system could be essential to maintaining or expanding future student enrollment at the college.

In the Mt. San Jacinto College area, 36% of residents are community college educated, having completed some college, no degree, or an associate degree. This percentage is nearly equal to the percentage of community-college-educated residents in the region, 33%. The percentage of residents with a bachelor's degree or higher in the college area, 22%, is also comparable to the region, 23%, but is far lower than the state, 35%. The proportion of residents with a high school diploma or less, 43%, is a relatively substantial population share in the college area, indicating the college area lags behind the region and state in terms of educational attainment. Mt. San Jacinto College is uniquely positioned to offer programs that will address employer demand for middle-skill job growth and has the opportunity to create transfer programs to four-year colleges and universities to improve educational attainment in its service area.

Mt. San Jacinto College offers career education programs in 13 out of the 15 CDE sectors. Fashion and interior design and manufacturing and product development are the only sectors not represented at the college. The occupations in the fashion and interior design sector are expected to have 3,005 annual job openings in the region over the next five years. Despite the high number of regional annual job openings, none of these occupations offers a median hourly wage that meets or exceeds the \$20.86 per hour standard. In-demand and high-wage manufacturing and product development occupations are expected to have 135 combined annual job openings in the college area and 997 annual job openings in the region.

Mt. San Jacinto College has opportunities to expand educational offerings in eight of its related CDE sectors, as well as one additional sector (manufacturing and product development) to meet the need for more workers in the area served by the college. In sum, there are 3,103 annual job openings for occupations related to the nine sectors. The sectors and their respective annual job openings in the college's area are:

- Building and Construction Trade: 1,298 annual job openings
- Transportation: 622 annual job openings
- Business and Finance: 491 annual job openings
- Health Science and Medical Technology: 272 annual job openings
- Manufacturing and Product Development: 135 annual job openings
- Energy, Environment, and Utilities: 126 annual job openings
- Education, Child Development, and Family Services: 74 annual job openings
- Hospitality and Tourism: 54 annual job openings
- Engineering and Architecture: 31 annual job openings

Recommendations

There are multiple employment opportunities in the Mt. San Jacinto College area with CE training requirements that are not currently addressed by career education programs. Furthermore, the college may choose to expand existing program offerings related to several sectors to address the projected need for more workers in the area and the region in the next five years.

Examples of pathways that warrant further exploration to determine if it is appropriate for the college to create new programs or expand existing ones include:

- Building and construction
- Transportation
- Business and finance
- Health science and medical technology
- Energy, environment, and utilities
- Manufacturing and product development

Further research can determine if training programs exist at nearby for-profit proprietary schools or through other avenues. A conversation with regional employers who hire for occupations related to these pathways may reveal the potential for program expansion to meet current and future industry needs.

Health care and social assistance employers in the college area are expected to add 7,081 jobs over the next five years, representing 29% of the college area's job growth. Middle-skill occupations that lack related program offerings at the college are expected to have 203 annual job openings, presenting an opportunity to explore the creation of new health care programs. However, the demand for the individual occupations that currently do not have programs is relatively low for the college area, and the cost of starting and operating health care programs is considerably high. A cost-benefit analysis of programs not currently in existence at the college and the occupations those programs would lead into is one strategy for the college to determine the feasibility of creating new program offerings.

Training related to the building and construction sector is another area the college may want to develop further. Construction industry employers are highly concentrated in the college area and are expected to add 3,099 jobs (11.4% growth) over the next five years. Occupations in-demand and that offer a high-wage in the college area include:

- Carpenters (522 annual job openings, \$22.93 median hourly wage)
- Electricians (211 annual job openings, \$24.28 median)
- Plumbers, pipefitters, and steamfitters (209 annual job openings, \$24.48 median)
- Operating engineers and other construction equipment operators (110 annual job openings, \$38.15 median)

The college and the trade unions associated with these occupations may consider developing a training partnership.

Occupations in the transportation sector also show promising employment demand in the college area and region. The three occupations with the most annual job openings in the college area for which the college currently does not offer programs are:

- Heavy and tractor-trailer truck drivers (356 annual job openings)
- First-line supervisors of transportation and material moving workers, except aircraft cargo handling supervisors (109 annual job openings)
- Production, planning, and expediting clerks (64 annual job openings)

Government is the largest industry sector employer in the college area. A high share of employment in this sector tends to be nested in public education, health care, and public safety services industry groups within the larger government sector; and these industry subsectors are addressed in established CDE sectors. Comprehensive research is necessary to determine if other government job opportunities exist outside of the more detailed government-industry groups. Retail trade, and accommodations and food services are the two other large industry sectors in the college area. These sectors were hit especially hard by the shutdown resulting from the COVID-19 pandemic but should undergo modest recovery over the next few years as the pandemic subsides. That said, annual openings for occupations without college training programs are relatively low. If the college elects to pursue growth in these sectors, it should establish direct job placement programs with relevant employments.

Finally, while the numbers of occupations and job openings in the Mt. San Jacinto College area are relatively low, 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 the regional job opportunities to students. Some points to consider for providing training for employment opportunities outside the immediate area are:

1. Mt. San Jacinto 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 regional job openings.
2. Mt. San Jacinto College may choose to identify employers whose businesses are close to its campus and determine those employers' near-term need for middle-skills workers.



APPENDIX A: MT. SAN JACINTO COLLEGE AREA

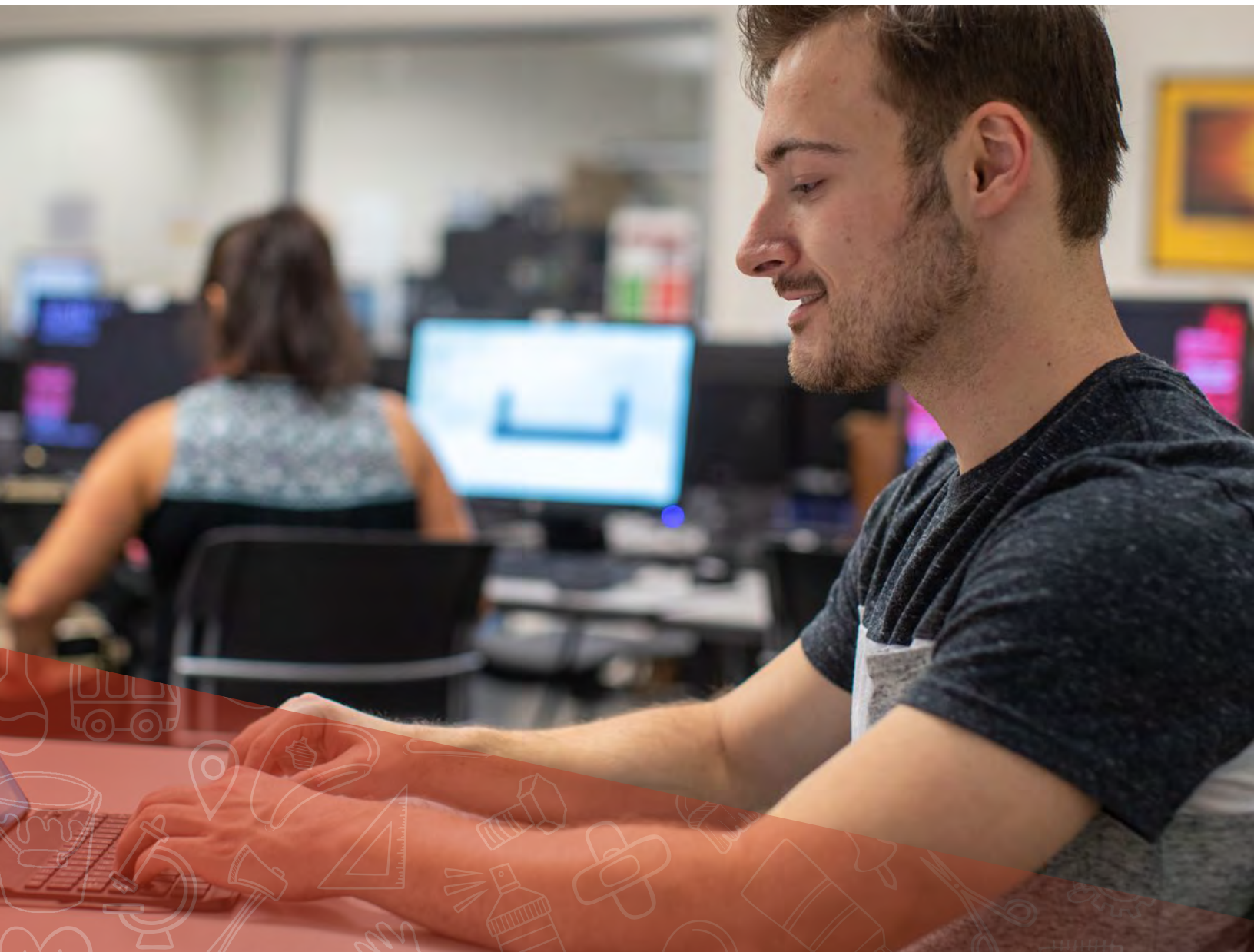
40 ZIP codes were used for this analysis. All data is derived from Emsi 2020.2.

Exhibit A1: Population and job counts for ZIP codes in the Mt. San Jacinto College area

ZIP	City/Community	2019 Population	2019 Jobs	Middle-skill Job Count
92220	Banning	38,154	6,964	3,079
92223	Beaumont	56,315	9,942	3,721
92230	Cabazon	2,681	3,501	724
92282	Whitewater	1,582	136	49
92320	Calimesa	9,628	2,623	1,297
92373	Redlands	30,952	24,148	9,919
92530	Lake Elsinore	55,650	16,422	6,261
92531	Lake Elsinore	2,283	35	15
92532	Lake Elsinore	24,024	4,840	1,700
92536	Aguanga	4,259	291	126
92539	Anza	3,742	524	194
92543	Hemet	35,761	9,459	3,990
92544	Hemet	54,326	5,368	1,986
92545	Hemet	44,540	13,570	5,064
92546	Hemet	4,101	116	24
92548	Homeland	7,548	829	308
92549	Idyllwild	546	1,508	478
92561	Mountain Center	1,946	303	120
92562	Murrieta	63,935	29,253	11,795
92563	Murrieta	79,333	12,505	5,346
92564	Murrieta	1,601	251	83
92567	Nuevo	10,275	1,397	523
92570	Perris	55,181	14,397	4,780
92571	Perris	58,372	12,845	4,632
92572	Perris	4,472	98	29
92581	San Jacinto	2,995	98	17
92582	San Jacinto	17,941	1,464	689
92583	San Jacinto	30,658	8,869	2,770
92584	Menifee	49,294	9,749	3,466
92585	Menifee	22,673	3,059	1,323
92586	Menifee	21,829	4,620	1,658
92587	Menifee	18,803	2,715	1,222
92589	Temecula	3,131	613	117

ZIP	City/Community	2019 Population	2019 Jobs	Middle-skill Job Count
92590	Temecula	3,458	21,478	8,414
92591	Temecula	44,585	23,520	8,421
92592	Temecula	83,428	20,888	7,915
92593	Temecula	1,969	125	31
92595	Wildomar	34,720	7,049	3,280
92596	Winchester	32,942	3,785	1,760
92599	Perris	0	371	140
	TOTAL	1,019,632	279,730	107,466

Source: Emsi 20.2



APPENDIX B: DEMOGRAPHIC COMPOSITION REFERENCE

Exhibit B1: Gender by area

Gender	College Area (Percentage)	Region (Percentage)
Male	49.4%	49.8%
Female	50.6%	50.2%

Source: Emsi 20.2

Exhibit B2: Race and ethnicity by area

Race/Ethnicity	College Area	College Area (Percentage)	Region
White	809,467	79.4%	78.2%
Black	69,771	6.8%	8.3%
Two or More Races	42,595	4.2%	4%
Asian	66,325	6.5%	7%
American Indian or Native Alaskan	25,616	2.5%	2%
Native Hawaiian or Pacific Islander	5,857	0.6%	0.5%
Total Hispanic (All Races)	451,202	44.3%	52%

Source: Emsi 20.2

Exhibit B3: Age by area

Age Group	College Area 2019 Share	College Area Growth Rate	Regional Share	Regional Growth Rate
0-9	146,976	14%	14%	7%
10-14	81,661	8%	7%	-3%
15-19	72,950	7%	7%	1%
20-24	63,524	6%	7%	-5%
25-34	139,554	14%	15%	3%
35-44	131,045	13%	13%	8%
45-54	120,888	12%	12%	-1%
55-64	115,732	11%	11%	1%
65+	147,303	14%	13%	18%

Source: Emsi 20.2

Exhibit B4: Unemployment rate by community

City/Community	Annual Average 2019	October 2020	November 2020	December 2020
Banning city	5.0%	12.6%	11.3%	11.4%
Beaumont city	3.3%	9.0%	7.7%	7.7%
Cabazon CDP	3.5%	8.7%	7.3%	7.7%
Calimesa city	4.2%	10.3%	8.6%	9.0%
Hemet city	5.7%	13.4%	12.2%	12.9%
Homeland CDP	4.5%	11.1%	9.4%	9.8%
Idyllwild Pine Cove CDP	2.5%	5.3%	4.7%	5.5%
Lake Elsinore city	3.9%	10.5%	8.8%	8.7%
Menifee City	4.0%	10.4%	8.3%	9.1%
Murrieta city	3.3%	8.9%	6.6%	7.2%
Nuevo CDP	4.0%	9.9%	8.3%	8.7%
Perris city	4.8%	11.3%	10.4%	11.2%
Redlands city	3.0%	7.8%	6.5%	7.2%
San Jacinto city	5.1%	12.2%	11.5%	11.8%
Temecula city	3.1%	8.6%	6.2%	6.9%
Wildomar city	3.7%	9.3%	7.7%	8.3%
Winchester CDP	4.8%	11.8%	10.0%	10.4%

Source: California Labor Market Information Division



APPENDIX C: INDUSTRY AND LOCATION QUOTIENT DEFINITIONS, AND SECTORS WITH FEWER THAN 5,000 JOBS

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, Mt. San Jacinto College employs faculty, but the institution also hires a variety of administrators and support staff to maintain operations. 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." A 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 5,000 jobs, along with their 2019 job count and expected five-year projected job growth are:

- **Finance and insurance**, 4,562 jobs in 2019, addition of 104 jobs by 2024
- **Educational services**, 4,066 jobs in 2019, addition of 531 jobs by 2024
- **Information**, 2,578 jobs in 2019, addition of 108 jobs by 2024
- **Agriculture, forestry, fishing, and hunting**, 1,670 jobs in 2019, addition of 22 jobs by 2024
- **Management of companies and enterprises**, 744 jobs in 2019, reduction of 19 jobs by 2024
- **Utilities**, 494 jobs in 2019, addition of 14 jobs by 2024
- **Mining, quarrying, and oil and gas extraction**, 143 jobs in 2019, addition of 6 jobs by 2024



APPENDIX D: KEY TERMS AND 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 health care industry sector, but these jobs may also exist in educational industries. The Standard Occupational Classification (SOC) System classifies 775 detailed occupations according to the tasks and duties of each job.

Skill Level Categories

- 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 or higher. These occupations are mostly trained by four-year colleges and universities.

Annual Job Openings are calculated by the sum of 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	153	934	\$25.84	\$33.75	\$42.91	Both
Administrative Services Managers	Middle-skill	41	259	\$34.42	\$47.33	\$62.97	Both
Advertising and Promotions Managers	Higher-skill	3	14	\$22.15	\$44.58	\$70.04	Both
Aircraft Mechanics and Service Technicians	Middle-skill	20	185	\$27.04	\$34.63	\$48.55	Both
Appraisers and Assessors of Real Estate	Middle-skill	13	64	\$21.36	\$28.30	\$42.48	Both
Architects, Except Landscape and Naval	Higher-skill	16	102	\$25.70	\$35.82	\$53.67	Both
Architectural and Civil Drafters	Middle-skill	20	123	\$20.13	\$27.44	\$36.01	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
Architectural and Engineering Managers	Higher-skill	15	101	\$55.58	\$70.20	\$83.70	Both
Art Directors	Higher-skill	23	100	\$9.39	\$24.62	\$42.06	Both
Audio and Video Equipment Technicians	Middle-skill	14	87	\$14.23	\$18.65	\$28.93	Both
Automotive Body and Related Repairers	Middle-skill	32	167	\$13.27	\$18.48	\$28.57	Both
Bill and Account Collectors	Middle-skill	41	261	\$15.95	\$18.60	\$23.30	In-demand
Bookkeeping, Accounting, and Auditing Clerks	Middle-skill	333	2,079	\$15.76	\$19.60	\$25.17	Both
Brickmasons and Blockmasons	Middle-skill	18	120	\$17.17	\$24.57	\$29.75	Both
Budget Analysts	Higher-skill	3	37	\$22.48	\$33.17	\$43.91	Both
Bus and Truck Mechanics and Diesel Engine Specialists	Middle-skill	62	483	\$18.32	\$24.05	\$30.33	Both
Business Operations Specialists, All Other	Higher-skill	177	1,143	\$22.40	\$31.18	\$42.44	Both
Buyers and Purchasing Agents	Middle-skill	59	426	\$20.83	\$27.40	\$35.23	Both
Cargo and Freight Agents	Middle-skill	9	123	\$19.10	\$23.15	\$30.07	Both
Carpenters	Middle-skill	522	2,591	\$16.61	\$22.93	\$29.57	Both
Cartographers and Photogrammetrists	Higher-skill	3	16	\$27.11	\$30.41	\$43.35	High-wage
Chefs and Head Cooks	Middle-skill	46	252	\$14.00	\$20.24	\$32.18	Both
Chief Executives	Higher-skill	35	204	\$40.59	\$78.12	\$118.61	Both
Child, Family, and School Social Workers	Higher-skill	45	234	\$20.13	\$25.85	\$33.33	Both
Childcare Workers	Middle-skill	379	2,008	\$9.71	\$12.04	\$15.76	In-demand
Civil Engineers	Higher-skill	47	285	\$40.81	\$52.01	\$63.56	Both
Clinical Laboratory Technologists and Technicians	Middle-skill	33	194	\$19.21	\$24.72	\$35.08	Both
Community and Social Service Specialists, All Other	Higher-skill	29	165	\$13.81	\$23.93	\$31.70	Both
Community Health Workers	Middle-skill	14	82	\$19.16	\$23.48	\$30.30	Both
Computer and Information Systems Managers	Higher-skill	25	152	\$52.52	\$68.15	\$82.80	Both
Computer Network Architects	Middle-skill	6	39	\$28.91	\$49.65	\$62.90	Both
Computer Network Support Specialists	Middle-skill	17	108	\$22.76	\$28.00	\$37.23	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
Computer Programmers	Higher-skill	13	72	\$29.41	\$40.36	\$48.42	Both
Computer Systems Analysts	Higher-skill	30	186	\$31.78	\$39.87	\$50.65	Both
Computer User Support Specialists	Middle-skill	61	390	\$19.54	\$26.11	\$34.08	Both
Construction and Building Inspectors	Middle-skill	31	164	\$31.27	\$40.80	\$53.80	Both
Construction Managers	Middle-skill	98	482	\$23.37	\$32.46	\$51.52	Both
Correctional Officers and Jailers	Middle-skill	91	463	\$29.37	\$38.33	\$43.30	Both
Customer Service Representatives	Middle-skill	403	2,658	\$13.88	\$17.44	\$22.85	In-demand
Database Administrators	Higher-skill	8	49	\$33.88	\$46.72	\$61.31	Both
Dental Hygienists	Middle-skill	37	186	\$40.54	\$45.41	\$50.58	Both
Detectives and Criminal Investigators	Middle-skill	17	85	\$45.11	\$49.12	\$58.20	Both
Diagnostic Medical Sonographers	Middle-skill	10	56	\$32.15	\$39.30	\$49.44	Both
Dietetic Technicians	Middle-skill	9	47	\$11.81	\$15.27	\$19.20	In-demand
Dietitians and Nutritionists	Higher-skill	16	85	\$28.59	\$34.97	\$40.58	Both
Drafters, All Other	Middle-skill	3	21	\$16.74	\$20.09	\$32.48	Both
Electrical and Electronics Engineering Technicians	Middle-skill	17	107	\$22.49	\$29.45	\$38.39	Both
Electrical Power-Line Installers and Repairers	Middle-skill	27	148	\$25.84	\$35.93	\$54.40	Both
Electricians	Middle-skill	211	1,365	\$18.07	\$24.28	\$32.53	Both
Elementary School Teachers, Except Special Education	Higher-skill	440	1,962	\$33.13	\$42.88	\$48.90	Both
Emergency Medical Technicians and Paramedics	Middle-skill	63	280	\$12.10	\$15.49	\$20.02	In-demand
Engineering Technicians, Except Drafters, All Other	Middle-skill	12	86	\$26.71	\$34.76	\$42.10	Both
Executive Secretaries and Executive Administrative Assistants	Middle-skill	65	397	\$23.06	\$28.13	\$34.25	Both
Farmers, Ranchers, and Other Agricultural Managers	Middle-skill	29	230	\$16.19	\$21.41	\$51.02	Both
Film and Video Editors	Higher-skill	3	25	\$20.18	\$40.40	\$54.56	Both
Financial Managers	Higher-skill	66	421	\$36.52	\$53.14	\$72.74	Both
Firefighters	Middle-skill	55	269	\$25.92	\$30.40	\$37.87	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 Supervisors of Construction Trades and Extraction Workers	Middle-skill	202	1,000	\$24.06	\$32.24	\$42.99	Both
First-Line Supervisors of Correctional Officers	Middle-skill	9	45	\$46.59	\$48.36	\$51.21	Both
First-Line Supervisors of Fire Fighting and Prevention Workers	Middle-skill	5	24	\$37.62	\$45.26	\$70.76	Both
First-Line Supervisors of Food Preparation and Serving Workers	Middle-skill	359	1,908	\$13.03	\$14.94	\$18.63	In-demand
First-Line Supervisors of Gaming Workers	Middle-skill	33	146	\$20.78	\$27.77	\$33.45	Both
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	Middle-skill	37	267	\$15.42	\$22.64	\$32.54	Both
First-Line Supervisors of Mechanics, Installers, and Repairers	Middle-skill	80	500	\$26.09	\$33.91	\$42.44	Both
First-Line Supervisors of Office and Administrative Support Workers	Middle-skill	274	1,750	\$20.78	\$26.41	\$33.50	Both
First-Line Supervisors of Police and Detectives	Middle-skill	8	38	\$57.42	\$72.60	\$84.12	Both
First-Line Supervisors of Production and Operating Workers	Middle-skill	76	589	\$21.56	\$28.35	\$38.26	Both
First-Line Supervisors of Protective Service Workers, All Other	Middle-skill	17	154	\$13.49	\$18.18	\$28.43	Both
First-line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	Middle-skill	109	1,134	\$20.66	\$27.19	\$33.41	Both
Food Scientists and Technologists	Higher-skill	2	21	\$23.79	\$31.13	\$40.76	Both
Food Service Managers	Middle-skill	128	653	\$15.83	\$20.87	\$29.15	Both
General and Operations Managers	Higher-skill	339	2,162	\$31.34	\$48.54	\$69.84	Both
Glaziers	Middle-skill	24	125	\$17.08	\$29.05	\$55.40	Both
Graphic Designers	Middle-skill	52	255	\$16.44	\$20.71	\$29.83	Both
Health Educators	Higher-skill	13	72	\$26.41	\$40.78	\$46.24	Both
Healthcare Support Workers, All Other	Middle-skill	37	208	\$18.22	\$21.26	\$24.08	In-demand
Heavy and Tractor-Trailer Truck Drivers	Middle-skill	356	4,395	\$16.43	\$21.57	\$28.71	Both
Human Resources Managers	Higher-skill	22	152	\$41.68	\$54.47	\$69.44	Both
Human Resources Specialists	Higher-skill	82	607	\$24.36	\$29.60	\$37.34	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
Industrial Machinery Mechanics	Middle-skill	42	301	\$22.40	\$27.95	\$33.68	Both
Information Security Analysts	Higher-skill	5	31	\$42.56	\$55.09	\$66.67	Both
Interpreters and Translators	Middle-skill	17	100	\$18.52	\$26.11	\$40.13	Both
Kindergarten Teachers, Except Special Education	Higher-skill	32	144	\$24.89	\$34.17	\$38.76	Both
Landscape Architects	Higher-skill	6	40	\$26.33	\$33.68	\$43.90	Both
Legal Secretaries	Middle-skill	23	152	\$18.20	\$25.39	\$30.85	Both
Legal Support Workers, All Other	Middle-skill	8	51	\$20.73	\$25.83	\$29.28	Both
Licensed Vocational Nurses	Middle-skill	138	809	\$20.90	\$25.10	\$29.89	Both
Loan Officers	Higher-skill	37	224	\$14.26	\$26.98	\$44.08	Both
Management Analysts	Higher-skill	126	679	\$26.81	\$37.83	\$53.36	Both
Managers, All Other	Higher-skill	166	920	\$17.06	\$34.61	\$57.22	Both
Market Research Analysts and Marketing Specialists	Higher-skill	96	591	\$18.54	\$26.18	\$36.30	Both
Marketing Managers	Higher-skill	21	130	\$35.55	\$48.04	\$70.92	Both
Medical and Health Services Managers	Higher-skill	69	401	\$43.12	\$56.33	\$70.83	Both
Medical Assistants	Middle-skill	222	1,287	\$13.13	\$15.23	\$17.83	In-demand
Meeting, Convention, and Event Planners	Higher-skill	21	125	\$17.25	\$22.96	\$33.04	Both
Middle School Teachers, Except Special and Career/Technical Education	Higher-skill	80	352	\$31.64	\$39.99	\$45.96	Both
Mobile Heavy Equipment Mechanics, Except Engines	Middle-skill	37	240	\$24.21	\$30.12	\$35.78	Both
Multimedia Artists and Animators	Middle-skill	10	36	\$6.69	\$15.36	\$31.22	Both
Music Directors and Composers	Higher-skill	18	85	\$13.94	\$22.59	\$37.82	Both
Network and Computer Systems Administrators	Higher-skill	25	158	\$30.39	\$38.48	\$50.43	Both
Operating Engineers and Other Construction Equipment Operators	Middle-skill	110	554	\$26.92	\$38.15	\$45.18	Both
Operations Research Analysts	Higher-skill	5	36	\$34.37	\$41.45	\$53.59	Both
Paralegals and Legal Assistants	Middle-skill	38	262	\$22.27	\$27.46	\$35.00	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
Payroll and Timekeeping Clerks	Middle-skill	36	238	\$18.83	\$22.56	\$26.50	Both
Personal Financial Advisors	Higher-skill	27	122	\$25.86	\$36.52	\$87.10	Both
Pesticide Handlers, Sprayers, and Applicators, Vegetation	Middle-skill	3	23	\$11.79	\$16.20	\$23.30	In-demand
Photographers	Middle-skill	29	146	\$12.18	\$20.05	\$36.36	Both
Physical Therapist Assistants	Middle-skill	24	103	\$30.72	\$34.61	\$38.13	Both
Plumbers, Pipefitters, and Steamfitters	Middle-skill	209	983	\$16.81	\$24.48	\$30.10	Both
Police and Sheriff's Patrol Officers	Middle-skill	128	628	\$36.88	\$47.03	\$57.47	Both
Preschool Teachers, Except Special Education	Middle-skill	80	413	\$12.55	\$14.36	\$17.65	In-demand
Probation Officers and Correctional Treatment Specialists	Higher-skill	25	125	\$32.78	\$38.66	\$50.79	Both
Producers and Directors	Higher-skill	8	58	\$16.10	\$30.34	\$44.51	Both
Production, Planning, and Expediting Clerks	Middle-skill	64	537	\$17.76	\$22.06	\$27.74	Both
Property, Real Estate, and Community Association Managers	Middle-skill	56	289	\$19.83	\$30.43	\$51.81	Both
Psychiatric Technicians	Middle-skill	22	149	\$31.98	\$34.62	\$37.58	Both
Public Relations Specialists	Higher-skill	31	177	\$21.09	\$29.25	\$40.28	Both
Radiologic Technologists	Middle-skill	24	140	\$30.62	\$36.03	\$41.78	Both
Real Estate Brokers	Middle-skill	37	168	\$18.25	\$37.66	\$56.98	Both
Real Estate Sales Agents	Middle-skill	110	476	\$15.97	\$26.42	\$44.61	Both
Registered Nurses	Middle-skill	429	2,616	\$38.82	\$47.45	\$58.41	Both
Respiratory Therapists	Middle-skill	25	150	\$29.33	\$35.39	\$41.59	Both
Secondary School Teachers, Except Special and Career/ Technical Education	Higher-skill	233	1,034	\$31.61	\$40.49	\$47.02	Both
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	Middle-skill	449	2,760	\$14.16	\$18.58	\$23.76	In-demand
Sheet Metal Workers	Middle-skill	48	261	\$17.17	\$24.15	\$30.67	Both
Social and Community Service Managers	Higher-skill	38	249	\$18.91	\$30.62	\$49.47	Both
Social and Human Service Assistants	Middle-skill	116	713	\$14.94	\$17.90	\$23.68	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
Software Developers, Applications	Higher-skill	45	237	\$38.82	\$48.70	\$60.83	Both
Software Developers, Systems Software	Higher-skill	19	118	\$37.41	\$48.83	\$62.03	Both
Sound Engineering Technicians	Middle-skill	4	17	\$11.22	\$15.10	\$26.72	Both
Solar Photovoltaic Installers	Middle-skill	5	52	\$16.80	\$19.15	\$25.83	Both
Special Education Teachers, Kindergarten and Elementary School	Higher-skill	45	203	\$29.24	\$37.82	\$47.13	Both
Special Education Teachers, Middle School	Higher-skill	10	46	\$33.38	\$38.72	\$45.60	Both
Special Education Teachers, Preschool	Middle-skill	10	51	\$11.00	\$12.07	\$18.09	Neither
Structural Iron and Steel Workers	Middle-skill	45	237	\$21.97	\$32.33	\$39.40	Both
Substance Abuse, Behavioral Disorder, and Mental Health Counselors	Higher-skill	98	532	\$17.20	\$21.24	\$26.94	Both
Substitute Teachers	Higher-skill	388	1,788	\$16.37	\$18.05	\$21.09	In-demand
Surgical Technologists	Middle-skill	23	135	\$22.87	\$27.39	\$32.60	Both
Surveying and Mapping Technicians	Middle-skill	9	59	\$21.08	\$28.15	\$39.94	Both
Tax Preparers	Middle-skill	22	123	\$11.75	\$16.73	\$31.80	Both
Teacher Assistants	Middle-skill	530	2,469	\$13.79	\$16.84	\$19.75	In-demand
Teachers and Instructors, All Other	Higher-skill	129	615	\$12.71	\$16.79	\$26.42	In-demand
Telecommunications Equipment Installers and Repairers, Except Line Installers	Middle-skill	66	403	\$22.21	\$26.71	\$30.13	Both
Telecommunications Line Installers and Repairers	Middle-skill	33	179	\$17.20	\$25.59	\$35.66	Both
Training and Development Specialists	Higher-skill	44	290	\$19.05	\$27.60	\$37.68	Both
Transportation, Storage, and Distribution Managers	Middle-skill	27	279	\$32.81	\$41.71	\$54.09	Both
Water and Wastewater Treatment Plant and System Operators	Middle-skill	29	146	\$26.25	\$32.87	\$40.77	Both
Web Developers	Middle-skill	20	109	\$16.52	\$24.36	\$36.27	Both

Source: COE, Emsi 20.2

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 & Renewables



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