

Attachment 1 - PY16-19 FOUR YEAR REGIONAL PLAN MODIFICATION

Signature Page

The undersigned below certify that all Plan modifications are accurately presented here to the best of their knowledge. This signature page shall become an Exhibit to the Master Agreement for Workforce Development Programs, indicating submission and approval.

Planning Region: Central Planning Region

| Elected Official | Elected Official |
|---|---|
| <p>Signature: _____</p> <p>Date: __/__/____</p> <p>Printed Name: Mary Hodge</p> <p>Elected Official for: Adams County Board of County Commissioners</p> <p><u>Local Workforce Development Board</u></p> <p>Chair Signature: <u>[Signature]</u></p> <p>Date: <u>8/2/18</u></p> <p>Printed Name: Tricia Allen</p> <p><u>Local Area Director</u></p> <p>Signature: <u>[Signature]</u></p> <p>Date: <u>7/30/18</u></p> <p>Printed Name: Jodie Kammerzell</p> | <p>Signature: _____</p> <p>Date: __/__/____</p> <p>Printed Name: Click or tap here to enter text.</p> <p>Elected Official for: Click or tap here to enter text.</p> <p><u>Local Workforce Development Board</u></p> <p>Chair Signature: _____</p> <p>Date: __/__/____</p> <p>Printed Name: Click or tap here to enter text.</p> <p><u>Local Area Director</u></p> <p>Signature: _____</p> <p>Date: __/__/____</p> <p>Printed Name: Click or tap here to enter text.</p> |
| <p>Signature: _____</p> <p>Date: __/__/____</p> <p>Printed Name: Click or tap here to enter text.</p> <p>Elected Official for: Click or tap here to enter text.</p> <p><u>Local Workforce Development Board</u></p> <p>Chair Signature: _____</p> <p>Date: __/__/____</p> <p>Printed Name: Click or tap here to enter text.</p> <p><u>Local Area Director</u></p> <p>Signature: _____</p> <p>Date: __/__/____</p> <p>Printed Name: Click or tap here to enter text.</p> | <p>Signature: _____</p> <p>Date: __/__/____</p> <p>Printed Name: Click or tap here to enter text.</p> <p>Elected Official for: Click or tap here to enter text.</p> <p><u>Local Workforce Development Board</u></p> <p>Chair Signature: _____</p> <p>Date: __/__/____</p> <p>Printed Name: Click or tap here to enter text.</p> <p><u>Local Area Director</u></p> <p>Signature: _____</p> <p>Date: __/__/____</p> <p>Printed Name: Click or tap here to enter text.</p> |
| <p>Signature: _____</p> <p>Date: __/__/____</p> <p>Printed Name: Click or tap here to enter text.</p> <p>Elected Official for: Click or tap here to enter text.</p> <p><u>Local Workforce Development Board</u></p> <p>Chair Signature: _____</p> <p>Date: __/__/____</p> <p>Printed Name: Click or tap here to enter text.</p> <p><u>Local Area Director</u></p> <p>Signature: _____</p> <p>Date: __/__/____</p> <p>Printed Name: Click or tap here to enter text.</p> | <p>Signature: _____</p> <p>Date: __/__/____</p> <p>Printed Name: Click or tap here to enter text.</p> <p>Elected Official for: Click or tap here to enter text.</p> <p><u>Local Workforce Development Board</u></p> <p>Chair Signature: _____</p> <p>Date: __/__/____</p> <p>Printed Name: Click or tap here to enter text.</p> <p><u>Local Area Director</u></p> <p>Signature: _____</p> <p>Date: __/__/____</p> <p>Printed Name: Click or tap here to enter text.</p> |



Colorado Workforce
Development Council

John Hickenlooper, Governor
Sam Walker, Managing Director
Executive Director, CDLE
Kyle Sickman, Chair
Lee Wheeler-Berliner, Director

June 29, 2018

Local Workforce Area WIOA 2018-2020 Plan –CWDC Decision

The Colorado Workforce Development Council (CWDC) has the responsibility of reviewing and approving or disapproving the four-year plans required under WIOA for each local workforce area. The approval is determined in consultation with the Colorado Department of Labor & Employment (CDLE). The Local Area Strategic Plans were reviewed by the CDLE Regional Services Team, in consultation with CDLE Fiscal Auditors, the Human Resources Equal Opportunity Officer, and the Workforce Development Programs Contract Coordinator. Their recommendations were presented to the Colorado Workforce Development Council for review and approval.

The Colorado Workforce Development Council approves the Central Planning Region's 2018 - 2020 regional plan.

Please contact the Colorado Workforce Development Council offices with any questions.

Sincerely

Lee Wheeler-Berliner
Director
Colorado Workforce Development Council

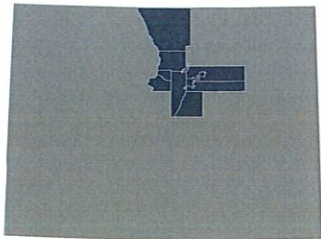
Kyle Sickman
Chair
Colorado Workforce Development Council

Colorado Central Planning Region's Regional Plan for Execution of Workforce Development Activities

Developed in accordance with the
Workforce Innovation and Opportunity Act

May 2, 2016

Modified April 11,
2018



Colorado
Central Planning
Region

Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, El Paso, Gilpin, Jefferson, Larimer & Teller Counties

Executive Summary

The Colorado Central Planning Region's regional plan was developed in alignment with the state and local area plans and in accordance with Workforce Innovation and Opportunity Act (WIOA) regulations. The Colorado Central Planning Region has long understood the benefits of regional planning and has worked to align and unite the efforts of its local area workforce development boards for several years with great success. Because of these efforts, and the region's commitment to utilizing the resources and expertise of its seven local areas, the Colorado Central Planning Region is the only WIOA planning region that created its own dataset to illustrate the regional economic conditions, a summary of which has been included in this plan. As this data demonstrates, the commuter patterns within the Colorado Central Planning Region further require alignment of services and systems to ensure customer needs are consistently met across all seven local areas. Through this plan, the Colorado Central Planning Region will formalize its regional planning process and will explore innovative means to better serve the needs of its customers and to meet the economic demands of the region. The benefits of this regional plan will include, but will not be limited to:

- Synergy across local areas and among partners in the region
- Potential economies of scale
- Ability to address crossover of needs to fill gaps and reduce duplication of services
- Ability to share data to inform best practices and unify systems
- Increased capacity for coordination, communications and marketing
- Improved responsiveness of workforce development areas to business and industry
- Ability to advance sector initiatives and career pathways for customers
- Strategic and resource alignment decisions at the local level

To ensure all relevant stakeholders were involved in the development of this plan, the Colorado Central Planning Region invited local workforce development boards, local elected officials and key partners from the Central Planning Region to participate in multiple planning and feedback sessions.

The plan is organized to address the 14 questions posed by WIOA for regional planning documents. This regional document formalizes the existing partnerships between the seven workforce development areas that make up the 10 counties of the Colorado Central Planning Region but does not commit district level funds or establish a governing body. The leaders of the Colorado Central Planning Region are all members of the Colorado Urban Workforce Alliance (CUWA), which will act as the driver of the regional plan. The oversight and implementation of this plan will be the responsibility of every workforce director, workforce development board and his/her local elected official. This four-year plan will be reviewed each year and amended as needed.

Planning Region: Colorado Central Planning Region

Local Areas included in this Planning Region: The Colorado Central Planning Region includes seven workforce development areas encompassing 10 counties: Adams, Arapahoe/Douglas, Boulder, Broomfield, Denver, Tri-County (Jefferson, Clear Creek and Gilpin) and Larimer.

Executive Summary

In February 2018, an assessment of the economic impact of the Central Planning Region was conducted. Subsequently, the Pikes Peak Workforce Development Area joined the Colorado Central Planning Region and impact was reassessed to include its results:

- The eight Workforce Development Areas that make up the Colorado Central Planning Region invested \$47,897,579 in public monies in the most recent complete program year (PY16), which began July 1, 2016 and ended June 30, 2017.
- They placed a total of 80,019 people who were still working six months later.
- The average annualized wage of the people placed was \$45,739.
- Since the average annualized wage of all new hires in the Central Planning Region during this timeframe was \$36,322, the value added by workforce center services was \$9,417.
- This means that the eight Workforce Development Areas added \$753.5 million in additional worker earnings to the region's economy.
- This is a cost/benefit ratio of 15.73. In other words, for every \$1 public dollar invested, the return in PY16 was \$15.73 in additional worker earnings attributable to the value added by local Workforce Centers.
- Since, according to the 2016 Consumer Expenditure Survey conducted by the US Bureau of Labor Statistics indicates the average federal income tax burden for all families was 11.2%, this means that the eight Workforce Development Areas that make up Colorado's Central Planning Region paid back US taxpayers in 6.58 months.

Outcomes to Date for the Central Planning Region:

- Four (4) new industry driven sector partnerships were developed in the Central Planning Region within the construction, retail, tree care and information technology industries. Now, with the addition of the Pikes Peak Workforce Development Area to the Central Planning Region, there are an additional four industry sector partnerships, which include:
 - Advanced manufacturing
 - Hospitality
 - Healthcare
 - Information technology
- Connecting Colorado changes were made in order to better align outcomes across the Central Planning Region to report return on investment for training dollars provided by the local workforce areas.
- Completed a return on investment formula to estimate the economic value added by the workforce development system in the Colorado Central Planning Region.
- Formed Central Planning Region task force to collect data and train staff on data analysis to report local economic impact within the Central Planning Region. Contracted with ADWorks! to develop a 1 year annual report (Economic Impact Report) for Central Planning Region, Fall 2017 for PY16.
- Developed a common template for MOU's to be used across the Central Planning Region with WIOA mandated partners.

- Convened Career Services personnel to identify, define, align and market consistent service lines for Career Services across the Central Planning Region (on-going).
- Supported work based learning opportunities through the creation of 4 new federally approved apprenticeships for Medical Assistants and Medical Laboratory Assistants through the Greater Metro Denver Healthcare Partnership, a Software Development Apprenticeship in IT through the Technology Employment in Colorado Partnership (TEC-P) and an Advanced Manufacturing Technician Apprenticeship Program (AMTAP) through Lockheed Martin and supported by the regions within the Central Planning Region.

Future Initiatives for the Central Planning Region:

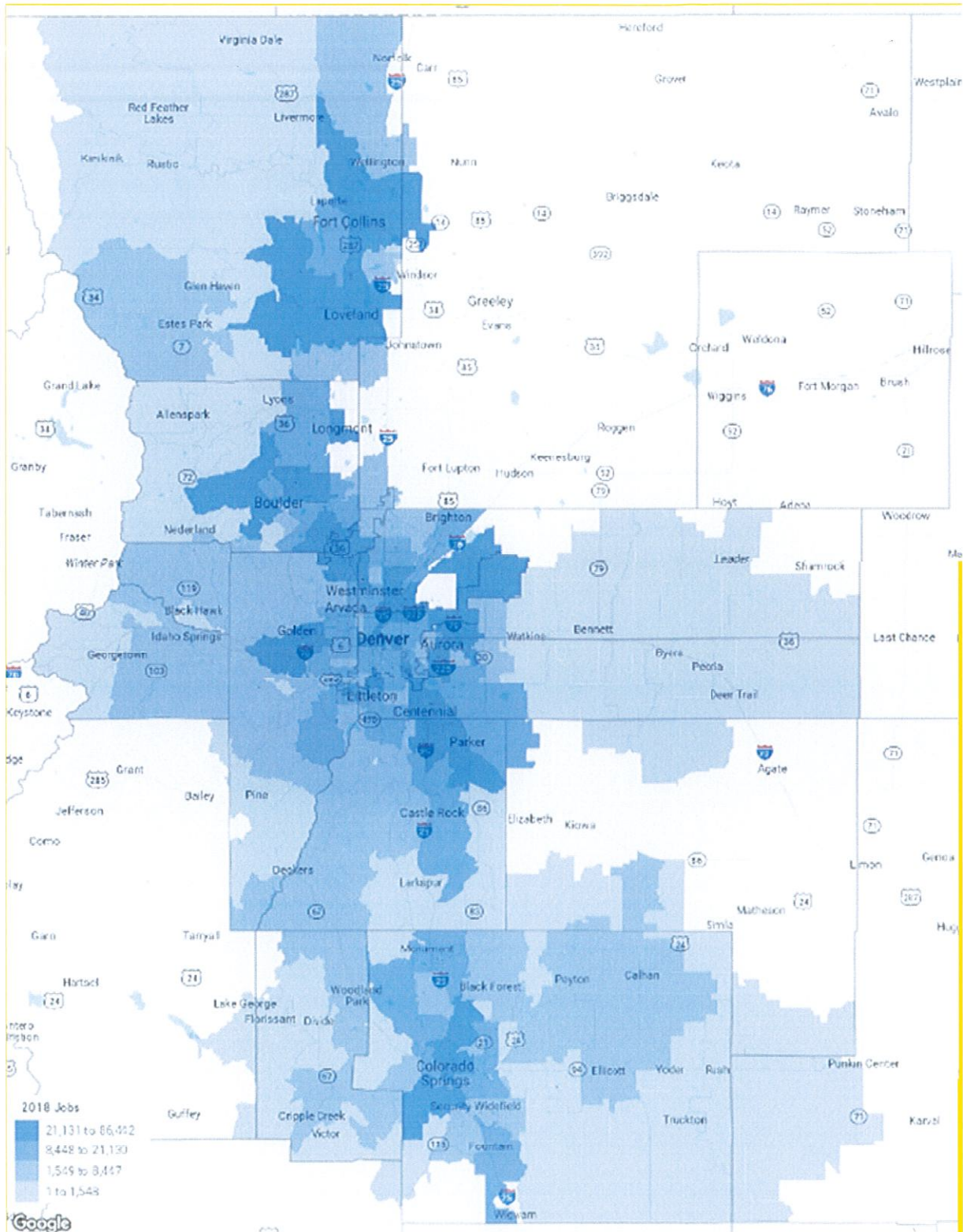
- Train staff on Connecting Colorado changes in order for staff to enter and report outcomes/impact using Connecting Colorado data. Identify new reports that can be pulled from Connecting Colorado.
- Align Business Services and Career Services across the Central Planning Region at a strategic level by sharing and reporting best practices.
- Convene expert data work group to create escalation process for reports that need additional levels of data support to report consistently across the Central Planning Region.
- Create new apprenticeship programs through existing industry led sector initiatives.
- Create new Work Based Learning opportunities throughout the Central Planning Region

Workforce Development leaders in the Colorado Central Planning Region recognize that workforce development needs may exceed those which may be met through the WIOA. Therefore, they are committed to data mining, analysis and articulation of those issues which are related to workforce development and to the continued economic prosperity in the Region. Considerations include poverty, number of people on public assistance, affordable housing, transportation, child care and affordable postsecondary education.

| Employment Concentrations, Colorado Central Planning Region | | | |
|---|-----------|--------------------------|------------------------------|
| County | 2018 Jobs | Average Earnings Per Job | Payrolled Business Locations |
| Denver County, CO | 561,393 | \$75,794 | 31,328 |
| Arapahoe County, CO | 366,745 | \$71,749 | 21,719 |
| El Paso County, CO | 351,560 | \$55,894 | 18,976 |
| Jefferson County, CO | 267,933 | \$63,003 | 20,721 |
| Adams County, CO | 234,102 | \$59,881 | 10,651 |
| Boulder County, CO | 207,866 | \$70,055 | 14,957 |
| Larimer County, CO | 184,194 | \$54,911 | 11,772 |
| Douglas County, CO | 140,483 | \$67,750 | 11,735 |
| Broomfield County, CO | 42,145 | \$100,015 | 2,732 |
| Teller County, CO | 8,748 | \$42,734 | 842 |
| Gilpin County, CO | 5,226 | \$48,689 | 164 |
| Clear Creek County, CO | 3,435 | \$50,114 | 357 |
| Totals | 2,373,830 | \$63,382 | 145,954 |

Source: EMSI - QCEW, Non-QCEW & Self-Employed Class of Worker

The table shows employment concentrations with El Paso and Teller counties added. The map shows employment concentrations by zip code within the region.



1. PROVIDE AN ANALYSIS OF THE REGIONAL ECONOMIC CONDITIONS.

The Colorado Central Planning Region's regional Workforce Innovation and Opportunity Act (WIOA) plan reflects up-to-date data and analysis about the region's economic condition, business/industry needs, as well as the population's job skills. The regional plan's strategies are customer-driven and intended to meet the needs of both employers and jobseekers. The leadership of the Colorado Central Planning Region is committed to reviewing and analyzing current data to identify ways to continuously improve the region's economy.

The Colorado Central Planning Region (herein called the Central Planning Region) seeks to achieve the following outcomes during the four-year planning period:

- Use data-driven strategies to identify and validate industry needs and determine what existing resources can be leveraged to design a strategy to meet those needs
- Strengthen and align the region's sector partnerships, as well as explore new sub-sector partnerships. A significant effort that the Central Planning Region will undertake is to help the seven local areas that make up the region align and coordinate local areas development strategies to help ensure that these partnerships are sustainable
- Share best practices between local areas for engaging employers of all sizes in the appropriate sector partnerships to actively co-design curricula with the region's education and job training programs
- Explore the application of a LEAN service delivery process at the region's entire workforce centers' career services departments so there is a common language and systems used across the region
- Share best practices and data-driven strategies with the region's local workforce centers so WIOA's target populations and area targeted populations are served more effectively

Each year, the leadership will review the progress the Central Planning Region has made toward these outcomes to refine its goals, objectives and activities to help reach the outcomes identified in this plan.

Overall Economy

Colorado's Central Planning Region has a robust and diversified economy that contains almost 68% of all Colorado jobs. The region is currently in a full employment market. Only 3.2% (114,396 people) are unemployed, which includes those workers who are marginally attached, working part time and the long-term unemployed.

A. EXISTING AND EMERGING IN-DEMAND INDUSTRY SECTORS AND OCCUPATIONS.

Table 1 below depicts the industries in which significant growth is expected in the Central Planning Region. The table is sorted by Location Quotient, which is a measure of employment concentration in a given geographic area relative to the national average, which is always 1.00. For example, a location quotient of 1.58 would mean employment in that industry sector is 1.58 times more concentrated in the Central Planning Region than the national average.

Table 1: Regional Industry Growth Projections

| Regional Industry Growth Projections, Colorado Central Planning Region | | | | | | | | | | |
|--|--|-----------|-----------|-----------|-----------|-----------|---------|--------------------|----------------------------|------------------------------|
| NAICS Code | Description | 2016 Jobs | 2017 Jobs | 2018 Jobs | 2019 Jobs | 2020 Jobs | Change | Annual Growth Rate | National Location Quotient | Payrolled Business Locations |
| 51 | Information | 53,691 | 52,518 | 51,540 | 50,710 | 50,257 | (3,434) | (1.3%) | 1.58 | 2,199 |
| 54 | Professional, Scientific, and Technical Services | 190,286 | 196,980 | 203,095 | 208,781 | 213,336 | 23,050 | 2.4% | 1.54 | 23,130 |
| 21 | Mining, Quarrying, and Oil and Gas Extraction | 15,805 | 16,894 | 17,891 | 18,820 | 19,569 | 3,764 | 4.8% | 1.53 | 747 |
| 23 | Construction | 123,179 | 123,723 | 124,558 | 125,608 | 127,215 | 4,036 | 0.7% | 1.24 | 9,113 |
| 53 | Real Estate and Rental and Leasing | 37,667 | 37,746 | 37,877 | 38,045 | 38,309 | 642 | 0.3% | 1.24 | 5,899 |
| 55 | Management of Companies and Enterprises | 33,595 | 35,627 | 37,467 | 39,165 | 40,488 | 6,893 | 4.1% | 1.19 | 1,381 |
| 52 | Finance and Insurance | 86,890 | 88,061 | 89,243 | 90,434 | 91,619 | 4,729 | 1.1% | 1.15 | 7,204 |
| 71 | Arts, Entertainment, and Recreation | 35,953 | 36,606 | 37,190 | 37,723 | 38,113 | 2,160 | 1.2% | 1.14 | 1,554 |
| 42 | Wholesale Trade | 80,394 | 81,354 | 82,296 | 83,226 | 84,130 | 3,736 | 0.9% | 1.10 | 9,579 |
| 72 | Accommodation and Food Services | 172,686 | 176,834 | 180,532 | 183,897 | 186,384 | 13,698 | 1.6% | 1.07 | 7,436 |
| 56 | Administrative and Support and Waste Management and Remediation Services | 120,146 | 123,913 | 127,477 | 130,890 | 133,866 | 13,720 | 2.3% | 0.98 | 6,705 |
| 81 | Other Services (except Public Administration) | 87,080 | 88,680 | 90,141 | 91,502 | 92,629 | 5,549 | 1.3% | 0.96 | 9,252 |
| 90 | Government | 280,032 | 283,823 | 287,191 | 290,248 | 292,477 | 12,445 | 0.9% | 0.95 | 1,059 |
| 44 | Retail Trade | 174,664 | 176,720 | 178,724 | 180,690 | 182,532 | 7,868 | 0.9% | 0.89 | 10,035 |
| 48 | Transportation and Warehousing | 54,240 | 54,841 | 55,434 | 56,022 | 56,593 | 2,353 | 0.9% | 0.88 | 1,954 |
| 61 | Educational Services | 42,497 | 43,918 | 45,176 | 46,314 | 47,134 | 4,637 | 2.2% | 0.87 | 1,937 |
| 62 | Health Care and Social Assistance | 208,532 | 215,576 | 221,927 | 227,765 | 232,243 | 23,711 | 2.3% | 0.86 | 9,420 |
| 31 | Manufacturing | 99,338 | 98,940 | 98,809 | 98,873 | 99,469 | 131 | 0.0% | 0.67 | 3,545 |
| 22 | Utilities | 4,120 | 4,068 | 4,018 | 3,971 | 3,930 | (190) | (0.9%) | 0.62 | 127 |
| 11 | Crop and Animal Production | 5,817 | 5,818 | 5,820 | 5,822 | 5,828 | 11 | 0.0% | 0.26 | 300 |
| | Totals | 1,906,612 | 1,942,641 | 1,976,407 | 2,008,507 | 2,036,120 | 129,509 | 1.4% | | 112,576 |

Source: EMSI 2015.3 – QCEW Employees, Non-QCEW Employees, and Self-Employed Class of Worker

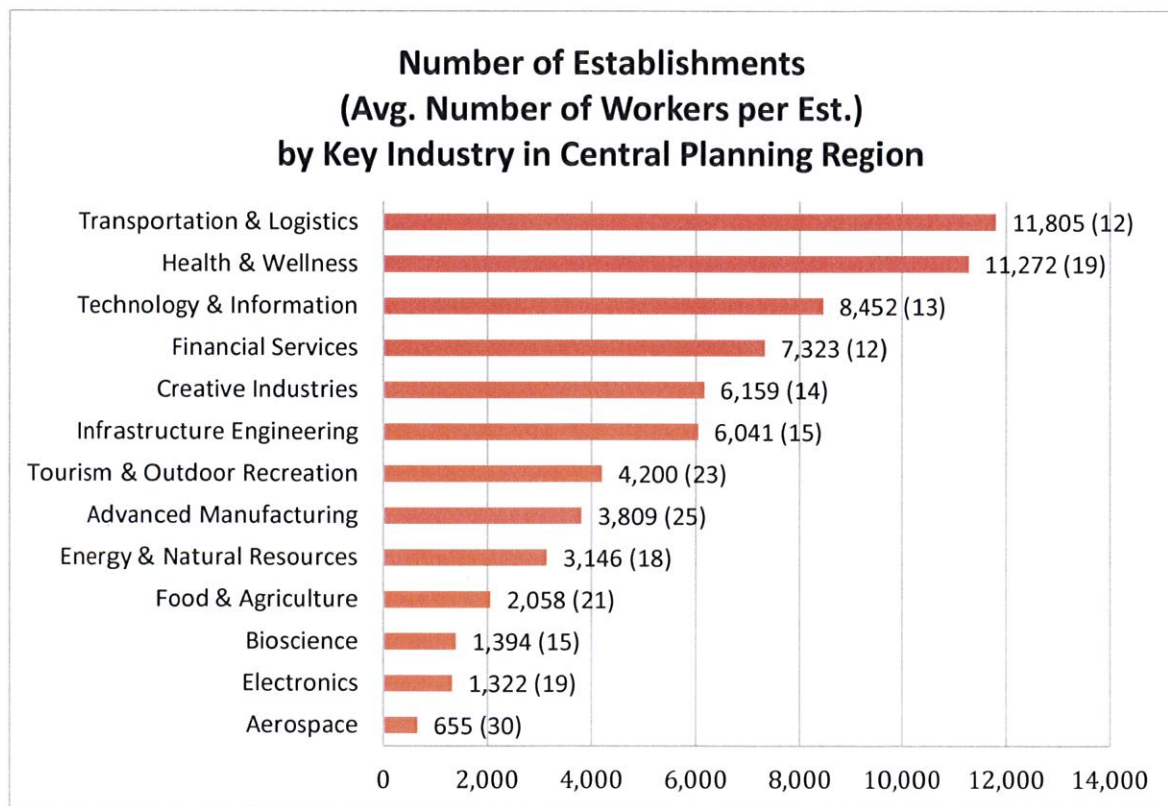
An examination of this data reveals the following observations about the Central Planning Region's existing in-demand industry sectors and occupations:

- Most jobs in the region are concentrated in the information economic group, which includes telecommunications, broadcast cable, data hosting and related services, software publishing and other publishing.
- The professional, scientific and technical group includes law offices, accountants, engineering services, elements of aerospace and computer system design and related services. This economic group is vital to the regional economy because it provides the intellectual infrastructure that attracts high-tech businesses of all kinds.
- Construction jobs lost during the great recession have returned and the region's real estate market is robust.

- Employment in the management of companies and enterprises group tends to be most concentrated in downtown Denver and the Arapahoe/Douglas region.
- Transportation and warehousing companies are not concentrated in the Central Planning Region as a whole, but they are a key sector for the Adams County Workforce Development Area.
- Air transportation is heavily concentrated in the Denver County Workforce Development Area but not in the Central Planning Region as a whole.

The graph below depicts the concentration of workers and businesses within the region's key industries as of 2016.

Figure 2: Number of Establishments by Key Industry



As shown in Figure 3, below, the Central Planning Region is home to industries that employ large numbers of workers and pays salaries that meet Colorado's self-sufficiency standard.

Figure 3: 2015 Employment by Key Industry

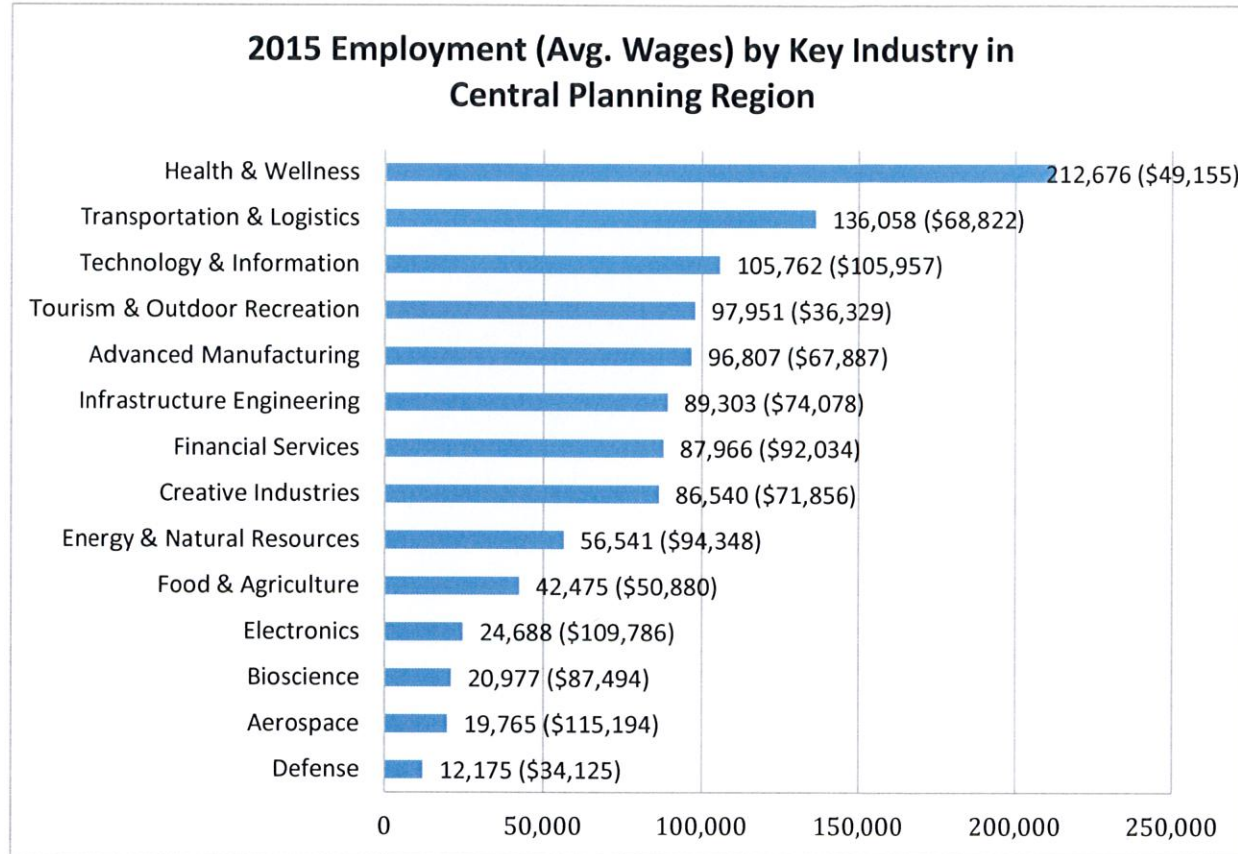


Table 2, on the following page, depicts the top **20 key industry sectors** in the Central Planning Region. These key sectors are diverse, but they tend to be somewhat concentrated in high technology sectors. The Central Planning Region will pay close attention to the projection for telecommunications through 2020 because recent sector activity in greater metropolitan Denver may impact projected growth. Among the regions key industry sectors, the professional, scientific and technical services group employs the most people.

Table 2: Regional Industry Sector Growth Projections

| Regional Industry Sector Growth Projections, Colorado Central Planning Region | | | | | | | | | | |
|---|---|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|----------------------------|------------------------------|
| NAICS Code | Description | 2016 Jobs | 2017 Jobs | 2018 Jobs | 2019 Jobs | 2020 Jobs | Change | Annual Growth Rate | National Location Quotient | Payrolled Business Locations |
| 211 | Oil and Gas Extraction | 9,148 | 9,770 | 10,337 | 10,863 | 11,280 | 2,132 | 4.7% | 3.63 | 361 |
| 481 | Air Transportation | 14,121 | 14,420 | 14,698 | 14,963 | 15,192 | 1,071 | 1.5% | 2.54 | 70 |
| 312 | Beverage and Tobacco Product Manufacturing | 5,869 | 5,865 | 5,862 | 5,860 | 5,862 | (7) | (0.0%) | 2.22 | 145 |
| 518 | Data Processing, Hosting, and Related Services | 7,852 | 7,922 | 7,957 | 7,965 | 7,904 | 52 | 0.1% | 2.15 | 331 |
| 517 | Telecommunications | 19,414 | 18,818 | 18,347 | 17,969 | 17,822 | (1,592) | (1.6%) | 1.96 | 420 |
| 511 | Publishing Industries (except Internet) | 14,446 | 13,730 | 13,144 | 12,658 | 12,426 | -2,020 | -2.8% | 1.70 | 615 |
| 523 | Securities, Commodity Contracts, and Other Financial Investments and Related Activities | 20,001 | 20,608 | 21,159 | 21,669 | 22,062 | 2,061 | 2.1% | 1.65 | 2,074 |
| 541 | Professional, Scientific, and Technical Services | 190,286 | 196,980 | 203,095 | 208,781 | 213,336 | 23,050 | 2.4% | 1.54 | 23,130 |
| 515 | Broadcasting (except Internet) | 5,089 | 5,099 | 5,114 | 5,133 | 5,165 | 76 | 0.3% | 1.44 | 85 |
| 334 | Computer and Electronic Product Manufacturing | 16,910 | 16,309 | 15,850 | 15,496 | 15,424 | -1,486 | -1.8% | 1.39 | 324 |
| 238 | Specialty Trade Contractors | 85,702 | 85,881 | 86,281 | 86,844 | 87,845 | 2,143 | 0.5% | 1.34 | 6,236 |
| 451 | Sporting Goods, Hobby, Musical Instrument, and Book Stores | 10,667 | 10,807 | 10,941 | 11,069 | 11,181 | 514 | 1.0% | 1.34 | 744 |
| 902 | State Government | 83,116 | 84,650 | 86,032 | 87,302 | 88,278 | 5,162 | 1.2% | 1.29 | 211 |
| 423 | Merchant Wholesalers, Durable Goods | 46,453 | 46,889 | 47,329 | 47,773 | 48,230 | 1,777 | 0.8% | 1.27 | 4,273 |
| 712 | Museums, Historical Sites, and Similar Institutions | 2,355 | 2,436 | 2,506 | 2,569 | 2,612 | 257 | 2.2% | 1.25 | 44 |
| 711 | Performing Arts, Spectator Sports, and Related Industries | 12,045 | 12,153 | 12,251 | 12,341 | 12,407 | 362 | 0.6% | 1.24 | 707 |
| 531 | Real Estate | 28,995 | 29,092 | 29,219 | 29,369 | 29,579 | 584 | 0.4% | 1.23 | 5,181 |
| 532 | Rental and Leasing Services | 7,969 | 7,940 | 7,931 | 7,937 | 7,978 | 9 | 0.0% | 1.22 | 618 |
| 551 | Management of Companies and Enterprises | 33,595 | 35,627 | 37,467 | 39,165 | 40,488 | 6,893 | 4.1% | 1.19 | 1,381 |
| 442 | Furniture and Home Furnishings Stores | 6,597 | 6,495 | 6,422 | 6,370 | 6,375 | -222 | -0.7% | 1.14 | 461 |
| | Totals | 620,630 | 631,489 | 641,940 | 652,094 | 661,446 | 40,817 | 1.3% | | 47,411 |

Source: EMSI 2015.3 – QCEW Employees, Non-QCEW Employees, and Self-Employed Class of Worker

Table 3 shows the **top occupations, by percent of total employment**, for the region.

Table 3: All Sector Staffing Patterns

| All Sector Staffing Patterns, Central Planning Region | | | | | | | | |
|---|--|-----------|-----------|--------|----------|---------------|------------------------|-----------------------------------|
| SOC Code | Description | 2016 Jobs | 2020 Jobs | Change | % Change | % of Industry | Median Hourly Earnings | Typical Entry Level Education |
| 41-2031 | Retail Salespersons | 56,050 | 58,792 | 2,742 | 5% | 3.0% | \$11.03 | Less than high school |
| 35-3021 | Combined Food Preparation and Serving Workers, Including Fast Food | 48,830 | 53,609 | 4,779 | 10% | 2.5% | \$9.09 | Less than high school |
| 43-6014 | Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 46,063 | 49,192 | 3,129 | 7% | 2.4% | \$17.78 | High school diploma or equivalent |
| 35-3031 | Waiters and Waitresses | 36,415 | 38,737 | 2,322 | 6% | 1.9% | \$9.07 | Less than high school |
| 41-2011 | Cashiers | 33,228 | 34,784 | 1,556 | 5% | 1.8% | \$9.59 | Less than high school |
| 13-1199 | Business Operations Specialists, All Other | 33,009 | 34,350 | 1,341 | 4% | 1.7% | \$34.78 | High school diploma or equivalent |
| 43-4051 | Customer Service Representatives | 33,180 | 36,518 | 3,338 | 10% | 1.7% | \$15.88 | High school diploma or equivalent |
| 29-1141 | Registered Nurses | 32,611 | 35,699 | 3,088 | 9% | 1.7% | \$33.93 | Associate's degree |
| 37-2011 | Janitors and Cleaners, Except Maids and Housekeeping Cleaners | 30,166 | 32,795 | 2,629 | 9% | 1.6% | \$11.16 | Less than high school |
| 11-1021 | General and Operations Managers | 29,376 | 31,477 | 2,101 | 7% | 1.5% | \$52.84 | Bachelor's degree |
| 13-2011 | Accountants and Auditors | 28,138 | 29,929 | 1,791 | 6% | 1.5% | \$33.76 | Bachelor's degree |
| 43-9061 | Office Clerks, General | 27,522 | 29,753 | 2,231 | 8% | 1.4% | \$16.56 | High school diploma or equivalent |
| | Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | 23,739 | 24,672 | 933 | 4% | 1.3% | \$28.08 | High school diploma or equivalent |
| 43-5081 | Stock Clerks and Order Fillers | 22,978 | 23,667 | 689 | 3% | 1.2% | \$12.43 | Less than high school |
| 53-7062 | Laborers and Freight, Stock, and Material Movers, Hand | 22,942 | 24,632 | 1,690 | 7% | 1.2% | \$12.13 | Less than high school |
| 43-3031 | Bookkeeping, Accounting, and Auditing Clerks | 22,073 | 23,631 | 1,558 | 7% | 1.2% | \$18.54 | High school diploma or equivalent |
| 25-1099 | Postsecondary Teachers | 21,905 | 23,687 | 1,782 | 8% | 1.1% | \$30.92 | Doctoral or professional degree |
| 15-1132 | Software Developers, Applications | 20,112 | 21,514 | 1,402 | 7% | 1.1% | \$47.42 | Bachelor's degree |
| 41-3099 | Sales Representatives, Services, All Other | 17,968 | 18,992 | 1,024 | 6% | 0.9% | \$26.12 | High school diploma or equivalent |
| 37-2012 | Maids and Housekeeping Cleaners | 18,027 | 19,448 | 1,421 | 8% | 0.9% | \$8.97 | Less than high school |

Source: QCEW Employees, Non-QCEW Employees & Self-Employed - EMSI 2015.3 Class of Worker

Table 4, below, shows the **top 20 occupations in the key sector** identified in the Central Planning Region.

Table 4: Key Sector Staffing Patterns

| Key Sector Staffing Patterns, Central Planning Region | | | | | | | | |
|---|--|-----------|-----------|--------|----------|---------------|------------------------|-----------------------------------|
| SOC Code | Description | 2016 Jobs | 2020 Jobs | Change | % Change | % of Industry | Median Hourly Earnings | Typical Entry Level Education |
| 43-6014 | Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 20,246 | 21,721 | 1,475 | 7% | 3.2% | \$17.78 | High school diploma or equivalent |
| 13-2011 | Accountants and Auditors | 19,483 | 20,942 | 1,459 | 7% | 3.1% | \$33.76 | Bachelor's degree |
| 15-1132 | Software Developers, Applications | 16,657 | 17,846 | 1,189 | 7% | 2.7% | \$47.42 | Bachelor's degree |
| 13-1199 | Business Operations Specialists, All Other | 16,499 | 17,385 | 886 | 5% | 2.7% | \$34.78 | High school diploma or equivalent |
| 25-1099 | Postsecondary Teachers | 14,610 | 15,531 | 921 | 6% | 2.4% | \$30.92 | Doctoral or professional degree |
| 43-9061 | Office Clerks, General | 12,468 | 13,475 | 1,007 | 8% | 2.0% | \$16.56 | High school diploma or equivalent |
| 11-1021 | General and Operations Managers | 12,413 | 13,474 | 1,061 | 9% | 2.0% | \$52.84 | Bachelor's degree |
| 41-4012 | Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | 11,810 | 12,195 | 385 | 3% | 1.9% | \$28.08 | High school diploma or equivalent |
| 43-4051 | Customer Service Representatives | 10,963 | 11,649 | 686 | 6% | 1.8% | \$15.88 | High school diploma or equivalent |
| 41-2031 | Retail Salespersons | 10,774 | 11,011 | 237 | 2% | 1.8% | \$11.03 | Less than high school |
| 43-3031 | Bookkeeping, Accounting, and Auditing Clerks | 10,358 | 11,159 | 801 | 8% | 1.7% | \$18.54 | High school diploma or equivalent |
| 23-1011 | Lawyers | 10,292 | 11,061 | 769 | 7% | 1.7% | \$51.95 | Doctoral or professional degree |
| 47-2111 | Electricians | 10,169 | 10,821 | 652 | 6% | 1.6% | \$21.99 | High school diploma or equivalent |
| 41-3099 | Sales Representatives, Services, All Other | 9,707 | 10,165 | 458 | 5% | 1.6% | \$26.12 | High school diploma or equivalent |
| 47-2061 | Construction Laborers | 8,849 | 8,944 | 95 | 1% | 1.5% | \$14.93 | Less than high school |
| 15-1133 | Software Developers, Systems Software | 8,865 | 9,370 | 505 | 6% | 1.4% | \$49.70 | Bachelor's degree |
| 15-1151 | Computer User Support Specialists | 7,748 | 8,520 | 772 | 10% | 1.2% | \$25.52 | Some college, no degree |
| 13-1111 | Management Analysts | 7,529 | 8,425 | 896 | 12% | 1.2% | \$35.51 | Bachelor's degree |
| 13-1161 | Market Research Analysts and Marketing Specialists | 7,512 | 8,545 | 1,033 | 14% | 1.2% | \$32.84 | Bachelor's degree |
| 47-2031 | Carpenters | 6,997 | 6,862 | (135) | -2% | 1.2% | \$18.73 | High school diploma or equivalent |

Source: QCEW Employees, Non-QCEW Employees & Self-Employed - EMSI 2015.3 Class of Worker

B. THE EMPLOYMENT NEEDS OF EMPLOYERS IN THOSE INDUSTRY SECTORS AND OCCUPATIONS.

Table 5 on the following page was generated using the Help Wanted Online "Wanted Analytics," which is an online tool that allows occupational listings to be parsed by geographic area, industry and/or occupation, education level, skills and other factors. Below are the **top 20 unduplicated jobs** listed over the last 120 days in the Central Planning Region.



Table 5: Top Jobs Currently Listed

| Top Jobs Currently Listed, Key Sectors Central Planning Region, Last 120 Days | | | |
|--|-----------------|--------|------------------------|
| Occupation | Occupation Code | Volume | Same Period Prior Year |
| Retail Salespersons | 41203100 | 2,279 | 2,037 |
| Software Developers, Applications | 15113200 | 1,899 | 1,654 |
| First-Line Supervisors of Retail Sales Workers | 41101100 | 1,822 | 1,565 |
| Marketing Managers | 11202100 | 1,736 | 1,526 |
| Heavy and Tractor-Trailer Truck Drivers | 53303200 | 1,437 | 867 |
| Network and Computer Systems Administrators | 15114200 | 1,409 | 1,392 |
| Management Analysts | 13111100 | 1,259 | 1,143 |
| Computer Systems Analysts | 15112100 | 1,138 | 1,338 |
| Computer User Support Specialists | 15115100 | 1,137 | 1,157 |
| Web Developers | 15113400 | 987 | 905 |
| Information Technology Project Managers | 15119909 | 986 | 932 |
| First-Line Supervisors of Office and Administrative Support Workers | 43101100 | 937 | 1,135 |
| Sales Managers | 11202200 | 919 | 708 |
| Customer Service Representatives | 43405100 | 874 | 1,084 |
| Computer Systems Engineers/Architects | 15119902 | 810 | 560 |
| Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products | 41401100 | 772 | 547 |
| Sales Agents, Financial Services | 41303102 | 769 | 930 |
| Accountants | 13201101 | 686 | 725 |
| Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | 41401200 | 629 | 567 |
| Tellers | 43307100 | 572 | 702 |

Source: Wanted Analytics

Table 6, below, shows the top skills and certifications in demand in current job listings by employers in the Central Planning Region:

Table 6: Top Skills & Certifications in Demand

| Top Skills & Certifications in Demand | |
|---------------------------------------|---|
| Skills | Certifications |
| Quality Assurance (QA) | Driver's License |
| Java | Certified Public Accountant (CPA) |
| Linux | Top Secret Sensitive Compartmentalized Information (TS SCI) |
| Customer Relationship Management | Continuing Education |
| Structured Query Language (SQL) | Professional Engineer (PE) |

Source: Wanted Analytics

Difficult to Hire Occupations

In order to analyze which occupations are most difficult to fill for employers in the Central Planning Region, an analysis was performed using EMSI's real-time job posting data from CareerBuilder. To perform the analysis, the average number of job postings for each occupation was computed and then compared with average hire data. These Economic Modeling Specialists International (EMSI) estimates use Longitudinal Employer-Household Dynamics Quarterly Workforce Indicator data.

Table 7, below, shows the **top 20 occupations by number employed in the region** that fall in the "difficult to hire" category. Difficulty to hire was determined by dividing the average number of *annual* hires by the average number of job postings. Those occupations that had less than one hire per posting are considered "difficult to fill."

Table 7: Training Pipeline Completions to Hires Ratio

| Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region | | | | | | |
|---|---|-----------|--------------------------|---------------------------|-------------------|-------------------|
| SOC | Description | 2016 Jobs | Avg. Annual Job Postings | Avg. Number Annual Hires* | Hires per Posting | Hiring Difficulty |
| 29-1141 | Registered Nurses | 32,618 | 36,214 | 18,656 | 0.5 | Difficult |
| 15-1132 | Software Developers, Applications | 20,114 | 19,011 | 9,649 | 0.5 | Difficult |
| 53-3032 | Heavy and Tractor-Trailer Truck Drivers | 17,754 | 38,715 | 13,500 | 0.3 | Difficult |
| 43-1011 | First-Line Supervisors of Office and Administrative Support Workers | 15,606 | 15,253 | 9,629 | 0.6 | Difficult |
| 41-1011 | First-Line Supervisors of Retail Sales Workers | 13,884 | 22,170 | 10,577 | 0.5 | Difficult |
| 15-1151 | Computer User Support Specialists | 11,317 | 11,202 | 6,481 | 0.6 | Difficult |
| 13-1111 | Management Analysts | 9,783 | 9,337 | 3,841 | 0.4 | Difficult |
| 11-9199 | Managers, All Other | 9,738 | 9,376 | 3,218 | 0.3 | Difficult |
| 15-1121 | Computer Systems Analysts | 8,717 | 11,636 | 4,222 | 0.4 | Difficult |
| 15-1142 | Network and Computer Systems Administrators | 8,392 | 14,712 | 4,781 | 0.3 | Difficult |
| 41-3031 | Securities, Commodities, and Financial Services Sales Agents | 7,575 | 8,208 | 2,877 | 0.4 | Difficult |
| 31-9092 | Medical Assistants | 7,084 | 3,995 | 3,795 | 0.9 | Difficult |
| 15-1199 | Computer Occupations, All Other | 6,624 | 20,476 | 3,493 | 0.2 | Difficult |
| 43-6013 | Medical Secretaries | 6,364 | 3,667 | 3,486 | 1.0 | Difficult |
| 17-2051 | Civil Engineers | 5,687 | 3,758 | 2,464 | 0.7 | Difficult |
| 41-4011 | Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products | 5,646 | 5,536 | 2,361 | 0.4 | Difficult |
| 17-2141 | Mechanical Engineers | 5,578 | 3,190 | 2,489 | 0.8 | Difficult |
| 11-3021 | Computer and Information Systems Managers | 5,412 | 5,368 | 2,568 | 0.5 | Difficult |
| 11-3031 | Financial Managers | 5,113 | 7,676 | 2,578 | 0.3 | Difficult |
| 43-3071 | Tellers | 4,722 | 3,684 | 1,895 | 0.5 | Difficult |

Sources: EMSI 2015.3 QCEW, Non-QCEW & Self-Employed Class of Worker, Real Time Job Posting Data from Career Builder & 2014 IPEDS Data

*Average monthly hires estimated using Longitudinal Employer-Household Dynamics Quarterly Workforce Indicators, date range January 2013 to February 2015

Tables for each occupational family have been prepared and added to Appendix A to provide a more thorough analysis of regional employment dynamics.

The table below shows the relative economic strength of the Colorado Central Planning Region with the addition of the Pikes Peak Workforce Development Area in relation to Colorado as a whole. Over 80% of the total value of goods and services produced in Colorado comes from the Central Planning Region.

| Regional Comparison | | | | | | | |
|----------------------------------|-------------------|--------------------|-------------|----------------|-------------------|-------------------|-------------------|
| Geography | Population (2017) | Labor Force (2017) | Jobs (2017) | Cost of Living | GRP | Imports | Exports |
| Colorado Central Planning Region | 4,253,494 | 2,318,169 | 2,309,189 | 111.2 | \$280,790,998,989 | \$184,492,225,596 | \$241,897,541,396 |
| Colorado | 5,618,947 | 3,028,316 | 2,933,542 | 106.5 | \$336,978,787,486 | \$231,613,888,632 | \$285,109,787,300 |
| Percent of State | 75.7% | 76.5% | 78.7% | | 83.3% | 79.7% | 84.8% |

Source: EMSI - QCEW, Non-QCEW, Self-Employed & Extended Proprietor Class of Worker

These graphs show historical growth in employment, the number of payrolled business locations (establishments) and average worker earnings across all industries within the Colorado Central Planning Region.



The table shows growth projections by major economic group through 2023 for the Central Planning Region.

| Regional Industry Growth Projections, Colorado Central Planning Region | | | | | | | | | | | |
|--|--|-----------|-----------|-----------|-----------|-----------|-----------|---------|--------------------|----------------------------|-----------------------------|
| NAICS Code | Description | 2018 Jobs | 2019 Jobs | 2020 Jobs | 2021 Jobs | 2022 Jobs | 2023 Jobs | Change | Annual Growth Rate | National Location Quotient | Payrolled Business Location |
| 62 | Health Care and Social Assistance | 252,429 | 262,169 | 270,884 | 278,878 | 284,667 | 291,945 | 39,516 | 3.1% | 0.83 | 13,362 |
| 90 | Government | 391,727 | 400,804 | 408,849 | 416,135 | 421,281 | 427,838 | 36,111 | 1.8% | 1.08 | 1,334 |
| 54 | Professional, Scientific, and Technical Services | 226,197 | 232,641 | 238,295 | 243,252 | 246,788 | 251,305 | 25,108 | 2.2% | 1.48 | 30,166 |
| 72 | Accommodation and Food Services | 215,039 | 220,648 | 225,475 | 229,725 | 232,360 | 236,047 | 21,008 | 2.0% | 1.05 | 9,369 |
| 44 | Retail Trade | 220,306 | 224,303 | 227,903 | 231,190 | 233,704 | 236,747 | 16,441 | 1.5% | 0.91 | 12,346 |
| 23 | Construction | 152,115 | 155,802 | 159,126 | 162,177 | 164,483 | 167,301 | 15,186 | 2.0% | 1.18 | 12,369 |
| 81 | Other Services (except Public Administration) | 118,640 | 121,284 | 123,620 | 125,627 | 127,195 | 129,094 | 10,454 | 1.8% | 1.04 | 12,753 |
| 56 | Administrative and Support and Waste Management and Remediation Services | 144,716 | 147,187 | 149,349 | 151,293 | 152,580 | 154,346 | 9,630 | 1.3% | 0.98 | 8,681 |
| 52 | Finance and Insurance | 103,045 | 105,132 | 107,005 | 108,766 | 110,006 | 111,651 | 8,606 | 1.7% | 1.13 | 8,853 |
| 42 | Wholesale Trade | 91,987 | 93,780 | 95,370 | 96,810 | 97,831 | 99,156 | 7,169 | 1.6% | 1.03 | 10,853 |
| 61 | Educational Services | 54,569 | 56,049 | 57,317 | 58,396 | 59,100 | 60,070 | 5,501 | 2.0% | 0.89 | 2,501 |
| 31 | Manufacturing | 117,250 | 118,677 | 119,836 | 120,765 | 121,217 | 122,097 | 4,847 | 0.8% | 0.64 | 4,252 |
| 48 | Transportation and Warehousing | 67,331 | 68,632 | 69,738 | 70,629 | 71,255 | 72,083 | 4,752 | 1.4% | 0.82 | 2,550 |
| 53 | Real Estate and Rental and Leasing | 48,263 | 49,185 | 49,991 | 50,694 | 51,188 | 51,840 | 3,577 | 1.5% | 1.23 | 8,173 |
| 71 | Arts, Entertainment, and Recreation | 44,864 | 45,825 | 46,647 | 47,355 | 47,803 | 48,431 | 3,567 | 1.6% | 1.10 | 2,173 |
| 55 | Management of Companies and Enterprises | 35,412 | 36,369 | 37,184 | 37,892 | 38,306 | 38,909 | 3,497 | 2.0% | 1.05 | 1,913 |
| 51 | Information | 66,050 | 66,330 | 66,600 | 66,841 | 67,106 | 67,427 | 1,377 | 0.4% | 1.53 | 3,016 |
| 21 | Mining, Quarrying, and Oil and Gas Extraction | 11,396 | 11,637 | 11,871 | 12,096 | 12,314 | 12,547 | 1,151 | 2.0% | 1.25 | 746 |
| 11 | Agriculture, Forestry, Fishing and Hunting | 7,632 | 7,827 | 7,992 | 8,144 | 8,220 | 8,346 | 714 | 1.9% | 0.27 | 391 |
| 22 | Utilities | 4,860 | 4,876 | 4,884 | 4,879 | 4,867 | 4,861 | 1 | 0.0% | 0.60 | 156 |
| | Totals | 2,373,829 | 2,429,159 | 2,477,936 | 2,521,542 | 2,552,273 | 2,592,041 | 178,444 | 1.5% | | 145,953 |

Source: EMSI – QCEW Employees, Non-QCEW Employees & Self-Employed Class of Worker

Since the Central Planning Region now includes nearly all of Colorado's urban Front Range, more insight can be gained through providing comparative information on historical growth and projections for Boulder and Larimer counties, greater metro Denver, and El Paso and Teller Counties.

Boulder & Larimer Counties



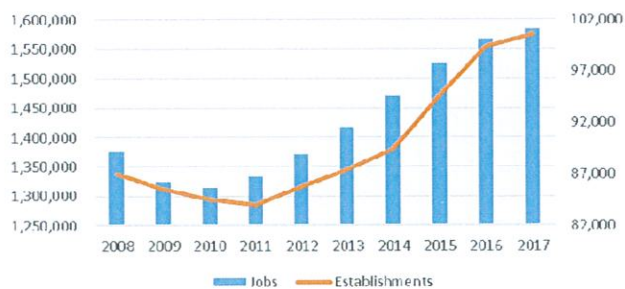
| NAICS Code | Description | 2018 Jobs | 2019 Jobs | 2020 Jobs | 2021 Jobs | 2022 Jobs | 2023 Jobs | Change | Annual Growth Rate | National Location Quotient | Payrolled Business Locations |
|------------|--|-----------|-----------|-----------|-----------|-----------|-----------|--------|--------------------|----------------------------|------------------------------|
| 90 | Government | 77,595 | 79,784 | 81,716 | 83,458 | 84,664 | 86,222 | 8,627 | 2.2% | 1.28 | 235 |
| 62 | Health Care and Social Assistance | 40,915 | 42,155 | 43,276 | 44,311 | 45,092 | 46,048 | 5,133 | 2.5% | 0.82 | 2,373 |
| 54 | Professional, Scientific, and Technical Services | 45,007 | 46,188 | 47,222 | 48,121 | 48,767 | 49,587 | 4,580 | 2.0% | 1.79 | 6,222 |
| 72 | Accommodation and Food Services | 37,785 | 38,717 | 39,518 | 40,222 | 40,659 | 41,269 | 3,484 | 1.8% | 1.12 | 1,744 |
| 44 | Retail Trade | 38,662 | 39,362 | 39,993 | 40,570 | 41,012 | 41,548 | 2,886 | 1.5% | 0.96 | 2,267 |
| 81 | Other Services (except Public Administration) | 17,388 | 17,810 | 18,183 | 18,503 | 18,751 | 19,056 | 1,668 | 1.9% | 0.92 | 2,242 |
| 23 | Construction | 20,768 | 21,162 | 21,520 | 21,862 | 22,107 | 22,415 | 1,647 | 1.6% | 0.98 | 2,121 |
| 31 | Manufacturing | 32,961 | 33,423 | 33,800 | 34,104 | 34,248 | 34,526 | 1,565 | 0.9% | 1.08 | 1,109 |
| 42 | Wholesale Trade | 11,543 | 11,923 | 12,258 | 12,559 | 12,768 | 13,044 | 1,501 | 2.6% | 0.77 | 1,715 |
| 61 | Educational Services | 7,306 | 7,521 | 7,702 | 7,853 | 7,944 | 8,076 | 770 | 2.1% | 0.72 | 516 |
| 53 | Real Estate and Rental and Leasing | 7,545 | 7,734 | 7,899 | 8,040 | 8,140 | 8,272 | 727 | 1.9% | 1.15 | 1,409 |
| 71 | Arts, Entertainment, and Recreation | 7,644 | 7,821 | 7,973 | 8,104 | 8,185 | 8,300 | 656 | 1.7% | 1.14 | 515 |
| 48 | Transportation and Warehousing | 4,998 | 5,117 | 5,216 | 5,297 | 5,348 | 5,421 | 423 | 1.7% | 0.37 | 308 |
| 56 | Administrative and Support and Waste Management and Remediation Services | 16,542 | 16,630 | 16,710 | 16,785 | 16,836 | 16,911 | 369 | 0.4% | 0.69 | 1,413 |
| 52 | Finance and Insurance | 8,422 | 8,490 | 8,554 | 8,620 | 8,668 | 8,744 | 322 | 0.8% | 0.56 | 1,336 |
| 55 | Management of Companies and Enterprises | 2,260 | 2,321 | 2,373 | 2,419 | 2,445 | 2,484 | 224 | 2.0% | 0.41 | 301 |
| 21 | Mining, Quarrying, and Oil and Gas Extraction | 757 | 773 | 788 | 801 | 813 | 827 | 70 | 1.8% | 0.50 | 76 |
| 51 | Information | 11,212 | 11,207 | 11,207 | 11,209 | 11,229 | 11,246 | 34 | 0.1% | 1.58 | 653 |
| 11 | Agriculture, Forestry, Fishing and Hunting | 2,228 | 2,238 | 2,246 | 2,259 | 2,255 | 2,260 | 32 | 0.3% | 0.48 | 145 |
| 22 | Utilities | 522 | 524 | 526 | 525 | 525 | 525 | 3 | 0.1% | 0.39 | 31 |
| | Totals | 392,060 | 400,903 | 408,679 | 415,621 | 420,458 | 426,782 | 28,398 | 1.4% | | 26,729 |

Source: EMSI – QCEW Employees, Non-QCEW Employees & Self-Employed Class of Worker

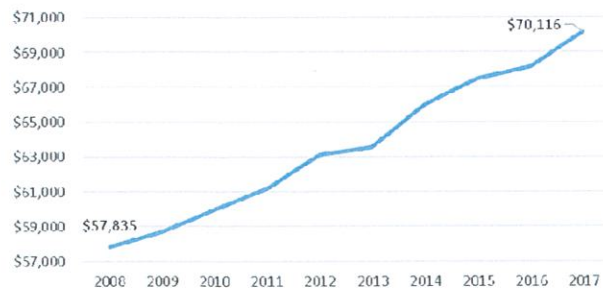
Between 2008 and 2017, government outpaced other economic groups, adding 17,334 new jobs. During the same period, accommodation and food services added 7,088 jobs and professional, scientific and technical services added 6,445 jobs.

Denver-Aurora-Lakewood Metro Area

Historical Trends, Jobs & Establishments,
Denver-Aurora-Lakewood Metro Area



Historical Trends, Worker Earnings,
Denver-Aurora-Lakewood Metro Area

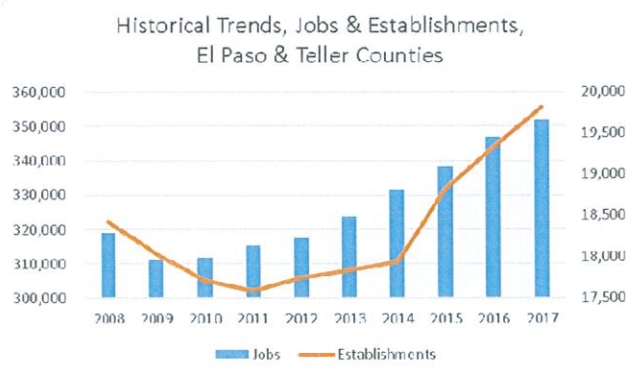


| Regional Industry Growth Projections, Denver-Aurora-Lakewood Metro Area | | | | | | | | | | | |
|---|--|-----------|-----------|-----------|-----------|-----------|-----------|---------|--------------------|----------------------------|------------------------------|
| NAICS Code | Description | 2018 Jobs | 2019 Jobs | 2020 Jobs | 2021 Jobs | 2022 Jobs | 2023 Jobs | Change | Annual Growth Rate | National Location Quotient | Payrolled Business Locations |
| 62 | Health Care and Social Assistance | 175,050 | 181,994 | 188,192 | 193,867 | 197,940 | 203,089 | 28,039 | 3.2% | 0.84 | 8,952 |
| 90 | Government | 221,923 | 226,916 | 231,354 | 235,383 | 238,261 | 241,903 | 19,980 | 1.8% | 0.89 | 877 |
| 54 | Professional, Scientific, and Technical Services | 154,754 | 159,503 | 163,666 | 167,317 | 169,912 | 173,236 | 18,482 | 2.4% | 1.47 | 20,467 |
| 72 | Accommodation and Food Services | 145,080 | 149,034 | 152,435 | 155,429 | 157,279 | 159,876 | 14,796 | 2.0% | 1.03 | 6,305 |
| 23 | Construction | 112,528 | 115,478 | 118,133 | 120,555 | 122,386 | 124,628 | 12,100 | 2.2% | 1.27 | 8,620 |
| 44 | Retail Trade | 147,213 | 149,836 | 152,199 | 154,356 | 156,012 | 158,012 | 10,799 | 1.5% | 0.88 | 8,163 |
| 56 | Administrative and Support and Waste Management and Remediation Services | 107,589 | 109,680 | 111,504 | 113,140 | 114,210 | 115,685 | 8,096 | 1.5% | 1.06 | 6,121 |
| 52 | Finance and Insurance | 81,528 | 83,350 | 84,985 | 86,515 | 87,600 | 89,020 | 7,492 | 1.8% | 1.29 | 6,427 |
| 81 | Other Services (except Public Administration) | 76,424 | 78,040 | 79,465 | 80,679 | 81,638 | 82,792 | 6,368 | 1.7% | 0.98 | 8,762 |
| 42 | Wholesale Trade | 74,726 | 76,080 | 77,280 | 78,368 | 79,142 | 80,141 | 5,415 | 1.4% | 1.23 | 8,347 |
| 61 | Educational Services | 38,286 | 39,416 | 40,388 | 41,220 | 41,769 | 42,522 | 4,236 | 2.2% | 0.91 | 1,643 |
| 48 | Transportation and Warehousing | 57,268 | 58,347 | 59,265 | 60,004 | 60,533 | 61,224 | 3,956 | 1.4% | 1.02 | 1,944 |
| 31 | Manufacturing | 72,673 | 73,751 | 74,635 | 75,354 | 75,726 | 76,389 | 3,716 | 1.0% | 0.57 | 2,658 |
| 55 | Management of Companies and Enterprises | 31,839 | 32,706 | 33,444 | 34,085 | 34,460 | 35,007 | 3,168 | 2.0% | 1.38 | 1,445 |
| 71 | Arts, Entertainment, and Recreation | 30,724 | 31,396 | 31,971 | 32,464 | 32,780 | 33,218 | 2,494 | 1.6% | 1.10 | 1,363 |
| 53 | Real Estate and Rental and Leasing | 34,772 | 35,394 | 35,938 | 36,413 | 36,751 | 37,192 | 2,420 | 1.4% | 1.29 | 5,507 |
| 51 | Information | 49,046 | 49,532 | 49,971 | 50,360 | 50,686 | 51,107 | 2,061 | 0.8% | 1.65 | 2,039 |
| 21 | Mining, Quarrying, and Oil and Gas Extraction | 9,912 | 10,111 | 10,307 | 10,497 | 10,690 | 10,889 | 977 | 2.0% | 1.59 | 637 |
| 11 | Agriculture, Forestry, Fishing and Hunting | 4,841 | 5,002 | 5,140 | 5,262 | 5,334 | 5,440 | 599 | 2.5% | 0.24 | 225 |
| 22 | Utilities | 3,790 | 3,809 | 3,820 | 3,822 | 3,813 | 3,812 | 22 | 0.1% | 0.68 | 104 |
| | Totals | 1,629,967 | 1,669,374 | 1,704,093 | 1,735,089 | 1,756,923 | 1,785,180 | 155,212 | 1.9% | | 100,607 |

Source: EMSI – QCEW Employees, Non-QCEW Employees & Self-Employed Class of Worker

Between 2008 and 2017, healthcare added the most jobs (42,953), followed by professional, scientific and technical services (30,794 jobs), and accommodation and food services (28,750 jobs).

El Paso and Teller Counties



| Regional Industry Growth Projections, El Paso & Teller Counties | | | | | | | | | | | |
|---|--|-----------|-----------|-----------|-----------|-----------|-----------|--------|--------------------|----------------------------|------------------------------|
| NAICS Code | Description | 2018 Jobs | 2019 Jobs | 2020 Jobs | 2021 Jobs | 2022 Jobs | 2023 Jobs | Change | Annual Growth Rate | National Location Quotient | Payrolled Business Locations |
| 90 | Government | 94,100 | 96,006 | 97,693 | 99,219 | 100,294 | 101,663 | 7,563 | 1.6% | 1.70 | 289 |
| 62 | Health Care and Social Assistance | 36,687 | 38,248 | 39,648 | 40,936 | 41,873 | 43,051 | 6,364 | 3.5% | 0.79 | 2,072 |
| 44 | Retail Trade | 35,326 | 36,038 | 36,677 | 37,259 | 37,694 | 38,229 | 2,903 | 1.6% | 0.95 | 1,987 |
| 72 | Accommodation and Food Services | 32,753 | 33,477 | 34,102 | 34,655 | 35,004 | 35,486 | 2,733 | 1.7% | 1.06 | 1,388 |
| 81 | Other Services (except Public Administration) | 25,444 | 26,074 | 26,633 | 27,123 | 27,499 | 27,955 | 2,511 | 2.0% | 1.46 | 1,827 |
| 54 | Professional, Scientific, and Technical Services | 27,126 | 27,664 | 28,140 | 28,565 | 28,874 | 29,261 | 2,135 | 1.6% | 1.18 | 3,669 |
| 23 | Construction | 20,445 | 20,812 | 21,147 | 21,458 | 21,700 | 21,989 | 1,544 | 1.5% | 1.05 | 1,911 |
| 56 | Administrative and Support and Waste Management and Remediation Services | 21,068 | 21,377 | 21,650 | 21,895 | 22,069 | 22,296 | 1,228 | 1.2% | 0.94 | 1,239 |
| 52 | Finance and Insurance | 13,214 | 13,412 | 13,588 | 13,752 | 13,859 | 14,009 | 795 | 1.2% | 0.95 | 1,124 |
| 61 | Educational Services | 9,042 | 9,180 | 9,297 | 9,395 | 9,459 | 9,546 | 504 | 1.1% | 0.98 | 355 |
| 53 | Real Estate and Rental and Leasing | 6,089 | 6,203 | 6,302 | 6,391 | 6,449 | 6,530 | 441 | 1.4% | 1.02 | 1,299 |
| 71 | Arts, Entertainment, and Recreation | 6,693 | 6,807 | 6,906 | 6,993 | 7,046 | 7,123 | 430 | 1.3% | 1.09 | 309 |
| 48 | Transportation and Warehousing | 5,197 | 5,304 | 5,394 | 5,468 | 5,516 | 5,583 | 386 | 1.5% | 0.42 | 327 |
| 42 | Wholesale Trade | 5,978 | 6,060 | 6,134 | 6,202 | 6,252 | 6,318 | 340 | 1.1% | 0.44 | 874 |
| 11 | Agriculture, Forestry, Fishing and Hunting | 793 | 823 | 849 | 872 | 885 | 904 | 111 | 2.8% | 0.18 | 54 |
| 55 | Management of Companies and Enterprises | 1,317 | 1,346 | 1,371 | 1,392 | 1,405 | 1,423 | 106 | 1.6% | 0.26 | 172 |
| 21 | Mining, Quarrying, and Oil and Gas Extraction | 735 | 762 | 786 | 806 | 820 | 840 | 105 | 2.9% | 0.52 | 34 |
| 22 | Utilities | 552 | 547 | 542 | 536 | 533 | 528 | (24) | (0.9%) | 0.45 | 23 |
| 31 | Manufacturing | 11,893 | 11,792 | 11,702 | 11,616 | 11,558 | 11,506 | (387) | (0.7%) | 0.43 | 523 |
| 51 | Information | 5,855 | 5,655 | 5,486 | 5,337 | 5,257 | 5,141 | (714) | (2.4%) | 0.93 | 346 |
| | Totals | 360,308 | 367,589 | 374,046 | 379,870 | 384,046 | 389,379 | 23,738 | 1.3% | | 19,819 |

Source: EMSI – QCEW Employees, Non-QCEW Employees & Self-Employed Class of Worker

In El Paso and Teller counties, between 2008 and 2017, government added the most jobs (12,149), followed by healthcare (8,875 jobs), and accommodation and food service (5,250 jobs).

Highly Concentrated Sectors

There are many ways to identify the industries that make up a sector. One way is by function. Location Quotient measures the employment concentration in any given area against the national average. So, for the table immediately below, we would say, "In Boulder and Larimer counties, the employment concentration in computer and electronic product manufacturing is 4.79 times more concentrated than the national average."

These tables show the top employment concentrations by sector, which may be defined as a group of industries that perform similar functions.

| Top Industries by Employment Concentration, Boulder & Larimer Counties | | | | |
|--|--|-----------|------------------------|-----------------------------------|
| NAICS | Description | 2018 Jobs | 2017 Location Quotient | 2017 Payrolled Business Locations |
| 334 | Computer and Electronic Product Manufacturing | 11,871 | 4.79 | 157 |
| 312 | Beverage and Tobacco Product Manufacturing | 2,495 | 3.81 | 91 |
| 511 | Publishing Industries (except Internet) | 6,009 | 3.43 | 243 |
| 902 | State Government | 39,543 | 2.96 | 55 |
| 451 | Sporting Goods, Hobby, Musical Instrument, and Book Stores | 2,988 | 1.90 | 223 |
| 518 | Data Processing, Hosting, and Related Services | 1,457 | 1.87 | 143 |
| 541 | Professional, Scientific, and Technical Services | 45,007 | 1.79 | 6,222 |
| 711 | Performing Arts, Spectator Sports, and Related Industries | 2,748 | 1.36 | 268 |
| 333 | Machinery Manufacturing | 3,419 | 1.31 | 71 |
| 814 | Private Households | 2,914 | 1.31 | 734 |

Source: EMSI - QCEW, Non-QCEW & Self-Employed Class of Worker

| Top Industries by Employment Concentration, Denver-Aurora-Lakewood Metro Area | | | | |
|---|---|-----------|------------------------|-----------------------------------|
| NAICS | Description | 2018 Jobs | 2017 Location Quotient | 2017 Payrolled Business Locations |
| 211 | Oil and Gas Extraction | 5,975 | 3.70 | 307 |
| 533 | Lessors of Nonfinancial Intangible Assets (except Copyrighted Works) | 870 | 3.58 | 80 |
| 481 | Air Transportation | 14,123 | 2.91 | 64 |
| 518 | Data Processing, Hosting, and Related Services | 8,685 | 2.64 | 521 |
| 517 | Telecommunications | 18,890 | 2.38 | 340 |
| 515 | Broadcasting (except Internet) | 5,398 | 1.91 | 73 |
| 525 | Funds, Trusts, and Other Financial Vehicles | 211 | 1.91 | 49 |
| 523 | Securities, Commodity Contracts, and Other Financial Investments and Related Activities | 19,252 | 1.85 | 1,915 |
| 312 | Beverage and Tobacco Product Manufacturing | 4,443 | 1.72 | 148 |
| 486 | Pipeline Transportation | 860 | 1.71 | 22 |

Source: EMSI - QCEW, Non-QCEW & Self-Employed Class of Worker

| Top Industries by Employment Concentration, El Paso & Teller Counties | | | | |
|---|--|-----------|------------------------|-----------------------------------|
| NAICS | Description | 2018 Jobs | 2017 Location Quotient | 2017 Payrolled Business Locations |
| 901 | Federal Government | 43,471 | 4.90 | 138 |
| 813 | Religious, Grantmaking, Civic, Professional, and Similar Organizations | 13,704 | 2.27 | 251 |
| 511 | Publishing Industries (except Internet) | 3,595 | 1.58 | 112 |
| 212 | Mining (except Oil and Gas) | 436 | 1.56 | 7 |
| 721 | Accommodation | 5,878 | 1.47 | 159 |
| 334 | Computer and Electronic Product Manufacturing | 6,035 | 1.28 | 43 |
| 453 | Miscellaneous Store Retailers | 2,141 | 1.25 | 264 |
| 451 | Sporting Goods, Hobby, Musical Instrument, and Book Stores | 1,815 | 1.25 | 126 |
| 712 | Museums, Historical Sites, and Similar Institutions | 407 | 1.22 | 15 |
| 339 | Miscellaneous Manufacturing | 1,574 | 1.22 | 66 |

Source: EMSI - QCEW, Non-QCEW & Self-Employed Class of Worker

Comparative Staffing Patterns

These tables show the top occupations by percent of total employment in the Colorado Central Planning Region, Boulder and Larimer counties, Denver-Aurora-Lakewood Metro Area, and El Paso and Teller counties.

| Sector Staffing Patterns, Colorado Central Planning Region | | | | | | | | |
|--|---|-----------|-----------|--------|----------|---------------|------------------------|-----------------------------------|
| SOC Code | Description | 2018 Jobs | 2023 Jobs | Change | % Change | % of Industry | Median Hourly Earnings | Typical Entry Level Education |
| 41-2031 | Retail Salespersons | 67,830 | 73,317 | 5,487 | 8% | 2.9% | \$11.33 | No formal educational credential |
| 35-3021 | Combined Food Preparation and Serving Workers, Including Fast Food | 54,838 | 61,609 | 6,771 | 12% | 2.3% | \$9.64 | No formal educational credential |
| 55-9999 | Military occupations | 53,545 | 58,143 | 4,598 | 9% | 2.3% | \$15.73 | N/A |
| 43-6014 | Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 46,560 | 50,159 | 3,599 | 8% | 2.0% | \$17.64 | High school diploma or equivalent |
| 41-2011 | Cashiers | 45,186 | 48,197 | 3,011 | 7% | 1.9% | \$10.20 | No formal educational credential |
| 35-3031 | Waiters and Waitresses | 43,139 | 46,243 | 3,104 | 7% | 1.8% | \$9.28 | No formal educational credential |
| 43-9061 | Office Clerks, General | 43,294 | 47,523 | 4,229 | 10% | 1.8% | \$17.49 | High school diploma or equivalent |
| 29-1141 | Registered Nurses | 40,853 | 46,879 | 6,026 | 15% | 1.7% | \$33.49 | Bachelor's degree |
| 43-4051 | Customer Service Representatives | 38,533 | 42,281 | 3,748 | 10% | 1.6% | \$16.57 | High school diploma or equivalent |
| 13-1199 | Business Operations Specialists, All Other | 36,886 | 38,925 | 2,039 | 6% | 1.6% | \$36.29 | Bachelor's degree |
| 37-2011 | Janitors and Cleaners, Except Maids and Housekeeping Cleaners | 36,259 | 39,221 | 2,962 | 8% | 1.5% | \$11.86 | No formal educational credential |
| 11-1021 | General and Operations Managers | 35,940 | 39,291 | 3,351 | 9% | 1.5% | \$54.63 | Bachelor's degree |
| 13-2011 | Accountants and Auditors | 33,495 | 36,615 | 3,120 | 9% | 1.4% | \$33.20 | Bachelor's degree |
| 53-7062 | Laborers and Freight, Stock, and Material Movers, Hand | 28,815 | 31,363 | 2,548 | 9% | 1.2% | \$13.22 | No formal educational credential |
| 43-5081 | Stock Clerks and Order Fillers | 27,246 | 29,307 | 2,061 | 8% | 1.2% | \$12.15 | High school diploma or equivalent |
| 41-4012 | Manufacturing, Except Technical and Scientific Products | 26,926 | 28,558 | 1,632 | 6% | 1.1% | \$28.96 | High school diploma or equivalent |
| 15-1132 | Software Developers, Applications | 26,018 | 28,637 | 2,619 | 10% | 1.1% | \$49.60 | Bachelor's degree |
| 35-2014 | Cooks, Restaurant | 25,664 | 28,568 | 2,904 | 11% | 1.1% | \$12.19 | No formal educational credential |
| 25-1099 | Postsecondary Teachers | 25,160 | 27,553 | 2,393 | 10% | 1.1% | \$31.78 | Doctoral or professional degree |
| 39-9021 | Personal Care Aides | 25,826 | 30,197 | 4,371 | 17% | 1.1% | \$10.69 | High school diploma or equivalent |

Source: EMSI - QCEW Employees, Non-QCEW Employees & Self-Employed Class of Worker

| Sector Staffing Patterns, Boulder and Larimer Counties | | | | | | | | |
|--|---|-----------|-----------|--------|----------|---------------|------------------------|-----------------------------------|
| SOC Code | Description | 2018 Jobs | 2023 Jobs | Change | % Change | % of Industry | Median Hourly Earnings | Typical Entry Level Education |
| 41-2031 | Retail Salespersons | 12,666 | 13,583 | 917 | 7% | 3.3% | \$11.53 | No formal educational credential |
| 35-3021 | Combined Food Preparation and Serving Workers, Including Fast Food | 10,686 | 11,879 | 1,193 | 11% | 2.7% | \$9.61 | No formal educational credential |
| 43-6014 | Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 9,434 | 10,198 | 764 | 8% | 2.4% | \$17.60 | High school diploma or equivalent |
| 43-9061 | Office Clerks, General | 9,233 | 10,178 | 945 | 10% | 2.3% | \$16.95 | High school diploma or equivalent |
| 35-3031 | Waiters and Waitresses | 7,438 | 7,979 | 541 | 7% | 1.9% | \$9.42 | No formal educational credential |
| 25-1099 | Postsecondary Teachers | 7,290 | 8,149 | 859 | 12% | 1.8% | \$30.18 | Doctoral or professional degree |
| 41-2011 | Cashiers | 7,088 | 7,609 | 521 | 7% | 1.8% | \$10.37 | No formal educational credential |
| 29-1141 | Registered Nurses | 6,582 | 7,195 | 613 | 9% | 1.7% | \$32.86 | Bachelor's degree |
| 15-1132 | Software Developers, Applications | 5,667 | 5,924 | 257 | 5% | 1.5% | \$48.29 | Bachelor's degree |
| 37-2011 | Janitors and Cleaners, Except Maids and Housekeeping Cleaners | 5,627 | 6,126 | 499 | 9% | 1.4% | \$12.57 | No formal educational credential |
| 11-1021 | General and Operations Managers | 5,431 | 5,948 | 517 | 10% | 1.4% | \$49.91 | Bachelor's degree |
| 13-1199 | Business Operations Specialists, All Other | 5,342 | 5,642 | 300 | 6% | 1.4% | \$34.00 | Bachelor's degree |
| 43-4051 | Customer Service Representatives | 5,063 | 5,464 | 401 | 8% | 1.3% | \$15.22 | High school diploma or equivalent |
| 35-2014 | Cooks, Restaurant | 4,536 | 5,048 | 512 | 11% | 1.1% | \$12.25 | No formal educational credential |
| 13-2011 | Accountants and Auditors | 4,437 | 4,816 | 379 | 9% | 1.1% | \$30.65 | Bachelor's degree |
| 43-5081 | Stock Clerks and Order Fillers | 4,328 | 4,680 | 352 | 8% | 1.1% | \$12.07 | High school diploma or equivalent |
| 43-3031 | Bookkeeping, Accounting, and Auditing Clerks | 4,032 | 4,190 | 158 | 4% | 1.0% | \$19.78 | Some college, no degree |
| 39-9021 | Personal Care Aides | 4,071 | 4,651 | 580 | 14% | 1.0% | \$11.13 | High school diploma or equivalent |
| 37-3011 | Landscaping and Groundskeeping Workers | 3,762 | 4,064 | 302 | 8% | 1.0% | \$13.65 | No formal educational credential |
| 41-4012 | Manufacturing, Except Technical and Scientific Products | 3,719 | 4,062 | 343 | 9% | 0.9% | \$29.18 | High school diploma or equivalent |

Source: EMSI - QCEW Employees, Non-QCEW Employees & Self-Employed Class of Worker

| Sector Staffing Patterns, Denver-Aurora-Lakewood Metro Area | | | | | | | | |
|---|--|-----------|-----------|--------|----------|---------------|------------------------|-----------------------------------|
| SOC Code | Description | 2018 Jobs | 2023 Jobs | Change | % Change | % of Industry | Median Hourly Earnings | Typical Entry Level Education |
| 41-2031 | Retail Salespersons | 46,152 | 49,925 | 3,773 | 8% | 2.9% | \$11.25 | No formal educational credential |
| 35-3021 | Combined Food Preparation and Serving Workers, Including Fast Food | 35,873 | 40,466 | 4,593 | 13% | 2.2% | \$9.76 | No formal educational credential |
| 41-2011 | Cashiers | 30,843 | 32,809 | 1,966 | 6% | 1.9% | \$10.18 | No formal educational credential |
| 43-6014 | Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 29,909 | 32,362 | 2,453 | 8% | 1.8% | \$17.98 | High school diploma or equivalent |
| 35-3031 | Waiters and Waitresses | 29,446 | 31,699 | 2,253 | 8% | 1.8% | \$9.33 | No formal educational credential |
| 43-9061 | Office Clerks, General | 28,261 | 31,126 | 2,865 | 10% | 1.7% | \$17.99 | High school diploma or equivalent |
| 43-4051 | Customer Service Representatives | 28,116 | 30,721 | 2,605 | 9% | 1.7% | \$16.99 | High school diploma or equivalent |
| 13-1199 | Business Operations Specialists, All Other | 27,170 | 28,770 | 1,600 | 6% | 1.7% | \$36.67 | Bachelor's degree |
| 29-1141 | Registered Nurses | 27,813 | 32,015 | 4,202 | 15% | 1.7% | \$34.26 | Bachelor's degree |
| 11-1021 | General and Operations Managers | 26,236 | 28,734 | 2,498 | 10% | 1.6% | \$57.08 | Bachelor's degree |
| 13-2011 | Accountants and Auditors | 25,633 | 28,171 | 2,538 | 10% | 1.6% | \$33.87 | Bachelor's degree |
| 37-2011 | Janitors and Cleaners, Except Maids and Housekeeping Cleaners | 25,351 | 27,446 | 2,095 | 8% | 1.6% | \$11.79 | No formal educational credential |
| 53-7062 | Laborers and Freight, Stock, and Material Movers, Hand | 22,945 | 24,926 | 1,981 | 9% | 1.4% | \$13.20 | No formal educational credential |
| 41-4012 | Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | 21,257 | 22,503 | 1,246 | 6% | 1.3% | \$29.09 | High school diploma or equivalent |
| 43-5081 | Stock Clerks and Order Fillers | 19,234 | 20,667 | 1,433 | 7% | 1.2% | \$12.01 | High school diploma or equivalent |
| 41-3099 | Sales Representatives, Services, All Other | 18,003 | 19,331 | 1,328 | 7% | 1.1% | \$28.05 | High school diploma or equivalent |
| 35-2014 | Cooks, Restaurant | 18,123 | 20,223 | 2,100 | 12% | 1.1% | \$12.08 | No formal educational credential |
| 43-3031 | Bookkeeping, Accounting, and Auditing Clerks | 17,136 | 17,728 | 592 | 3% | 1.1% | \$19.27 | Some college, no degree |
| 39-9021 | Personal Care Aides | 17,315 | 20,364 | 3,049 | 18% | 1.0% | \$10.61 | High school diploma or equivalent |
| 15-1132 | Software Developers, Applications | 16,576 | 18,713 | 2,137 | 13% | 1.0% | \$49.93 | Bachelor's degree |

Source: EMSI - QCEW Employees, Non-QCEW Employees & Self-Employed Class of Worker

| Sector Staffing Patterns, El Paso and Teller Counties | | | | | | | | |
|---|---|-----------|-----------|--------|----------|---------------|------------------------|-----------------------------------|
| SOC Code | Description | 2018 Jobs | 2023 Jobs | Change | % Change | % of Industry | Median Hourly Earnings | Typical Entry Level Education |
| 55-9999 | Military occupations | 41,090 | 44,676 | 3,586 | 9% | 11.7% | \$15.73 | N/A |
| 41-2031 | Retail Salespersons | 9,006 | 9,814 | 808 | 9% | 2.6% | \$11.42 | No formal educational credential |
| 35-3021 | Combined Food Preparation and Serving Workers, Including Fast Food | 8,183 | 9,152 | 969 | 12% | 2.3% | \$9.30 | No formal educational credential |
| 43-6014 | Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 7,216 | 7,597 | 381 | 5% | 2.1% | \$16.50 | High school diploma or equivalent |
| 41-2011 | Cashiers | 7,120 | 7,639 | 519 | 7% | 2.0% | \$10.15 | No formal educational credential |
| 35-3031 | Waiters and Waitresses | 6,152 | 6,467 | 315 | 5% | 1.8% | \$9.11 | No formal educational credential |
| 29-1141 | Registered Nurses | 6,364 | 7,553 | 1,189 | 19% | 1.7% | \$31.04 | Bachelor's degree |
| 43-9061 | Office Clerks, General | 5,804 | 6,224 | 420 | 7% | 1.7% | \$16.20 | High school diploma or equivalent |
| 43-4051 | Customer Service Representatives | 5,348 | 6,091 | 743 | 14% | 1.5% | \$15.59 | High school diploma or equivalent |
| 37-2011 | Janitors and Cleaners, Except Maids and Housekeeping Cleaners | 5,242 | 5,604 | 362 | 7% | 1.5% | \$11.46 | No formal educational credential |
| 13-1199 | Business Operations Specialists, All Other | 4,389 | 4,529 | 140 | 3% | 1.3% | \$36.61 | Bachelor's degree |
| 39-9021 | Personal Care Aides | 4,434 | 5,178 | 744 | 17% | 1.2% | \$10.67 | High school diploma or equivalent |
| 11-1021 | General and Operations Managers | 4,291 | 4,632 | 341 | 8% | 1.2% | \$45.54 | Bachelor's degree |
| 25-2021 | Elementary School Teachers, Except Special Education | 4,167 | 4,534 | 367 | 9% | 1.2% | \$21.56 | Bachelor's degree |
| 15-1132 | Software Developers, Applications | 3,777 | 4,004 | 227 | 6% | 1.1% | \$50.04 | Bachelor's degree |
| 43-5081 | Stock Clerks and Order Fillers | 3,642 | 3,917 | 275 | 8% | 1.0% | \$13.00 | High school diploma or equivalent |
| 13-2011 | Accountants and Auditors | 3,450 | 3,665 | 215 | 6% | 1.0% | \$31.64 | Bachelor's degree |
| 37-2012 | Maids and Housekeeping Cleaners | 3,279 | 3,619 | 340 | 10% | 0.9% | \$9.86 | No formal educational credential |
| 25-9041 | Teacher Assistants | 3,181 | 3,465 | 284 | 9% | 0.9% | \$11.74 | Some college, no degree |
| 37-3011 | Landscaping and Groundskeeping Workers | 3,114 | 3,314 | 200 | 6% | 0.9% | \$11.43 | No formal educational credential |

Source: EMSI - QCEW Employees, Non-QCEW Employees & Self-Employed Class of Worker

The reader will note that several high-skilled occupations show up in all four tables:

- Registered nurses
- Accountants and auditors
- Software developers, applications
- Business operations specialists

Area employers are experiencing shortages in all four of these occupations because the regional training pipeline is not producing a sufficient number of graduates with the skills needed.

Real-Time Labor Market Information: Top Job Postings

This table shows the top 20 jobs listed in the Colorado Central Planning Region.

| Top Jobs Currently Listed, Colorado Central Planning Region, Last 120 Days | | | |
|--|-----------------|--------|------------------------|
| Occupation | Occupation Code | Volume | Same Period Prior Year |
| Registered Nurses | 29114100 | 7,375 | 8,605 |
| Heavy and Tractor-Trailer Truck Drivers | 53303200 | 6,243 | 4,988 |
| Software Developers, Applications | 15113200 | 5,690 | 4,524 |
| Network and Computer Systems Administrators | 15114200 | 4,611 | 5,013 |
| Retail Salespersons | 41203100 | 4,000 | 4,621 |
| First-Line Supervisors of Office and Administrative Support Workers | 43101100 | 3,700 | 3,891 |
| Customer Service Representatives | 43405100 | 3,694 | 4,534 |
| First-Line Supervisors of Food Preparation and Serving Workers | 35101200 | 3,420 | 3,986 |
| Computer User Support Specialists | 15115100 | 3,402 | 3,643 |
| First-Line Supervisors of Retail Sales Workers | 41101100 | 3,263 | 3,666 |
| Accountants | 13201101 | 2,984 | 2,515 |
| Maintenance and Repair Workers, General | 49907100 | 2,898 | 3,193 |
| Computer Systems Analysts | 15112100 | 2,729 | 2,495 |
| Marketing Managers | 11202100 | 2,713 | 2,375 |
| Computer Systems Engineers/Architects | 15119902 | 2,562 | 2,311 |
| Light Truck or Delivery Services Drivers | 53303300 | 2,494 | 2,297 |
| Web Developers | 15113400 | 2,471 | 2,477 |
| Bookkeeping, Accounting, and Auditing Clerks | 43303100 | 2,379 | 2,270 |
| Management Analysts | 13111100 | 2,312 | 2,017 |
| Information Technology Project Managers | 15119909 | 2,273 | 2,178 |

Source: CEB Talent Neuron

Difficult to Hire

These tables are updated and depict difficulty to hire for the top 20 occupations by percent of total employment in the Colorado Central Planning Region, Boulder and Larimer counties, Denver-Aurora-Lakewood Metro Area, and El Paso and Teller counties.

| Difficulty to Hire, Top Occupations, Colorado Central Planning Region | | | | |
|--|----------------------|-------------------|-------------------|--------------------|
| Occupation | Avg Monthly Postings | Avg Monthly Hires | Hires Per Listing | Difficulty to Hire |
| Registered Nurses | 5,984 | 1,853 | 0.31 | Very Difficult |
| Software Developers, Applications | 3,149 | 1,060 | 0.34 | Very Difficult |
| Stock Clerks and Order Fillers | 2,508 | 2,135 | 0.85 | Very Difficult |
| Customer Service Representatives | 2,572 | 2,577 | 1.00 | Difficult |
| Accountants and Auditors | 1,383 | 1,787 | 1.29 | Difficult |
| Postsecondary Teachers | 841 | 1,189 | 1.41 | Difficult |
| Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | 845 | 1,227 | 1.45 | Difficult |
| Retail Salespersons | 3,826 | 5,701 | 1.49 | Difficult |
| General and Operations Managers | 1,091 | 2,342 | 2.15 | Difficult |
| Business Operations Specialists, All Other | 833 | 1,875 | 2.25 | Difficult |
| Cashiers | 1,358 | 4,293 | 3.16 | Medium |
| Cooks, Restaurant | 1,010 | 3,229 | 3.20 | Medium |
| Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 842 | 2,928 | 3.48 | Medium |
| Combined Food Preparation and Serving Workers, Including Fast Food | 1,589 | 6,712 | 4.22 | Medium |
| Personal Care Aides | 405 | 2,069 | 5.11 | Medium |
| Laborers and Freight, Stock, and Material Movers, Hand | 530 | 2,973 | 5.61 | Medium |
| Janitors and Cleaners, Except Maids and Housekeeping Cleaners | 543 | 3,071 | 5.66 | Medium |
| Waiters and Waitresses | 747 | 5,471 | 7.33 | Medium |
| Office Clerks, General | 355 | 2,901 | 8.16 | Very Easy |
| Military occupations | 39 | 2,332 | N/A | N/A |

Source: EMSI - QCEW Employees, Non-QCEW Employees & Self-Employed Class of Worker

| Difficulty to Hire, Top Occupations, Boulder and Larimer Counties | | | | |
|--|----------------------|-------------------|-------------------|--------------------|
| Occupation | Avg Monthly Postings | Avg Monthly Hires | Hires Per Listing | Difficulty to Hire |
| Registered Nurses | 898 | 283 | 0.32 | Very Difficult |
| Software Developers, Applications | 525 | 200 | 0.38 | Very Difficult |
| Stock Clerks and Order Fillers | 415 | 317 | 0.76 | Very Difficult |
| Customer Service Representatives | 353 | 304 | 0.86 | Very Difficult |
| Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | 138 | 166 | 1.20 | Difficult |
| Retail Salespersons | 684 | 1,022 | 1.49 | Difficult |
| Postsecondary Teachers | 211 | 338 | 1.60 | Difficult |
| Accountants and Auditors | 119 | 212 | 1.78 | Difficult |
| General and Operations Managers | 146 | 335 | 2.29 | Difficult |
| Bookkeeping, Accounting, and Auditing Clerks | 102 | 235 | 2.30 | Difficult |
| Cashiers | 241 | 634 | 2.63 | Difficult |
| Business Operations Specialists, All Other | 88 | 263 | 2.99 | Difficult |
| Cooks, Restaurant | 152 | 564 | 3.71 | Medium |
| Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 125 | 535 | 4.28 | Medium |
| Personal Care Aides | 79 | 350 | 4.43 | Medium |
| Combined Food Preparation and Serving Workers, Including Fast Food | 284 | 1,267 | 4.46 | Medium |
| Janitors and Cleaners, Except Maids and Housekeeping Cleaners | 70 | 407 | 5.81 | Medium |
| Waiters and Waitresses | 118 | 932 | 7.90 | Medium |
| Landscaping and Groundskeeping Workers | 38 | 345 | 9.08 | Easy |
| Office Clerks, General | 35 | 540 | 15.43 | Very Easy |

Source: EMSI - QCEW Employees, Non-QCEW Employees & Self-Employed Class of Worker

| Difficulty to Hire, Top Occupations, Denver-Aurora-Lakewood Metro Area | | | | |
|--|----------------------|-------------------|-------------------|--------------------|
| Occupation | Avg Monthly Postings | Avg Monthly Hires | Hires Per Listing | Difficulty to Hire |
| Registered Nurses | 4,405 | 1,277 | 0.29 | Very Difficult |
| Software Developers, Applications | 2,249 | 716 | 0.32 | Very Difficult |
| Stock Clerks and Order Fillers | 1,863 | 1,538 | 0.83 | Very Difficult |
| Customer Service Representatives | 1,941 | 1,779 | 0.92 | Very Difficult |
| Sales Representatives, Services, All Other | 1,078 | 1,166 | 1.08 | Difficult |
| Accountants and Auditors | 1,195 | 1,384 | 1.16 | Difficult |
| Retail Salespersons | 2,779 | 3,933 | 1.42 | Difficult |
| Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | 622 | 968 | 1.56 | Difficult |
| Bookkeeping, Accounting, and Auditing Clerks | 635 | 1,074 | 1.69 | Difficult |
| General and Operations Managers | 854 | 1,727 | 2.02 | Difficult |
| Business Operations Specialists, All Other | 659 | 1,417 | 2.15 | Difficult |
| Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 650 | 1,928 | 2.97 | Difficult |
| Cashiers | 992 | 2,995 | 3.02 | Medium |
| Cooks, Restaurant | 748 | 2,291 | 3.06 | Medium |
| Combined Food Preparation and Serving Workers, Including Fast Food | 1,168 | 4,445 | 3.81 | Medium |
| Personal Care Aides | 294 | 1,329 | 4.52 | Medium |
| Janitors and Cleaners, Except Maids and Housekeeping Cleaners | 412 | 2,235 | 5.42 | Medium |
| Laborers and Freight, Stock, and Material Movers, Hand | 422 | 2,446 | 5.80 | Medium |
| Waiters and Waitresses | 554 | 3,755 | 6.78 | Medium |
| Office Clerks, General | 283 | 1,963 | 6.94 | Medium |

Source: EMSI - QCEW Employees, Non-QCEW Employees & Self-Employed Class of Worker

| Difficulty to Hire, Top Occupations, El Paso and Teller Counties | | | | |
|---|----------------------|-------------------|-------------------|--------------------|
| Occupation | Avg Monthly Postings | Avg Monthly Hires | Hires Per Listing | Difficulty to Hire |
| Software Developers, Applications | 376 | 145 | 0.39 | Very Difficult |
| Registered Nurses | 739 | 295 | 0.40 | Very Difficult |
| Stock Clerks and Order Fillers | 234 | 288 | 1.23 | Difficult |
| Customer Service Representatives | 283 | 499 | 1.76 | Difficult |
| Retail Salespersons | 367 | 759 | 2.07 | Difficult |
| Business Operations Specialists, All Other | 87 | 201 | 2.32 | Difficult |
| Accountants and Auditors | 70 | 198 | 2.82 | Difficult |
| General and Operations Managers | 92 | 290 | 3.15 | Medium |
| Maids and Housekeeping Cleaners | 80 | 269 | 3.36 | Medium |
| Cashiers | 135 | 686 | 5.09 | Medium |
| Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 77 | 478 | 6.20 | Medium |
| Combined Food Preparation and Serving Workers, Including Fast Food | 143 | 1,017 | 7.11 | Medium |
| Janitors and Cleaners, Except Maids and Housekeeping Cleaners | 61 | 441 | 7.19 | Medium |
| Landscaping and Groundskeeping Workers | 28 | 279 | 9.95 | Easy |
| Waiters and Waitresses | 76 | 802 | 10.55 | Easy |
| Office Clerks, General | 39 | 409 | 10.59 | Easy |
| Personal Care Aides | 33 | 393 | 11.79 | Very Easy |
| Teacher Assistants | 10 | 135 | 13.98 | Very Easy |
| Elementary School Teachers, Except Special Education | 4 | 147 | 35.47 | Very Easy |
| Military occupations | 19 | 1,792 | 93.56 | N/A |

Source: EMSI - QCEW Employees, Non-QCEW Employees & Self-Employed Class of Worker

2. PROVIDE AN ANALYSIS OF THE KNOWLEDGE AND SKILLS NEEDED TO MEET THE EMPLOYMENT NEEDS OF THE EMPLOYERS IN THE REGION, INCLUDING EMPLOYMENT NEEDS IN IN-DEMAND INDUSTRY SECTORS AND OCCUPATIONS.

According to a 2012 national survey by The Chronicle of Higher Education, nearly one-third of employers were dissatisfied with the skills of their workers.¹ Across most industries in Colorado, employers have reported that it is difficult to hire workers because they do not possess the knowledge or skills they need to perform the jobs they need to fill.² A major skills gap in the Central Planning Region is STEM (science, technology, engineering and math) knowledge. For the occupations identified in Colorado's "Top Jobs" list, a majority requires high levels of one or more STEM fields. In fact, when using Brookings Institution's definition of STEM occupations, the Colorado Talent Pipeline Report found that 62% of the occupations are STEM-related. Compared with the STEM jobs across the state's overall workforce—which is approximately 20%—this suggests STEM competencies will be in high demand from employers in Colorado and the Central Planning Region.

In addition to STEM skills, the Colorado Talent Pipeline Report also identified certain skills that make employers more likely to promote individuals within their organizations. The top 15 skill clusters include for these promoted workers are: economics; social media marketing; people skills; statistical analysis and data mining; software revision control system; software applications; multilingual; politics; user Interface; human resources recruiting; analytical and problem solving; software development skills; mobile development; legal skills; and history, archaeology and anthropology.³

The Colorado Talent Pipeline Report also noted core skills that are necessary for success in work or education beyond high school. Those skills are listed below⁴ and will be a focus of the workforce and education programs driven by sector partnerships and career pathways within the Central Planning Region.

Entrepreneurial: critical thinking and problem solving; creativity and innovation; inquiry and analysis; and risk taking

Personal: initiative and self-direction; personal responsibility and self-management; adaptability and flexibility; personal awareness; learn independently; and perseverance

¹ The Chronicle of Higher Education. (2012). The Role of Higher Education in Career Development: Employer Perceptions. December 2012. Available at <http://chronicle.com/items/biz/pdf/Employers%20Survey.pdf>.

² Colorado Workforce Development Council. (2015). *Colorado Talent Pipeline Report*. Retrieved at <https://www.colorado.gov/pacific/cwdc/colorado-talent-pipeline-report>.

³ The Colorado Talent Pipeline Report, data sourced from LinkedIn, 2015.

⁴ Ibid.

Civic/Interpersonal: core academic foundation; collaboration and teamwork; communication; global and cultural awareness; and ethics and integrity

Professional: time management; career literacy; grit and resilience; work ethic-dependable and reliable; and self-advocacy

The Colorado Talent Pipeline Report also notes the top six "soft" skills required by employers (and their O*NET definition) are:

Active Listening: giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate and not interrupting at inappropriate times

Critical Thinking: using logic and reasoning to identify the strengths and weaknesses of alternative solution, conclusions or approaches to problems

Complex Problem Solving: identifying complex problems and reviewing related information to develop and evaluate options and implement solutions

Judgment and Decision Making: considering the relative costs and benefits of potential actions to choose the most appropriate one

Reading Comprehension: understanding written sentences and paragraphs in work-related documents

Speaking: talking with others to convey information effectively

To supplement the above, and with the addition of the Pikes Peak Workforce Development Area to the Colorado Central Planning Region, some additional information is provided showing current skills in demand in the Region.

| Top Skills & Certifications in Demand, Colorado Central Planning Region | | |
|---|--------------------------------|---|
| Workplace Skills | Essential Skills | Certifications |
| Microsoft Office | Oral and written communication | Driver's license |
| IMPACT software | Integrity | Commercial Driver's License (CDL) |
| Quality assurance (QA) | Detail oriented | Basic Life Support (BLS) |
| Freight+ | Creativity | Secret Clearance (up to TS SCI) |
| Linux | Marketing | Certified Registered Nurse |
| Java | Problem solving | CPR certification |
| Python | Customer service oriented | HAZMAT |
| Microsoft PowerPoint | Team worker, team-oriented | OSHA certification |
| Customer relationship management | Self-starting, self-motivated | First aid certification |
| Technical support | Organizational skills | Advanced Cardiac Life Support (ACLS) |
| Structured Query Language (SQL) | Coaching | Food safety certification (HACCP) |
| Quality control | Management skills | Accounting |
| Pediatrics | Work independently | Certified Information Systems Security Professional (CISSP) |
| Software development | Troubleshooting | Tanker and Hazmat endorsement |
| UNIX | High energy | Project Management Professional (PMP) |
| Preventive maintenance | Strong leadership skills | Licensed Practical Nurse (LPN) |
| JavaScript (JS) | Time management | Certified Public Accountant (CPA) |
| Bilingual | Analytical skills | DOT Medical Card |
| Salesforce CRM SFDC | Ability to travel | Pediatric Advanced Life Support (PALS) |
| Software as a Service (SaaS) | Strong interpersonal skills | DoD 8570 Certification |

Source: CEB Talent Neuron



3. PROVIDE AN ANALYSIS OF THE WORKFORCE IN THE REGION, INCLUDING CURRENT LABOR FORCE EMPLOYMENT AND UNEMPLOYMENT DATA, AND INFORMATION ON LABOR MARKET TRENDS, AND THE EDUCATIONAL AND SKILL LEVELS OF THE WORKFORCE IN THE REGION, INCLUDING INDIVIDUALS

WITH BARRIERS TO EMPLOYMENT.

Table 8: Age Demographics

| Age Demographics, Colorado Central Planning Region | | | | |
|--|-----------------|-----------------|----------|----------|
| Demographic | 2016 Population | 2020 Population | Change | % Change |
| Under 5 years | 226,839 | 243,192 | 16,353 | 7% |
| 5 to 9 years | 217,029 | 217,399 | 370 | 0% |
| 10 to 14 years | 228,971 | 225,072 | (3,899) | (2%) |
| 15 to 19 years | 192,329 | 234,713 | 42,384 | 22% |
| 20 to 24 years | 257,169 | 219,600 | (37,569) | (15%) |
| 25 to 29 years | 256,097 | 269,268 | 13,171 | 5% |
| 30 to 34 years | 265,713 | 270,456 | 4,743 | 2% |
| 35 to 39 years | 241,685 | 259,336 | 17,651 | 7% |
| 40 to 44 years | 227,240 | 228,617 | 1,377 | 1% |
| 45 to 49 years | 227,743 | 221,973 | (5,770) | (3%) |
| 50 to 54 years | 218,289 | 216,124 | (2,165) | (1%) |
| 55 to 59 years | 223,862 | 212,797 | (11,065) | (5%) |
| 60 to 64 years | 200,098 | 211,879 | 11,781 | 6% |
| 65 to 69 years | 158,108 | 180,856 | 22,748 | 14% |
| 70 to 74 years | 110,070 | 138,766 | 28,696 | 26% |
| 75 to 79 years | 69,140 | 90,264 | 21,124 | 31% |
| 80 to 84 years | 47,506 | 53,174 | 5,668 | 12% |
| 85 years and over | 49,226 | 51,410 | 2,184 | 4% |
| Totals | 3,417,115 | 3,544,896 | 127,782 | 4% |

Source: U.S. Census Bureau compiled by EMSI

Table 8, left, shows the population demographics in the Central Planning Region. The age of the region's workers has implications for the regional economy, particularly in sectors such as healthcare. According to the Colorado Demography Office, this is the "decade of change" for Colorado, whereby the population in the state (and Central Planning Region) will grow to resemble the national population.

This means businesses will face increasing shortages of workers, and industry groups whose customers are older adults, such as nursing and residential care centers, will need to hire additional workers to accommodate that expected growth.

The Central Planning Region is anticipating that the changing employment in key age groupings of the labor force (Table 9) will create a shortfall in available workers. It is estimated that 159,076 workers over 45 years of age will be leaving the labor force each year. Only 131,655 workers under 34 will be available to replace them.

Table 9: Employment Age Groupings

| Age Band | Count | Percent |
|-------------|---------|---------|
| 14-18 Years | 4,362 | 0.7% |
| 19-24 Years | 43,043 | 7.1% |
| 25-34 Years | 134,101 | 22.0% |
| 35-44 Years | 149,595 | 24.6% |
| 45-54 Years | 146,709 | 24.1% |
| 55-64 Years | 101,919 | 16.7% |
| 65+ Years | 29,454 | 4.8% |

| Age Gap Analysis | |
|--------------------------|----------|
| Age Grouping | Percent |
| Age 34 and Under | 29.8% |
| Age 45 and Older | 45.6% |
| Industry Age Gap | 15.8% |
| Worker Shortfall (count) | (96,576) |

Source: EMSI 2015.2 Data

This means that over the next five years, there will be an estimated shortfall of 27,420 workers in the expanding regional economy.

Current Labor Force Employment and Unemployment Data

The Central Planning Region is considered a "full employment" market, which makes it more difficult for employers to fill open positions.

The total employment in the Central Planning Region is nearly 67% of Colorado's overall employment. Table 10, below, shows employment concentrations by county. Currently, the region is in a full employment market with the unemployment rate below 4.9%. At present, the unemployment rate for the region is 3.2%. Total unemployment, including marginally attached, part-time and long-term unemployed, is estimated at 114,396. Therefore, the workforce development system in the region will need to work more with WIOA's targeted populations and identify any untapped talent pool that exists within the Central Planning Region.

Table 10: Employment Concentrations by County

| Top Employment Concentrations by County | | |
|---|-----------|-------------------------|
| County | 2015 Jobs | Average Worker Earnings |
| Denver County, CO | 515,357 | \$60,191 |
| Arapahoe County, CO | 346,417 | \$57,494 |
| Jefferson County, CO | 257,699 | \$48,569 |
| Adams County, CO | 212,329 | \$46,145 |
| Boulder County, CO | 193,678 | \$55,587 |
| Larimer County, CO | 166,353 | \$42,823 |
| Douglas County, CO | 127,871 | \$55,334 |
| Broomfield County, CO | 38,807 | \$70,988 |
| Gilpin County, CO | 4,902 | \$37,678 |
| Clear Creek County, CO | 3,931 | \$44,548 |

Source: EMSI 2015.3 – QCEW Employees, Non-QCEW Employees, and Self-Employed Class of Worker

Table 11, below, shows the unemployment rate in all individual counties within the Central Planning Region, the individual workforce development areas containing more than one county, the metropolitan areas and the region as a whole.

Table 11: Unemployment Rate

| Unemployment Rate, Colorado Central Planning Region, November 2015 | | | |
|--|-------------------|-------------|------------|
| Area | Unemployment Rate | Labor Force | Unemployed |
| Adams | 3.8% | 244,895 | 9,427 |
| Arapahoe | 3.2% | 332,948 | 10,816 |
| Boulder | 2.8% | 176,779 | 4,904 |
| Broomfield | 3.0% | 33,676 | 1,000 |
| Clear Creek | 3.1% | 5,565 | 171 |
| Denver | 3.2% | 370,023 | 11,947 |
| Douglas | 2.7% | 169,318 | 4,616 |
| Gilpin | 2.6% | 3,378 | 87 |
| Jefferson | 3.1% | 312,034 | 9,583 |
| Larimer | 2.9% | 179,427 | 5,225 |
| Arapahoe/Douglas Workforce Area | 3.1% | 502,266 | 15,432 |
| Tri-County Workforce Area | 3.1% | 320,977 | 9,841 |
| Boulder MSA | 2.8% | 176,779 | 4,904 |
| Fort Collins-Loveland MSA | 2.9% | 179,427 | 5,225 |
| Denver-Aurora-Lakewood MSA | 3.2% | 1,494,481 | 48,281 |
| Colorado Central Planning Region | 3.2% | 1,828,043 | 57,776 |

Source: Local Area Unemployment Statistics (LAUS), U.S. Bureau of Labor Statistics

The following tables show estimated numbers of unemployed as well as unemployment rates within the Central Planning Region, extrapolated from the national unemployment data.

Table 12: Unemployment Rates/Estimated Counts

Table 12, right, shows the estimated numbers of persons who are long-term unemployed in the Central Planning Region, as well as an estimate of the total count of underutilized labor. This is defined by the Bureau of Labor Statistics as the "U-6" unemployment rate. The U-6 rate is defined as "total unemployed, plus all persons marginally attached to the Labor force, plus total employed part-time for economic reasons as a percent of the civilian labor force plus all persons marginally attached to the labor force."

| Estimated Counts | |
|--|----------|
| Special Population | Estimate |
| Long Term Unemployed | 14,854 |
| Working Part-Time for Economic Reasons | 70,686 |
| Estimate of U-6 Rate | 114,396 |

Sources: LAUS, National Unemployment Data

Labor Market Trends

Commute Patterns

Table 13: Inflow/Outflow Commute Patterns

| County | Inflow/Outflow | |
|-------------|-------------------------------|---------------------------------|
| | Percent Commuting into County | Percent Commuting Out of County |
| Adams | 66.3% | 71.8% |
| Arapahoe | 65.6% | 63.5% |
| Boulder | 50.2% | 41.5% |
| Broomfield | 87.9% | 86.2% |
| Clear Creek | 79.1% | 87.2% |
| Denver | 70.5% | 52.3% |
| Douglas | 64.2% | 75.4% |
| Gilpin | 89.2% | 75.1% |
| Jefferson | 58.2% | 65.5% |
| Larimer | 32.6% | 36.3% |

Source: U.S. Census Bureau

The U.S. Census Bureau has detailed data on commute patterns. Table 13, left, shows the commuter inflow/outflow patterns for each of the counties in the Central Planning Region. The "Percent Commuting into County" column shows the percent of the total jobs in each county that are filled by people who commute in from other counties. These are people who do not live in the county where they work. The "Percent Commuting out of County" column represents residents of the county who commute to other counties to work. These are people who

live in the county but commute to some other county to work. Counties that have a relatively small percentage of people commuting in and out have labor markets that are more self-contained than counties with larger percentages. One trend to watch is the percent of people in a county's labor force who work from home. In the United States, 4.5% of working people work from home. In Colorado's Central Planning Region, the county with the highest percentage of its workers working from home is Douglas County (11%).

The mean travel time to work ranges from 22.4 minutes for Boulder residents to 34.4 minutes for Clear Creek residents.



Tale 14, on the following page, shows the commute patterns across the Central Planning Region.

Table 14: Commute Patterns

| Commute Patterns within Colorado Central Planning Region | | | | | | | | | | | |
|--|----------------|----------|---------|------------|-------------|--------|---------|--------|-----------|---------|--------|
| County | Work Here | | | | | | | | | | |
| | Adams | Arapahoe | Boulder | Broomfield | Clear Creek | Denver | Douglas | Gilpin | Jefferson | Larimer | |
| Live Here | Adams | 52,689 | 20,313 | 12,331 | 6,750 | 90 | 51,015 | 4,361 | 745 | 22,661 | 2,693 |
| | Arapahoe | 20,175 | 93,767 | 4,491 | 1,851 | 84 | 81,186 | 20,168 | 434 | 19,202 | 2,344 |
| | Boulder | 5,946 | 5,380 | 71,847 | 4,401 | 142 | 11,379 | 1,813 | 205 | 7,122 | 3,771 |
| | Broomfield | 4,215 | 1,820 | 6,269 | 3,620 | 15 | 5,247 | 514 | 57 | 3,236 | 469 |
| | Clear Creek | 248 | 321 | 207 | 32 | 559 | 657 | 105 | 126 | 853 | 75 |
| | Denver | 22,753 | 47,960 | 6,735 | 2,850 | 133 | 123,320 | 11,130 | 640 | 27,430 | 2,281 |
| | Douglas | 5,755 | 39,441 | 2,486 | 989 | 60 | 30,784 | 33,766 | 142 | 13,020 | 1,410 |
| | Gilpin | 125 | 101 | 376 | 38 | 38 | 253 | 49 | 589 | 336 | 43 |
| | Jefferson | 20,948 | 32,274 | 10,916 | 5,384 | 602 | 66,726 | 9,109 | 1,938 | 85,879 | 2,675 |
| | Larimer | 3,244 | 3,809 | 8,591 | 661 | 28 | 6,238 | 1,446 | - | 3,432 | 80,550 |
| | Jobs in County | 136,098 | 245,186 | 124,249 | 26,576 | 1,751 | 376,805 | 82,461 | 4,876 | 183,171 | 96,311 |
| | Percent* | 61.3% | 61.8% | 42.2% | 86.4% | 68.1% | 67.3% | 59.1% | 87.9% | 53.1% | 16.4% |

Source: U.S. Census Bureau, Longitudinal Employer-Household Dynamics

*Percent of workers commuting into county from other counties within Colorado Central Planning Region

Educational and Skill Levels of the Region's Workforce *Educational Attainment and Field of Degree*

An analysis of the "inventory" of degreed, working-age people in the United States shows a trend that also exists in the Central Planning Region.

Figure 4: Degree Holders

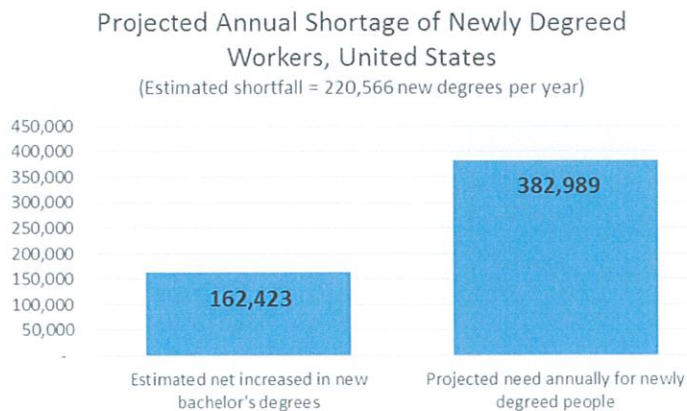


Figure 4, left, is an analysis of U.S. Census data regarding the number of degree holders in Colorado's Central Planning Region.

This bar graph illustrates a national problem; there are not enough new bachelor's degree holders to replace older degree holders leaving the labor force and fill positions created by new growth.

In Colorado, 74% of all jobs statewide will require some level of postsecondary education or training by the year 2020.⁵ Relative to the rest of the nation, Colorado has a highly educated adult population. It is estimated that 68% of adults have some college experience or a postsecondary credential, while 46% have an associate's degree or higher.⁶ When the "top jobs" were extracted from that total, the percent of jobs requiring postsecondary education or training is even larger—88% of Colorado's "top jobs" require some level of formal postsecondary education or training for entry, whether it is an employer-sponsored formal training program, apprenticeship, certificate or degree.⁷

Approximately 1.26 million bachelor's degree-holding older workers "age out" of the labor force each year, and an estimated 1.42 million new bachelor's degree holders enter the labor force. This yields a net increase in degreed workers of approximately 162,000. However, when economic growth is factored in, the data reveals that nearly 383,000 additional American jobs require a bachelor's degree each year. This means that nationally, there is an annual shortfall of over 220,000 bachelor's degrees to meet annual workforce needs.

In the Central Planning Region, this issue exists as well. Geographically specific census data shows that nearly 18,200 degreed workers age out of the regional labor force each year, while over 21,300 new degree holders join the labor force. This is a net growth of degree holders in the labor force of 3,200 per year. However, projected annual growth through 2020 of jobs in the region requiring bachelor's degrees is nearly 3,400. Therefore, the region does not have enough degreed workers to meet the labor force need.

An analysis was done of training pipeline capacity for all occupations in the region, as shown in Table 15, on the following page. Table 15 also shows the relationship between the number of "completers," or graduates from accredited programs eligible for federal financial aid and projected annual openings for each of the occupations in the computer and mathematics family. The number of completers assigned to each occupation is derived using a "crosswalk." Occupations are classified using the Standard Occupational Classification System (SOC) or ONET. Occupational training programs are ordered using the federal Classification of Instructional Programs (CIP) coding system. When these two classification systems are put side by side, the occupations a training program can prepare one for can be

⁵ Colorado Workforce Development Council. (2016). Driving Colorado Forward Together: Colorado's Combined Plan for Execution of Work force Development Activities. (Draft released for public comment January 11, 2016).

⁶ FY 2014–2015 Colorado Skills for Job Report.

⁷ Colorado Workforce Development Council. (2015). Colorado Talent Pipeline Report. Retrieved at <https://www.colorado.gov/pacific/cwdc/colorado-talent-pipeline-report>.

subjectively determined.

Unfortunately, the CIP classification system does not crosswalk exactly with the Standard Occupational Classification (SOC) or ONET occupational codes. For example, for SOC 15-1132, Software Developers, Applications, it appears that there are 1.2 graduates for every new position. However, business leaders in the information technology and advanced manufacturing sectors have shared that this is one of the most difficult to fill positions. Table 15, on the following page, shows this might be due to weaknesses in the crosswalk of CIP codes and occupational classifications.⁸ The problem has always been that a graduate in one CIP code can ostensibly do several different occupations upon completion. While this may be true for someone obtaining a graduate degree in business administration, IT hiring managers say it is far less true for computer-related occupations.

| Training Pipeline: Colorado Central Planning Region - Computer & Mathematical | | | | | | | |
|---|--|-----------|---------------------------|-----------------------------|------------------------|---------------------------------|------------------------|
| SOC | Description | 2016 Jobs | Projected Annual Openings | Regional Completions (2014) | Completers per Opening | Typical Entry Level Education | Median Hourly Earnings |
| 15-2011 | Actuaries | 481 | 28 | 10 | 0.4 | Bachelor's degree | \$50.67 |
| 15-1132 | Software Developers, Applications | 20,114 | 622 | 724 | 1.2 | Bachelor's degree | \$47.42 |
| 15-1151 | Computer User Support Specialists | 11,317 | 461 | 728 | 1.6 | Some college, no degree | \$25.52 |
| 15-1133 | Software Developers, Systems Software | 10,176 | 305 | 795 | 2.6 | Bachelor's degree | \$49.70 |
| 15-1131 | Computer Programmers | 3,923 | 197 | 529 | 2.7 | Bachelor's degree | \$40.38 |
| 15-2031 | Operations Research Analysts | 713 | 49 | 144 | 2.9 | Bachelor's degree | \$35.77 |
| 15-1121 | Computer Systems Analysts | 8,717 | 423 | 1,244 | 2.9 | Bachelor's degree | \$40.24 |
| 15-1142 | Network and Computer Systems Administrators | 8,392 | 260 | 818 | 3.1 | Bachelor's degree | \$39.47 |
| 15-1199 | Computer Occupations, All Other | 6,624 | 168 | 1,194 | 7.1 | Bachelor's degree | \$44.14 |
| 15-1152 | Computer Network Support Specialists | 3,188 | 84 | 728 | 8.7 | Associate's degree | \$31.86 |
| 15-1141 | Database Administrators | 2,058 | 81 | 804 | 9.9 | Bachelor's degree | \$48.10 |
| 15-2041 | Statisticians | 470 | 32 | 462 | 14.4 | Master's degree | \$38.38 |
| 15-1134 | Web Developers | 3,176 | 126 | 1,908 | 15.2 | Associate's degree | \$26.39 |
| 15-1143 | Computer Network Architects | 3,502 | 105 | 1,908 | 18.2 | Bachelor's degree | \$49.20 |
| 15-1122 | Information Security Analysts | 1,235 | 73 | 1,908 | 26.1 | Bachelor's degree | \$44.95 |
| 15-1111 | Computer and Information Research Scientists | 116 | 8 | 1,459 | 194.5 | Doctoral or professional degree | \$52.34 |

Source: EMSI 2015.3 QCEW, Non-QCEW & Self-Employed Class of Worker

Table 15: Training Pipeline

Because of these discrepancies, a strong emphasis of the Central Planning Region will be to convene leaders in workforce development, postsecondary education, economic developers, industry associations and sector leaders. These groups would be in a position to thoroughly review the training pipeline in the region and align the curricula of training providers with the skills and knowledge needed by the region's employers.

⁸ Business intelligence from leaders in the information technology industry strongly suggests that qualified candidates for software developers and applications are very hard to find in the metropolitan Denver area. The problem specifically cited by industry leaders in information technology is that many current graduates do not have the specific skills they need and require too much additional in-house training to make hires feasible. (This information was derived by workforce centers through the TEC-P sector partnership currently funded in greater metro Denver by the U.S. Department of Labor).

Table 16: Unemployment Rate. Special

Colorado Central Planning Region's Regional Plan
Modified April 11, 2018

Special Populations in the Labor Force Table 16, right, shows the various populations within the region that have disproportionately high unemployment rates. Estimates in this table were extrapolated from the U.S. Bureau of Labor Statistics national unemployment data.

| Area | Unemployment Rate | Labor Force | Unemployed |
|-----------------------------------|-------------------|-------------|------------|
| All Veterans over 18 years | 3.0% | 124,819 | 3,748 |
| Gulf War II Era Veterans | 3.6% | 35,326 | 1,261 |
| Disabled Veterans* | 17.2% | 21,469 | 1,321 |
| Black or African American | 3.6% | 366,580 | 13,263 |
| Hispanic or Latino | 4.0% | 304,641 | 12,264 |
| All Teenagers (16-19) | 9.8% | 65,110 | 6,380 |
| Black or African American (16-19) | 14.7% | 7,969 | 1,174 |
| Hispanic or Latino (16-19) | 10.5% | 12,720 | 1,334 |

Sources: Local Area Unemployment Statistics (LAUS), National Unemployment Data and Connecting Colorado*

Justice System Involved

According to the U.S. Bureau of Justice Statistics, Colorado's incarceration rate is lower than the national average at 383 per 100,000 residents. This means that the Colorado Central Planning Region supports 13,239 of its resident population in prisons or local jails at an average cost of \$30,374 per year—a total cost to taxpayers of just over \$402.1million annually. In addition, data from the same source estimates the following for the Central Planning Region:

- 8,400 residents are on parole
- 65,918 residents are on probation

Poverty

The U.S. Census Bureau estimates that in 2014, the Colorado Central planning region had:

- 25,236 people receiving cash public assistance
- 95,023 people receiving Food Stamp/SNAP benefits

Individuals with Disabilities

According to the U.S. Census Bureau, an estimated 156,386 individuals with disabilities ages 18 to 64 reside in the Central Planning Region.

Homeless

In 2014, the Metro Denver Homeless Initiative issued the "State of Homelessness Report." It was based on a point in time survey, which included Adams, Arapahoe, Boulder, Broomfield, Douglas and Jefferson counties. It excluded Larimer County. The report offers the following estimates based on the survey:

- There were a total of 5,812 homeless people in the six-county area.
- Of these, 47% (2,726) were households without children, and 53% (3,086) were households with children.

- An estimated 4,644 of the homeless people were working age.
- This group included 399 veterans.

Age Bands

Because the age of the region's labor force affects regional competitiveness, an analysis was conducted to determine the age of the Central Planning Region's existing workforce. Over the next five years, the region's population under age 20 will grow by 55,000 people (6.4%), while the working age population will shrink by approximately 7,000 people. The region's population over 65 years of age will grow by over 80,000 (18%). Over the next five years, there will be an estimated shortfall of 27,420 workers in the expanding regional economy. Therefore, the region's leadership will develop strategies to retain a mature workforce. Also, the region's leadership will need to develop strategies to employ youth, who are most likely among all age bands to not be working, many of which have never had a job, and therefore will require training focused on pre-employment skills.

As shown in Table 16, below, the region will experience a substantial labor shortfall as persons over 45 years leave the labor force and are replaced by substantially fewer and younger workers.

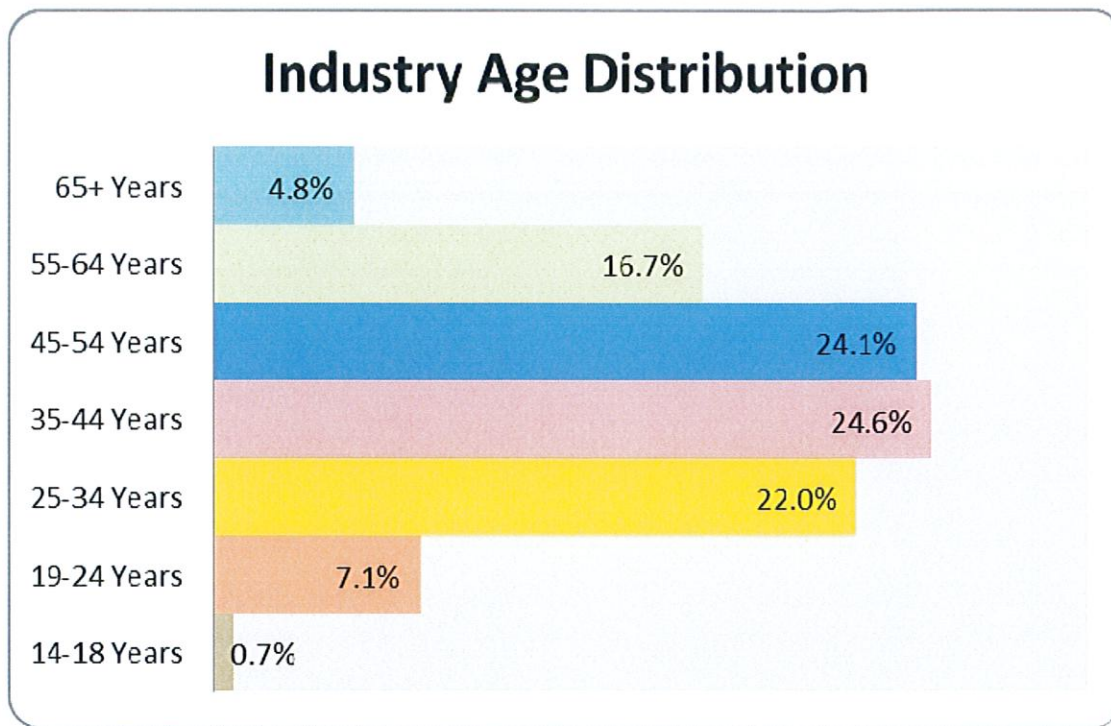
Table 16: Labor Force Age Gap

| Age Gap Analysis | |
|--------------------------|----------|
| Age Grouping | Percent |
| Age 34 and Under | 29.8% |
| Age 45 and Older | 45.6% |
| Industry Age Gap | 15.8% |
| Worker Shortfall (count) | (96,576) |

Source: EMSI 2015.2 Data

According to the Colorado State Demography office, this is the decade of change for the state in terms of age demographics. Colorado, and particularly the Central Planning Region, has heretofore experienced a relatively young population buoyed by in-migration of young, highly educated and highly skilled baby boomers who came here over decades to seek opportunity. Now, many of these baby boomers have left the labor force, or anticipate leaving the labor force over the next decade, but are staying in Colorado because of its quality of life. Thus, Colorado's overall population is growing older, and by the end of this decade, the state should reflect age demographics similar to those in the rest of the nation. Figure 5, on the following page, shows the age distribution of workers in the Central Planning Region.

Figure 5: Industry Age Distribution



WIOA Priority Populations

WIOA requires priority be given to public assistance recipients, other low-income individuals and individuals who are basic-skills deficient when providing individualized career services and training services using WIOA Title I Adult program funds. In addition, Training and Employment Guidance Letter (TEGL) 3-15 specifies that priority should also be applied to individuals who are both underemployed and low-income. Congruently, WIOA provides a focus on serving individuals with barriers to employment. The intent of this priority in the law is to ensure access to these populations. Under the previous Workforce Investment Act (WIA), priority was required for public assistance recipients and other low-income individuals when funds were limited. Under WIOA, priority of service is required regardless of the funding levels and also is expanded to include individuals who are basic-skills deficient. Thus, the Central Planning Region will give specific focus to these populations to ensure alignment of services among all local area workforce development boards and regional and WIOA partners.

With the addition of the Pikes Peak Workforce Development Area to the Colorado Central Planning Region, it is necessary to update the tables above. This table shows the latest unemployment rates (February 2018) by county within the Colorado Central Planning Region.

Unemployment

| Unemployment Rate, Colorado Central Planning Region | | | | |
|---|-------------|-----------|------------|------|
| County | Labor Force | Employed | Unemployed | U-3 |
| Adams | 266,875 | 257,353 | 9,522 | 3.6% |
| Arapahoe | 358,779 | 347,467 | 11,312 | 3.2% |
| Boulder | 191,332 | 185,861 | 5,471 | 2.9% |
| Broomfield | 38,735 | 37,615 | 1,120 | 2.9% |
| Clear Creek | 5,961 | 5,791 | 170 | 2.9% |
| Denver | 405,718 | 392,792 | 12,926 | 3.2% |
| Douglas | 187,045 | 181,916 | 5,129 | 2.7% |
| El Paso | 334,413 | 321,664 | 12,749 | 3.8% |
| Gilpin | 3,664 | 3,578 | 86 | 2.3% |
| Jefferson | 331,929 | 322,111 | 9,818 | 3.0% |
| Larimer | 198,044 | 192,306 | 5,738 | 2.9% |
| Teller | 12,446 | 11,987 | 459 | 3.7% |
| Totals | 2,334,941 | 2,260,441 | 74,500 | 3.2% |

Source: U.S. Bureau of Labor Statistics

This table provides an estimate of total unemployment within the Colorado Central Planning Region.

| Estimated Counts | | |
|--|--------------------|--------|
| Population | Cumulative Percent | Number |
| Unemployed | 3.2% | 74,500 |
| Discouraged Workers | 3.4% | 5,451 |
| Marginally Attached Workers | 3.9% | 10,902 |
| Working Part-Time for Economic Reasons | 6.3% | 56,329 |

Source: U.S. Bureau of Labor Statistics

Commute Patterns

These updated commute tables now include El Paso and Teller counties.

Table 18: Commute Matrix, Colorado Central Planning Region

| LIVE IN County | WORK IN | | | | | | | |
|-------------------|---------|----------|---------|------------|-------------|---------|---------|---------|
| | Adams | Arapahoe | Boulder | Broomfield | Clear Creek | Denver | Douglas | El Paso |
| Adams | 60,672 | 22,063 | 14,050 | 7,210 | 92 | 56,328 | 4,899 | 3,263 |
| Arapahoe | 25,810 | 102,858 | 4,786 | 1,733 | 97 | 88,344 | 23,162 | 5,440 |
| Boulder | 6,475 | 5,189 | 75,481 | 4,288 | 52 | 12,018 | 1,781 | 1,921 |
| Broomfield | 4,812 | 1,855 | 7,358 | 3,838 | 19 | 5,908 | 497 | 381 |
| Clear Creek | 254 | 302 | 125 | 38 | 740 | 614 | 90 | 62 |
| Denver | 29,400 | 55,383 | 8,045 | 3,094 | 162 | 142,630 | 12,459 | 4,195 |
| Douglas | 7,003 | 43,313 | 2,724 | 993 | 74 | 33,343 | 37,252 | 4,452 |
| El Paso | 5,311 | 9,571 | 2,365 | 778 | 42 | 11,548 | 4,533 | 178,705 |
| Gilpin | 119 | 125 | 381 | 21 | 29 | 236 | 38 | 41 |
| Jefferson | 24,011 | 34,860 | 12,485 | 5,462 | 585 | 72,089 | 10,016 | 4,944 |
| Larimer | 4,514 | 4,186 | 8,569 | 732 | 58 | 6,927 | 1,483 | 2,280 |
| Teller | 162 | 398 | 79 | 25 | 11 | 505 | 198 | 2,931 |

Source: US Census, Longitudinal Employer-Household Dynamics, On the Map

Commuter Inflow/Outflow

| County | Number Commuting into County | Number Commuting Out of County | Work and Live In County |
|-------------|------------------------------------|---|-------------------------------|
| Denver | 287,860 | 147,042 | 142,630 |
| Arapahoe | 177,245 | 172,878 | 102,858 |
| Jefferson | 113,096 | 169,683 | 90,461 |
| Adams | 107,871 | 137,152 | 60,672 |
| Boulder | 60,967 | 43,203 | 75,481 |
| Douglas | 59,156 | 107,157 | 37,252 |
| El Paso | 29,910 | 43,944 | 178,705 |
| Broomfield | 24,374 | 25,125 | 3,838 |
| Larimer | 20,000 | 32,655 | 86,785 |
| Gilpin | 3,829 | 1,358 | 682 |
| Teller | 1,837 | 4,702 | 3,463 |
| Clear Creek | 1,221 | 2,467 | 740 |

Source: US Census

This inflow/outflow table is sorted to show which counties within the Colorado Central Planning Region have the highest numbers of people commuting in from other counties to work.

Age Bands and the Labor Force

Industry Age Distribution, CCPR

| Age Band | Number | Percent |
|-------------|-----------|---------|
| 14-18 Years | 48,942 | 2.1% |
| 19-24 Years | 245,779 | 10.6% |
| 25-34 Years | 540,609 | 23.4% |
| 35-44 Years | 500,080 | 21.7% |
| 45-54 Years | 475,012 | 20.6% |
| 55-64 Years | 370,753 | 16.1% |
| 65+ Years | 127,945 | 5.5% |
| Total | 2,309,120 | 100.0% |

Source: EMSI - QCEW, Non-QCEW & Self-Employed

This table and the one below, show that the general population of the Colorado Central Planning Region, including El Paso and Teller counties, is aging.

Age Gap Analysis

| | | |
|-------------|-----------|-------|
| 34 or under | 835,330 | 36.2% |
| 45 or older | 973,710 | 42.2% |
| Age Gap | (138,380) | -6.0% |

Source: EMSI - QCEW, Non-QCEW & Self-Employed

The result is that each year, there are roughly 6,919 fewer young people entering the labor force than there are people leaving the labor force due to retirement and/or inability to work.

Annual Change

| | |
|--------------------------------|---------|
| Entering Labor Force | 41,767 |
| Vacancies (Attrition + Growth) | 48,686 |
| Annual Surplus/Shortfall | (6,919) |

Source: EMSI - QCEW, Non-QCEW & Self-Employed

What this means is that the region must increasingly depend on net in-migration to compensate for people leaving the labor

force, as well as new job growth.

| Population by Age Cohort | | | | | | |
|--------------------------|-----------------|-----------------|----------|----------------|------------------------------------|------------------------------------|
| Age Cohort | 2018 Population | 2023 Population | Change | Percent Change | Percent of Total Population (2018) | Percent of Total Population (2023) |
| Under 5 years | 276,124 | 311,908 | 35,784 | 13.0% | 6.40% | 6.85% |
| 5 to 9 years | 266,143 | 276,861 | 10,718 | 4.0% | 6.17% | 6.08% |
| 10 to 14 years | 277,345 | 269,999 | (7,346) | (2.6%) | 6.43% | 5.93% |
| 15 to 19 years | 275,059 | 282,507 | 7,448 | 2.7% | 6.37% | 6.21% |
| 20 to 24 years | 301,653 | 304,919 | 3,266 | 1.1% | 6.99% | 6.70% |
| 25 to 29 years | 343,024 | 336,121 | (6,903) | (2.0%) | 7.95% | 7.38% |
| 30 to 34 years | 343,965 | 368,521 | 24,556 | 7.1% | 7.97% | 8.09% |
| 35 to 39 years | 313,064 | 345,776 | 32,712 | 10.4% | 7.25% | 7.59% |
| 40 to 44 years | 281,791 | 310,167 | 28,376 | 10.1% | 6.53% | 6.81% |
| 45 to 49 years | 273,887 | 270,993 | (2,894) | (1.1%) | 6.35% | 5.95% |
| 50 to 54 years | 268,685 | 265,031 | (3,654) | (1.4%) | 6.23% | 5.82% |
| 55 to 59 years | 271,274 | 256,147 | (15,127) | (5.6%) | 6.29% | 5.63% |
| 60 to 64 years | 247,571 | 256,131 | 8,560 | 3.5% | 5.74% | 5.63% |
| 65 to 69 years | 212,900 | 232,157 | 19,257 | 9.0% | 4.93% | 5.10% |
| 70 to 74 years | 147,888 | 193,854 | 45,966 | 31.1% | 3.43% | 4.26% |
| 75 to 79 years | 92,324 | 129,367 | 37,043 | 40.1% | 2.14% | 2.84% |
| 80 to 84 years | 60,853 | 74,482 | 13,629 | 22.4% | 1.41% | 1.64% |
| 85 years and over | 62,493 | 67,915 | 5,422 | 8.7% | 1.45% | 1.49% |
| Total | 4,316,043 | 4,552,856 | 236,813 | 5.5% | 100.00% | 100.00% |

Source: US Census Data compiled by EMSI

Unemployment in Selected Populations

| Unemployment, Selected Populations, Colorado Central Planning Region | | |
|--|----------------|-----------------------------|
| Population | Estimated Rate | Estimated Number Unemployed |
| All Veterans over 18 years | 3.2% | 4,425 |
| Gulf War II Era Veterans | 3.9% | 1,886 |
| Disabled Veterans | 3.2% | 1,242 |
| All Individuals with Disabilities | 6.9% | 2,544 |
| Black or African American | 5.4% | 15,870 |
| Hispanic or Latino | 4.0% | 16,351 |
| All Teens age 16-19 | 11.2% | 9,773 |
| Black or African American (age 16-19) | 21.2% | 2,451 |
| Hispanic or Latino (age 16-19) | 11.1% | 2,059 |

Source: US Bureau of Labor Statistics

Estimates for this table were derived using the U.S. Bureau of Labor Statistics Unemployment Situation Summary and Local Area Unemployment Statistics.

Training Pipeline Shortfalls

The following tables show the top regional training pipeline shortfalls by postsecondary educational attainment level. It is recommended that workforce development professionals work in a convening role with businesses and postsecondary educators to validate this data and to ensure curriculum design is business-relevant.

| Training Pipeline, Top Occupations in Industry, Colorado Central Planning Region | | | | | |
|--|---|--------|-----------------|-----------------------------|----------------------|
| SOC | Nondegree Postsecondary Certificate | Jobs | Annual Openings | Regional Completions (2016) | Surplus/ (Shortfall) |
| 43-3031 | Bookkeeping, Accounting, and Auditing Clerks | 24,149 | 2,868 | 373 | (2,495) |
| 53-3032 | Heavy and Tractor-Trailer Truck Drivers | 19,116 | 2,458 | 0 | (2,458) |
| 25-9041 | Teacher Assistants | 16,933 | 2,168 | 2 | (2,166) |
| 31-1014 | Nursing Assistants | 15,678 | 2,352 | 1,470 | (882) |
| 39-5012 | Hairdressers, Hairstylists, and Cosmetologists | 11,240 | 1,652 | 1,034 | (618) |
| 49-2022 | Telecommunications Equipment Installers and Repairers, Except Line Installers | 4,086 | 495 | 0 | (495) |
| 49-9021 | Heating, Air Conditioning, and Refrigeration Mechanics and Installers | 4,932 | 623 | 255 | (368) |
| 29-2061 | Licensed Practical and Licensed Vocational Nurses | 4,481 | 550 | 195 | (355) |
| 25-4031 | Library Technicians | 2,142 | 326 | 0 | (326) |
| 31-9091 | Dental Assistants | 6,070 | 884 | 623 | (261) |
| 31-9011 | Massage Therapists | 6,611 | 988 | 838 | (150) |
| 49-2011 | Computer, Automated Teller, and Office Machine Repairers | 1,706 | 194 | 44 | (150) |
| 27-4011 | Audio and Video Equipment Technicians | 1,352 | 159 | 26 | (133) |
| 15-1151 | Computer User Support Specialists | 14,597 | 1,416 | 1,286 | (130) |
| 33-2011 | Firefighters | 3,614 | 311 | 188 | (123) |
| 49-2094 | Electrical and Electronics Repairers, Commercial and Industrial Equipment | 1,375 | 138 | 44 | (94) |
| 49-2097 | Electronic Home Entertainment Equipment Installers and Repairers | 821 | 94 | 0 | (94) |
| 33-1021 | First-Line Supervisors of Fire Fighting and Prevention Workers | 929 | 77 | 20 | (57) |
| 51-5111 | Prepress Technicians and Workers | 486 | 55 | 0 | (55) |
| 29-2057 | Ophthalmic Medical Technicians | 734 | 82 | 33 | (49) |

Source: IPEDS Data Compiled by EMSI 2018.1

| Training Pipeline, Top Occupations in Industry, Colorado Central Planning Region | | | | | |
|--|---|-------|-----------------|-----------------------------|----------------------|
| SOC | Associate's Degree | Jobs | Annual Openings | Regional Completions (2016) | Surplus/ (Shortfall) |
| 23-2011 | Paralegals and Legal Assistants | 5,539 | 667 | 245 | (422) |
| 43-4161 | Human Resources Assistants, Except Payroll and Timekeeping | 2,265 | 273 | 0 | (273) |
| 29-2021 | Dental Hygienists | 4,090 | 378 | 167 | (211) |
| 25-2011 | Preschool Teachers, Except Special Education | 8,884 | 1,022 | 841 | (181) |
| 19-4099 | Life, Physical, and Social Science Technicians, All Other | 919 | 134 | 15 | (119) |
| 19-4031 | Chemical Technicians | 836 | 95 | 0 | (95) |
| 17-3013 | Mechanical Drafters | 832 | 78 | 0 | (78) |
| 49-9062 | Medical Equipment Repairers | 883 | 95 | 31 | (64) |
| 17-3012 | Electrical and Electronics Drafters | 621 | 63 | 0 | (63) |
| 19-4041 | Geological and Petroleum Technicians | 429 | 53 | 0 | (53) |
| 29-2012 | Medical and Clinical Laboratory Technicians | 1,845 | 187 | 138 | (49) |
| 49-2021 | Radio, Cellular, and Tower Equipment Installers and Repairs | 369 | 46 | 0 | (46) |
| 27-4012 | Broadcast Technicians | 648 | 62 | 28 | (34) |
| 53-2021 | Air Traffic Controllers | 338 | 32 | 0 | (32) |
| 43-9031 | Desktop Publishers | 226 | 24 | 0 | (24) |
| 17-3021 | Aerospace Engineering and Operations Technicians | 311 | 32 | 12 | (20) |
| 17-3026 | Industrial Engineering Technicians | 657 | 63 | 47 | (16) |
| 17-3025 | Environmental Engineering Technicians | 327 | 37 | 24 | (13) |
| 17-3027 | Mechanical Engineering Technicians | 500 | 53 | 43 | (10) |
| 17-3024 | Electro-Mechanical Technicians | 186 | 19 | 12 | (7) |

Source: IPEDS Data Compiled by EMSI 2018.1

| Training Pipeline, Top Occupations in Industry, Colorado Central Planning Region | | | | | |
|--|---|--------|-----------------|-----------------------------|----------------------|
| SOC | Bachelor's Degree | Jobs | Annual Openings | Regional Completions (2016) | Surplus/ (Shortfall) |
| 13-1199 | Business Operations Specialists, All Other | 36,887 | 3,773 | 21 | (3,752) |
| 13-2011 | Accountants and Auditors | 33,497 | 3,659 | 1,349 | (2,310) |
| 25-2021 | Elementary School Teachers, Except Special Education | 21,520 | 1,998 | 443 | (1,555) |
| 13-1161 | Market Research Analysts and Marketing Specialists | 14,407 | 1,804 | 338 | (1,466) |
| 41-3031 | Securities, Commodities, and Financial Services Sales Agents | 10,355 | 1,163 | 0 | (1,163) |
| 25-2031 | Secondary School Teachers, Except Special and Career/Technical Education | 13,932 | 1,281 | 451 | (830) |
| 27-2022 | Coaches and Scouts | 6,604 | 1,024 | 198 | (826) |
| 29-1141 | Registered Nurses | 40,855 | 3,382 | 2,658 | (724) |
| 41-4011 | Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products | 5,623 | 672 | 21 | (651) |
| 13-1023 | Purchasing Agents, Except Wholesale, Retail, and Farm Products | 5,576 | 549 | 0 | (549) |
| 25-2022 | Middle School Teachers, Except Special and Career/Technical Education | 10,483 | 964 | 431 | (533) |
| 13-1041 | Compliance Officers | 4,601 | 446 | 29 | (417) |
| 13-1121 | Meeting, Convention, and Event Planners | 2,984 | 409 | 0 | (409) |
| 41-9031 | Sales Engineers | 3,439 | 381 | 0 | (381) |
| 13-1071 | Human Resources Specialists | 10,112 | 1,127 | 796 | (331) |
| 27-1024 | Graphic Designers | 5,595 | 600 | 274 | (326) |
| 15-1132 | Software Developers, Applications | 26,019 | 2,236 | 1,935 | (301) |
| 13-1081 | Logisticians | 2,823 | 312 | 11 | (301) |
| 19-4021 | Biological Technicians | 2,632 | 285 | 0 | (285) |
| 17-2051 | Civil Engineers | 8,059 | 723 | 448 | (275) |

Source: IPEDS Data Compiled by EMSI 2018.1

| Training Pipeline, Top Occupations in Industry, Colorado Central Planning Region | | | | | |
|--|--|--------|-----------------|-----------------------------|----------------------|
| SOC | Graduate Level or Professional Degree | Jobs | Annual Openings | Regional Completions (2016) | Surplus/ (Shortfall) |
| 21-1014 | Mental Health Counselors | 4,386 | 582 | 245 | (337) |
| 23-1011 | Lawyers | 12,939 | 739 | 620 | (119) |
| 21-1012 | Educational, Guidance, School, and Vocational Counselors | 3,537 | 448 | 330 | (118) |
| 25-4021 | Librarians | 1,796 | 195 | 79 | (116) |
| 21-1022 | Healthcare Social Workers | 2,155 | 301 | 192 | (109) |
| 29-1123 | Physical Therapists | 4,288 | 346 | 245 | (101) |
| 29-1122 | Occupational Therapists | 2,422 | 205 | 160 | (45) |
| 21-1023 | Mental Health and Substance Abuse Social Workers | 1,601 | 231 | 192 | (39) |
| 29-1071 | Physician Assistants | 2,476 | 218 | 191 | (27) |
| 21-1015 | Rehabilitation Counselors | 1,614 | 200 | 190 | (10) |
| 29-1066 | Psychiatrists | 371 | 21 | 17 | (4) |
| 29-1127 | Speech-Language Pathologists | 2,987 | 238 | 234 | (4) |
| 19-3051 | Urban and Regional Planners | 628 | 63 | 61 | (2) |
| 19-1041 | Epidemiologists | 278 | 27 | 25 | (2) |

Source: IPEDS Data Compiled by EMSI 2018.1

Net Educational Attainment,
Colorado Central Planning Region



Annual Degree Surplus/(Shortfall)

This bar graph, taken from the US Census American Community Survey, shows that in the Colorado Central Planning Region, approximately 6,350 more newly degreed persons will enter the labor force each year than will leave.

This is generally good news, although this number can change over time, and may be affected by economic conditions as well as the cost of postsecondary training.

4. DESCRIBE THE DEVELOPMENT AND IMPLEMENTATION OF SECTOR INITIATIVES FOR IN-DEMAND INDUSTRY SECTORS OR OCCUPATIONS FOR THE PLANNING REGION, AND EXPLAIN HOW SECTOR PARTNERSHIPS WILL BE UTILIZED TO FACILITATE THE ENGAGEMENT OF EMPLOYERS, INCLUDING SMALL EMPLOYERS AND EMPLOYERS IN IN-DEMAND INDUSTRY SECTORS AND OCCUPATIONS, IN WORKFORCE DEVELOPMENT PROGRAMS.

The Central Planning Region will engage the following strategies for the development and implementation of sector initiatives for in-demand industry sectors and occupations and to facilitate the engagement of employers in workforce development programs:

- Strengthen and align existing industry sector partnerships, support the development of subsector partnerships and work to make all industry sector partnerships sustainable
- Promote clear communication of regional priorities and outcomes for industry sector partnerships so that all partners understand them and are better equipped to cooperate and collaborate
- Foster the development of reciprocal relationships between workforce and sector partners, to include training and education entities and employers, so that industry sector partnerships more effectively meet employer and jobseeker needs

Discussion

Historically, the Central Planning Region partners have undertaken sector initiatives at the local level and have engaged in regional initiatives when it has been appropriate. Such regional sector initiatives were driven by data that demonstrated there was a consistent need across local area boundaries to respond to certain in-demand industry sectors and occupations, such as healthcare, technology, manufacturing and construction.

The Central Planning Region views sector partnerships as a way to bring together employers, at a regional and local level, from the same industry with the education, training and other community support programs needed to implement solutions and services that ensure the target industry thrives and that the target talent groups improve their employment opportunities. The Central Planning Region has several existing sector initiatives within its two state-defined regions.

- Region 2, which includes Larimer, Weld and Broomfield counties, has three sector partnerships: 1) health and wellness (active), 2) advanced manufacturing (active) and 3) energy and natural resources (emerging).

- As of the date of this report, Region 2 has continued to maintain and grow the three sector partnerships above, and is adding a new sector partnership in information technology (emerging).
- Region 3, which includes Adams, Arapahoe/Douglas, Boulder and Denver counties and the Tri-County (Jefferson, Clear Creek and Gilpin) area, has five sector partnerships: 1) health and wellness (active), 2) advanced manufacturing (active), 3) landscape architecture (emerging), 4) technology and information (emerging) and 5) construction and development (exploring).
- In Region 3, existing and new developments include: 1) health and wellness (active), 2) advanced manufacturing (active), 3) retail (active), 4) information technology (active), 5) construction (active), 6) tree care (emerging), and 7) early childhood education (exploring)
- In Region 4, which includes El Paso and Teller counties, existing and new sector partnership developments include: 1) advanced manufacturing (active), 2) hospitality (emerging), 3) healthcare (active), and 4) information technology (emerging)

These sector partnerships were developed to collect industry data and design career pathways. These pathways are a series of talent development strategies and support services that enable individuals to secure employment or advance in a demand industry or occupation. The sector partnerships provide a way to ensure that the region's talent pipeline is aligned with the hiring needs of employers. Each partnership is convened by the most appropriate entity. Often this is a workforce center where a significant portion of residents are employed in a concentrated industry or the Colorado Urban Workforce Alliance when an industry is dispersed throughout the entire region. In some cases, the region's sector partnerships are supported with grant funding, e.g., Technology Employment in Colorado Partnership (TEC-P).

This approach will continue to be utilized and strengthened. For example, there continues to be a gap in communication and coordination between education providers and employers. The Central Planning Region will work to create more linear systems that influence education partners so that training and education is led by employer needs. In addition, the region will need to reinforce the work of local area workforce development boards in helping employers to understand the availability of talent and alternative forms of training, e.g., apprenticeships and work based learning opportunities.

The Central Planning Region will continue to use sector partnerships in furtherance of the state's key goal to **engage business and industry as a fulcrum to inform and align all elements of the demand-driven system**, which is described in the Colorado Combined Plan for Execution of Workforce

Development Activities. The state is committed to expanding regionally focused sector partnerships that are championed by business and industry to drive career pathways. In addition to working to expand and sustain the existing sector partnerships, the Central Planning Region will expand some of these partnerships where the data indicates there is a concentration of in-demand industries. The region may also choose to create sub-sector partnerships as well based on what the data suggests is needed. For example, the Central Planning Region will coordinate efforts that are happening in a particular locale and broaden that focus across the entire region when the issue(s) impact the entire region, thereby reducing fragmentation of effort. A key role of the Central Planning Region's leadership will also be to continuously evaluate the needs of the region to identify new industry partners that could contribute toward the resolution of critical issues, *e.g.*, establishing the priorities for the region, aligning training providers' educational curricula with employers' true needs and developing apprenticeship programs.

To help the sector partnerships have a greater impact, the Central Planning Region will work to create stronger connections between career pathways offered by education and training providers and the region's sector partnerships that are identifying skill needs and workforce trends. Over the next four years, the Central Planning Region will encourage sector partnerships to focus on their role in informing career pathway development for youth, adults and individuals facing barriers to education and employment by promoting Colorado's recently developed framework and offering tools, resources and technical assistance. The Central Planning Region's leadership will also examine a sample of recent graduates' job placement rates to identify which education and/or job-training programs in the region need to further align their curricula to employers' needs.

The Central Planning Region will also seek to conduct an evaluation of the impact and outcomes of the sector partnerships to collect and analyze data that can be used to demonstrate the partnerships' return on investment. This data will be used as a marketing tool for large and small businesses that are not yet actively involved in the relevant sector partnerships. In addition to using data to recruit new employers to the sector partnerships, the Central Planning Region seeks to leverage these sector initiatives as a way to cultivate ownership from business and industry to leverage influence and resources. Through this strategy, the Central Planning Region will support and promote options that build more employer-focused training and education systems and that encourage employers to share ownership of these partnerships.

5. DESCRIBE HOW CAREER PATHWAYS WILL BE USED TO MEET THE NEEDS OF EMPLOYERS AND SUPPORT WORK- BASED LEARNING OPPORTUNITIES.

The Central Planning Region will use the following strategies to ensure employer and jobseeker needs are met through career pathways:

- Work to expand the scope of talent development strategies for in-demand industries and occupations, including, but not limited to, boot camps, apprenticeships and job shadowing
- Explore opportunities to build innovative projects at the regional level that address hard-to-fill positions, meet industry needs and create access points for jobseekers
- Make data-informed decisions and validate career pathways with employers to ensure that local area workforce centers, as well as education and training providers within the region, are consistently meeting the needs of jobseekers and industry
- Promote consistency among local area workforce development boards and key partners in the communication and application of career pathways across the region

Discussion

The Central Planning Region will use regional data to inform the above strategies and will confirm key data points through relationships with employers. This should ensure that the career pathways identified and communicated across the region are clearly associated with employer needs and are appropriately aligned with the various entry and exit points within the industry and/or occupation. For example, the Central Planning Region will promote the use of a consistent process across all local area boards that might include some or all of the following:

- Convening employer partners to verify labor market information, identify market shifts and challenges, growth opportunities and occupational gaps
- Cataloguing the knowledge, skills and abilities that lead to success in critical occupations
- Defining career pathways that can be communicated to jobseekers and regional partners

This strategy will aim to support the alignment of curricula and credentials to workforce needs and communicate the crosswalk of core competencies, credentialing and education requirements. This would include presenting opportunities for advancement and/or lateral moves within the industry.

Each career pathway should include education, training, employment, retention and advancement requirements, so jobseekers have a clear understanding of upward mobility within the sector.

The region will also explore opportunities to invest in innovative projects that meet the needs of employers in demand industries and that support work-based learning opportunities for jobseekers across the region. Central to these strategies will be ensuring that across the region, business services, career services and all partners are consistent in how they use and communicate career pathways. By ensuring defined career pathways are effectively communicated to all key partners and customers, the Central Planning Region aims to promote new hires' and incumbent workers' knowledge of the many pathways and growth opportunities available within a specific industry sector. Also crucial to the regional strategy will be providing employers information about the benefits of creating work-based learning opportunities for their current employees, e.g., increased employee satisfaction and/or reductions in employee turnover.

Exploring new work-based learning opportunities continues to be a priority for the Colorado Central Planning Region. To date, four new federally approved apprenticeships have been created in the Region:

- In partnership with Centura Health, an apprenticeship for Medical Assistants through the Greater Metro Denver Healthcare Partnership
- In partnership with Kaiser Permanente, an apprenticeship for Medical Laboratory Assistants through the Greater Metro Denver Healthcare Partnership
- Software Development Apprenticeship in IT through the Technology Employment in Colorado Partnership (TEC-P)
- Advanced Manufacturing Technician Apprenticeship Program (AMTAP) through Lockheed Martin and supported by the workforce regions within the Central Planning Region

Particularly in Region 4, an important part of Work Based Learning is Incumbent Worker Training where public dollars are available to employers to up-skill their existing employees. By providing more training to existing employees, businesses can then move those employees into higher positions within their company and open up entry level positions for workforce centers to assist to fill. Incumbent Worker Training is vital to fill critical skills gaps in this region.

The Colorado Central Planning Region will build on existing efforts, particularly in the realm of Work Based Learning, to ensure that workforce terminology is translated into words that are understood by

businesses.

6. DESCRIBE OTHER STRATEGIES AND SERVICES THAT WILL BE USED IN THE PLANNING REGION TO SUPPORT A LOCAL WORKFORCE DEVELOPMENT SYSTEM THAT MEETS THE NEEDS OF BUSINESSES IN THE PLANNING REGION.

The Central Planning Region will engage additional strategies to support a local workforce development system that meets the workforce needs across the planning region. These will include:

- When it is appropriate, leverage the collective resources of the local area workforce development boards to develop collaborative initiatives that engage with industry specific associations and aim to reduce duplication in efforts
- Coordinate and convene with the appropriate stakeholders in the community to encourage collaboration and avoid duplication of efforts on activities related to workforce and economic development
- Promote a consistent voice and systems across all local area workforce centers and regional partners to ensure a more seamless continuum of services for employer and jobseeker customers throughout the region
- Combine expertise across the partners to work with industry partners in a concerted effort, resulting in less duplicated business contact matched with professional staff able to address talent needs, regardless of the funding stream or targeted populations they may represent
- Coordinate service delivery and partnership alignment to maximize resources and identify and utilize the strengths available through each system

Discussion

Regionally, where there is mutual value to the local areas, the Central Planning Region will work to leverage resources to serve specific target industries through cross-regional industry sector initiatives, e.g., Greater Metro Denver Healthcare Partnership. Rather than address cross-regional trends and issues in local area silos, the Central Planning Region will determine how it can unify local areas in focused initiatives to better serve the needs of specific industries.

Additionally, to further reduce duplication, the Central Planning Region will work to develop a unified voice and systems among all of the local area workforce boards. This will be accomplished through supporting and promoting the state's efforts in cross-training staff and partners so that the systems and language used by local area workforce centers and partners are consistent and comparable across

the region. Colorado's case management, data collection and reporting system, Connecting Colorado, has recently been upgraded to provide for data integration and system alignment so that local areas can more efficiently and seamlessly serve customers across workforce and human service programs. In turn, this will reduce duplication of effort and data entry so that local areas can better match jobseeker participants to employer needs. The system provides the ability for Workforce Centers and their partners to track all WIOA Title 1-B, TAA, Veteran, Wagner-Peyser, state and local programs (approximately 100), plus discretionary grants in one common database. Workforce partners may make use of this system through data sharing agreements with the state or the local workforce areas. This system will be updated to reflect all WIOA changes and requirements over the life of this four-year combined plan. A key element of the newly integrated system is a common coding system, including common service codes that will improve data sharing and the use of comparable measures across the region. This will ultimately support the Central Planning Region in effectively and comprehensively analyzing performance at the local and regional levels. The Central Planning Region will support the state in this effort and comply with all requirements to ensure all local area staff and partners across the region are cross-trained and using the enhanced system consistently.

To support the new system, the local area workforce boards in the Central Planning Region will formally convene through already established statewide discussions. Workforce area directors will meet on a monthly basis to discuss state issues, and through this plan, will also take time to caucus as a regional planning group to determine how to move forward and assess progress. These partnerships are experiencing a new enthusiasm and willingness to work more closely in an effort to service all customers in a more thorough and seamless fashion. The Central Planning Region is committed to maximizing its mandated partner relationships to prepare WIOA candidates for success.

Workforce Development Areas within the Colorado Central Planning Region have held focus groups with business leaders to determine the most valuable data needed by businesses in competitive wage analysis, key industry profiles, and regional profiles. A Central Planning Region data group has been created to ensure alignment and standardization of data products for use by regional businesses.

Alignment of business services throughout the region and statewide continues through the Colorado Business Development Representative Group chartered by local and statewide workforce development leadership.

To further meet the needs of businesses throughout Colorado, and in the Colorado Central Planning

Region, the Colorado Workforce Development Council worked through the Colorado Department of Labor and Employment in issuing an RFP and awarding a state-level contract to Economic Modeling Specialists, Inc. (EMSI) for its Developer product. CWDC is also sponsoring beginning and advanced EMSI training throughout Colorado through the Statewide Business Services Alignment effort.

7. DESCRIBE EFFORTS THAT HAVE TAKEN PLACE OR ANTICIPATED EFFORTS TO ASSESS THE NEED FOR AND ESTABLISH REGIONAL SERVICE STRATEGIES, INCLUDING THE USE OF COOPERATIVE SERVICE DELIVERY AGREEMENTS.

The Central Planning Region will continue to support the efforts of the local area workforce development boards in implementing local area service strategies and will identify opportunities for regional services strategies, when applicable and beneficial to the region. Regional service strategies will be implemented when the Central Planning Region is able to effectively leverage its resources and influence to broaden impact and minimize duplicative efforts occurring within the local areas. The Central Planning Region will pursue cooperative service delivery agreements at the regional level where they are feasible and necessary, as these are currently coordinated and managed at the local area level.

A. DESCRIBE THE STRATEGIES AND SERVICES THAT WILL BE USED IN THE PLANNING REGION TO BETTER COORDINATE WORKFORCE DEVELOPMENT PROGRAMS AND SERVICES WITH REGIONAL ECONOMIC DEVELOPMENT SERVICES AND PROVIDERS.

The Central Planning Region will continue to partner and coordinate workforce development programs and services with economic entities under the umbrella of the Metro Denver Economic Development Corporation (Metro Denver EDC), a regional economic development organization that works in partnership with every city, county and economic development group within the Central Planning Region. Metro Denver EDC provides customers with resources and proprietary market research and analysis. Metro Denver EDC also serves as a liaison between the region's businesses, elected officials and workforce development boards.

B. DESCRIBE HOW THE PLANNING REGION WILL STRATEGICALLY COORDINATE WORKFORCE WITH METRO INVESTMENT ACTIVITIES WITH THE PROVISION OF ADULT EDUCATION AND LITERACY ACTIVITIES UNDER TITLE II.

The Central Planning Region will support the local area plans. These plans will coordinate the provision of adult education and literacy activities under Title II. Local area plans include memoranda of

understanding with service providers for these activities. When appropriate, the local areas will address these services using a regional-level service model. For example, there may be a need for regional activities in cases where customers are residents of one county but working and seeking services in another county. In such cases, the Central Planning Region would work to establish appropriate cooperative agreements to coordinate adult education and/or literacy activities cross-regionally rather than disrupt or deliver inconsistent services to the customer.

C. DESCRIBE HOW THE PLANNING REGION WILL STRATEGICALLY COORDINATE WORKFORCE INVESTMENT ACTIVITIES WITH THE PROVISION OF VOCATIONAL REHABILITATION SERVICES UNDER TITLE IV.

The Central Planning Region will support the local area plans, which will coordinate the provision of vocational rehabilitation services under Title IV. Local area plans include memoranda of understanding with service providers for these activities. When appropriate, local areas will address these services using a regional-level service model. The Central Planning Region will share best practices from different workforce areas in providing universal access to programs and services when serving individuals with disabilities.

D. DESCRIBE THE STRATEGIES AND SERVICES THAT WILL BE USED IN THE PLANNING REGION TO STRENGTHEN LINKAGES BETWEEN THE ONE-STOP DELIVERY SYSTEM AND UNEMPLOYMENT INSURANCE PROGRAMS.

The Central Planning Region will support the local area plans, which will coordinate linkages between the one-stop delivery system and unemployment insurance programs as appropriate to their county. Local area plans include memoranda of understanding with service providers for these activities. When appropriate, local areas will address these services using a regional level service model.

E. PROVIDE A DESCRIPTION OF HOW THE LOCAL BOARD WILL COORDINATE WORKFORCE INVESTMENT ACTIVITIES CARRIED OUT IN THE LOCAL AREA WITH STATEWIDE RAPID RESPONSE ACTIVITIES, AS DESCRIBED IN SECTION 134(A){2}{A}.

Please refer to local area plans, which state specifically how each workforce development board will work with statewide rapid response activities. All local workforce development boards in the Central Planning Region will comply with rapid response guidelines set by the Colorado Department of Labor and Employment, as described in the local area plan. Coordination of these activities will be based on employer and jobseeker needs.

At this update:

- MOUs are in place with local partners.
- Infrastructure agreements are in place with all state (Unemployment Insurance, Division of Vocational Rehabilitation) and local partners (Adult Basic Education).
- The Central Planning Region completed an economic impact report on workforce center operations (see attached), and a regional profile for the Central Planning Region.
- Each local area has developed relationships with local economic developers and chambers of commerce.

8. PROVIDE A DESCRIPTION OF THE REPLICATED COOPERATIVE AGREEMENTS (AS DEFINED IN SECTION 107(D){II}) BETWEEN THE LOCAL BOARD OR OTHER LOCAL ENTITIES DESCRIBED IN SECTION 101(A){11}(B) OF THE REHABILITATION ACT OF 1973 {29 U.S.C.721(A){II}(B)} AND THE LOCAL OFFICE OF A DESIGNATED STATE AGENCY OR DESIGNATED STATE UNIT ADMINISTERING PROGRAMS CARRIED OUT UNDER TITLE I OF SUCH ACT {29 U.S.C.720 ET SEQ.) (OTHER THAN SECTION 112 OR PART C OF THAT TITLE (29 U.S.C. 732,741) AND SUBJECT TO SECTION 121(F)} IN ACCORDANCE WITH SECTION 101(A){11} OF SUCH ACT (29 U.S.C.721 (A){11}) WITH RESPECT TO EFFORTS THAT WILL ENHANCE THE PROVISION OF SERVICES TO INDIVIDUALS WITH DISABILITIES AND TO OTHER INDIVIDUALS, SUCH AS CROSS TRAINING OF STAFF, TECHNICAL ASSISTANCE, USE AND SHARING OF INFORMATION, COOPERATIVE EFFORTS WITH EMPLOYERS, AND OTHER EFFORTS AT COOPERATION, COLLABORATION, AND COORDINATION.

The Central Planning Region is committed to providing services to individuals with disabilities and other untapped talent. It will explore opportunities for cooperative agreements among local boards and other local entities. Examples of these cooperative agreements may include, but are not limited to: 1) sharing labor market information with WIOA partners, including adult basic education providers and the Division of Vocational Rehabilitation; 2) engaging key stakeholders from businesses and industries cooperatively; and 3) enhancing the coordination of the continuum of talent development strategies for shared customer bases across systems to build and maximize staff capacity, resources and communication.

9. IF DETERMINED APPROPRIATE BY THE PLANNING REGION, DESCRIBE THE COORDINATION OF TRANSPORTATION AND OTHER SUPPORTIVE SERVICES OR DISCUSS WHY THESE ARE NOT

APPROPRIATE FOR THE PLANNING REGION AT THIS TIME.

The Central Planning Region's strategy for the coordination of transportation and other supportive services will center on using the collective voice of the region to approach agencies and negotiate competitive rates. This should improve the accessibility and affordability of these services to its customers. The region anticipates that the size and volume of its customer base will contribute to its ability to negotiate the best possible value for these services. The region will prioritize these efforts based on the most prevalent needs of customers across the region (e.g., transportation services, childcare). This will require all local area workforce development boards to develop a comprehensive understanding of each other's local area needs and available resources. Workforce boards will acquire this knowledge through regular informal meetings as well as through formal regional planning sessions, as described above.

As an update, the Workforce Development Areas that make up the Central Planning Region are committed to identifying and partnering with any additional resources that can provide a more comprehensive package of wrap-around supportive services than allowed under WIOA.

10. IF DETERMINED APPROPRIATE BY THE PLANNING REGION, DESCRIBE HOW ADMINISTRATIVE COST ARRANGEMENTS HAVE BEEN COORDINATED, INCLUDING THE POOLING OF FUNDS FOR ADMINISTRATIVE COSTS OR DISCUSS WHY THESE ARE NOT APPROPRIATE FOR THE PLANNING REGION AT THIS TIME.

The Central Planning Region will not pursue administrative cost agreements. Currently, each local area has its own unique budget structure and cost allocation plan that does not permit a regional administrative cost arrangement at this time.

11. THE ESTABLISHMENT OF AN AGREEMENT CONCERNING HOW THE PLANNING REGION WILL COLLECTIVELY NEGOTIATE AND REACH AGREEMENT WITH THE GOVERNOR ON LOCAL LEVELS OF PERFORMANCE FOR, AND REPORT ON, THE PERFORMANCE ACCOUNTABILITY MEASURES DESCRIBED IN WIOA SEC. 116(c) FOR LOCAL AREAS OR THE PLANNING REGION.

Within the Central Planning Region, local area workforce boards will operate autonomously, and the region will work to collectively negotiate with the governor the accountability measures for these local areas. In addition, when it is strategically and financially in the best interest of the region and local areas, the Central Planning Region will report outcomes at the regional rather than local level. Performance accountability measures will be more fully defined when regulations are released by

the federal government on June 16, 2016.

12. PROVIDE A DESCRIPTION OF HOW ONE-STOP CENTERS ARE IMPLEMENTING AND TRANSITIONING TO AN *INTEGRATED*, TECHNOLOGY-ENABLED INTAKE AND CASE MANAGEMENT INFORMATION SYSTEM FOR PROGRAMS CARRIED OUT UNDER THIS ACT AND PROGRAMS CARRIED OUT BY ONE-STOP PARTNERS.

All Colorado local workforce centers use Connecting Colorado, which is the case management, data collection and reporting system for the state. This system is integrated and technology-enabled and allows workforce centers and their partners to track all WIOA programs in one common database. Workforce partners may make use of this system through data sharing agreements with the state or the local workforce regions. Local workforce development boards carry out workforce activities by partnering locally through memoranda of understanding to implement core, non-core and other partner programs. Given these systems are currently in place, the Central Planning Region will continue to influence and direct the development of statewide technology integration that supports the work being conducted at the regional and local area levels.

In addition, the Central Planning Region is committed to implementing regional process improvement strategies to create shared access to data across local areas. This should reduce duplicate efforts and data entry and streamline customer interactions. This will be significant, since Colorado career centers are fully integrated and operate in close partnership with other workforce agencies, making co-enrollment in multiple programs commonplace. Co-enrollment provides the customer with the ideal service plan while allowing the system to utilize its resources in an efficient manner. By working alongside the state and local areas to simplify collection of customer intake data and share this data across multiple programs, the region will work to significantly improve the customer experience and contribute to a more efficient process overall. The region will also work to evaluate and identify opportunities to implement additional streamlined systems, when applicable. For example, local area workforce development boards within the region may be able to use the same on-the-job training contracts with employers to further reduce redundancies and inefficiencies.

To support this work, the region will also explore opportunities to create common classification systems and terminology across local areas so that measures between the local workforce centers and partners are comparable and meaningful.

13. BRIEFLY DESCRIBE THE ACTIVITIES AND STEPS TAKEN TO DEVELOP THIS REGIONAL PLAN.

To ensure all relevant stakeholders were involved in the development of this plan, the Central Planning Region's leadership invited local workforce development boards, district commissioners and key partners from the Central Planning Region to participate in multiple planning and feedback sessions. The following schedule of activities outlines the steps taken to develop the regional plan:

- Full-day planning session held with local area workforce directors and staff from the region: January 19, 2016
- Full-day planning and feedback session held with local area workforce directors, staff, board members and county commissioners/local elected officials: February 18, 2016
- First draft of plan developed and reviewed by the region's workforce directors, staff, board members, county commissioners/local elected officials and partners: February 29-March 14, 2016
- Feedback incorporated into plan: March 14-March 27, 2016
- Revised plan posted for public comment on CWDC website: March 28, 2016
- Public meeting for public comment held at Larimer County Workforce Center, 200 West Oak, 1st Floor Carter Lake Conference Room, Fort Collins, Colorado, from 4:30-6 p.m. on April 5, 2016
- Public meeting for public comment held at Arapahoe Douglas Works! Career Village, 6974 S. Lima Street, Centennial, Colorado, from 3-4:30 p.m. on April 12, 2016
- Submit final plan to the state: May 1, 2016

Together with the CUWA director, local elected officials, local area directors and workforce development boards will oversee implementation of the plan and report status outcomes on an annual basis. To support ongoing assessment of the plan and evaluate progress toward outcomes, the Central Planning Region will also work to develop a dashboard that provides a regional summary of data that has been pulled from relevant and comparable local area outcomes.

As an update, the Workforce Development Areas that make up the Central Planning Region have:

- Chartered the creation of a strategic data analysis group, which has to date researched, analyzed and created a report on the economic impact of workforce development activities

within the Central Planning Region, and an economic and workforce profile of the Region.

- The group is now working on a variety of other useful tasks, including industry profiles and area profiles.
- With the addition of the Pikes Peak Workforce Development Area to the Central Planning Region, the attached economic impact and profile reports will be rewritten to include Pikes Peak.
- The strategic data analysis group provided updated data and analysis for questions 1-3 of this Plan.
- Leadership from the eight local areas met to review the existing Plan and add specific updates based on the data analysis provided.
- The draft Plan will be posted on the CWDC website for public comment.
- The draft Plan will be shared by the leadership from each local area with their Workforce Development Boards and local partners.
- A Public Comment meeting has been scheduled in collaboration with Larimer County Workforce Center on April 24th, 2018 from 4pm – 6pm at 200 W. Oak Street, Fort Collins, CO.
- Comments will be incorporated into the draft plan where appropriate and the final plan will be submitted to the Colorado Department of Labor and Employment by May 18, 2018.

14. DESCRIBE THE PROCESS USED BY THE LOCAL BOARDS IN THIS PLANNING REGION TO PROVIDE AN OPPORTUNITY FOR PUBLIC COMMENT, INCLUDING COMMENT BY REPRESENTATIVES OF BUSINESSES AND COMMENT BY REPRESENTATIVES OF LABOR ORGANIZATIONS, AND INPUT INTO THE DEVELOPMENT OF THE PLAN PRIOR TO ITS SUBMISSION.

To ensure sufficient opportunity for public comment on the regional plan, the Central Planning Region posted the draft plan for public comment to the Colorado Workforce Development Council website as well as the websites of local area workforce and county websites, where appropriate, for a 30-day period. In addition, the Central Planning Region held two public meetings in Larimer and Douglas counties to ensure participation in the northern part of the region as well as the Denver metro area. These meetings provided businesses representatives, labor organizations and other individuals and organizations an opportunity to express concerns and provide feedback on the plan. The Central Planning Region considered, captured and documented all comments and included this feedback into the plan, when it was appropriate.

As an update:

- The draft Plan will be posted on the CWDC website for public comment.
- The draft Plan will be shared by the leadership from each local area with their Workforce Development Boards and local partners.
- Comments will be incorporated and the final plan will be submitted to the Colorado Department of Labor and Employment by May 18, 2018.

Public Comments Received May 4, 2018

1. **Question: On page 22 how are you defining difficult to hire? Is it because the business didn't have the number of applicants or because the applicants didn't have the desired qualifications or are there other reasons? Please clarify.**

Answer: Difficult to hire is defined by comparing the average number of unique job postings versus the average number of monthly hires over a defined period of time, usually a year. The assumption is that if employers post more jobs than they fill, the job is likely difficult to hire, and if employers fill more jobs than they post, the job is likely easy to fill.

For example, employers in the Colorado Central Planning Region posted only 39 general office clerk positions per month, on average, while they hired an average of 2,332 per month. This could mean outreach for qualified candidates for these positions is done primarily by word of mouth; nonetheless there are over 8 hires per unique posting. This suggests the job is easy to fill.

Conversely, employers in the region posted an average of 5,984 jobs for registered nurses per month, and hired only 1,853. This strongly suggests that the position is difficult to fill. This is borne out by referring to The training pipeline table at the bottom of page 37, where 3,382 openings for registered nurses are projected each year in the region, while the training pipeline is graduating only 2,658 – a shortfall of 724 registered nurses per year. The reader should note that the average monthly hire number (for registered nurses, 1,853) is different from projected annual openings (again for registered nurses 3,382) because the data used is sourced differently. Average monthly hires is compiled by EMSI from the US Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW), and annual openings comes from the Bureau of Labor Statistics Employment Projections Program, which offers a more conservative estimate of demand.

2. **The plan is missing information related to credentials and associate degrees.**

Please refer to the upper table on page 26 for a list of the top 20 workplace (hard), essential (soft) and certifications demanded by employers in the region. For associate degrees, please refer to the top table on page 38.

