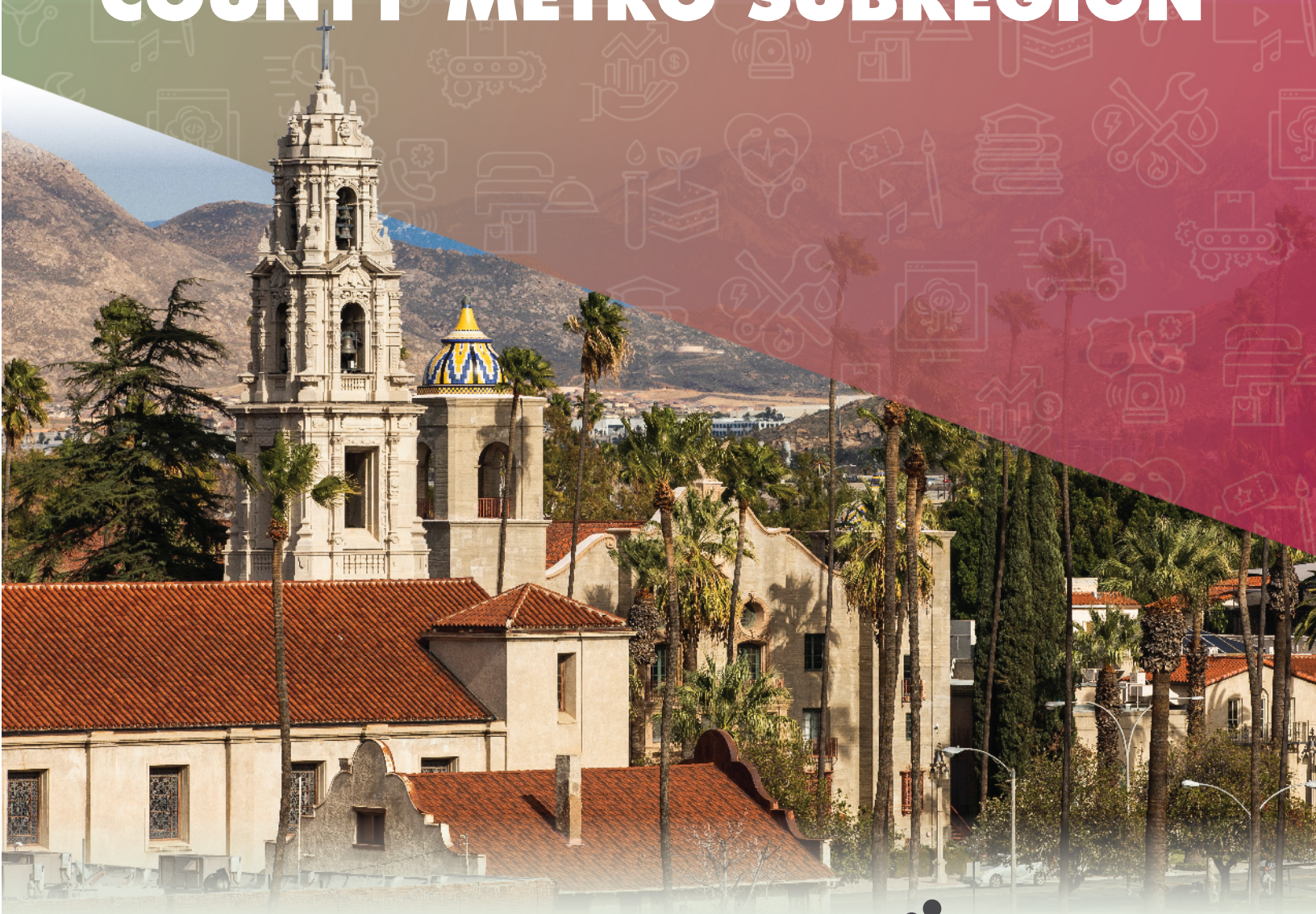**2023**

WORKFORCE DEMAND ASSESSMENT
INLAND EMPIRE-RIVERSIDE COUNTY METRO SUBREGION

INLAND EMPIRE/DESERT REGIONAL CONSORTIUM
Strong Workforce

C·O·E
CENTERS OF EXCELLENCE
FOR LABOR MARKET RESEARCH

Inland Empire-Riverside County Metro Subregional Overview

Located in the southwestern quadrant of the Riverside-San Bernardino-Ontario metropolitan statistical area (MSA), the Inland Empire-Riverside County Metro subregion encompasses the western portion of Riverside County, extending north to the San Bernardino County line, including San Gorgonio Pass communities and south to the San Diego County border. The Inland Empire-Riverside County Metro Subregion is the largest of the region's four subregions in terms of current population size and is expected to grow the fastest over the next five years. While this subregion was the second largest in terms of current job counts, it is projected to be the fastest growing and will add the most jobs over the next five years. (See Appendix A for a map of all subregions and a list of ZIP codes associated with this subregion.) This subregion is home to four community colleges within the Riverside Community College District and Mt. San Jacinto Community College District, 16 high school districts, and the University of California, Riverside.

To assist regional community colleges with strategic planning and career education (CE) program development, the Inland Empire/Desert Region Center of Excellence (COE) conducted a series of subregional workforce demand assessments to pinpoint high-quality job opportunities for program investment. This analysis identifies occupations that show strong workforce demand and offer median hourly earnings that exceed the state's living wage standard. The occupations highlighted in this assessment may be used to calibrate or develop CE training programs designed to address the region's in-demand and high-wage job opportunities.

Demographic, industry, and high-quality job information at the regional-level is available in the Inland Empire/Desert Regional Workforce Demand Assessment: https://bit.ly/2022IED.

Exhibit 1. Community colleges in the Inland Empire-Riverside County Metro Subregion
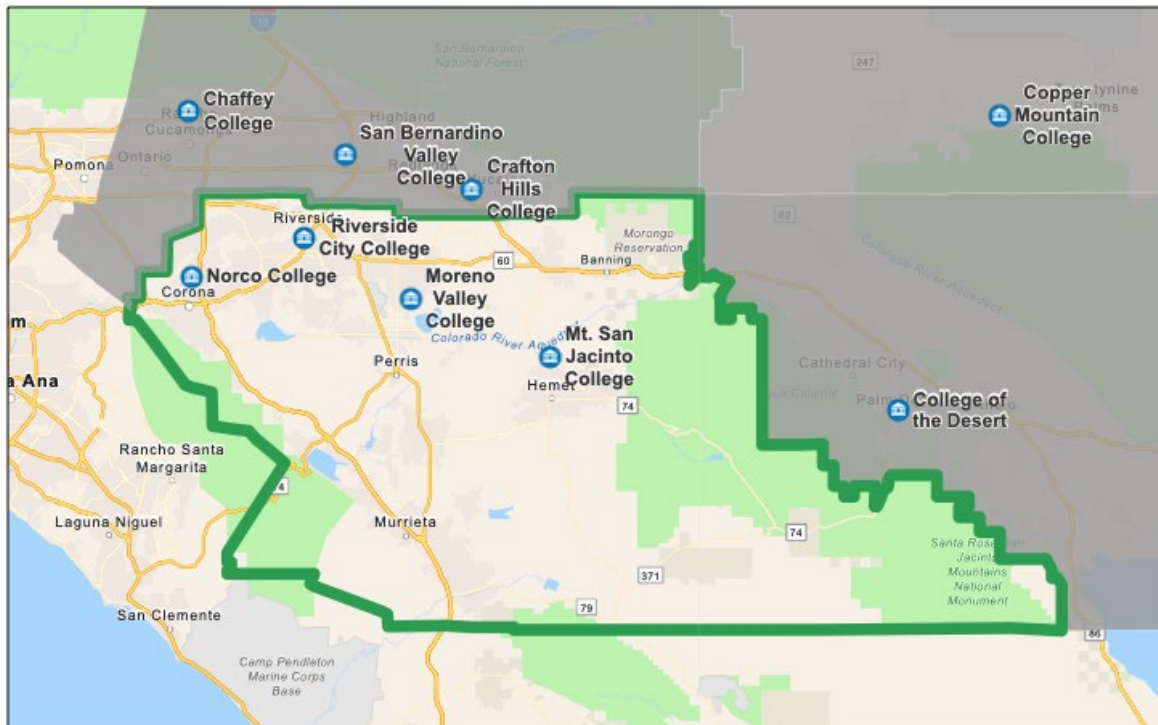
Methodology and Data Sources

This report focuses on occupations identified through the Bureau of Labor Statistics (BLS) Standard Occupational Classification (SOC) System that are crosswalked to California Community Colleges Taxonomy of Programs (TOP) codes. These occupations are most relevant for students who enroll in community college career education training programs (CE). This report analyzes occupations related to the 10 sectors designated by the California Community Colleges Chancellor's Office (CCCCO) with a typical entry-level education requirement of either high school, community college, or a bachelor's degree. The subregional analysis by sector allows for a comprehensive evaluation of where high-quality jobs exist and where colleges may invest in CE programs to address labor market demand.

A program inventory was conducted for each CCCCO sector, examining programs offered by community colleges in the region. Education levels, current employment (2021 job count), projected occupational demand (annual job openings), and earnings associated with occupations in each sector are included in the assessment.

For each sector, occupations that meet the high-quality job definition are highlighted, i.e., occupations that are both in-demand and have high-wages. For this study, an occupation is considered in-demand if it has 100 or more regional annual job openings over the next five years. Occupations are considered high wage if their median hourly wage meets or exceeds $21.82 per hour, the MIT living wage standard for a single adult in California. Further information on MIT Living Wage Standard Methodology is available on their website.[1]

Labor market data in this report is sourced from Lightcast 2022.4. The community college program inventory was sourced from the Chancellor's Office Curriculum Inventory (COCI 2.0) and each community college's course catalog. Each college verified the program inventory to ensure the college offerings were current and accurate. Each sector contains a list of existing program offerings and programs currently not offered by community colleges in the subregion.

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[1] "Living Wage Calculator for California," MIT Living Wage, 2023, accessed January 18, 2023, https://livingwage.mit.edu/states/06.
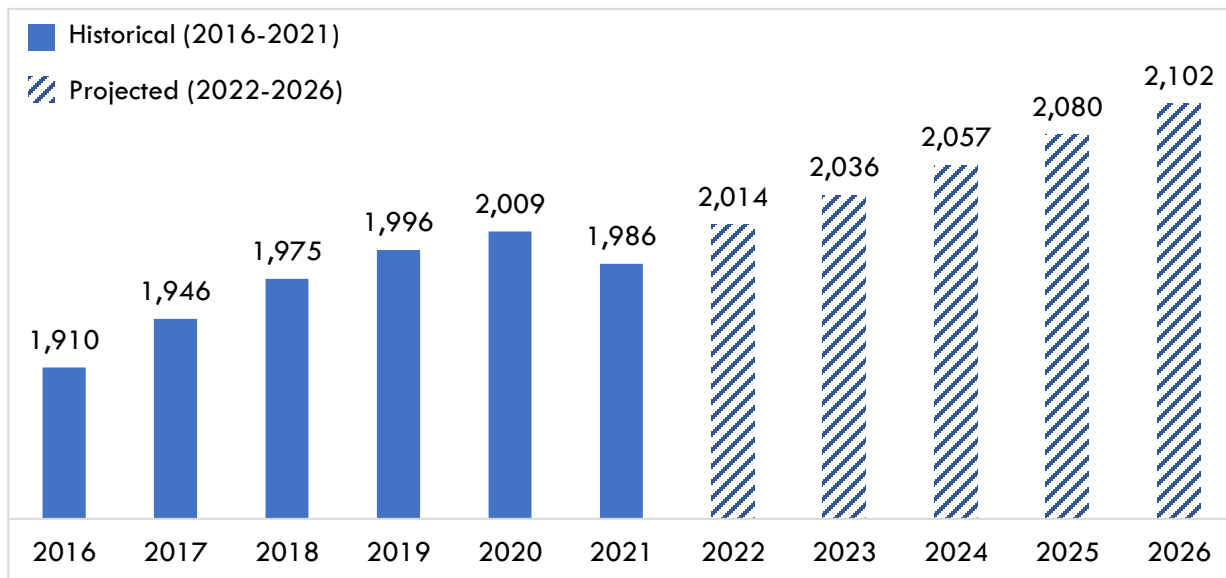
Subregion Demographics and Labor Force

This section analyzes the Inland Empire-Riverside County Metro Subregion's demographic characteristics, including population size, gender, race/ethnicity, age, educational attainment, and labor force participation. Providing foundational information on a subregion's demographic composition helps to ensure equitable service for all residents. The demographic data displayed in this report reflects the examined subregional area and may not directly reflect a postsecondary institution's student population.

Population

In 2021, the Inland Empire-Riverside County Metro Subregion contained about 1.99 million residents, or 42.7% of the region's 4.65 million residents (Exhibit 2). Over the last five years, between 2016 and 2021, the population of this subregion increased by 4%, while the greater region increased by 3.2%. Population growth in this subregion is expected to grow faster than the overall region (up by 4.1%) and the state (declining by -0.4%). Over the next five years, between 2021 and 2026, the subregion's population is projected to increase by 5.9%, adding nearly 117,000 residents.

Exhibit 2. Population change, in thousands, Inland Empire-Riverside County Metro Subregion, 2016-2026

Legend:
- Historical (2016-2021)
- Projected (2022-2026)

Year	Population
2016	1,910
2017	1,946
2018	1,975
2019	1,996
2020	2,009
2021	1,986
2022	2,014
2023	2,036
2024	2,057
2025	2,080
2026	2,102

Gender

The subregional population has slightly more male (50.2%) than female (49.8%) residents (Exhibit 3). These numbers are similar to the greater region's gender composition, in which 50.3% of residents are male and 49.7% are female.

Exhibit 3. Gender composition, Inland Empire-Riverside County Metro Subregion, 2021
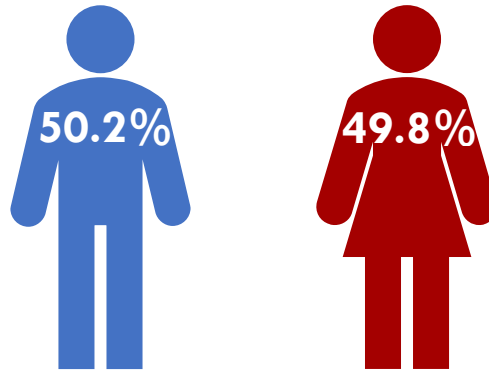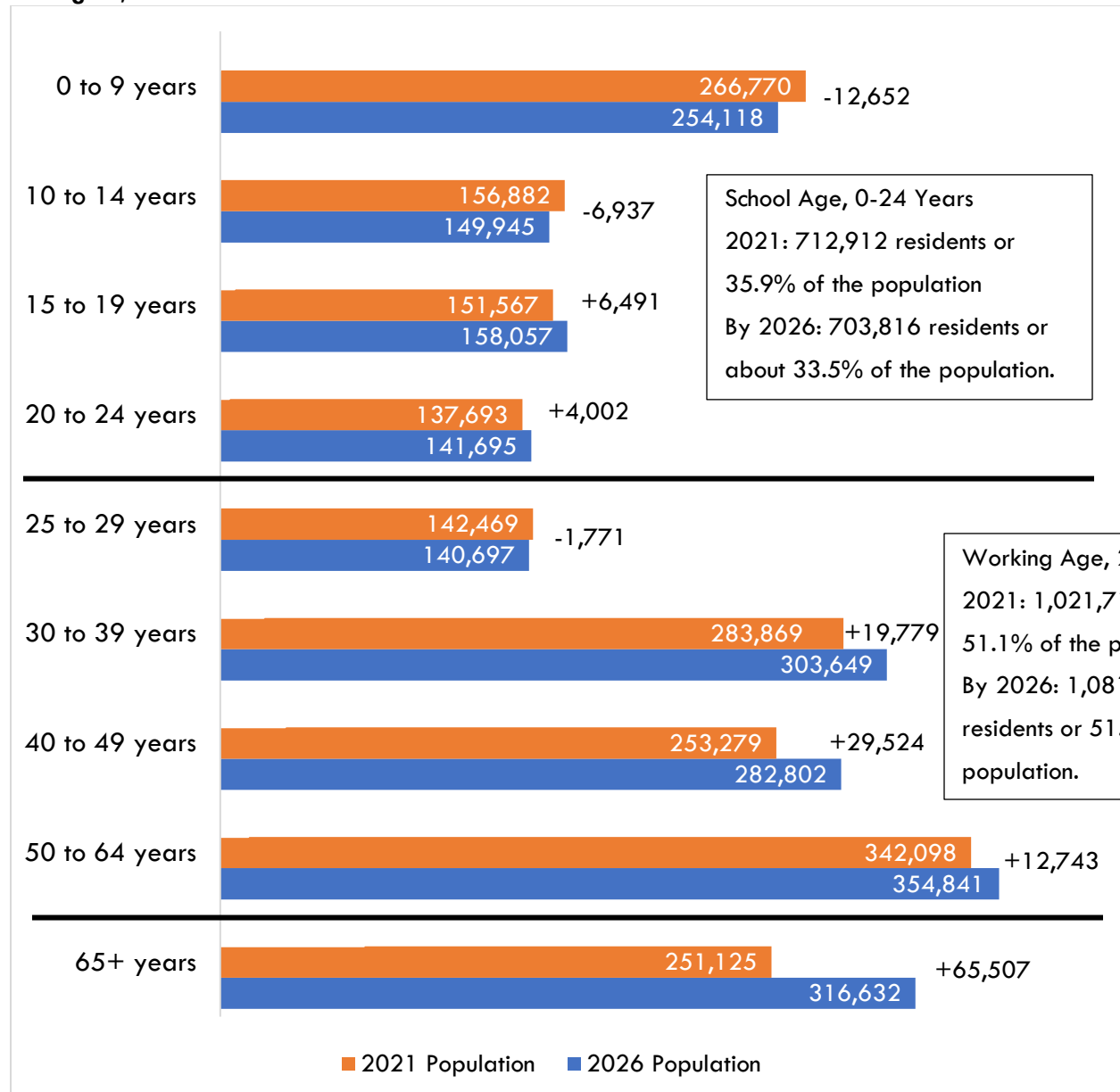

Age

The size of resident age categories may provide insight into future demand for housing, services, and educational enrollment. In 2021, the 0-to-24 age group represented nearly 36% of the Inland Empire-Riverside County Metro Subregion's population. By 2026, this age group is projected to decrease by just over 1% or nearly 9,100 residents. The most notable declines will be seen in the 0-to-9 age group (down 4.7%) and the 10-to-14 age group.

The working-age population, the 25-to-64 age group, comprised more than 51% of the subregion's population in 2021. Over the next five years, the working-age population is expected to gain nearly 60,300 residents, expanding by 5.9%. Within the working-age population, notable growth over the next five years is projected for two age groups: The 30-to-39 age group will increase by 7%, and the 40-to-49 age group will increase by 11.7%. The 25-to-29 age group will decrease by just over 1%.

The age group comprising residents 65 years and older is projected to rise by 26.1% over the next five years, adding more than 65,500 residents. This is the fastest-growing age group in the subregion.

Exhibit 4. Resident age composition and five-year change, Inland Empire-Riverside County Metro Subregion, 2021-2026

Age Group	2021 Population	2026 Population	Change
0 to 9 years	266,770	254,118	-12,652
10 to 14 years	156,882	149,945	-6,937
15 to 19 years	151,567	158,057	+6,491
20 to 24 years	137,693	141,695	+4,002
25 to 29 years	142,469	140,697	-1,771
30 to 39 years	283,869	303,649	+19,779
40 to 49 years	253,279	282,802	+29,524
50 to 64 years	342,098	354,841	+12,743
65+ years	251,125	316,632	+65,507

School Age, 0-24 Years
2021: 712,912 residents or 35.9% of the population
By 2026: 703,816 residents or about 33.5% of the population.

Working Age, 25-64 Years
2021: 1,021,715 residents or 51.1% of the population
By 2026: 1,081,989 residents or 51.5% of the population.
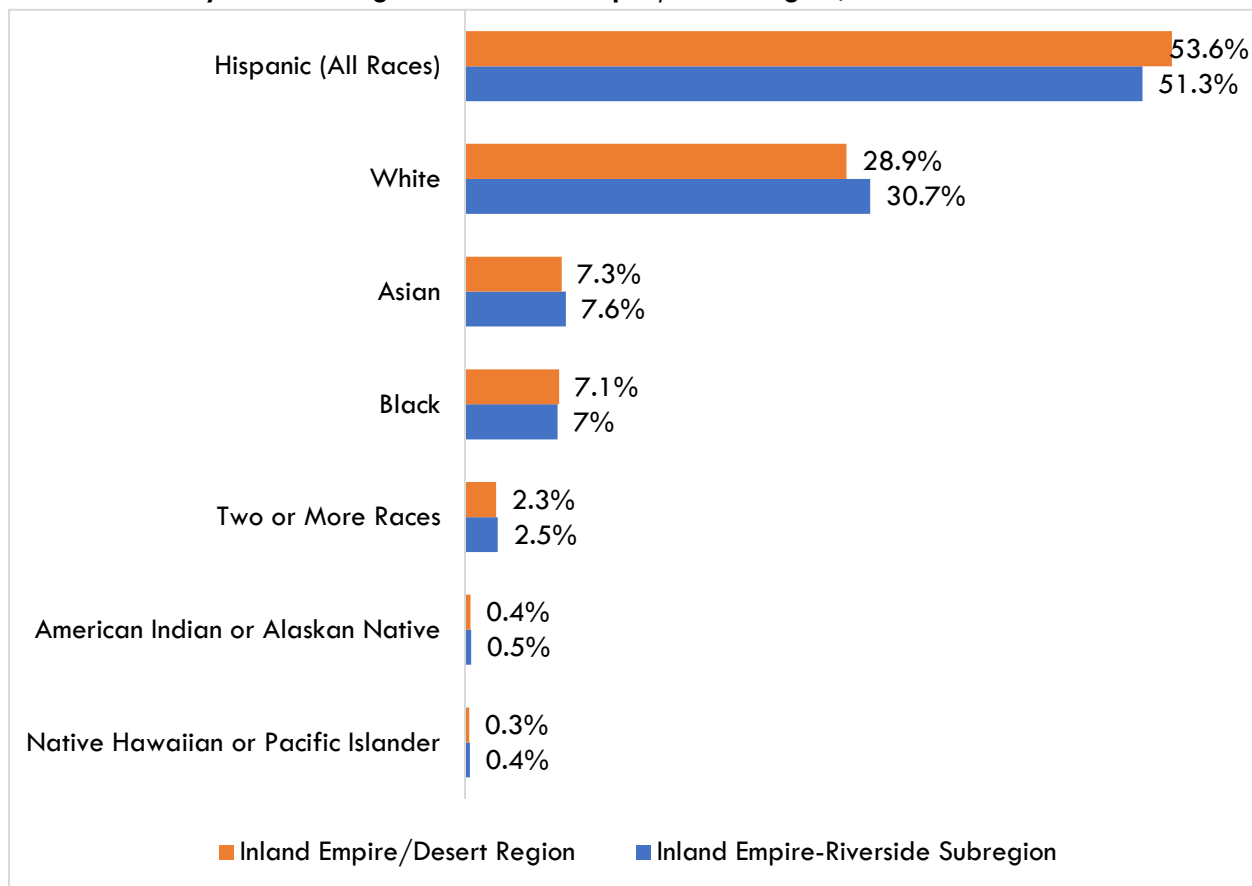
■ 2021 Population ■ 2026 Population

Race and Ethnicity

The U.S. Census Bureau collects race and ethnicity data from residents in accordance with the U.S. Office of Management and Budget's guidelines.[2] The Census questionnaire asks each resident to self-identify by selecting their race and whether they are of Hispanic or Latino origin. These are categories that generally reflect an individual's social definition and are "not an attempt to define race biologically, anthropologically, or genetically." Race and ethnicity data are particularly critical in federal and state civil rights policymaking, addressing issues such as providing equal employment opportunities and addressing racial disparities in health and environment assessments.[3] (See Appendix B for terms and definitions related to population demographics.)

In 2021, residents identifying as Hispanic or Latino (all races) made up more than half (51.3%) of the subregion's population, a slightly smaller share than the region's 53.6% (Exhibit 5). The subregion contains a somewhat larger percentage of Asian (alone) residents than the region, 7.6% and 7.3%, respectively. White residents comprise a larger proportion of the subregion's population, 30.7%, compared to the region's, 28.9%.

Exhibit 5. Race (non-Hispanic) and ethnicity (Hispanic or Latino, all races) composition, Inland Empire-Riverside County Metro Subregion and Inland Empire/Desert Region, 2021

	Inland Empire/Desert Region	Inland Empire-Riverside Subregion
Hispanic (All Races)	53.6%	51.3%
White	28.9%	30.7%
Asian	7.3%	7.6%
Black	7.1%	7%
Two or More Races	2.3%	2.5%
American Indian or Alaskan Native	0.4%	0.5%
Native Hawaiian or Pacific Islander	0.3%	0.4%

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[2] This report uses race and ethnicity data from Lightcast collected by the U.S. Census Bureau through the American Community Survey. The terms in this document, including white, Hispanic, and Black, adhere to the terms and definitions the Census Bureau uses in collecting its data. For definitions, please refer to https://www.census.gov/topics/population/race/about.html.
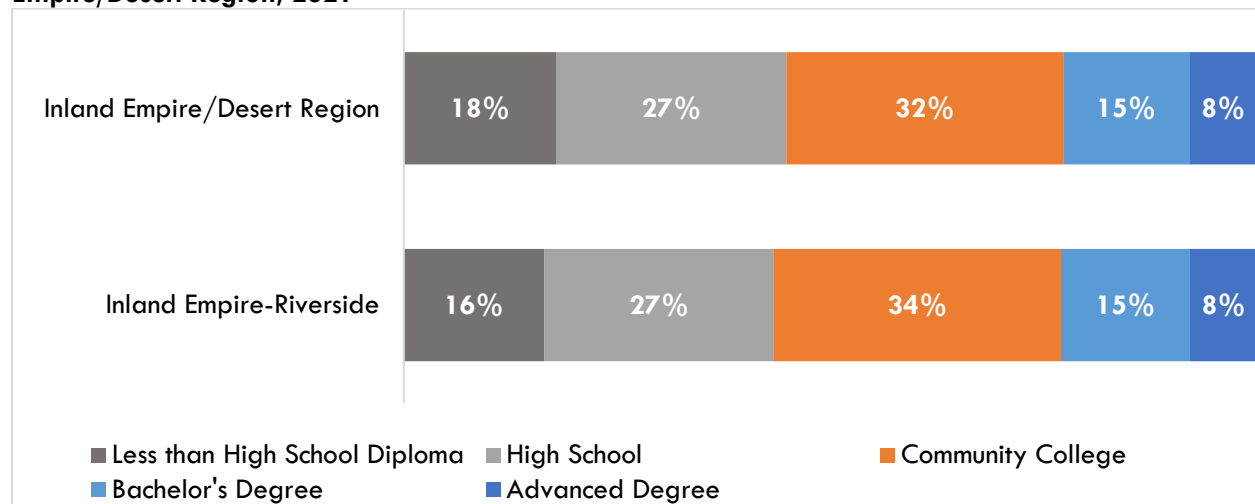[3] "*2020 Census Frequently Asked Questions About Race and Ethnicity,*" *United States Census Bureau, 2023, accessed January 18, 2023,* https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/release/faqs-race-ethnicity.html.

Educational Attainment

Educational attainment refers to the highest level of education that residents age 25 and older have completed. Educational attainment data may illuminate mismatches between resident skills and employment needs and the need for additional regional postsecondary program offerings.

Approximately 43% of the residents in the subregion have a high school diploma or less, a 2% smaller share than the Inland Empire/Desert Region (Exhibit 6). This may indicate an opportunity for more CE program outreach to increase educational attainment in the region. The subregion has a greater share of residents with a community college education (some college but no degree, or an associate degree), 34%, than the region, 32%. Compared to the region, the subregion has the same share of residents who have completed a bachelor's degree or higher, 23%.

Exhibit 6. Educational attainment, Inland Empire-Riverside County Metro Subregion and Inland Empire/Desert Region, 2021

| Region	Less than High School Diploma	High School	Community College	Bachelor's Degree	Advanced Degree
Inland Empire/Desert Region	18%	27%	32%	15%	8%
Inland Empire-Riverside	16%	27%	34%	15%	8%

Labor Force and Unemployment Rate

Labor force data reflects the employment status of people by where they live. The labor force is the total count of residents working (employed) or seeking work (unemployed). The unemployment rate represents the number of unemployed individuals expressed as a share of the total labor force. Exhibit 7 displays city-level unemployment rate trends for cities containing community college main campuses.

Exhibit 7. Annual average unemployment rate for the Inland Empire-Riverside County Metro Cities, 2018-2022 (Preliminary)
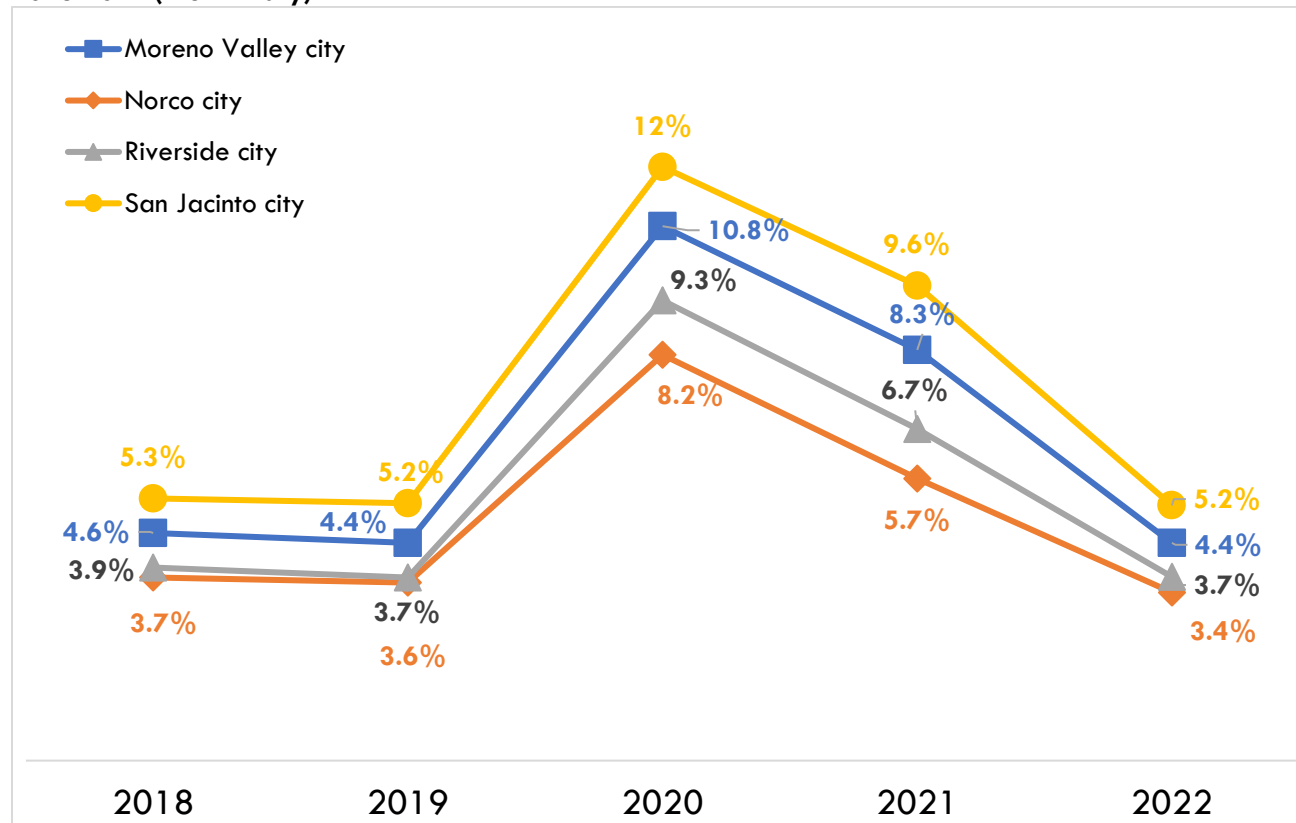
Subregional Industries

Industries are groups of employer establishments categorized by their primary business activity, e.g., what they produce, sell, or the services they provide.[4] Industries can be measured using many methods. This assessment analyzes industries by their current job count, job change over the next five years, average earnings per worker, and location quotient. It is essential to recognize that industries hire dozens of occupations that support a business's activity, including management, business and financial operations, health care, food preparation, sales, and production occupational categories, to name a few. Each industry job is counted, whether full-time or part-time, usually where the business conducts its payroll activity.

In the subregion, industry employers reported more than 676,500 total jobs in 2021, or about 39% of the Inland Empire/Desert Region's total employment (nearly 1.74 million jobs) (Exhibit 8). Over the next five years, the subregion's industry employment is projected to grow by 9.2% (adding more than 62,000 jobs, faster than the greater region's projected job growth of 8.6%. The subregion is projected to contribute 41.7% of the region's net job growth over the next five years.

Over the past five years, from 2016 to 2021, subregional employment rose by 12.2%, a net increase of over 73,700 jobs. Average employment in the subregion experienced a slight drop in 2020 due to the effects of the COVID-19 pandemic, shedding an average of nearly 26,900 jobs or about 4% of total employment.
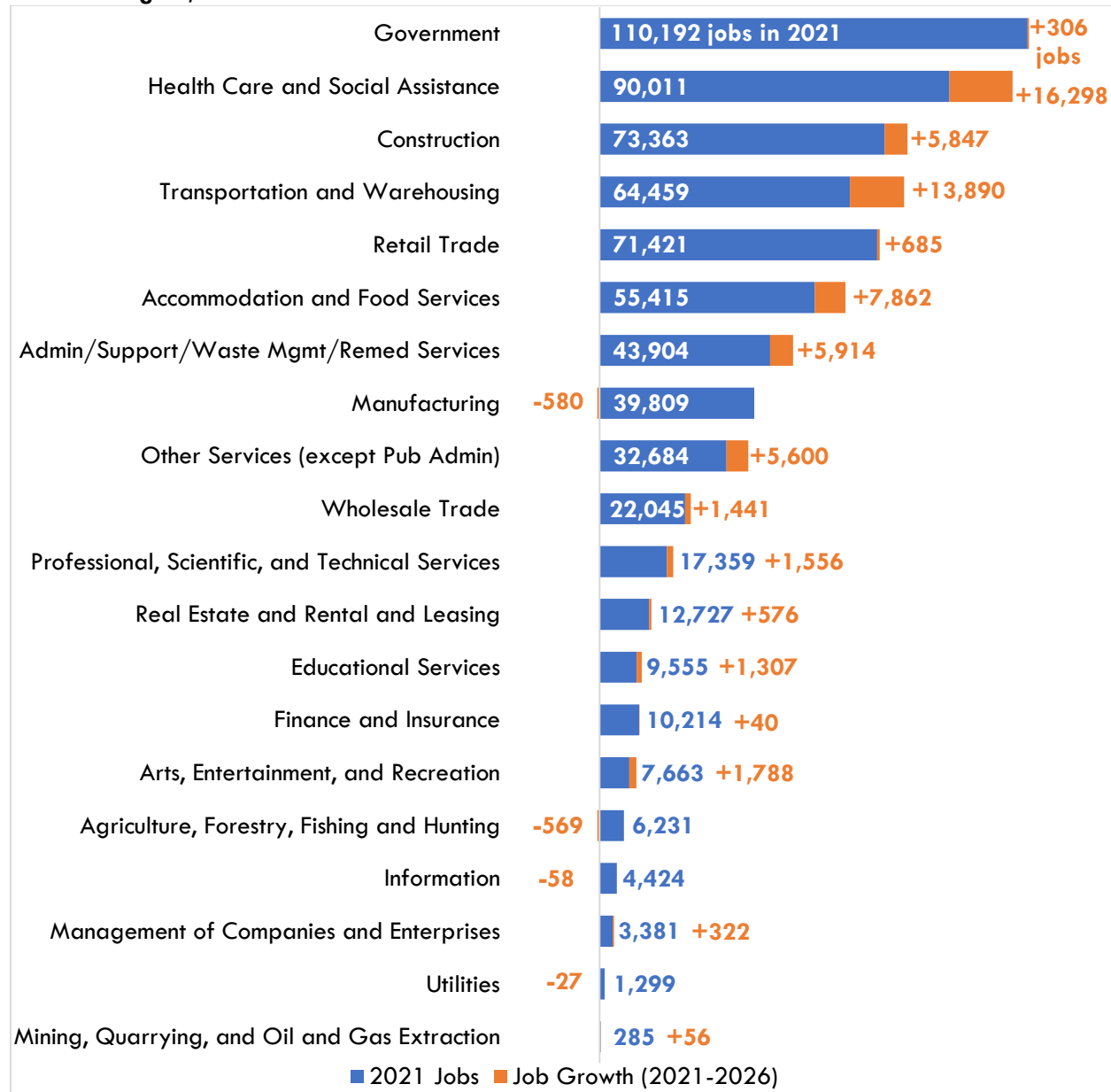
Exhibit 8. Historical and projected change in industry employment, Inland Empire-Riverside County Metro Subregion, 2016-2026
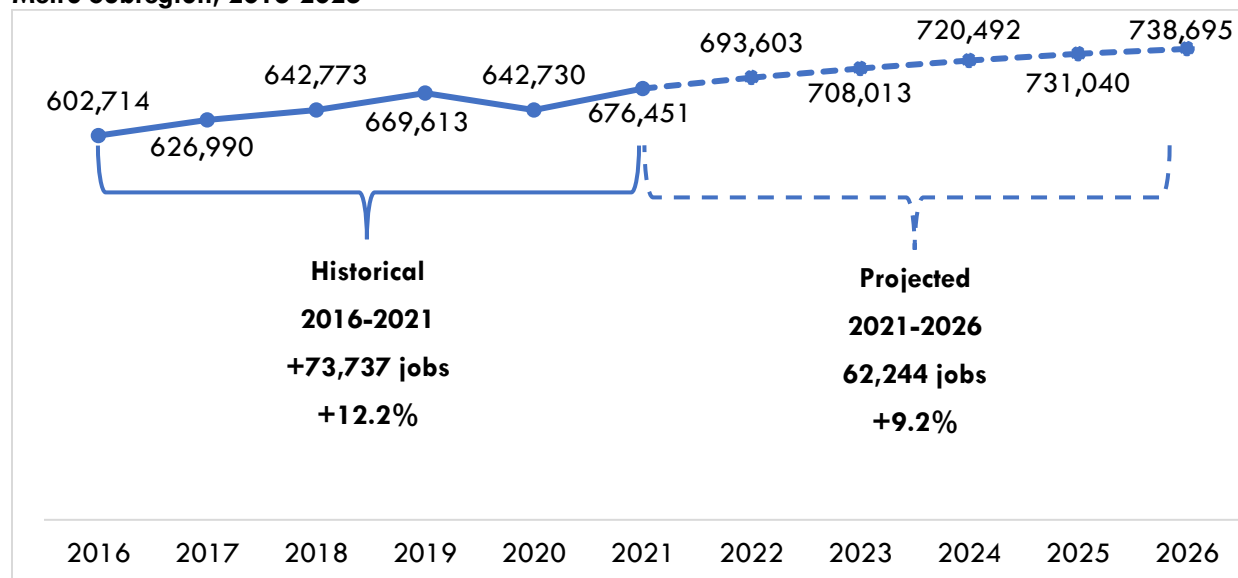
In 2021, the largest industries by employment were government, health care and social assistance, construction, transportation and warehousing, and retail trade. Combined, they accounted for more than 409,400 jobs or approximately 61% of subregional employment. The top five industries adding jobs to the subregion are health care and social assistance, transportation and warehousing, accommodation and food services, administrative and support, waste management and remediation services, and construction. These industries are projected to contribute 80% of the subregion's job growth through 2026.

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[4] "North American Industry Classification System (NAICS)," United States Census Bureau, 2017, accessed January 18, 2023, https://www.census.gov/naics/?58967?yearbck=2017.

Exhibit 9. Current and projected change in industry employment, Inland Empire-Riverside County Metro Subregion, 2021-2026

Industry	2021 Jobs	Job Growth (2021-2026)
Government	110,192 jobs in 2021	+306 jobs
Health Care and Social Assistance	90,011	+16,298
Construction	73,363	+5,847
Transportation and Warehousing	64,459	+13,890
Retail Trade	71,421	+685
Accommodation and Food Services	55,415	+7,862
Admin/Support/Waste Mgmt/Remed Services	43,904	+5,914
Manufacturing	39,809	-580
Other Services (except Pub Admin)	32,684	+5,600
Wholesale Trade	22,045	+1,441
Professional, Scientific, and Technical Services	17,359	+1,556
Real Estate and Rental and Leasing	12,727	+576
Educational Services	9,555	+1,307
Finance and Insurance	10,214	+40
Arts, Entertainment, and Recreation	7,663	+1,788
Agriculture, Forestry, Fishing and Hunting	6,231	-569
Information	4,424	-58
Management of Companies and Enterprises	3,381	+322
Utilities	1,299	-27
Mining, Quarrying, and Oil and Gas Extraction	285	+56

■ 2021 Jobs ■ Job Growth (2021-2026)

Industry Groups

The previous section described the employment share of the region's major industry sectors. NAICS codes facilitate a detailed analysis of subindustries within these major sectors. This analysis provides a clearer picture of industry activity that drives that regional economy.

Exhibit 10 provides a sample of high-quality industry groups. High-quality industries are those that are growing faster than the region overall (at or above 8.6% growth), have average per-job earnings above the living wage standard ($45,386 annually), and have a high location quotient at or above 1.2. A location quotient reflects the concentration of an industry in an area compared to the nation overall. Highly concentrated industries, those with a high location quotient, often describe the type of business activity an area is "known for." (See Appendix B for terms and definitions.)

In 2021, over 98,100 jobs were employed by industry groups that met the high-quality industry group definition. While high-quality industry groups accounted for nearly 15% of regional employment in 2021, these industry groups are projected to add 29% of subregional jobs over the next five years.

Exhibit 10. High-quality industry groups that are growing faster than the region overall, have average per-job earnings above the living wage standard, and a high concentration, Inland Empire-Riverside County Metro Subregion, 2021-2026

Industry Groups (NAICS4)	2021 Jobs	2021-2026 Job Change	Growth Rate	Location Quotient	Average Earnings Per Job
Transportation and Warehousing					
Warehousing and Storage (4931)	46,786	11,111	23.7%	6.6	$59,742
Construction					
Residential Building Construction (2361)	6,551	575	8.8%	1.2	$73,135
Utility System Construction (2371)	5,868	549	9.4%	2.0	$83,003
Building Equipment Contractors (2382)	18,772	2,382	12.7%	1.6	$68,574
Manufacturing					
Commercial and Service Industry Machinery Manufacturing (3333)	677	66	9.8%	1.9	$109,018
Office Furniture (including Fixtures) Manufacturing (3372)	775	95	12.2%	1.8	$75,874
Wholesale Trade					
Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers (4231)	2,446	276	11.3%	1.6	$77,533
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers (4237)	2,180	826	37.9%	1.8	$72,116
Grocery and Related Product Merchant Wholesalers (4244)	4,046	398	9.8%	1.3	$101,137
Health Care and Social Assistance					
Outpatient Care Centers (6214)	5,972	1,345	22.5%	1.4	$97,082
Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities (6232)	3,177	284	8.9%	1.2	$52,491
Arts, Entertainment, and Recreation					
Spectator Sports (7112)	861	316	36.7%	1.3	$45,439

The detailed industry groups displayed above are notable due to their growth, strong earnings, and concentration in the subregion compared to the nation overall. While location quotient data may provide insight into the unique presence of certain industries that may define a region, an additional 60 industry groups are growing and have average earnings per job above the regional living wage standard. In 2021, industry groups that met these criteria accounted for nearly 14% of subregional employment, with more than 93,500 jobs. These industry groups are projected to contribute 21% of subregional job growth through 2026.

Occupational Overview

An occupation is a collection of jobs, and job titles, which perform similar work tasks and share similar work knowledge, skills, and abilities. Employees who perform essentially the same tasks are classified in the same occupation, whether or not they are in the same industry. It's important to note that some occupations are concentrated in a few industries (e.g., police officers are only employed in government), whereas other occupations are found in most industries (e.g., information technology workers and maintenance workers).[5]

Inland Empire/Desert community colleges currently offer programs that train for occupations associated with the 10 CCCCO. The following sections discuss current employment and future demand for high-quality occupations related to regional training programs that align with the CCCCO sectors. For each sector, existing programs and programs not currently offered by community colleges in the subregion have been identified. The occupations listed for each sector meet the high-quality job designation, i.e., occupations that are both in-demand (at least 100 annual job openings) and high-wage ($21.82 and higher).

In this study, occupational employment in the subregion was analyzed in terms of each occupation's educational requirements, i.e., the entry-level education level needed to enter employment, such as a high school diploma; community college coursework, a degree, or certificate; or a bachelor's degree. Employers report typical entry-level educational requirements at the national level, and alternative paths to securing employment may exist depending on employer preferences and state licensing requirements. For example, registered nurses (RNs) typically must possess a bachelor's degree to enter employment in most states; however, California RN licensing may be attained after completing an Associate Degree in Nursing (ADN) through the California Community Colleges.[6]

California Community Colleges provide education and training that generally prepares workers to enter community-college-level jobs. These jobs typically require an education beyond a high school diploma but less than a four-year degree. Most community-college-level jobs offer a higher pay rate than jobs requiring less education, making them an excellent fit for community college students on a CE pathway who want to enter in-demand careers that offer a living wage.

Bachelor's-level jobs require a four-year degree from a college or university. These jobs were excluded from this report because they require a higher level of education from a four-year institution. High-school-level jobs illuminate possibilities open to those choosing to enter the workforce after securing a high school diploma or G.E.D., or jobs typically open to those who choose to work while attending college. This assessment does not include occupations that typically require an education beyond a bachelor's degree, such as physicians, lawyers, and most scientists, or occupations that do not typically require formal education to enter employment. Military occupations (about 2,100 regional military jobs in the region) were also excluded from the following sections of this assessment. Definitions for education levels are available in Appendix B.

Of the nearly 676,500 jobs in the subregion in 2021, 70% are included in this report. Exhibit 11 displays the count and share of jobs by educational level. For occupational wage information by educational level, please review the regional workforce demand assessment report.

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[5] "Concepts and Definitions," U.S. Bureau of Labor Statistics, 2022, accessed on August 8, 2022, https://www.bls.gov/cps/definitions.htm.

[6] "Steps to Become a California Registered Nurse," California Board of Registered Nursing, accessed on August 8, 2022, https://www.rn.ca.gov/careers/steps.shtml.

Exhibit 11. Share of jobs by education level, Inland Empire-Riverside County Metro Subregion and Inland Empire/Desert Region, 2021
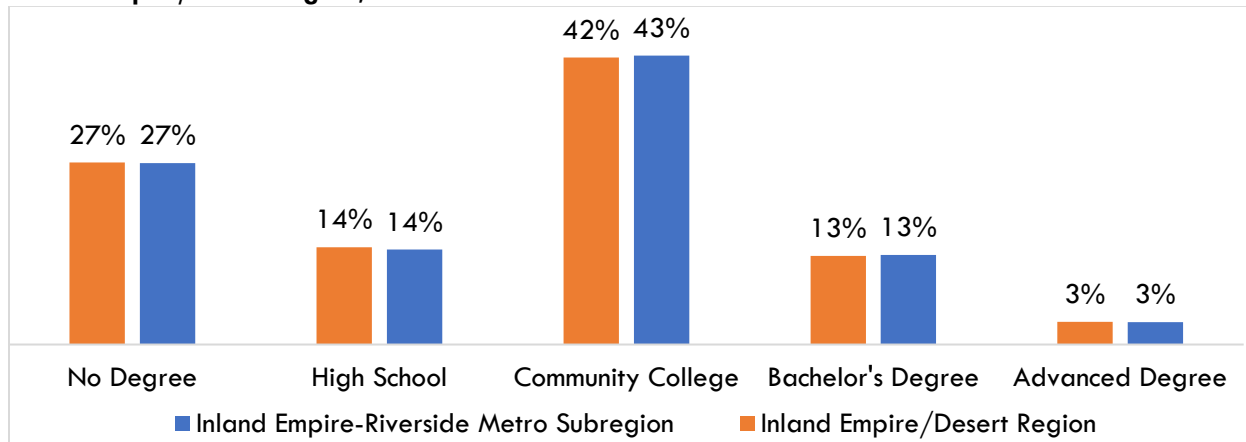
Advanced Manufacturing

The CCCCO advanced manufacturing sector aligns with the CDE manufacturing and product development sector. Two colleges in the Inland Empire-Riverside County Metro Subregion currently use five program codes for their advanced manufacturing programs.

Programs Offered

- 0934.00 - Electronics and Electric Technology
- 0953.40 - Mechanical Drafting
- 0956.00 - Manufacturing and Industrial Technology
- 0956.30 - Machining and Machine Tools
- 0956.50 - Welding Technology
- 0999.00 - Other Engineering and Related Industrial Technologies

Advanced manufacturing programs in the subregion prepare students for employment in two high-quality community-college-level occupations. High-quality occupations have at least 100 annual job openings and offer a median hourly rate of $21.82 at the regional-level.

In 2021, there were nearly 3,800 high-quality advanced manufacturing jobs in the subregion related to subregional training programs (Exhibit 12). Through 2026, more than 400 community-college-level job openings are projected annually for this occupational group in the subregion; nearly 1,000 job openings are projected annually in the greater region.

Exhibit 12. Education level, projected demand, and earnings for high-quality occupations

Occupations	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings Through 2026	Regional Annual Job Openings	Regional Median Hourly Earnings
First-Line Supervisors of Production and Operating Workers	CC	1,973	212	513	$28.84
Welders, Cutters, Solderers, and Brazers	CC	1,799	211	458	$22.53

Community College Programs Not Offered

In the subregion, 17 programs in the advanced manufacturing sector are currently not offered (Exhibit 13).

Exhibit 13. Programs not offered by community colleges in the subregion

Subregional Programs Not Offered	
0924.00 - Engineering Technology, General	0945.00 - Industrial Systems Technology and Maintenance
0934.20 - Industrial Electronics	0953.30 - Electrical, Electronic and Electro-Mechanical Drafting
0934.70 - Electron Microscopy	0953.60 - Technical Illustration
0934.80 - Laser and Optical Technology	0954.00 - Chemical Technology
0935.00 - Electro-Mechanical Technology	0954.20 - Plastics and Composites
0935.10 - Appliance Repair	0956.70 - Industrial and Occupational Safety and Health
0936.00 - Printing and Lithography	0956.80 - Industrial Quality Control
0943.00 - Instrumentation Technology	0961.00 - Optics
0943.30 - Vacuum Technology	

Occupational Training Opportunities

There is one program aligned with a high-quality occupation that community colleges may choose to address in the subregion.

- 0945.00 - Industrial Systems Technology and Maintenance

In 2021, there were nearly 900 industrial machinery mechanic jobs in the subregion (Exhibit 14). More than 100 annual job openings are projected annually for industrial machinery mechanics in the subregion, with nearly 300 job openings projected annually in the greater region.

Exhibit 14. High-quality occupation without training programs in the subregion

Occupation	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
Industrial Machinery Mechanics	CC	885	104	284	$28.82

Advanced Transportation and Logistics

The CCCCO advanced transportation and logistics sector aligns with the CDE transportation sector. Four colleges in the Inland Empire-Riverside County Metro Subregion currently use five program codes for their advanced transportation and logistics programs.

Programs Offered
- 0510.00 - Logistics and Materials Transportation
- 0948.00 - Automotive Technology
- 0949.00 - Automotive Collision Repair
- 0949.10 - Upholstery Repair - Automotive
- 3020.20 - Piloting

Advanced transportation and logistics programs in the subregion prepare students for employment in one high-quality bachelor's degree-level occupation and seven high-quality community college-level occupations. High-quality occupations have at least 100 annual job openings and offer a median hourly rate of $21.82 at the regional-level.

In 2021, these occupations accounted for nearly 12,100 jobs in the subregion. Nearly 1,500 job openings are projected annually for the high-quality advanced transportation and logistics occupational group through 2026, with nearly 4,300 job openings expected annually in the greater region (Exhibit 15).

Exhibit 15. Education level, projected demand, and earnings for high-quality occupations

Occupations	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
Airline Pilots, Copilots, and Flight Engineers	BS	156	95	120	$133.20
Automotive Service Technicians and Mechanics	CC	3,113	334	976	$23.26
First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	CC	3,092	450	1,307	$28.53
First-Line Supervisors of Mechanics, Installers, and Repairers	CC	1,991	213	550	$37.01
Production, Planning, and Expediting Clerks	CC	1,596	207	546	$22.70
Transportation, Storage, and Distribution Managers	CC	1,102	121	353	$44.82
Logisticians	CC	587	80	245	$36.41
Automotive Body and Related Repairers	CC	459	58	157	$27.07

Community College Programs Not Offered

In the subregion, 16 programs in the advanced transportation and logistics sector are currently not offered (Exhibit 16).

Exhibit 16. Programs not offered by community colleges in the subregion

Subregional Programs Not Offered	
0947.00 - Diesel Technology	0950.10 - Aviation Airframe Mechanics
0947.20 - Heavy Equipment Maintenance	0950.20 - Aviation Powerplant Mechanics
0947.40 - Railroad and Light Rail Operations	0950.40 - Aircraft Electronics (Avionics)
0947.50 - Truck and Bus Driving	0950.50 - Aircraft Fabrication
0948.30 - Motorcycle, Outboard and Small Engine Repair	0959.00 - Marine Technology
0948.40 - Alternative Fuels and Advanced Transportation Technology	3020.00 - Aviation and Airport Management and Services
0948.50 - Recreational Vehicle Service	3020.10 - Aviation and Airport Management
0950.00 - Aeronautical and Aviation Technology	3020.30 - Air Traffic Control

Occupational Training Opportunities

There are seven programs aligned with five high-quality community-college-level occupations that community colleges may choose to address in the subregion.

- 0947.00 - Diesel Technology
- 0947.20 - Heavy Equipment Maintenance
- 0947.50 - Truck and Bus Driving
- 0950.00 - Aeronautical and Aviation Technology
- 0950.10 - Aviation Airframe Mechanics
- 0950.20 - Aviation Powerplant Mechanics
- 0950.50 - Aircraft Fabrication

In 2021, these occupations accounted for nearly 15,300 jobs in the subregion (Exhibit 17). Through 2026, these high-quality occupations are projected to have nearly 2,100 job openings annually, with more than 7,600 annual job openings expected in the greater region.

Exhibit 17. High-quality occupations without training programs in the subregion

Occupations	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
Heavy and Tractor-Trailer Truck Drivers	CC	12,203	1,739	6,560	$23.17
Bus and Truck Mechanics and Diesel Engine Specialists	CC	1,088	124	408	$28.28
Mobile Heavy Equipment Mechanics, Except Engines	CC	802	92	248	$29.51
Bus Drivers, Transit and Intercity	CC	786	102	224	$24.39
Aircraft Mechanics and Service Technicians	CC	396	37	196	$36.07

Agriculture, Water, and Environmental Technologies

The CCCCO agriculture, water, and environmental technologies sector aligns with the CDE agriculture and natural resources sector. One college in the Inland Empire-Riverside County Metro Subregion currently offers a program in the agriculture, water, and environmental technologies sector.

Programs Offered
- 0109.00 - Horticulture
- 0104.00 - Viticulture, Enology, and Wine Business

There is one high-quality community-college-level occupation trained by the subregional agriculture programs. High-quality occupations have at least 100 annual job openings and offer a median hourly rate of $21.82 at the regional-level.

In 2021, there were nearly 600 first-line supervisors of landscaping, lawn service, and groundskeeping worker jobs in the subregion (Exhibit 18). Over the next five years, 70 annual job openings are projected for this occupation in the subregion, while the region may expect nearly 200 job openings.

Exhibit 18. Education level, projected demand, and earnings for high-quality occupations

Occupations	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	CC	571	70	196	$28.25

Community College Programs Not Offered

In the subregion, 22 programs in the agriculture, water, and environmental technologies sector are currently not offered (Exhibit 19).

Exhibit 19. Programs not offered by community colleges in the subregion

Subregional Programs Not Offered	
0101.00 - Agriculture Technology and Sciences, General	0109.40 - Turfgrass Technology
0102.00 - Animal Science	0112.00 - Agriculture Business, Sales and Service
0102.10 - Veterinary Technician (Licensed)	0113.00 - Food Processing and Related Technologies
0102.20 - Artificial Inseminator (Licensed)	0114.00 - Forestry
0102.30 - Dairy Science	0115.00 - Natural Resources
0102.40 - Equine Science	0115.10 - Parks and Outdoor Recreation
0103.00 - Plant Science	0115.20 - Wildlife and Fisheries
0103.10 - Agricultural Pest Control Adviser and Operator (Licensed)	0116.00 - Agricultural Power Equipment Technology
0109.10 - Landscape Design and Maintenance	0199.00 - Other Agriculture and Natural Resources
0109.20 - Floriculture/Floristry	0303.00 - Environmental Technology
0109.30 - Nursery Technology	1920.00 - Ocean Technology

Occupational Training Opportunities

There is one program aligned with one high-quality high-school-level occupation that community colleges may choose to address in the subregion.

- 0109.10 - Landscape Design and Maintenance

This occupation is projected to have more than 50 annual job openings in the subregion and more than 150 annual job openings in the greater region (Exhibit 20).

Exhibit 20. High-quality occupation without training programs in the subregion

Occupation	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
Tree Trimmers and Pruners	HS	393	57	162	$23.50

Business and Entrepreneurship

The CCCCO business and entrepreneurship sector aligns with the CDE business and finance and marketing, sales, and services sectors. Four colleges in the Inland Empire-Riverside County Metro Subregion currently utilize 17 business and entrepreneurship program codes.

Programs Offered

- 0501.00 - Business and Commerce, General
- 0502.00 - Accounting
- 0502.10 - Tax Studies
- 0504.00 - Banking and Finance
- 0505.00 - Business Administration
- 0506.00 - Business Management
- 0506.40 - Small Business and Entrepreneurship
- 0508.00 - International Business and Trade
- 0509.00 - Marketing and Distribution
- 0509.40 - Sales and Salesmanship
- 0509.70 - E-commerce (business emphasis)
- 0511.00 - Real Estate
- 0514.10 - Legal Office Technology
- 0514.40 - Office Management
- 0518.00 - Customer Service
- 0599.00 - Other Business and Management
- 3007.00 - Cosmetology and Barbering

Business and entrepreneurship programs in the subregion prepare students for employment in 32 high-quality occupations; 13 high-quality bachelor's degree-level, 17 community-college-level, and two high school-level occupations. High-quality occupations have at least 100 annual job openings and offer a median hourly rate of $21.82 at the regional-level.

In 2021, there were nearly 61,500 business jobs related to subregional training programs (Exhibit 21). Through 2026, more than 6,600 annual job openings are projected for business occupations in the subregion, with more than 16,900 annual job openings projected in the greater region.

Exhibit 21. Education level, projected demand, and earnings for high-quality occupations

Occupations	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
Accountants and Auditors	BS	2,895	1,550	800	$36.84
Human Resources Specialists	BS	2,204	1,367	792	$30.24
Sales Managers	BS	2,116	977	527	$47.35
Project Management Specialists	BS	1,978	935	454	$39.40
Financial Managers	BS	1,784	831	433	$60.47
Market Research Analysts and Marketing Specialists	BS	1,783	1,150	597	$29.96
Management Analysts	BS	1,400	777	446	$38.04
Cost Estimators	BS	1,297	679	283	$35.23
Chief Executives	BS	964	363	182	$75.12
Loan Officers	BS	791	313	158	$29.63

Occupations	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	BS	637	362	182	$43.18
Marketing Managers	BS	556	278	144	$58.96
Human Resources Managers	BS	518	254	138	$50.54
General and Operations Managers	CC	8,824	923	2,397	$46.18
First-Line Supervisors of Office and Administrative Support Workers	CC	6,145	672	1,759	$28.96
Bookkeeping, Accounting, and Auditing Clerks	CC	5,878	682	1,751	$22.31
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	CC	4,695	527	1,521	$29.06
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	CC	3,120	409	1,070	$23.16
Real Estate Sales Agents	CC	3,012	319	534	$26.07
Property, Real Estate, and Community Association Managers	CC	1,771	156	342	$23.70
Billing and Posting Clerks	CC	1,595	180	512	$21.82
Executive Secretaries and Executive Administrative Assistants	CC	1,290	136	340	$30.39
Real Estate Broker	CC	1,012	107	191	$33.98
Administrative Services Managers	CC	883	83	211	$46.62
First-Line Supervisors of Non-Retail Sales Workers	CC	793	79	216	$34.85
Payroll and Timekeeping Clerks	CC	649	67	172	$23.27
Human Resources Assistants, Except Payroll and Timekeeping	CC	485	54	145	$22.56
Facilities Managers	CC	467	43	112	$46.21
Loan Interviewers and Clerks	CC	457	41	106	$22.40
Tax Preparers	CC	315	40	102	$22.24
Insurance Claims and Policy Processing Clerks	HS	756	75	217	$22.14
Word Processors and Typists	HS	423	45	105	$22.61

Community College Programs Not Offered

In the subregion, nine programs in the business and entrepreneurship sector are currently not offered (Exhibit 22).

Exhibit 22. Programs not offered by community colleges in the subregion

Subregional Programs Not Offered	
0506.30 - Management Development and Supervision	0516.00 - Labor and Industrial Relations
0509.10 - Advertising	0606.00 - Public Relations
0509.20 - Purchasing	1255.00 - Mortuary Science
0511.10 - Escrow	3005.00 - Custodial Services
0512.00 - Insurance	

Occupational Training Opportunities

There are two programs aligned with three high-quality community-college-level occupations that community colleges may choose to address in the subregion.

- 0512.00 - Insurance
- 0509.20 - Purchasing

These business occupations accounted for nearly 3,600 jobs in 2021 (Exhibit 23). These occupations are expected to have more than 400 annual job openings in the subregion through 2026.

Exhibit 23. High-quality occupations without training programs in the subregion

Occupations	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
Insurance Sales Agents	CC	1,887	235	582	$23.90
Buyers and Purchasing Agents	CC	1,247	130	339	$29.68
Claims Adjusters, Examiners, and Investigators	CC	462	37	120	$36.42

Education and Human Development

The CCCCO education and human development sector aligns with the CDE education, child development, and family services sector. Four colleges in the Inland Empire-Riverside County Metro Subregion currently utilize 12 education and human development program codes.

Programs Offered
- 0802.00 - Educational Aide (Teacher Assistant)
- 0835.20 - Fitness Trainer
- 0835.60 - Coaching
- 0850.10 - Sign Language Interpreting
- 1305.00 - Child Development/Early Care and Education
- 1305.10 - Child and Adolescent Development
- 1305.20 - Children with Special Needs
- 1305.40 - Preschool Age Children
- 1305.80 - Child Development Administration and Management
- 1305.90 - Infants and Toddlers
- 2104.00 - Human Services
- 2140.00 - Legal and Community Interpretation

Education and human development programs in the subregion prepare students for employment in five high-quality bachelor's degree-level and two high-quality community-college-level occupations. High-quality occupations have at least 100 annual job openings and offer a median hourly rate of $21.82 at the regional-level.

In 2021, there were nearly 13,200 education jobs related to subregional training programs (Exhibit 24). Through 2026, nearly 1,200 job openings are projected annually for education and human development occupations in the education and human development sector, and more than 2,700 annual job openings are projected in the greater region.

Exhibit 24. Education level, projected demand, and earnings for high-quality occupations

Occupations	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
Elementary School Teachers, Except Special Education	BS	7,768	543	1,282	$46.47
Child, Family, and School Social Workers	BS	1,718	192	456	$29.20
Special Education Teachers, Kindergarten and Elementary School	BS	1,021	72	171	$39.51
Social and Community Service Managers	BS	735	90	208	$35.54
Special Education Teachers, Secondary School	BS	647	46	109	$48.36
Exercise Trainers and Group Fitness Instructors	CC	933	196	405	$22.19
Interpreters and Translators	CC	351	46	112	$30.76

Community College Programs Not Offered

In the subregion, ten programs in the education and human development sector are currently not offered (Exhibit 25).

Exhibit 25. Programs not offered by community colleges in the subregion

Subregional Programs Not Offered	
0802.10 - Educational Aide (Teacher Assistant), Bilingual	1305.50 - The School Age Child
0809.00 - Special Education	1305.60 - Parenting and Family Education
0860.00 - Educational Technology	1305.70 - Foster and Kinship Care
0899.00 - Other Education	1308.00 - Family Studies
1301.00 - Family and Consumer Sciences, General	2104.40 - Alcohol and Controlled Substances

Occupational Training Opportunities

There are five programs aligned with four high-quality bachelor's degree-level occupations that community colleges may choose to address in the subregion.

- 0802.10 - Educational Aide (Teacher Assistant), Bilingual
- 0860.00 - Educational Technology
- 1301.00 - Family and Consumer Sciences, General
- 1308.00 - Family Studies
- 2104.40 - Alcohol and Controlled Substances

These high-quality education and human development occupations accounted for nearly 9,200 jobs in 2021 (Exhibit 26). These occupations are expected to have nearly 800 annual job openings in the subregion through 2026.

Exhibit 26. Education level, projected demand, and earnings for high-quality occupations

Occupations	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
Secondary School Teachers, Except Special and Career/Technical Education	BS	4,976	332	779	$47.68
Middle School Teachers, Except Special and Career/Technical Education	BS	1,936	138	325	$47.72
Substance Abuse, Behavioral Disorder, and Mental Health Counselors	BS	1,299	169	468	$23.87
Training and Development Specialists	BS	988	119	312	$29.19

Energy, Construction, and Utilities

The CCCCO energy, environment, and utilities sector aligns with the CDE building and construction trades; energy, environment, and utilities; and engineering and architecture sectors. Three colleges in the Inland Empire-Riverside County Metro Subregion currently utilize 11 energy, construction, and utilities program codes.

Programs Offered
- 0201.00 - Architecture and Architectural Technology
- 0934.30 - Telecommunications Technology
- 0946.00 - Environmental Control Technology
- 0952.00 - Construction Crafts Technology
- 0952.20 - Electrical
- 0953.00 - Drafting Technology
- 0953.10 - Architectural Drafting
- 0957.00 - Civil and Construction Management Technology
- 0957.20 - Construction Inspection
- 0958.00 - Water and Wastewater Technology
- 2206.10 - Geographic Information Systems

Energy, construction, and utilities programs in the subregion prepare students for employment in two bachelor's degree-level, ten high-quality community college-level, and one high-quality high school-level occupation. High-quality occupations have at least 100 annual job openings and offer a median hourly rate of $21.82 at the regional-level.

In 2021, there were nearly 25,000 energy, construction, and utilities jobs related to subregional training programs (Exhibit 27). Through 2026, more than 2,900 annual job openings are projected for the high-quality energy, construction, and utilities occupational group, with more than 6,300 annual job openings projected in the greater region.

Exhibit 27. Education level, projected demand, and earnings for high-quality occupations

Occupations	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
Construction Managers	BS	3,246	325	624	$36.87
Architectural and Engineering Managers	BS	553	44	115	$72.93
Maintenance and Repair Workers, General	CC	5,814	662	1,715	$22.38
First-Line Supervisors of Construction Trades and Extraction Workers	CC	4,663	529	1,027	$35.65
Electricians	CC	3,679	529	1,169	$28.63
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	CC	3,142	375	697	$22.23
Telecommunications Line Installers and Repairers	CC	661	81	149	$30.31
Electrical Power-Line Installers and Repairers	CC	629	63	131	$47.71
Water and Wastewater Treatment Plant and System Operators	CC	593	55	127	$35.83
Telecommunications Equipment Installers and Repairers, Except Line Installers	CC	586	76	158	$28.65

Occupations	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
Construction and Building Inspectors	CC	544	67	156	$36.66
Architectural and Civil Drafters	CC	365	40	109	$29.05
Security and Fire Alarm Systems Installers	HS	474	68	137	$28.32

Community College Programs Not Offered
In the subregion, 18 programs in the energy, construction, and utilities sector are currently not offered (Exhibit 28).

Exhibit 28. Programs not offered by community colleges in the subregion

Subregional Programs Not Offered	
0299.00 - Other Architecture and Environmental Design	0952.70 - Painting, Decorating and Flooring
0934.40 - Electrical Systems and Power Transmission	0952.80 - Drywall and Insulation
0946.10 - Energy Systems Technology	0952.90 - Roofing
0947.30 - Heavy Equipment Operation	0953.20 - Civil Drafting
0952.10 - Carpentry	0954.30 - Petroleum Technology
0952.30 - Plumbing, Pipefitting and Steamfitting	0956.40 - Sheet Metal and Structural Metal
0952.40 - Glazing	0957.30 - Surveying
0952.50 - Mill and Cabinet Work	0959.10 - Diving and Underwater Safety
0952.60 - Masonry, Tile, Cement, Lath and Plaster	2102.10 - Public Works

Occupational Training Opportunities
There are seven programs aligned with eight high-quality occupations that community colleges may choose to address in the subregion.

- 0946.10 - Energy Systems Technology
- 0947.30 - Heavy Equipment Operation
- 0952.10 - Carpentry
- 0952.30 - Plumbing, Pipefitting and Steamfitting
- 0952.40 - Glazing
- 0952.60 - Masonry, Tile, Cement, Lath and Plaster
- 0956.40 - Sheet Metal and Structural Metal

These eight high-quality energy, construction, and utilities occupations accounted for nearly 18,300 jobs in 2021 and are expected to have nearly 2,100 annual job openings in the subregion through 2026 (Exhibit 29).

Exhibit 29. High-quality occupations without training programs in the subregion

Occupations	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
Carpenters	CC	10,365	1,080	2,117	$26.30
Plumbers, Pipefitters, and Steamfitters	CC	2,588	338	617	$27.87
Operating Engineers and Other Construction Equipment Operators	CC	2,010	250	477	$35.78
Plasterers and Stucco Masons	CC	1,082	101	166	$23.22
Structural Iron and Steel Workers	CC	717	90	180	$29.83
Sheet Metal Workers	CC	630	72	139	$26.99
Solar Photovoltaic Installers	CC	453	85	180	$22.54
Glaziers	CC	441	59	119	$23.01

Health

The CCCCO health sector aligns with the CDE health science and medical technology sector. Three colleges in the Inland Empire-Riverside County Metro Subregion currently utilize 15 health program codes.

Programs Offered
- 0514.20 - Medical Office Technology
- 1201.00 - Health Occupations, General
- 1202.00 - Hospital and Health Care Administration
- 1208.00 - Medical Assisting
- 1208.10 - Clinical Medical Assisting
- 1208.20 - Administrative Medical Assisting
- 1227.00 - Diagnostic Medical Sonography
- 1228.00 - Athletic Training and Sports Medicine
- 1230.10 - Registered Nursing
- 1230.20 - Licensed Vocational Nursing
- 1230.30 - Certified Nurse Assistant
- 1240.10 - Dental Assistant
- 1240.20 - Dental Hygienist
- 1250.00 - Emergency Medical Services
- 1251.00 - Paramedic

Health programs in the subregion prepare students for employment in one high-quality bachelor's degree-level and three high-quality community-college-level occupations. High-quality occupations have at least 100 annual job openings and offer a median hourly rate of $21.82 at the regional-level.

In 2021, there were more than 15,100 high-quality health jobs related to subregional training programs. Through 2026, more than 1,300 annual job openings are projected for high-quality health occupations (Exhibit 30).

Exhibit 30. Education level, projected demand, and earnings for high-quality occupations

Occupations	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
Medical and Health Services Managers	BS	1,571	202	581	$48.73
Registered Nurses	CC	10,389	815	2,324	$48.48
Licensed Practical and Licensed Vocational Nurses	CC	2,726	271	774	$28.50
Dental Hygienists	CC	434	42	104	$48.52

Community College Programs Not Offered

In the subregion, 34 programs in the health sector are currently not offered (Exhibit 31).

Exhibit 31. Programs not offered by community colleges in the subregion

Subregional Programs Not Offered	
0430.00 - Biotechnology and Biomedical Technology	1221.00 - Pharmacy Technology
0934.60 - Biomedical Instrumentation	1222.00 - Physical Therapist Assistant
0955.00 - Laboratory Science Technology	1223.00 - Health Information Technology
1205.00 - Medical Laboratory Technology	1220.00 - Speech/Language Pathology and Audiology
1205.10 - Phlebotomy	1223.10 - Health Information Coding
1206.00 - Physicians Assistant	1224.00 - School Health Clerk
1208.30 - Health Facility Unit Coordinator	1225.00 - Radiologic Technology
1209.00 - Hospital Central Service Technician	1226.00 - Radiation Therapy Technician
1210.00 - Respiratory Care/Therapy	1230.00 - Nursing
1211.00 - Polysomnography	1230.80 - Home Health Aide
1212.00 - Electro-Neurodiagnostic Technology	1239.00 - Psychiatric Technician
1213.00 - Cardiovascular Technician	1240.00 - Dental Occupations
1214.00 - Orthopedic Assistant	1240.30 - Dental Laboratory Technician
1215.00 - Electrocardiography	1261.00 - Community Health Care Worker
1217.00 - Surgical Technician	1262.00 - Massage Therapy
1218.00 - Occupational Therapy Technology	1299.00 - Other Health Occupations
1219.00 - Optical Technology	1309.00 - Gerontology

Occupational Training Opportunities

There are 12 programs aligned with nine high-quality occupations that community colleges may choose to address in the subregion.

- 1205.00 - Medical Laboratory Technology
- 1205.10 - Phlebotomy
- 1210.00 - Respiratory Care/Therapy
- 1214.00 - Orthopedic Assistant
- 1219.00 - Optical Technology
- 1221.00 - Pharmacy Technology
- 1222.00 - Physical Therapist Assistant
- 1223.00 - Health Information Technology
- 1223.10 - Health Information Coding
- 1225.00 - Radiologic Technology
- 1226.00 - Radiation Therapy Technician
- 1262.00 - Massage Therapy

These nine high-quality health occupations accounted for nearly 5,200 jobs in 2021 and are projected to have nearly 600 annual job openings in the subregion through 2026 (Exhibit 32).

Exhibit 32. High-quality occupations without training programs in the subregion

Occupations	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
Pharmacy Technicians	CC	1,417	125	342	$22.17
Phlebotomists	CC	631	101	231	$22.04
Radiologic Technologists and Technicians	CC	569	58	165	$43.91
Respiratory Therapists	CC	523	46	123	$37.31
Medical Records Specialists	CC	497	45	133	$22.60
Clinical Laboratory Technologists and Technicians	CC	479	51	127	$29.17
Opticians, Dispensing	CC	443	41	100	$22.20
Massage Therapists	CC	379	65	158	$22.00
Physical Therapist Assistants	CC	260	53	132	$35.77

Information and Communication Technologies (ICT)/Digital Media

The CCCCO information and communication technologies/digital media (ICT/DM) sector aligns with the CDE arts, media, and entertainment; and information and communication technologies sectors. Three colleges in the Inland Empire-Riverside County Metro Subregion currently utilize 24 ICT/DM program codes.

Programs Offered
- 0602.00 - Journalism
- 0604.20 - Television (including combined TV/Film/Video)
- 0614.00 - Digital Media
- 0614.10 - Multimedia
- 0614.20 - Electronic Game Design
- 0614.40 - Animation
- 0614.50 - Desktop Publishing
- 0614.60 - Computer Graphics and Digital Imagery
- 0701.00 - Information Technology, General
- 0702.00 - Computer Information Systems
- 0702.10 - Software Applications
- 0707.00 - Computer Software Development
- 0707.10 - Computer Programming
- 0707.20 - Database Design and Administration
- 0707.30 - Computer Systems Analysis
- 0708.00 - Computer Infrastructure and Support
- 0708.10 - Computer Networking
- 0708.20 - Computer Support
- 0709.00 - World Wide Web Administration
- 0709.10 - E-Commerce (technology emphasis)
- 1005.00 - Commercial Music
- 1006.00 - Technical Theater
- 1012.00 - Applied Photography
- 1030.00 - Graphic Art and Design

ICT/DM programs in the subregion prepare students for employment in five bachelor's degree-level and four community-college-level occupations. High-quality occupations have at least 100 annual job openings and offer a median hourly rate of $21.82 at the regional-level.

In 2021, there were more than 6,600 ICT/DM jobs related to subregional training programs. More than 700 high-quality job openings are projected annually in the subregion through 2026, with more than 1,800 annual job openings in the greater region (Exhibit 33).

Exhibit 33. Education level, projected demand, and earnings for high-quality occupations

Occupations	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
Software Developers	BS	1,161	128	383	$50.08
Computer Systems Analysts	BS	837	69	194	$45.73
Computer and Information Systems Managers	BS	797	71	191	$65.70
Graphic Designers	BS	682	71	167	$23.50
Writers and Authors	BS	411	72	140	$26.53
Computer User Support Specialists	CC	1,046	95	261	$28.01
Photographers	CC	696	97	222	$23.31
Musicians and Singers	CC	521	87	183	$23.07
Network and Computer Systems Administrators	CC	495	40	107	$40.12

Community College Programs Not Offered
In the subregion, 12 programs in the ICT/DM sector are currently not offered (Exhibit 34).

Exhibit 34. Programs not offered by community colleges in the subregion

Subregional Programs Not Offered	
0604.00 - Radio and Television	0614.30 - Website Design and Development
0604.10 - Radio	0699.00 - Other Media and Communications
0604.30 - Broadcast Journalism	0799.00 - Other Information Technology
0607.00 - Technical Communication	0934.10 - Computer Electronics
0610.00 - Mass Communications	1009.00 - Applied Design
0612.20 - Film Production	1013.00 - Commercial Art

Occupational Training Opportunities
All high-quality occupations related to the ICT/DM sector are being addressed by community colleges in the subregion.

Public Safety

The CCCCO public safety sector aligns with the CDE public services sector. Four colleges in the Inland Empire-Riverside County Metro Subregion currently utilize nine public safety program codes.

Programs Offered
- 1402.00 - Paralegal
- 2105.00 - Administration of Justice
- 2105.10 - Corrections
- 2105.30 - Industrial and Transportation Security
- 2105.40 - Forensics, Evidence and Investigation
- 2105.50 - Police Academy
- 2133.00 - Fire Technology
- 2133.50 - Fire Academy
- 4931.00 - Vocational ESL

Public safety programs in the subregion prepare students for employment in one high-quality high-school-level occupation and eight high-quality community-college-level occupations. High-quality occupations have at least 100 annual job openings and offer a median hourly rate of $21.82 at the regional-level.

In 2021, there were nearly 8,900 public safety jobs related to subregional training programs (Exhibit 35). Nearly 900 high-quality job openings are projected annually in the subregion through 2026.

Exhibit 35. Education level, projected demand, and earnings for high-quality occupations

Occupations	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
Police and Sheriff's Patrol Officers	CC	3,022	277	626	$47.40
Correctional Officers and Jailers	CC	1,793	173	420	$39.33
Firefighters	CC	1,460	134	297	$30.74
Detectives and Criminal Investigators	CC	544	46	111	$51.18
Paralegals and Legal Assistants	CC	474	69	171	$29.37
Court, Municipal, and License Clerks	CC	444	54	120	$24.04
Transportation Security Screeners	CC	344	35	108	$23.92
First-Line Supervisors of Security Workers	CC	334	48	102	$23.85
Public Safety Telecommunicators	HS	439	47	104	$29.22

Community College Programs Not Offered
In the subregion, five programs in the public safety sector are currently not offered (Exhibit 36).

Exhibit 36. Programs not offered by community colleges in the subregion

Subregional Programs Not Offered	
0514.30 - Court Reporting	2133.10 - Wildland Fire Technology
1602.00 - Library Technician (Aide)	2199.00 - Other Public and Protective Services
2105.20 - Probation and Parole	

Occupational Training Opportunities

There are two programs aligned with one high-quality bachelor's degree-level occupation and one high-quality community-college-level occupation that may be addressed by community colleges in the subregion.

- 1602.00 - Library Technician (Aide)
- 2105.20 - Probation and Parole

There were 1,200 high-quality public safety training opportunities in the subregion in 2021 (Exhibit 37). Through 2026, the subregion is expected to have more than 100 annual job openings, while the greater region is projected to have more than 300 annual job openings.

Exhibit 37. High-quality occupation without training programs in the subregion

Occupation	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
Probation Officers and Correctional Treatment Specialists	BS	713	69	159	$37.72
Library Technicians	CC	487	70	151	$23.01

Retail, Hospitality, and Tourism

The CCCCO retail, hospitality, and tourism sector aligns with the CDE fashion and interior design; and hospitality, tourism, and recreation sectors. Three colleges in the Inland Empire-Riverside County Metro Subregion currently utilize three retail, hospitality, and tourism program codes.

Programs Offered
- 0506.50 - Retail Store Operations and Management
- 1306.00 - Nutrition, Foods, and Culinary Arts
- 1306.30 - Culinary Arts

Retail, hospitality, and tourism programs in the subregion prepare students for employment in one high-quality community-college-level occupation: chefs and head cooks. High-quality occupations have at least 100 annual job openings and offer a median hourly rate of $21.82 at the regional-level.

In 2021, there were more than 900 chef and head cook jobs in the subregion (Exhibit 38). More than 100 high-quality job openings are projected annually in the subregion through 2026.

Exhibit 38. Education level, projected demand, and earnings for high-quality occupations

Occupations	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
Chefs and Head Cooks	CC	904	139	358	$22.24

Community College Programs Not Offered
In the subregion, 18 programs in the retail, hospitality, and tourism sector are currently not offered (Exhibit 39).

Exhibit 39. Programs not offered by community colleges in the subregion

Subregional Programs Not Offered	
0509.60 - Display	1306.20 - Dietetic Services and Management
0835.70 - Aquatics and Lifesaving	1306.60 - Dietetic Technology
0836.10 - Recreation Assistant	1307.00 - Hospitality
1301.10 - Consumer Services	1307.10 - Restaurant and Food Services and Management
1302.00 - Interior Design and Merchandising	1307.20 - Lodging Management
1303.00 - Fashion	1307.30 - Resort and Club Management
1303.10 - Fashion Design	3008.00 - Dry Cleaning
1303.20 - Fashion Merchandising	3009.00 - Travel Services and Tourism
1303.30 - Fashion Production	3020.40 - Flight Attendant

Occupational Training Opportunities

There are two programs aligned with two high-quality occupations that may be addressed by community colleges in the subregion.

- 1307.00 - Hospitality
- 1307.10 - Restaurant and Food Services and Management

The high-quality training opportunities in the retail, hospitality, and tourism sector accounted for more than 1,800 jobs in 2021. These occupations are expected to have nearly 300 annual job openings in the subregion through 2026 (Exhibit 40).

Exhibit 40. High-quality occupation without training programs in the subregion

Occupation	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
Meeting, Convention, and Event Planners	BS	413	55	132	$24.89
Food Service Managers	CC	1,398	201	504	$27.52

Unassigned/No Sector Assignments

Most CE community college programs have assigned sector designations, but a handful are unassigned. Eight programs in the unassigned sector are not currently offered in the subregion (Exhibit 41).

Exhibit 41. Programs not offered by community colleges in the subregion

Subregional Programs Not Offered	
0962.00 - Musical Instrument Repair	2102.00 - Public Administration
1008.10 - Commercial Dance	2104.50 - Disability Services
1099.00 - Other Fine and Applied Arts	3099.00 - Other Commercial Services
1399.00 - Other Family and Consumer Sciences	4932.00 - General Work Experience

Occupational Training Opportunities

The 2102.00 public administration career education program may lead to high-quality occupations, depending on the coursework focus.

- 2102.00 - Public Administration

The two high-school-level occupations without sector assignments accounted for nearly 2,66 jobs in 2021 and are projected to have more than 247 annual job openings in the subregion (Exhibit 42).

Exhibit 42. High-quality occupations without training programs in the subregion

| Occupations	Education Level	Subregional 2021 Jobs	Subregional Annual Job Openings	Regional Annual Job Openings	Regional Median Hourly Earnings
Eligibility Interviewers, Government Programs	HS	1,488	152	365	$22.90
Postal Service Mail Carriers	HS	1,178	95	238	$25.16

Appendix A: Subregional Boundaries and ZIP Codes

This appendix details the boundaries of the four subregions comprising the Inland Empire/Desert Region and includes a list of the ZIP codes defining the Inland Empire-Riverside County Metro Subregion. The Inland Empire-Riverside County Metro Subregion contains 71 ZIP codes.

The map shows the following subregions:
- High Desert (Blue)
- Low Desert (Red)
- Inland Empire-Riverside County Metro (Green)
- Inland Empire-San Bernardino Metro (Yellow)

Exhibit A1. Map of the four subregions along with their community colleges comprising the Inland Empire/Desert Region
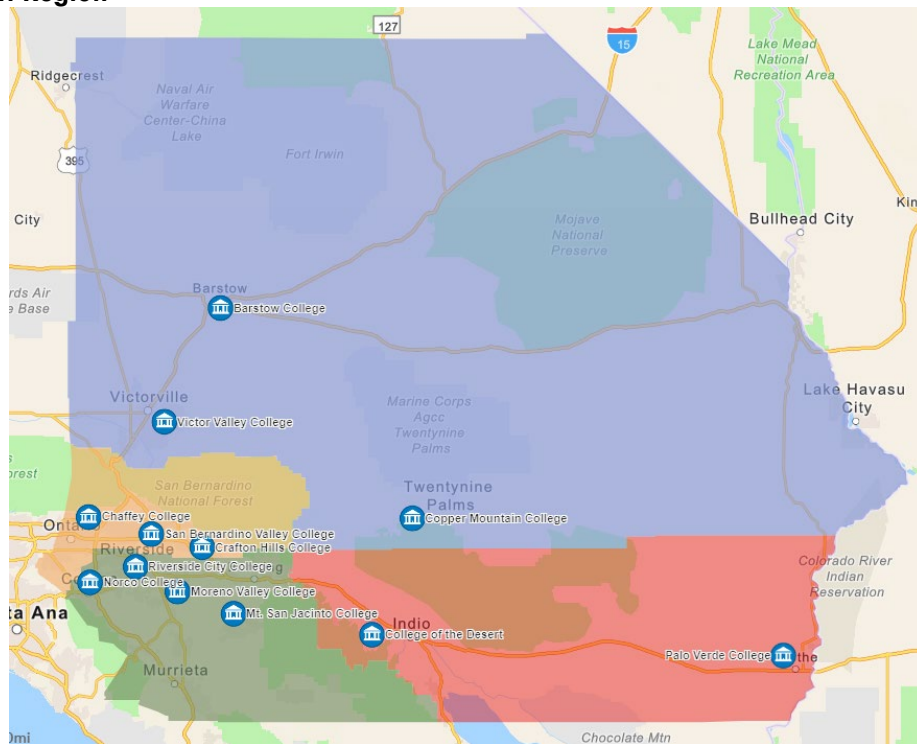
Exhibit A2. ZIP codes comprising the Inland Empire-Riverside County Metro Subregion

ZIP Code (City/Community)		
91752 (Mira Loma)	92532 (Lake Elsinore)	92581 (San Jacinto)
92220 (Banning)	92536 (Aguanga)	92582 (San Jacinto)
92223 (Beaumont)	92539 (Anza)	92583 (San Jacinto)
92230 (Cabazon)	92543 (Hemet)	92584 (Menifee)
92320 (Calimesa)	92544 (Hemet)	92585 (Menifee)
92501 (Riverside)	92545 (Hemet)	92586 (Menifee)
92502 (Riverside)	92546 (Hemet)	92587 (Menifee)
92503 (Riverside)	92548 (Homeland)	92589 (Temecula)
92504 (Riverside)	92549 (Idyllwild)	92590 (Temecula)
92505 (Riverside)	92551 (Moreno Valley)	92591 (Temecula)
92506 (Riverside)	92552 (Moreno Valley)	92592 (Temecula)
92507 (Riverside)	92553 (Moreno Valley)	92593 (Temecula)
92508 (Riverside)	92554 (Moreno Valley)	92595 (Wildomar)
92509 (Jurupa Valley)	92555 (Moreno Valley)	92596 (Winchester)
92513 (Riverside)	92556 (Moreno Valley)	92599 (Perris)
92514 (Riverside)	92557 (Moreno Valley)	92860 (Norco)
92516 (Riverside)	92561 (Mountain Center)	92877 (Corona)
92517 (Riverside)	92562 (Murrieta)	92878 (Corona)
92518 (March Air Reserve Base)	92563 (Murrieta)	92879 (Corona)
92519 (Riverside)	92564 (Murrieta)	92880 (Corona)
92521 (Riverside)	92567 (Nuevo)	92881 (Corona)
92522 (Riverside)	92570 (Perris)	92882 (Corona)
92530 (Lake Elsinore)	92571 (Perris)	92883 (Corona)
92531 (Lake Elsinore)	92572 (Perris)	

ZIP Code Limitations

ZIP codes were developed by the U.S. Post Office for the purpose of efficient mail delivery. Unlike official state, county, and sometimes metropolitan statistical area (MSA) designations, ZIP code boundaries may morph over time based on changes in carrier routes. Some ZIP codes cover an area of land, and others are location points (e.g., designated by some post office locations). ZIP codes may not cover highly rural areas, such as mountain tops, large patches of desert, or open water. Lightcast makes every effort to ensure multiple data sources align with their ZIP code reporting standards. All four subregional workforce assessments sum to the Riverside-San Bernardino-Ontario MSA regional total.

Appendix B: Terms & Definitions

Labor Market Definitions

Industry Employment is a count of jobs in a given geography. Businesses operating within the same industry produce similar goods and services and share comparable production processes for creating these goods and services. The North American Industry Classification System (NAICS) is the federal system used to classify all business establishments into specific industries. Staffing patterns show the distribution of occupational employment and demand for each industry. For example, Community Colleges employ faculty, but the institutions also hire 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.

A **location quotient** quantifies how concentrated a particular industry, cluster, occupation, or demographic group is in a region 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 account for 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.

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

Annual Job Openings are calculated by the sum of projected growth and replacement jobs (Growth + Replacements = Openings). Growth captures the changes 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 the total openings for the time frame.

High-Quality Occupation Definition: The analysis identified high-quality occupations that show relatively strong workforce demand (100+ regional annual job openings) and offer a median hourly wage that is higher than the California living wage standard ($21.82 per hour). As a result, the occupations highlighted in this report can be used to calibrate training programs to address regional in-demand jobs that pay self-sustaining earnings.

Education Definitions

Education Level Categories

- No-degree-level: Occupations that require no formal education.
- High-school-level: Occupations that require a high school diploma or equivalent.
- Community-college-level: Occupations that mostly require some college, a postsecondary certificate, or an associate degree. These are occupations relevant to community college training.
- Bachelor's-degree-level: Occupations that mostly require a bachelor's degree. These occupations are mostly trained by four-year colleges and universities.
- Advanced-degree-level: Occupations that typically require education and training beyond a bachelor's degree.

Demographic Definitions[7]

White: includes all individuals who identify with one or more nationalities or ethnic groups originating in Europe, the Middle East, or North Africa. Examples of these groups include, but are not limited to, German, Irish, English, Italian, Lebanese, Egyptian, Polish, French, Iranian, Slavic, Cajun, and Chaldean.

Black or African American: includes all individuals who identify with one or more nationalities or ethnic groups originating in any of the black racial groups of Africa. Examples of these groups include, but are not limited to, African American, Jamaican, Haitian, Nigerian, Ethiopian, and Somali.

American Indian or Alaska Native: includes all individuals who identify with any of the original peoples of North and South America (including Central America) and who maintain tribal affiliation or community attachment. It includes people who identify as "American Indian" or "Alaska Native" and includes groups such as the Navajo Nation, Blackfeet Tribe, Mayan, Aztec, Native Village of Barrow Inupiat Traditional Government, and Nome Eskimo Community.

Asian: includes all individuals who identify with one or more nationalities or ethnic groups originating in the Far East, Southeast Asia, or the Indian subcontinent. Examples of these groups include, but are not limited to, Chinese, Filipino, Asian Indian, Vietnamese, Korean, and Japanese. The category also includes groups such as Pakistani, Cambodian, Hmong, Thai, Bengali, Mien, etc.

Native Hawaiian and Pacific Islander: includes all individuals who identify with one or more nationalities or ethnic groups originating in Hawaii, Guam, Samoa, or other Pacific Islands. Examples of these groups include, but are not limited to, Native Hawaiian, Samoan, Chamorro, Tongan, Fijian, and Marshallese.

Hispanic, Latino, or Spanish origin: includes all individuals who identify with one or more nationalities or ethnic groups originating in Mexico, Puerto Rico, Cuba, Central, and South America, and other Spanish cultures. Examples of these groups include, but are not limited to, Mexican or Mexican American, Puerto Rican, Cuban, Salvadoran, Dominican, Colombian, Guatemalan, Honduran, Spaniard, Ecuadorian, Peruvian, and Venezuelan.

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[7] This report uses race and ethnicity data from Lightcast collected by the U.S. Census Bureau through the American Community Survey. The terms in this document, including white, Hispanic, and Black, adhere to the terms and definitions the Census Bureau uses in collecting its data. For definitions, please refer to https://www.census.gov/topics/population/race/about.html.

Appendix C: Sector Crosswalk Used for Program Inventory

A program inventory study was conducted for each CCCCO sector, examining each college with related programs that align with CDE sectors. The CDE developed Career Education (CE) Model Curriculum Standards for grades 7 through 12 that categorize courses and programs into 15 industry sectors. The CE model sectors are not to be confused with the NAICS employment industry sectors discussed in the previous section of this report or with the CCCCO sectors. The CE model provides a useful way to classify postsecondary CE offerings and connect career pathways from high school to college. The relationship between the CDE and CCCCO sectors is illustrated below.

Exhibit C1. Crosswalk showing CCCCO priority and emerging sector alignment with CDE sectors

CCCCO Priority and Emerging Sectors		CDE Industry Sectors	
	Advanced Manufacturing	Manufacturing and Product Development	
	Advanced Transportation	Transportation	
	Agriculture, Water & Environmental Technologies	Agriculture and Natural Resources	
	Business & Entrepreneurship	Business and Finance	
		Marketing, Sales, and Services	
	Education & Human Development	Education, Child Development, and Family Services	
	Energy, Construction & Utilities	Building and Construction Trades	
		Energy, Environment, and Utilities	
		Engineering and Architecture	
	Health	Health Science and Medical Technology	
	Information & Communication Technologies (ICT)/Digital Media	Arts, Media, and Entertainment	
		Information and Communication Technologies	
	Public Safety	Public Services	
	Retail, Hospitality & Tourism	Fashion and Interior Design	
		Hospitality, Tourism, and Recreation	