

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

**Developed in accordance with the  
Workforce Innovation and Opportunity Act**

**June 2020**



Colorado Central Planning Region

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

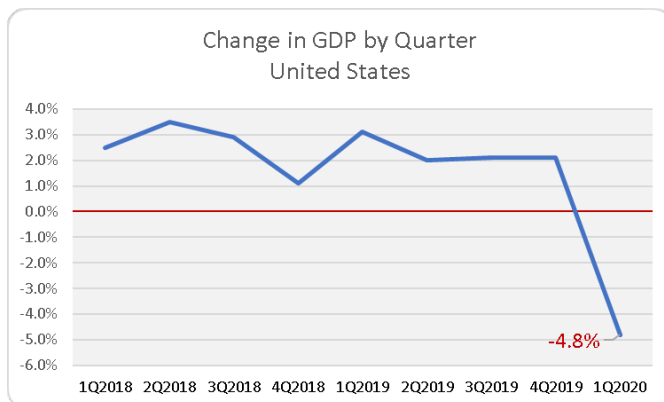
### Colorado Central Planning Region (CCPR) Plan

*When initially written, Colorado, the CCPR and all of its workforce areas were in a full-employment market and the economy was experiencing one of the longest periods of sustained growth in history. The COVID-19 pandemic changed all that, which resulted in a substantial update to this plan.*

*The reader should note that the original portion of the plan, which is clearly labeled below was left mostly intact to reflect the fundamental strength of the region's labor force. What follows immediately below is the update on the effects experienced by Colorado, the Colorado Central Planning Region and the seven workforce development areas that make up the region since we began seeing effects from the pandemic on March 1, 2020.*

***Current conditions underscore the readiness of Colorado's workforce development system to put public funds out quickly and be an integral part of economic recovery.***

#### Initial Effects of COVID-19 Pandemic: United States



The COVID-19 pandemic has had far reaching effects on the United States as a whole. We are one of the hardest hit countries in the world: At this writing, the United States has 4.25% of the world population, but has just over 32% (1.54 million) of the known cases worldwide, and has suffered 28.3% (90,717) of the deaths worldwide.

Though it has just 4.25% of the world's population, 71% of the economy in the United States is based on consumerism, and the US economy is so powerful that in 2019, it made up 15.11% of the worldwide Gross Domestic Product (GDP).

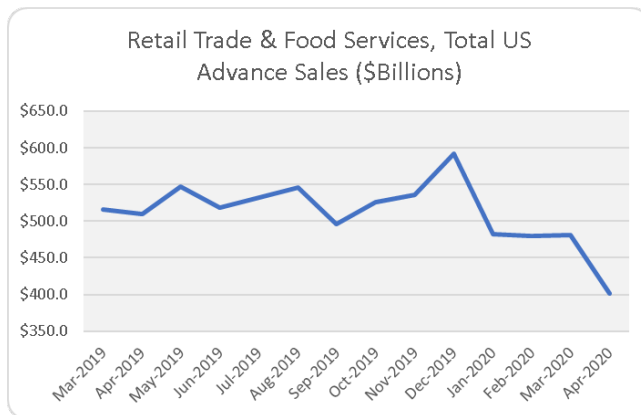
When the pandemic hit in earnest in March 2020, the economy of the United States was temporarily shut down for the purpose of flattening the curve of new cases to help the healthcare system cope. This took time, and in spite of massive stimulus packages from the U.S. government, by the week ending April 25, 2020, 34.1 million new unemployment claims had been filed by Americans, and when national unemployment numbers were reported for April on the first Friday in May, the national unemployment rate had risen from 4.4% in March 2020 to 14.7% in April. New numbers coming in suggest that when May unemployment numbers are reported on the first Friday in June, the US unemployment rate will be approximately 23%.

#### *Reduction in Demand for Goods and Services*

Without in any way diminishing the suffering of the millions of Americans laid off from their jobs, and the millions of small business who have closed or are in danger of closing, the crisis to the economy of the United States, because it is 71% consumption based, is the dramatic reduction in demand for goods and services. This affects businesses across the board, and economists at both the International Monetary

Fund and the US Federal Reserve are now predicting that the nation will not experience a full recovery until at least the end of 2021.

This lowered consumption is right now hitting durable goods and boutique retailers the hardest, while demand for groceries has risen. We are seeing reductions in prices for gasoline, motor vehicles, appliances, electronics, clothing, sporting goods, and other retailers while prices of food and drink retailers have trended up. This is because unemployment payments are a safety net only. The payments, in aggregate, make up only around 23% of the total loss of worker earnings. This drives consumer confidence down and means that people only tend to buy the basics during times of deep recession.



This US Census table shows the 16.6% decrease in sales for retail and food service establishments between March and April 2020.

A growing number of economists fear that some sectors of the economy will experience deflation as people stop spending money on them – appliances, for example, while the prices of basic items, particularly food and personal items will continue to rise.

Lowered spending on certain goods will cause layoffs in those portions of the economy, and these new layoffs will decrease worker earnings, and thus demand for goods and services even more, leading to more layoffs.

Other relevant national indicators (for March 2020, source: US Census):

- Durable goods manufacturing orders -14.4%
- New residential sales -15.4%
- New residential construction -22.3%
- New business formations -4.5% in first quarter 2020

Currently, many states have opted to loosen their initial 'stay at home' orders and allow people to return to work while keeping up social distancing. Pandemic experts are saying there will be a second wave of COVID-19 as this happens. Currently around 6,000 Americans are dying per day, and some models predict a death toll of over 250,000 by August 2020.

#### *Hidden Expense to Businesses*

In the struggle to reopen, businesses are incurring a variety of expenses, which will further affect profit margins. They must provide personal protective masks, as well as plexiglass barriers for customer facing employees. Furniture is being removed and cubicles being enlarged to allow for social distancing. Restaurants are asking for flexibility in regulations to allow for more patio dining. Factories are adjusting assembly lines to allow for social distancing. All these adjustments cost money and may force businesses to reduce staff to compensate for the higher costs.

As to the hospitality and tourism industry, Bloomberg is reporting that the number of flights have been cut by 90% for summer, and many hotels are down to 1% capacity. Recovery in this sector is being projected to lag other areas of the economy, with some tying full recovery to the development of a vaccine, which could take 18 months or longer.

#### Initial Effects of COVID-19 Pandemic: Colorado

Through the week ending April 25, 2020, nearly 360,000 Coloradans have filed new unemployment claims. As the table to the right shows, this is 11.5% of the state's total labor force. In addition, through the week ending May 2, 2020, an additional 54,000 Coloradans who are small business owners or gig workers have filed Pandemic Unemployment Assistance claims.

Geography	Labor Force	Initial Claims	Percent
Colorado	3,129,300	359,565	11.5%
Adams	280,249	33,181	11.8%
Arapahoe	374,600	45,616	12.2%
Boulder	200,110	19,220	9.6%
Denver	428,493	53,777	12.6%
Douglas	199,341	18,369	9.2%
Jefferson	344,319	38,328	11.1%
Larimer	209,090	21,847	10.4%

Sources: Bureau of Labor Statistics, Colorado Department of Labor & Employment

#### New Unemployment Claims by Industry Sector

This table shows the number of new claims by industry sector in Colorado. The reader should note that the numbers on are significantly lower than the number in the table on the previous page. This is because the industry sector of layoff is not identifiable for nearly 24% of the claims, thus the percentage of total job loss in each industry sector may be significantly higher. That said, the table below does depict those industry sectors heaviest hit by layoffs through the week ending May 2, 2020.

Note that the information published in these tables is available at statewide level only.

NAICS	Industry	Jobs	New Claims	Percent
71	Arts, Entertainment, and Recreation	70,458	17,096	24.3%
72	Accommodation and Food Services	296,615	69,471	23.4%
44	Retail Trade	288,901	38,191	13.2%
81	Other Services (except Public Administration)	148,668	17,679	11.9%
62	Health Care and Social Assistance	332,068	36,224	10.9%
21	Mining, Quarrying, and Oil and Gas Extraction	30,737	3,340	10.9%
61	Educational Services	64,386	6,095	9.5%
53	Real Estate and Rental and Leasing	69,673	6,566	9.4%
56	Administrative Support and Waste Management & Remediation	178,171	15,807	8.9%
48	Transportation and Warehousing	98,151	8,695	8.9%
42	Wholesale Trade	113,976	8,827	7.7%
31	Manufacturing	157,598	10,813	6.9%
23	Construction	224,598	12,541	5.6%
55	Management of Companies and Enterprises	43,528	2,219	5.1%
51	Information	80,451	3,950	4.9%
54	Professional, Scientific, and Technical Services	279,061	11,336	4.1%
11	Agriculture, Forestry, Fishing and Hunting	31,510	686	2.2%
52	Finance and Insurance	126,204	2,253	1.8%
90	Government	521,390	2,865	0.5%
22	Utilities	8,369	-	0.0%

Sources: EMSI QCEW, Non-QCEW & Self-Employed Class of Worker AND Colorado Department of Labor & Employment

*New Unemployment Claims by Occupational Group*

This table shows the impact of COVID-19 related mass layoffs by occupation group in Colorado. Note the total number on the table below is 374,858. This does not match the total 359,565 new claims in Colorado, very likely because a number of claimants have been laid off from multiple jobs.

Occupation Groups with Greatest Percent of Total Job Loss, Colorado				
SOC	Description	Jobs in Q42019	New UI Claims 3/1/2020- 5/2/2020	Percent of Total Jobs
35	Food Preparation and Serving Related	272,087	83,659	30.7%
31	Healthcare Support	75,706	17,307	22.9%
27	Arts, Design, Entertainment, Sports, and Media	65,403	14,874	22.7%
39	Personal Care and Service	133,060	28,101	21.1%
11	Management	160,855	28,092	17.5%
41	Sales and Related	336,371	52,544	15.6%
29	Healthcare Practitioners and Technical	164,243	20,088	12.2%
51	Production	114,821	13,012	11.3%
49	Installation, Maintenance, and Repair	121,995	13,137	10.8%
19	Life, Physical, and Social Science	35,118	3,558	10.1%
53	Transportation and Material Moving	179,772	17,827	9.9%
47	Construction and Extraction	184,216	15,722	8.5%
45	Farming, Fishing & Forestry	21,114	1,604	7.6%
37	Building and Grounds Cleaning and Maintenance	112,203	8,414	7.5%
25	Education, Training, and Library	166,639	11,934	7.2%
21	Community and Social Service	53,685	3,532	6.6%
23	Legal	27,183	1,592	5.9%
43	Office and Administrative Support	410,548	20,933	5.1%
13	Business and Financial Operations	222,009	10,000	4.5%
17	Architecture and Engineering	69,203	2,890	4.2%
15	Computer and Mathematical	132,805	4,319	3.3%
33	Protective Service	66,612	1,719	2.6%

Sources: EMSI QCEW, Non-QCEW & Self-Employed Class of Worker and CDLE Unemployment Insurance Division



*Loss in Worker Earnings and Commensurate Reduction in Demand for Goods and Services*

Estimated Loss in Worker Earnings, Colorado			
SOC	Description	Median Annual Wage	Reduction in Worker Earnings Since 3/1/2020
11	Management	\$113,244	\$275,380,117
13	Business and Financial Operations	\$72,197	\$62,496,627
15	Computer and Mathematical	\$93,562	\$34,980,029
17	Architecture and Engineering	\$83,045	\$20,775,210
19	Life, Physical, and Social Science	\$69,213	\$21,317,257
21	Community and Social Service	\$48,079	\$14,699,784
23	Legal	\$89,875	\$12,385,654
25	Education, Training, and Library	\$46,818	\$48,365,198
27	Arts, Design, Entertainment, Sports, and Media	\$46,161	\$59,435,096
29	Healthcare Practitioners and Technical	\$72,279	\$125,685,170
31	Healthcare Support	\$34,279	\$51,355,058
33	Protective Service	\$41,494	\$6,174,465
35	Food Preparation and Serving Related	\$24,166	\$175,006,099
37	Building and Grounds Cleaning and Maintenance	\$27,897	\$20,318,371
39	Personal Care and Service	\$26,015	\$63,282,725
41	Sales and Related	\$34,576	\$157,265,949
43	Office and Administrative Support	\$38,322	\$69,441,621
45	Farming, Fishing and Forestry	\$30,268	\$4,202,621
47	Construction and Extraction	\$46,084	\$62,717,837
49	Installation, Maintenance, and Repair	\$48,494	\$55,147,186
51	Production	\$35,981	\$40,527,918
53	Transportation and Material Moving	\$34,820	\$53,733,788
<b>Subtotal of Worker Earnings Lost over 9-week Period</b>			<b>\$1,434,693,780</b>
<b>Unemployment Payment Offset</b>			<b>\$1,036,000,000</b>
<b>Net Reduction in Worker Earnings</b>			<b>\$398,693,780</b>

Sources: EMSI QCEW, Non-QCEW & Self-Employed Class of Worker and CDLE Unemployment Insurance Division

When people are working and confident about the future, they buy goods and services. As mentioned earlier, 71% of the US economy is consumer driven.

When a downturn occurs, people lose confidence and do not purchase as much.

Unemployment payments are an important safety net, and with the additional pandemic assistance provided through the federal government, have offset 72.2% of the actual loss in worker earnings.

This means that business in Colorado have foregone, or

lost, an estimated \$400 million in revenues over the nine weeks from March 1 through May 2, 2020.

A reduction in demand of this magnitude will have lasting effects across the economy, even if all workers could be absorbed back into employment immediately upon relaxing the stay-at-home restrictions, which they will not.

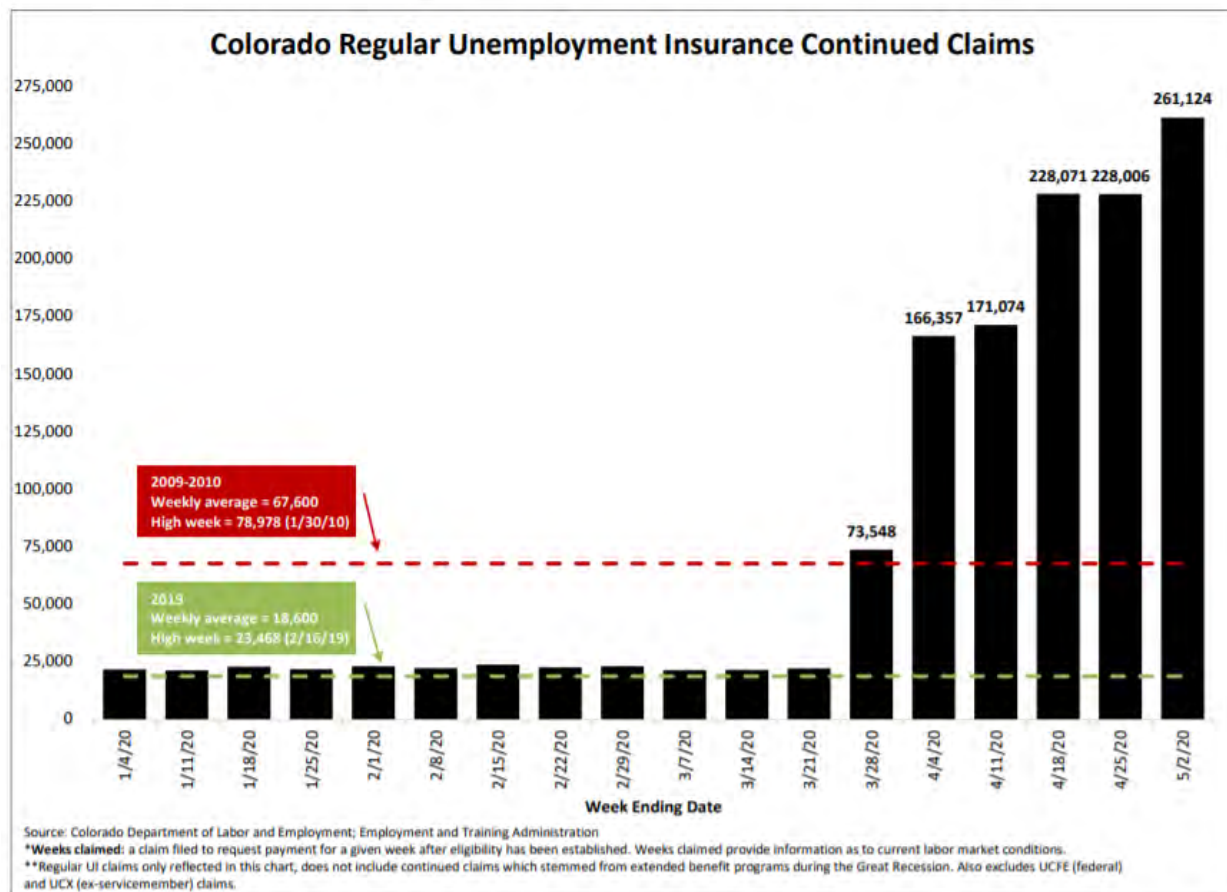
- Hospitality and recreation, which includes hotels, casinos, various tourist attractions and amusement parks, may not recover until the end of 2021, and will not be able to operate at full pre-pandemic capacity until a vaccine is developed and made widely available.
- While eating and drinking places may reopen, they will have to practice social distancing. Even with relaxation of regulations allowing more patio dining, sales will be down significantly.
- According to the Conference Board, US consumer confidence went down 31.9 points in April with projections that it will fall even further in May. The Organization for Economic Cooperation & Development (OECD) saw worldwide consumer confidence decrease from 100.54 in January 2020 to 97.82 at the end of April.
- Consumer confidence, should it remain low, may cause disruptions in other sectors of the economy, though is difficult to predict the magnitude or scope of these potential disruptions.
- Childcare availability and school re-openings will also affect the rate at which people return to work.



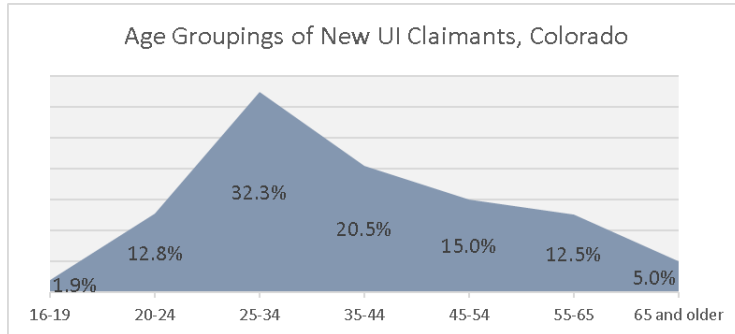
### Reabsorption of Unemployment Claimants into Economy

A key issue is how many of the workers displaced by the pandemic will be reabsorbed into gainful employment and when. The chart below shows that while 359,565 Coloradans had filed new unemployment claims between March 1, 2020 and May 2, 2020, the state paid out on 261,124 continuing claims during the week ending May 2, 2020.

Since there is no way of knowing how many of the initial claims were actually approved, it is very difficult to determine how many workers have been reabsorbed into their jobs to date. Colorado is still in the very early stages of getting people back to work, and many other factors will come into play during through 2020 and into 2021.

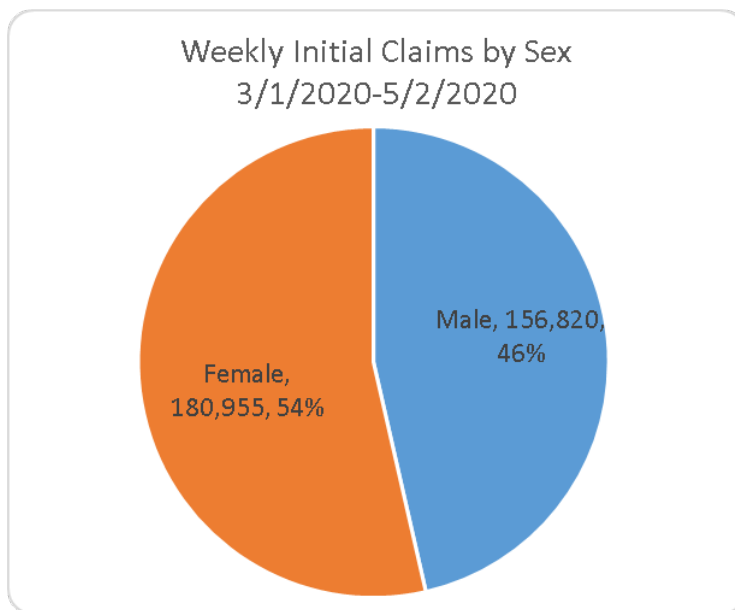


### Demographic Characteristics of Claimants



The mass layoffs in the early part of the pandemic affected hospitality and recreation, and retail the most. Because the labor force in these industries tends to be younger, the 25-34 age grouping is disproportionately represented in the new claimant population.

### Gender Disparity

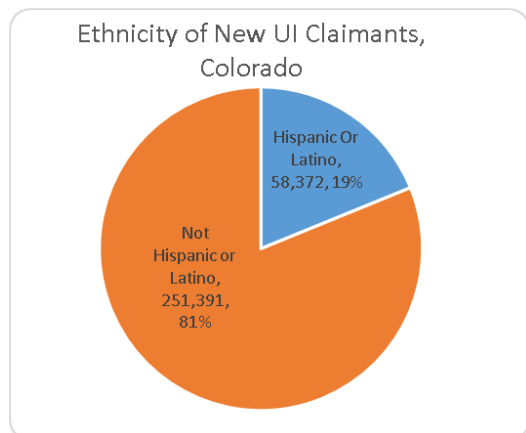
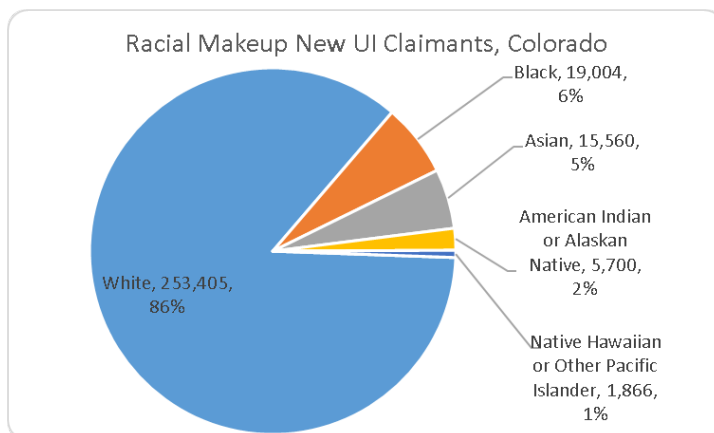


Men made up 52.9% of the state's workforce and women 47.1% prior to the pandemic. The pie chart shows that women have been disproportionately affected by the pandemic. This is because the majority of workers in the hardest hit industry groups are female.

Colorado Last Quarter 2019 Employment		
Gender	Number	Percent
Male	1,631,558	52.9%
Female	1,453,384	47.1%

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

### Race/Ethnicity of Claimants





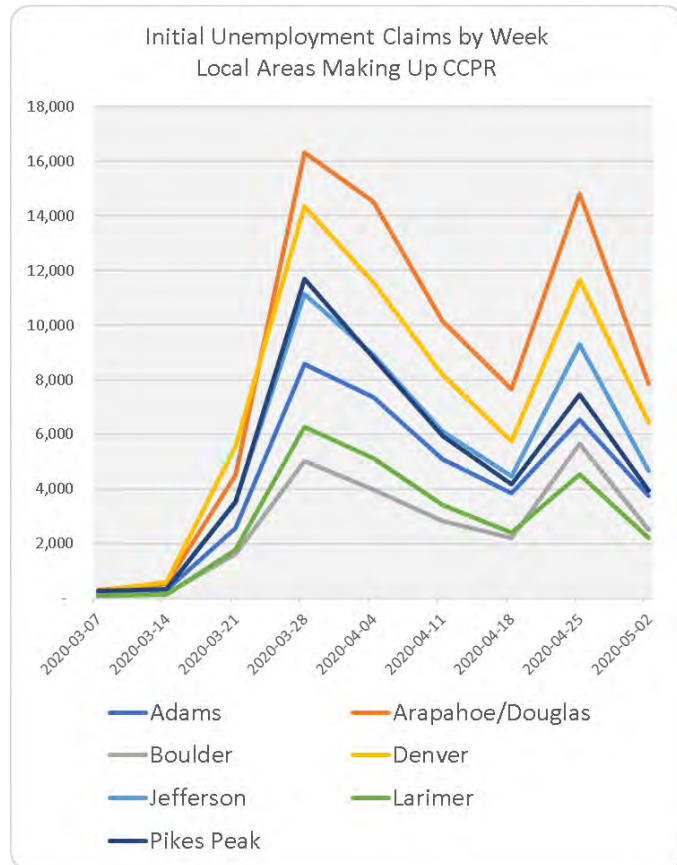
### Initial Effects of COVID-19 Pandemic: Colorado Central Planning Region & Local Workforce Areas

While the workforce, training pipeline, sector partnerships and other cooperative efforts that have kept the economy growing in the seven workforce development areas that make up the Colorado Central Planning Region remain robust, the mass layoffs resulting from the COVID-19 pandemic have to date only lightly touched some industry groups, but have decimated others. The table immediately to the right shows workforce areas most heavily hit by mass layoffs in the region. The line graph shows initial unemployment claims by workforce area from March 1, 2020 through May 2, 2020. The second spike is the Pandemic Unemployment Assistance (PUA) claims, which began the week ending April 25. PUA covers gig workers and others not traditionally eligible for regular unemployment payments.

Total new claims for 9-week period, excluding the PUA claims:

New Unemployment Claims as a Percent of the Labor Force			
Local Workforce	Labor Force	Initial Claims	Percent
Adams	280,249	33,181	11.8%
Arapahoe/Douglas	573,941	63,985	11.1%
Boulder	200,110	19,220	9.6%
Denver	428,493	53,777	12.6%
Jefferson	354,214	40,312	11.4%
Larimer	209,090	21,847	10.4%
Pikes Peak	356,814	39,111	11.0%
CCPR Total	2,402,911	271,433	11.3%

Sources: Bureau of Labor Statistics, Colorado Department of Labor & Employment



### Data Updates

Colorado has committed to a workforce system that is data driven. To this end, a statewide Workforce Intelligence Data Expert (WIDE) group that serves the workforce development system's operational and business services groups, as well as economic developers, chambers of commerce and other stakeholders to ensure that funds intended for economic recovery are targeted for optimal effect.

The CCPR, Colorado and the United States are all in the early days of returning to work. As new data becomes available, it will be used to adjust services to both job seekers and employers to be more targeted, business relevant and yield the highest possible return on investment for public funds.

## Fundamental Strengths of Labor Force in Region, January 2020

### Question 1

Provide an analysis of the regional economic conditions overall, as well as for each area included in this planning region, including existing and emerging in-demand industry sectors and occupations, and the employment needs of employers in those industry sectors and occupations.

### The Colorado Central Planning Region

County	2020 Jobs	Average Earnings Per Job	Payrolled Business Locations
Denver	571,630	\$82,564	33,770
Arapahoe	368,281	\$76,626	22,436
El Paso	354,622	\$59,592	20,393
Jefferson	271,489	\$69,313	20,529
Adams	244,311	\$64,134	11,406
Boulder	211,296	\$77,187	15,756
Larimer	188,265	\$59,249	12,526
Douglas	145,522	\$73,104	12,420
Broomfield	43,572	\$98,947	2,891
Teller	8,848	\$46,167	917
Gilpin	5,051	\$51,964	175
Clear Creek	3,658	\$54,407	377
Totals	2,416,546	\$72,135	153,595

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

The Colorado Central Planning Region (CCPR) is made up of twelve counties along the eastern slope of the Rocky Mountains. Moving south from the Wyoming border, these are Larimer, Boulder, Broomfield, Adams, Denver, Jefferson, Gilpin, Clear Creek, Arapahoe, Douglas, El Paso, and Teller counties. Together these counties make up over three quarters of the population and labor force in Colorado, and nearly eighty percent of the jobs in the state.

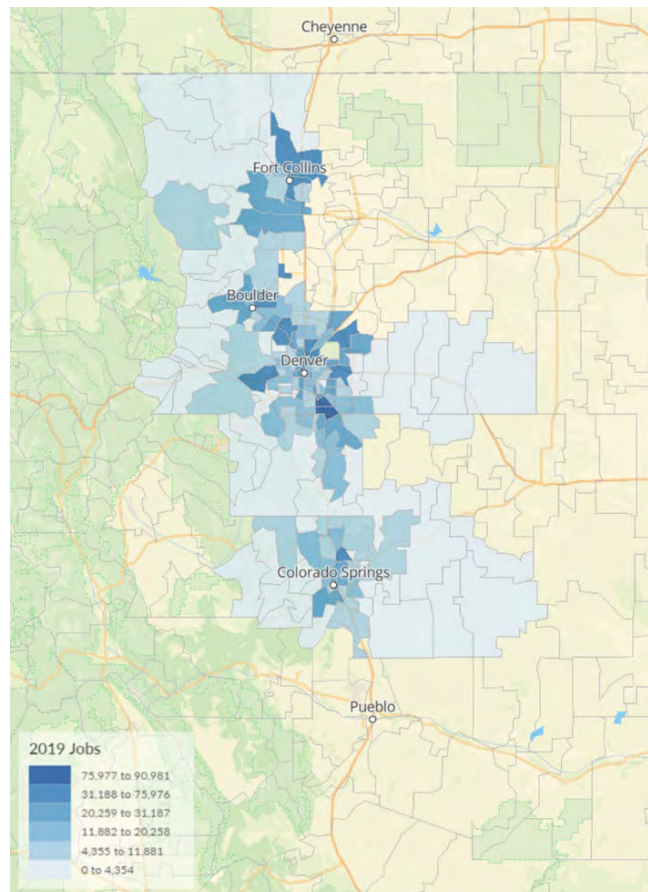
The CCPR contains four metropolitan statistical areas: these are Fort Collins (Larimer), Boulder, Denver (Adams, Jefferson, Gilpin, Clear Creek, Arapahoe and

Douglas), and Colorado Springs (El Paso and Teller).

There are seven federally defined workforce development areas that serve these eleven counties and four urban areas. Broomfield, though a sub-area of the Rural Consortium, is included in this report because it is surrounded by Boulder, Jefferson and Adams counties, and is part of Colorado's urban front range. The seven workforce development areas are:

- Adams (serving Adams County)
- Arapahoe/Douglas (serving Arapahoe and Douglas counties)
- Boulder (serving Boulder County)
- Denver (serving the City and County of Denver)
- Tri-County (serving Jefferson, Clear Creek and Gilpin counties)
- Larimer (serving Larimer County)
- Pikes Peak (serving El Paso and Teller counties)

The map shows employment concentrations by zip code and labels the four urban areas (metropolitan statistical areas) that make up the CCPR.



Essentially, employment in the state of Colorado is most heavily concentrated in the CCPR. The region has 78.7% of Colorado's jobs, and produces 83% of Gross Regional Product (GRP). At this writing, new data for the tables below is not yet available.

### sRegional Economic Conditions

Regional Comparison							
Geography	Population (2019)	Labor Force (2019)	Jobs (2019)	Cost of Living	GRP (\$Billions)	Imports (\$Billions)	Exports (\$Billions)
Colorado Central Planning Region	4,367,959	2,433,920	2,416,721	113.8	\$316.1	\$206.7	\$271.4
Colorado	5,776,548	3,178,070	3,072,205	112.7	\$379.8	\$260.6	\$323.5
Percent of State	75.6%	76.6%	78.7%		83.2%	79.3%	83.9%

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

A regional economic comparison for each of the seven workforce development areas:

Adams Workforce Area							
Geography	Population (2019)	Labor Force (2019)	Jobs (2019)	Cost of Living	GRP (\$Billions)	Imports (\$Billions)	Exports (\$Billions)
Adams Workforce Area	520,126	277,033	244,327	103.6	\$26.6	\$31.4	\$30.3
Colorado Central Planning Region	4,367,959	2,433,920	2,416,721	113.8	\$316.1	\$206.7	\$271.4
Percent of Colorado Central Planning Region	11.9%	11.4%	10.1%		8.4%	15.2%	11.2%

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

Arapahoe/Douglas Workforce Area							
Geography	Population (2019)	Labor Force (2019)	Jobs (2019)	Cost of Living	GRP (\$Billions)	Imports (\$Billions)	Exports (\$Billions)
Arapahoe/Douglas Workforce Area	1,010,068	567,905	513,844	114.0	\$72.7	\$61.9	\$61.5
Colorado Central Planning Region	4,367,959	2,433,920	2,416,721	113.8	\$316.1	\$206.7	\$271.4
Percent of Colorado Central Planning Region	23.1%	23.3%	21.3%		23.0%	29.9%	22.7%

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

Boulder Workforce Area							
Geography	Population (2019)	Labor Force (2019)	Jobs (2019)	Cost of Living	GRP (\$Billions)	Imports (\$Billions)	Exports (\$Billions)
Boulder Workforce Area	329,432	200,566	211,313	116.7	\$28.8	\$22.3	\$27.9
Colorado Central Planning Region	4,367,959	2,433,920	2,416,721	113.8	\$316.1	\$206.7	\$271.4
Percent of Colorado Central Planning Region	7.5%	8.2%	8.7%		9.1%	10.8%	10.3%

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

Broomfield Workforce Area							
Geography	Population (2019)	Labor Force (2019)	Jobs (2019)	Cost of Living	GRP (\$Billions)	Imports (\$Billions)	Exports (\$Billions)
Broomfield Workforce Area	71,134	40,902	43,584	122.6	\$8.2	\$6.8	\$9.4
Colorado Central Planning Region	4,367,959	2,433,920	2,416,721	113.8	\$316.1	\$206.7	\$271.4
Percent of Colorado Central Planning Region	1.6%	1.7%	1.8%		2.6%	3.3%	3.5%

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

Denver Workforce Area							
Geography	Population (2019)	Labor Force (2019)	Jobs (2019)	Cost of Living	GRP (\$Billions)	Imports (\$Billions)	Exports (\$Billions)
Denver Workforce Area	729,311	423,116	571,659	126.4	\$87.1	\$48.2	\$92.0
Colorado Central Planning Region	4,367,959	2,433,920	2,416,721	113.8	\$316.1	\$206.7	\$271.4
Percent of Colorado Central Planning Region	16.7%	17.4%	23.7%		27.6%	23.3%	33.9%

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

Jefferson (Tri-County) Workforce Area							
Geography	Population (2019)	Labor Force (2019)	Jobs (2019)	Cost of Living	GRP (\$Billions)	Imports (\$Billions)	Exports (\$Billions)
Tri-County Workforce Area	601,333	352,580	280,221	115.3	\$34.5	\$41.8	\$39.0
Colorado Central Planning Region	4,367,959	2,433,920	2,416,721	113.8	\$316.1	\$206.7	\$271.4
Percent of Colorado Central Planning Region	13.8%	14.5%	11.6%		10.9%	20.2%	14.4%

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

Larimer Workforce Area							
Geography	Population (2019)	Labor Force (2019)	Jobs (2019)	Cost of Living	GRP (\$Billions)	Imports (\$Billions)	Exports (\$Billions)
Larimer Workforce Area	356,604	211,381	188,291	108.0	\$19.6	\$20.0	\$20.4
Colorado Central Planning Region	4,367,959	2,433,920	2,416,721	113.8	\$316.1	\$206.7	\$271.4
Percent of Colorado Central Planning Region	8.2%	8.7%	7.8%		6.2%	9.7%	7.5%

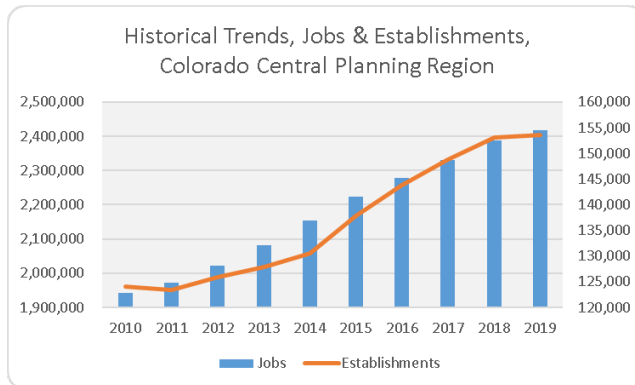
Source: EMSI - QCEW, Non-QCEW, Self-Employed & Extended Proprietor Class of Worker

Pikes Peak Workforce Area							
Geography	Population (2019)	Labor Force (2019)	Jobs (2019)	Cost of Living	GRP (\$Billions)	Imports (\$Billions)	Exports (\$Billions)
Pikes Peak Workforce Area	749,951	360,437	363,482	107.3	\$38.6	\$43.4	\$51.0
Colorado Central Planning Region	4,367,959	2,433,920	2,416,721	113.8	\$316.1	\$206.7	\$271.4
Percent of Colorado Central Planning Region	17.2%	14.8%	15.0%		12.2%	21.0%	18.8%

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

## Historical Trends

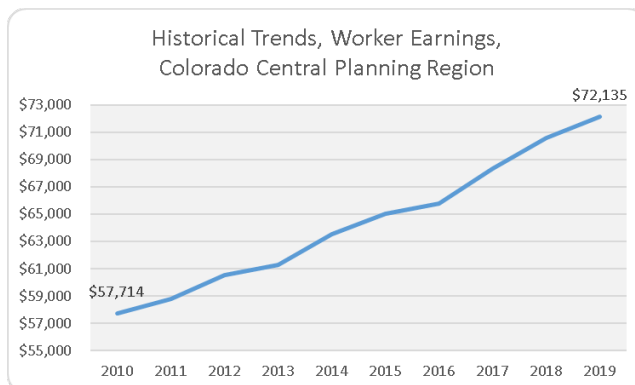
Except where indicated, source for all bar and line graphs in this Plan is EMSI Developer. Data elements from EMSI may include Class of Worker, Instructional Program Education Data System (IPEDS), age, race/ethnicity, and job posting records.



This figure shows growth in jobs and establishments over the last decade in the CCPR.

Between 2010 and 2019, the number of jobs in the region grew from 1.9 million jobs in 2010 to 2.4 million jobs in 2019, a total growth of 24.3%. This is a 1.6% annual growth rate.

The average annual earnings per worker for all jobs in the region grew 25% in the same timeframe, an annual growth rate of 2.2%.

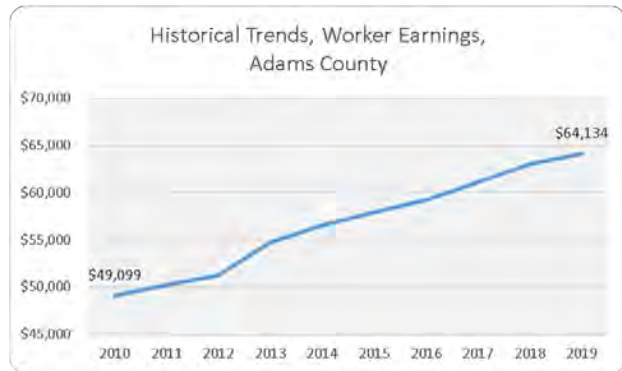
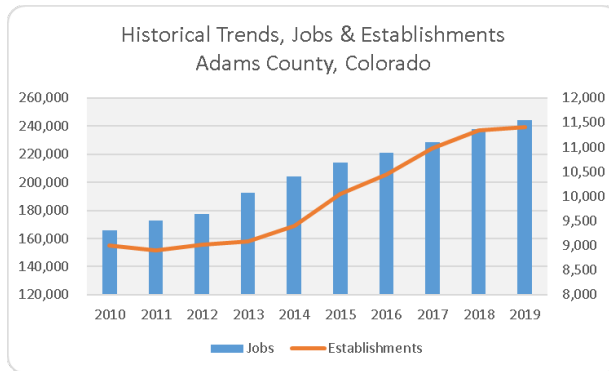


Unemployment in the CCPR has been below 4.7% since July 2014. U.S. Federal Reserve economists currently consider full employment at between 4.1% and 4.7%. Full employment is defined as the lowest unemployment rate that won't cause inflation. As of November 2019, the CCPR unemployment rate was 2.4%. The wage growth may be, in part, due to full employment.

Industries in the CCPR that added the most jobs between 2010 and 2019 were:

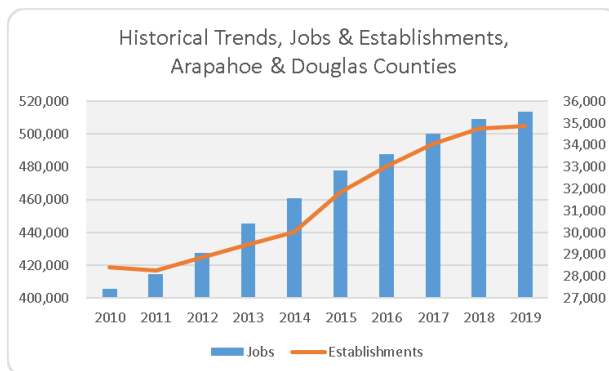
- Professional, scientific and technical services added 63,893 jobs, an annual growth rate of 3.5%.
- Healthcare and social assistance added 55,279 jobs (2.8% annual growth).
- Accommodation and food service added 53,088 jobs (3.2% annual growth).

#### Historical Trends for Each Local Workforce Area



Between 2010 and 2019, Adams County added 78,559 jobs, a 4.4% annual growth rate:

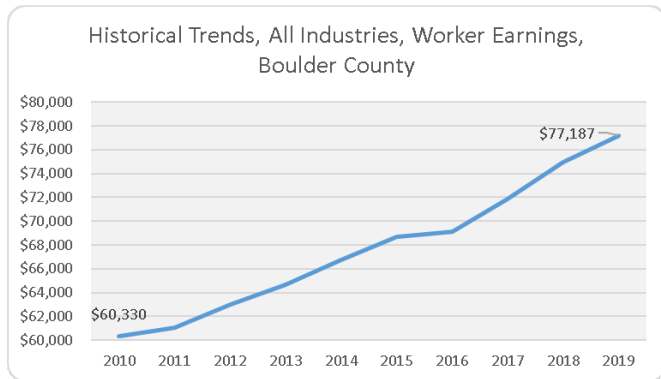
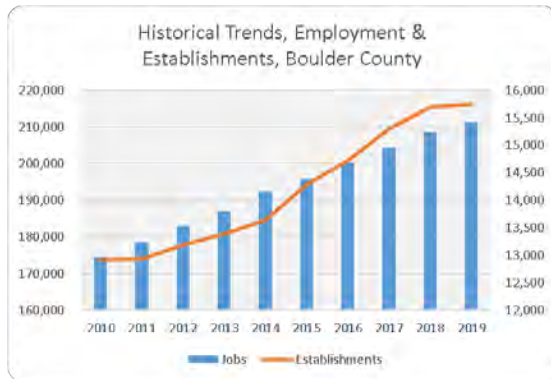
- Government added 24,284 jobs, an annual growth rate of 8.1%.
- Construction added 10,697 jobs (5.6% annual growth).
- Transportation and warehousing added 8,689 jobs (5.6% annual growth).



Between 2010 and 2019, Arapahoe and Douglas counties added 108,054 jobs, a 2.7% annual growth rate:

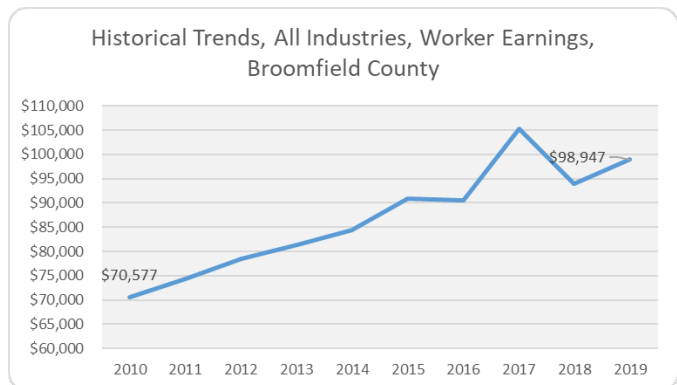
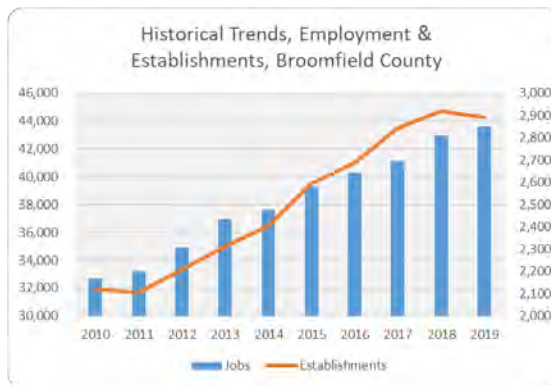
- Healthcare and social assistance added 17,422 jobs, an annual growth rate of 3.9%.
- Professional, scientific and technical services added 14,486 jobs (3.5% annual growth).
- Construction added 12,030 jobs (4.4% annual growth).





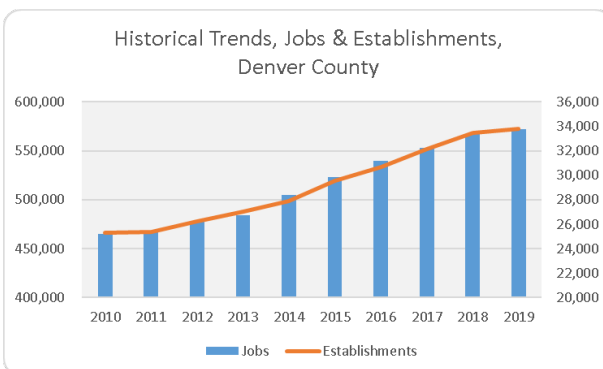
Between 2010 and 2019, Boulder County added 10,895 jobs, a 3.2% annual growth rate:

- Professional, scientific and technical services added 8,683 jobs, an annual growth rate of 3.4%.
- Healthcare and social assistance added 5,244 jobs (2.7% annual growth).
- Government added 4,812 jobs (1.6% annual growth).



Between 2010 and 2019, Broomfield County added 36,834 jobs, a 2.2% annual growth rate:

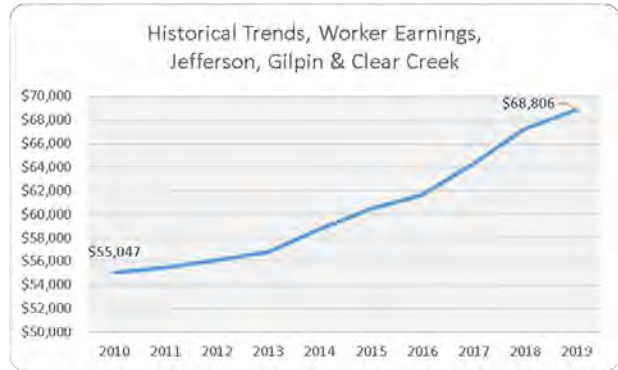
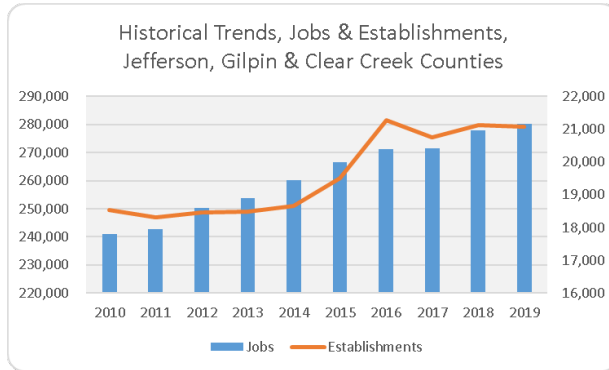
- Information added 2,089 jobs, an annual growth rate of 6.6%.
- Management of companies and enterprises added 1,834 jobs (8.7% annual growth).
- Professional, scientific and technical services added 1,621 jobs (3.5% annual growth).



Between 2010 and 2019, the City and County of Denver added 106,791 jobs, a 2.3% annual growth rate:

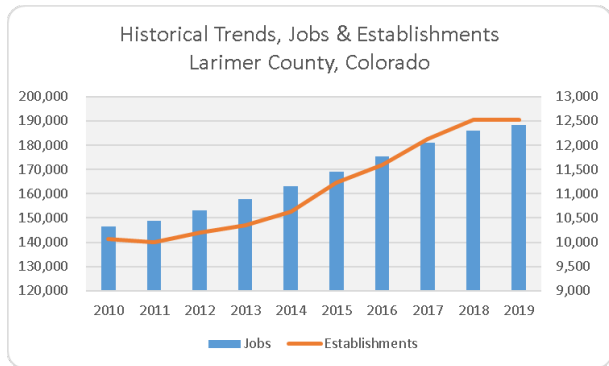
- Professional, scientific and technical services added 23,541 jobs, an annual growth rate of 5.1%.
- Accommodation and food service added 15,646 jobs (3.8% annual growth).
- Construction added 9,960 jobs (5.1% annual growth).





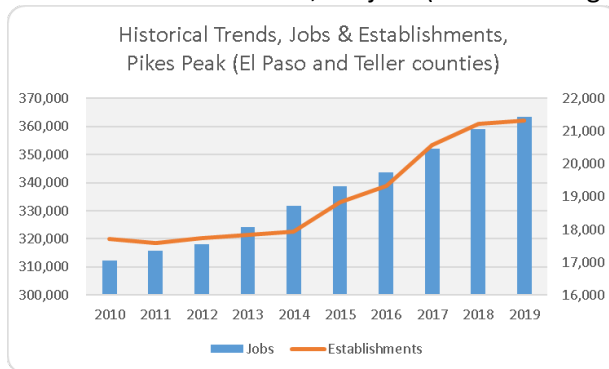
Between 2010 and 2019, Jefferson, Gilpin and Clear Creek counties, which make up the Tri-County Workforce Area added 39,149 jobs, a 1.7% annual growth rate:

- Healthcare and social assistance added 8,553 jobs, an annual growth rate of 3.4%.
- Construction added 6,216 jobs (3.8% annual growth).
- Accommodation and food service added 5,604 jobs (2.5% annual growth).



Between 2010 and 2019, the Larimer County added 41,664 jobs, a 2.8% annual growth rate:

- Government added 13,393 jobs, an annual growth rate of 4.4%.
- Accommodation and food service added 4,861 jobs (3.3% annual growth).
- Construction added 3,993 jobs (3.9% annual growth).



Between 2010 and 2019, El Paso and Teller counties which make up the Pikes Peak Workforce Area, added 51,062 jobs, a 1.7% annual growth rate:

- Healthcare and social assistance added 9,923 jobs, an annual growth rate of 3.5%.
- Accommodation and food service added 7,874 jobs (3.0% annual growth).
- Construction added 6,556 jobs (4.0% annual growth).

## Growth Projections through 2024

These tables were run in early 2020 and will clearly need post-pandemic revisions. Projections are published by the US Bureau of Labor Statistics. Note that in the 2008-2009 recession, unemployment also outpaced projections that existed at that time. Projections were revised in July 2010, and likely the same thing will happen here, but at a later date.

NAICS Code	Description	2020 Jobs	2021 Jobs	2022 Jobs	2023 Jobs	2024 Jobs	Change	Annual Growth Rate	National Location Quotient	Payrolled Business Locations
90	Government	391,510	400,996	409,265	416,413	423,240	31,729	1.6%	1.08	1,342
62	Health Care and Social Assistance	250,745	260,649	269,377	277,308	284,619	33,874	2.6%	0.82	14,096
54	Professional, Scientific, and Technical Services	237,901	246,801	254,363	260,988	266,763	28,862	2.3%	1.49	32,408
44	Retail Trade	217,509	220,674	223,428	225,892	228,134	10,625	1.0%	0.91	12,330
72	Accommodation and Food Services	215,485	222,038	227,681	232,690	237,233	21,748	1.9%	1.04	9,668
23	Construction	160,309	165,630	170,144	174,090	177,564	17,255	2.1%	1.17	13,235
56	Administrative and Support and Waste Management and Remediation Services	143,546	145,604	147,321	148,797	150,079	6,533	0.9%	0.96	9,071
31	Manufacturing	119,612	121,508	122,916	123,975	124,758	5,146	0.8%	0.63	4,307
81	Other Services (except Public Administration)	115,772	118,130	120,149	121,900	123,482	7,710	1.3%	1.01	12,739
52	Finance and Insurance	107,698	110,040	112,027	113,704	115,277	7,579	1.4%	1.11	9,083
42	Wholesale Trade	92,923	94,365	95,468	96,331	97,025	4,101	0.9%	1.05	11,035
48	Transportation and Warehousing	76,114	79,104	81,532	83,568	85,194	9,081	2.3%	0.84	2,690
51	Information	70,490	71,754	72,811	73,722	74,507	4,017	1.1%	1.61	3,523
61	Educational Services	55,115	56,848	58,336	59,554	60,719	5,604	2.0%	0.89	2,674
53	Real Estate and Rental and Leasing	51,041	52,407	53,548	54,533	55,367	4,326	1.6%	1.24	9,083
71	Arts, Entertainment, and Recreation	47,044	48,448	49,609	50,597	51,436	4,392	1.8%	1.11	2,366
55	Management of Companies and Enterprises	37,551	38,908	40,019	40,958	41,769	4,218	2.2%	1.08	2,634
21	Mining, Quarrying, and Oil and Gas Extraction	12,525	12,842	13,112	13,349	13,562	1,036	1.6%	1.22	735
11	Agriculture, Forestry, Fishing and Hunting	8,831	9,320	9,739	10,107	10,437	1,606	3.4%	0.31	418
22	Utilities	4,824	4,831	4,832	4,829	4,819	(5)	(0.0%)	0.59	160
	Totals	2,416,546	2,480,899	2,535,677	2,583,306	2,625,985	209,439	1.7%		153,595

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

NAICS Code	Description	2020 Jobs	2021 Jobs	2022 Jobs	2023 Jobs	2024 Jobs	Change	Annual Growth Rate	National Location Quotient	Payrolled Business Locations
90	Government	50,684	52,934	54,818	56,601	57,845	7,161	2.7%	1.35	125
23	Construction	28,597	29,431	30,156	30,790	31,235	2,638	1.8%	1.97	1,650
48	Transportation and Warehousing	23,755	24,808	25,679	26,406	26,788	3,033	2.4%	2.48	614
62	Health Care and Social Assistance	22,348	23,247	24,064	24,820	25,397	3,049	2.6%	0.68	853
44	Retail Trade	22,082	22,506	22,878	23,212	23,440	1,358	1.2%	0.89	1,096
72	Accommodation and Food Services	18,248	18,858	19,395	19,877	20,205	1,957	2.1%	0.83	783
42	Wholesale Trade	17,562	17,781	17,951	18,086	18,119	558	0.6%	1.91	1,085
56	Administrative and Support and Waste Management and Remediation Services	16,258	16,747	17,168	17,535	17,769	1,511	1.8%	1.03	755
31	Manufacturing	14,918	15,223	15,467	15,664	15,739	821	1.1%	0.75	489
81	Other Services (except Public Administration)	9,048	9,222	9,376	9,504	9,594	546	1.2%	0.76	885
54	Professional, Scientific, and Technical Services	8,679	8,928	9,145	9,328	9,462	783	1.7%	0.51	1,344
53	Real Estate and Rental and Leasing	4,124	4,210	4,283	4,343	4,381	257	1.2%	0.95	567
52	Finance and Insurance	3,958	4,044	4,116	4,183	4,225	267	1.3%	0.39	505
61	Educational Services	2,826	2,895	2,941	2,999	3,054	228	1.6%	0.43	146
51	Information	2,673	2,680	2,686	2,690	2,697	24	0.2%	0.58	144
71	Arts, Entertainment, and Recreation	2,561	2,680	2,782	2,871	2,927	365	2.7%	0.57	112
11	Agriculture, Forestry, Fishing and Hunting	2,092	2,148	2,199	2,249	2,278	186	1.7%	0.71	53
55	Management of Companies and Enterprises	1,776	1,811	1,841	1,866	1,880	105	1.2%	0.48	118
21	Mining, Quarrying, and Oil and Gas Extraction	1,071	1,158	1,234	1,302	1,346	275	4.7%	0.99	65
22	Utilities	638	637	637	636	635	(2)	(0.1%)	0.75	18
	Totals	253,898	261,949	268,817	274,962	279,018	25,120	1.9%		11,406

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

Regional Industry Growth Projections, Arapahoe/Douglas Workforce Area										
NAICS Code	Description	2020 Jobs	2021 Jobs	2022 Jobs	2023 Jobs	2024 Jobs	Change	Annual Growth Rate	National Location Quotient	Payrolled Business Locations
62	Health Care and Social Assistance	63,219	65,708	67,960	70,032	71,603	8,384	2.5%	0.93	3,226
90	Government	57,323	58,314	59,190	60,031	60,698	3,375	1.2%	0.74	222
54	Professional, Scientific, and Technical Services	55,819	57,440	58,866	60,114	61,022	5,203	1.8%	1.59	7,472
44	Retail Trade	55,288	55,909	56,469	56,979	57,367	2,079	0.7%	1.07	2,657
52	Finance and Insurance	42,876	43,887	44,752	45,549	46,093	3,217	1.5%	2.04	2,654
72	Accommodation and Food Services	41,528	42,559	43,478	44,315	44,916	3,388	1.6%	0.91	1,937
23	Construction	38,704	39,704	40,581	41,355	41,899	3,195	1.6%	1.28	2,961
56	Administrative and Support and Waste Management and Remediation Services	36,476	36,907	37,277	37,597	37,797	1,321	0.7%	1.11	2,191
51	Information	25,262	25,610	25,904	26,155	26,304	1,042	0.8%	2.65	837
81	Other Services (except Public Administration)	24,432	24,839	25,194	25,522	25,751	1,319	1.1%	0.98	2,682
42	Wholesale Trade	20,075	20,314	20,506	20,665	20,723	648	0.6%	1.05	2,832
55	Management of Companies and Enterprises	12,702	13,025	13,298	13,534	13,665	963	1.5%	1.66	746
31	Manufacturing	11,341	11,515	11,652	11,757	11,794	453	0.8%	0.27	629
53	Real Estate and Rental and Leasing	11,304	11,533	11,731	11,898	12,015	710	1.2%	1.26	2,060
71	Arts, Entertainment, and Recreation	10,764	11,057	11,308	11,523	11,662	898	1.6%	1.16	452
61	Educational Services	9,848	10,079	10,257	10,438	10,592	743	1.5%	0.72	563
48	Transportation and Warehousing	8,452	8,800	9,095	9,311	9,486	1,034	2.3%	0.42	511
21	Mining, Quarrying, and Oil and Gas Extraction	1,074	1,064	1,055	1,048	1,046	(29)	(0.5%)	0.48	145
11	Agriculture, Forestry, Fishing and Hunting	664	687	706	725	738	74	2.1%	0.11	62
22	Utilities	462	475	486	495	499	37	1.6%	0.26	18
	Totals	527,612	539,426	549,766	559,046	565,668	38,055	1.4%		34,856

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

Regional Industry Growth Projections, Boulder County Workforce Area										
NAICS Code	Description	2020 Jobs	2021 Jobs	2022 Jobs	2023 Jobs	2024 Jobs	Change	Annual Growth Rate	National Location Quotient	Payrolled Business Locations
90	Government	37,103	37,789	38,369	38,947	39,406	2,303	1.2%	1.16	104
54	Professional, Scientific, and Technical Services	34,429	35,422	36,290	37,044	37,582	3,153	1.8%	2.39	4,325
62	Health Care and Social Assistance	25,198	25,939	26,610	27,224	27,688	2,490	1.9%	0.90	1,558
31	Manufacturing	20,301	20,590	20,811	20,979	21,011	710	0.7%	1.20	629
72	Accommodation and Food Services	18,686	19,072	19,419	19,736	19,969	1,284	1.3%	1.00	885
44	Retail Trade	18,603	18,845	19,066	19,269	19,429	826	0.9%	0.88	1,106
51	Information	8,885	8,945	9,000	9,048	9,087	202	0.5%	2.28	516
81	Other Services (except Public Administration)	8,701	8,810	8,905	8,997	9,054	353	0.8%	0.85	1,241
23	Construction	7,707	7,828	7,936	8,033	8,100	393	1.0%	0.62	831
56	Administrative and Support and Waste Management and Remediation Services	7,205	7,223	7,239	7,253	7,265	60	0.2%	0.54	760
42	Wholesale Trade	7,001	7,161	7,296	7,415	7,482	481	1.3%	0.89	1,035
52	Finance and Insurance	4,658	4,668	4,676	4,686	4,697	39	0.2%	0.54	763
61	Educational Services	4,554	4,709	4,839	4,953	5,037	482	2.0%	0.81	375
71	Arts, Entertainment, and Recreation	4,451	4,539	4,615	4,679	4,720	269	1.2%	1.17	319
53	Real Estate and Rental and Leasing	3,863	3,922	3,974	4,016	4,048	185	0.9%	1.05	806
48	Transportation and Warehousing	1,833	1,877	1,915	1,942	1,963	130	1.4%	0.22	107
55	Management of Companies and Enterprises	1,627	1,687	1,737	1,781	1,806	179	2.1%	0.52	290
11	Agriculture, Forestry, Fishing and Hunting	1,046	1,083	1,116	1,145	1,168	122	2.2%	0.42	66
22	Utilities	238	236	233	230	229	(9)	(0.8%)	0.33	13
21	Mining, Quarrying, and Oil and Gas Extraction	186	180	175	170	167	(18)	(2.0%)	0.20	32
	Totals	216,275	220,525	224,218	227,544	229,908	#REF!	1.2%		15,756

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

## Colorado Central Planning Region's Regional Plan

Regional Industry Growth Projections, Broomfield County Workforce Area										
NAICS Code	Description	2020 Jobs	2021 Jobs	2022 Jobs	2023 Jobs	2024 Jobs	Change	Annual Growth Rate	National Location Quotient	Payrolled Business Locations
11	Agriculture, Forestry, Fishing and Hunting	10	11	11	12	12	2	4.0%	0.02	2
21	Mining, Quarrying, and Oil and Gas Extraction	95	105	113	120	125	30	5.6%	0.49	8
22	Utilities	<10	<10	<10	<10	<10	<10	N/A	0.01	0
23	Construction	2,714	2,883	3,029	3,159	3,245	530	3.6%	1.05	171
31	Manufacturing	4,597	4,589	4,577	4,560	4,536	(61)	(0.3%)	1.29	103
42	Wholesale Trade	1,479	1,516	1,545	1,569	1,578	99	1.3%	0.90	246
44	Retail Trade	4,815	4,824	4,833	4,841	4,851	36	0.1%	1.08	266
48	Transportation and Warehousing	356	372	385	395	403	47	2.5%	0.21	30
51	Information	5,037	5,253	5,438	5,600	5,698	661	2.5%	6.17	88
52	Finance and Insurance	1,930	2,023	2,103	2,173	2,217	287	2.8%	1.07	174
53	Real Estate and Rental and Leasing	550	552	555	556	558	9	0.3%	0.71	156
54	Professional, Scientific, and Technical Services	6,269	6,432	6,577	6,703	6,799	530	1.6%	2.08	724
55	Management of Companies and Enterprises	3,766	4,006	4,210	4,387	4,490	724	3.6%	5.73	62
56	Administrative and Support and Waste Management and Remediation Services	1,807	1,860	1,907	1,947	1,973	166	1.8%	0.64	179
61	Educational Services	1,113	1,163	1,199	1,239	1,272	159	2.7%	0.94	61
62	Health Care and Social Assistance	3,308	3,521	3,709	3,879	3,997	688	3.9%	0.57	207
71	Arts, Entertainment, and Recreation	563	583	600	614	624	62	2.1%	0.71	39
72	Accommodation and Food Services	3,537	3,600	3,656	3,708	3,746	209	1.2%	0.90	179
81	Other Services (except Public Administration)	1,377	1,409	1,435	1,461	1,480	102	1.4%	0.65	181
90	Government	1,958	2,018	2,070	2,118	2,152	193	1.9%	0.29	18
	Totals	45,283	46,719	47,951	49,041	49,756	4,473	1.9%		2,891

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

Regional Industry Growth Projections, City and County of Denver Workforce Area										
NAICS Code	Description	2020 Jobs	2021 Jobs	2022 Jobs	2023 Jobs	2024 Jobs	Change	Annual Growth Rate	National Location Quotient	Payrolled Business Locations
90	Government	75,956	76,782	77,554	78,259	78,817	2,861	0.7%	0.88	239
54	Professional, Scientific, and Technical Services	68,100	70,703	72,978	74,974	76,362	8,261	2.3%	1.75	7,812
72	Accommodation and Food Services	57,059	58,631	60,020	61,273	62,142	5,083	1.7%	1.13	2,269
62	Health Care and Social Assistance	55,693	57,195	58,573	59,846	60,846	5,152	1.8%	0.74	2,603
56	Administrative and Support and Waste Management and Remediation Services	37,144	37,312	37,454	37,574	37,647	502	0.3%	1.02	1,896
44	Retail Trade	33,262	33,797	34,269	34,695	34,994	1,732	1.0%	0.58	2,292
48	Transportation and Warehousing	31,063	31,686	32,219	32,643	32,925	1,861	1.2%	1.40	607
52	Finance and Insurance	29,552	30,004	30,379	30,737	30,978	1,426	0.9%	1.26	2,029
42	Wholesale Trade	29,048	29,217	29,333	29,410	29,378	331	0.2%	1.37	2,627
23	Construction	28,536	29,424	30,198	30,875	31,345	2,809	1.9%	0.85	1,903
81	Other Services (except Public Administration)	26,752	27,160	27,517	27,830	28,038	1,287	0.9%	0.97	3,308
61	Educational Services	21,958	22,640	23,208	23,752	24,167	2,209	1.9%	1.44	564
31	Manufacturing	21,555	21,603	21,620	21,611	21,547	(8)	(0.0%)	0.47	885
53	Real Estate and Rental and Leasing	16,663	17,142	17,554	17,910	18,140	1,477	1.7%	1.67	2,167
51	Information	14,647	14,842	15,012	15,160	15,262	615	0.8%	1.39	952
55	Management of Companies and Enterprises	13,956	14,288	14,568	14,810	14,943	987	1.4%	1.64	690
71	Arts, Entertainment, and Recreation	12,855	13,245	13,575	13,857	14,027	1,172	1.8%	1.25	544
21	Mining, Quarrying, and Oil and Gas Extraction	8,191	8,354	8,498	8,628	8,716	525	1.3%	3.28	306
11	Agriculture, Forestry, Fishing and Hunting	2,180	2,381	2,557	2,704	2,821	641	5.3%	0.32	46
22	Utilities	1,876	1,876	1,875	1,872	1,865	(10)	(0.1%)	0.95	34
	Totals	586,045	598,283	608,964	618,418	624,960	38,914	1.3%		33,770

## Colorado Central Planning Region's Regional Plan

Regional Industry Growth Projections, Jefferson (Tri-County) Workforce Area (Jefferson, Clear Creek and Gilpin Counties)										
NAICS Code	Description	2020 Jobs	2021 Jobs	2022 Jobs	2023 Jobs	2024 Jobs	Change	Annual Growth Rate	National Location Quotient	Payrolled Business Locations
90	Government	40,201	40,610	40,982	41,348	41,668	1,467	0.7%	0.95	215
62	Health Care and Social Assistance	33,878	34,717	35,490	36,208	36,776	2,898	1.7%	0.92	1,913
44	Retail Trade	31,074	31,251	31,417	31,577	31,712	639	0.4%	1.11	1,775
54	Professional, Scientific, and Technical Services	29,558	30,329	31,001	31,576	31,983	2,424	1.6%	1.55	4,444
72	Accommodation and Food Services	28,653	29,262	29,810	30,315	30,688	2,035	1.4%	1.16	1,262
23	Construction	22,450	23,014	23,505	23,943	24,231	1,781	1.5%	1.38	2,230
31	Manufacturing	20,912	21,178	21,378	21,528	21,548	636	0.6%	0.93	532
56	Administrative and Support and Waste Management and Remediation Services	16,760	17,118	17,425	17,694	17,858	1,098	1.3%	0.94	1,261
81	Other Services (except Public Administration)	13,723	13,887	14,029	14,162	14,263	540	0.8%	1.02	1,647
52	Finance and Insurance	8,581	8,563	8,543	8,537	8,536	(45)	(0.1%)	0.75	1,233
42	Wholesale Trade	7,619	7,666	7,699	7,723	7,715	95	0.2%	0.74	1,580
71	Arts, Entertainment, and Recreation	6,458	6,467	6,472	6,472	6,473	14	0.0%	1.28	329
51	Information	5,775	6,003	6,200	6,374	6,487	712	2.4%	1.12	375
53	Real Estate and Rental and Leasing	5,261	5,307	5,348	5,378	5,405	144	0.5%	1.08	1,104
61	Educational Services	5,085	5,214	5,326	5,426	5,505	420	1.6%	0.68	397
48	Transportation and Warehousing	4,481	4,620	4,736	4,821	4,881	400	1.7%	0.42	276
55	Management of Companies and Enterprises	2,755	2,810	2,856	2,896	2,917	162	1.1%	0.66	339
21	Mining, Quarrying, and Oil and Gas Extraction	1,020	1,027	1,034	1,039	1,044	24	0.5%	0.84	92
22	Utilities	796	788	780	773	767	(29)	(0.7%)	0.83	35
11	Agriculture, Forestry, Fishing and Hunting	769	776	783	792	797	28	0.7%	0.23	46
Totals		285,809	290,607	294,814	298,583	301,252	15,442	1.1%		21,080

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

Regional Industry Growth Projections, Larimer County Workforce Area										
NAICS Code	Description	2020 Jobs	2021 Jobs	2022 Jobs	2023 Jobs	2024 Jobs	Change	Annual Growth Rate	National Location Quotient	Payrolled Business Locations
90	Government	43,300	44,604	45,701	46,748	47,502	4,202	1.9%	1.51	126
44	Retail Trade	20,704	21,068	21,391	21,680	21,886	1,182	1.1%	1.09	1,157
72	Accommodation and Food Services	19,906	20,419	20,873	21,283	21,571	1,665	1.6%	1.19	908
62	Health Care and Social Assistance	18,162	18,728	19,243	19,719	20,086	1,924	2.0%	0.73	1,157
31	Manufacturing	15,418	15,729	15,976	16,174	16,243	825	1.0%	1.01	511
23	Construction	14,056	14,384	14,672	14,929	15,107	1,052	1.5%	1.27	1,389
54	Professional, Scientific, and Technical Services	13,208	13,419	13,605	13,759	13,887	680	1.0%	1.02	2,323
56	Administrative and Support and Waste Management and Remediation Services	9,622	9,730	9,824	9,906	9,960	337	0.7%	0.80	717
81	Other Services (except Public Administration)	8,576	8,795	8,984	9,154	9,274	698	1.6%	0.94	974
42	Wholesale Trade	5,418	5,603	5,756	5,885	5,945	527	1.9%	0.77	736
53	Real Estate and Rental and Leasing	4,222	4,345	4,450	4,539	4,601	379	1.7%	1.28	744
52	Finance and Insurance	4,037	4,062	4,081	4,102	4,120	82	0.4%	0.52	598
71	Arts, Entertainment, and Recreation	3,549	3,638	3,714	3,778	3,819	271	1.5%	1.04	229
51	Information	3,515	3,635	3,738	3,829	3,885	370	2.0%	1.01	236
61	Educational Services	3,392	3,517	3,619	3,714	3,782	391	2.2%	0.67	191
48	Transportation and Warehousing	3,389	3,447	3,494	3,530	3,550	161	0.9%	0.46	206
11	Agriculture, Forestry, Fishing and Hunting	1,523	1,549	1,572	1,596	1,609	87	1.1%	0.68	92
55	Management of Companies and Enterprises	986	1,023	1,055	1,082	1,097	111	2.2%	0.35	154
21	Mining, Quarrying, and Oil and Gas Extraction	581	595	607	618	625	44	1.5%	0.70	61
22	Utilities	284	288	291	294	295	11	0.8%	0.43	19
Totals		193,845	198,576	202,646	206,319	208,845	15,000	1.5%		12,526

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

Regional Industry Growth Projections, Pikes Peak (El Paso and Teller Counties)										
NAICS Code	Description	2020 Jobs	2021 Jobs	2022 Jobs	2023 Jobs	2024 Jobs	Change	Annual Growth Rate	National Location Quotient	Payrolled Business Locations
90	Government	94,471	96,214	97,729	99,187	100,318	5,847	1.2%	1.72	294
62	Health Care and Social Assistance	38,843	40,321	41,660	42,892	43,822	4,979	2.4%	0.81	2,580
44	Retail Trade	34,846	35,227	35,569	35,881	36,116	1,270	0.7%	0.95	1,982
72	Accommodation and Food Services	34,421	35,280	36,039	36,726	37,206	2,785	1.6%	1.07	1,447
54	Professional, Scientific, and Technical Services	30,739	31,690	32,527	33,265	33,787	3,049	1.9%	1.24	3,966
81	Other Services (except Public Administration)	25,522	26,027	26,459	26,852	27,179	1,657	1.3%	1.46	1,822
23	Construction	22,866	23,478	24,013	24,480	24,809	1,943	1.6%	1.08	2,101
56	Administrative and Support and Waste Management and Remediation Services	20,332	20,424	20,504	20,574	20,628	296	0.3%	0.88	1,313
52	Finance and Insurance	14,447	14,776	15,054	15,309	15,475	1,028	1.4%	0.97	1,128
31	Manufacturing	12,466	12,487	12,493	12,485	12,451	(15)	(0.0%)	0.43	531
61	Educational Services	8,073	8,120	8,165	8,198	8,233	160	0.4%	0.83	377
71	Arts, Entertainment, and Recreation	7,247	7,400	7,531	7,643	7,710	463	1.2%	1.11	342
53	Real Estate and Rental and Leasing	6,420	6,537	6,638	6,726	6,785	365	1.1%	1.01	1,480
42	Wholesale Trade	6,163	6,211	6,245	6,273	6,271	108	0.3%	0.46	895
51	Information	5,962	5,844	5,743	5,651	5,602	(360)	(1.2%)	0.89	377
48	Transportation and Warehousing	5,774	5,923	6,046	6,147	6,215	440	1.5%	0.41	339
55	Management of Companies and Enterprises	1,340	1,368	1,393	1,414	1,425	86	1.2%	0.25	235
11	Agriculture, Forestry, Fishing and Hunting	1,037	1,104	1,163	1,214	1,253	216	3.9%	0.24	52
21	Mining, Quarrying, and Oil and Gas Extraction	624	629	632	635	637	13	0.4%	0.39	27
22	Utilities	537	531	525	519	515	(22)	(0.9%)	0.43	24
	Totals	372,130	379,590	386,129	392,071	396,437	24,308	1.3%		21,310

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

### Existing and Emerging In-Demand Industry Sectors

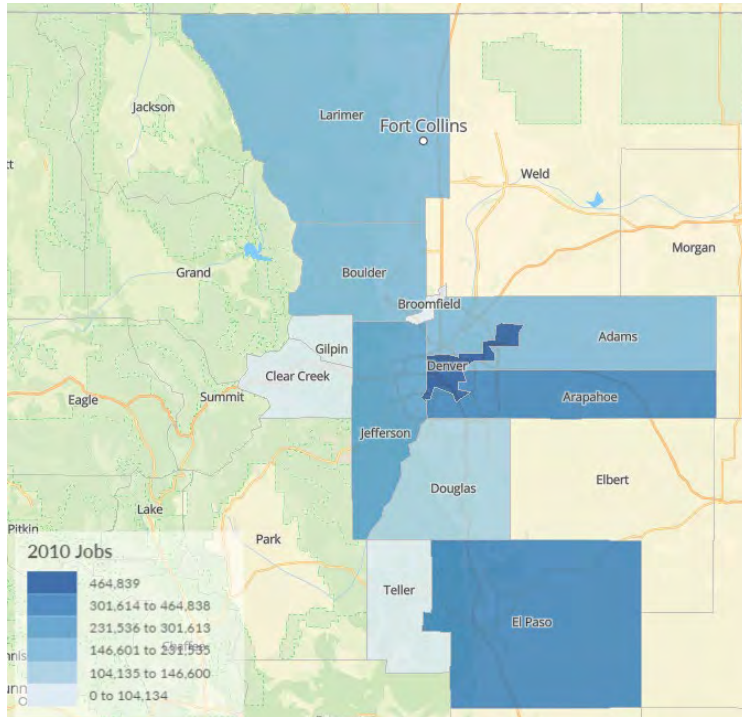
The tables below are sorted by concentration (location quotient or LQ), which is an index with 1.00 as the national average. Thus, an LQ of 2.96 means employment in that industry is concentrated at 2.96 times the national average. These concentrations may change incrementally, but are likely to stay relatively the same in the near term, despite unemployment.

The reader will note that in all cases in the table below, industries shown are ‘primary’ in nature. This means they may be called ‘traded’ industries in the sense they create goods or services that are then exported, at least in part, and money flows back into the region in the form of net profits, and worker earnings.

Top Industries by Employment Concentration, Colorado Central Planning Region				
NAICS	Description	2019 Jobs	2019 Location Quotient	2019 Payrolled Business Locations
211	Oil and Gas Extraction	6,279	2.96	270
518	Data Processing, Hosting, and Related Services	13,977	2.64	1,120
517	Telecommunications	22,889	2.12	450
481	Air Transportation	16,138	2.10	80
533	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	652	1.90	90
312	Beverage and Tobacco Product Manufacturing	7,780	1.78	303
511	Publishing Industries (except Internet)	20,269	1.76	979
523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities	24,692	1.59	2,833
515	Broadcasting (except Internet)	6,158	1.50	102
541	Professional, Scientific, and Technical Services	246,801	1.49	32,408

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





This map shows employment concentrations in the eleven counties that make up the Colorado Central Planning Region.

Each county within the region has a unique economic footprint, a different concentration of key industries.

Together, these counties, along with Broomfield and Weld, which are not included in this Plan, are loosely known as Colorado's Front Range.

The Front Range economy is vibrant and diverse. The CCPR is known throughout the United States and internationally as an opportunity center for highly skilled

talent.

It is also on the short list as a good place to do business. Metro Denver is ranked as the No. 1 best place for business and careers by Forbes, and the No. 2 best place to live by US News. Colorado is the second most highly educated state, behind Massachusetts, and Business insider ranks Colorado the No. 3 best economy. Here are tables for each of the local workforce areas. The reader will note some substantive differences between each of the seven workforce development areas that make up the CCPR.

### Adams

Top Industries by Employment Concentration, Adams				
NAICS	Description	2020 Jobs	2020 Location Quotient	2019 Payrolled Business Locations
492	Couriers and Messengers	5,771	4.56	47
324	Petroleum and Coal Products Manufacturing	696	4.01	10
493	Warehousing and Storage	6,657	3.51	50
562	Waste Management and Remediation Services	2,449	3.41	88
902	State Government	25,557	3.10	30
484	Truck Transportation	7,923	2.96	385
237	Heavy and Civil Engineering Construction	4,483	2.57	107
238	Specialty Trade Contractors	21,897	2.34	1,284
423	Merchant Wholesalers, Durable Goods	10,656	2.14	698
532	Rental and Leasing Services	1,799	2.00	115

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

Adams County makes up the northeastern part of greater metro Denver. Its western border abuts Jefferson County, and the City and County of Denver forms a salient moving northeast through Adams County to Denver International Airport.

Adams County is home to many truck transportation, wholesalers, warehousing and storage companies, as well as courier and messenger services using Denver International Airport as a hub. The county is also home to a number of heavy construction companies and numerous specialty trade contractors.

The county is also home to the Colorado Spaceport, which is being built out for horizontal launches. Because of this, growth in engineering, aerospace manufacturing and technical consultancies is expected moving east from Aurora along the I-70 corridor. The Marriott Hotels Group located its new Gaylord of the Rockies in the City of Aurora in Adams County near Denver International Airport.

### Arapahoe/Douglas

Top Industries by Employment Concentration, Arapahoe/Douglas				
NAICS	Description	2020 Jobs	2020 Location Quotient	2019 Payrolled Business Locations
517	Telecommunications	11,586	5.04	162
515	Broadcasting (except Internet)	3,396	3.89	31
525	Funds, Trusts, and Other Financial Vehicles	201	3.89	29
518	Data Processing, Hosting, and Related Services	4,295	3.81	253
523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities	10,257	3.11	781
533	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	175	2.39	23
524	Insurance Carriers and Related Activities	17,088	1.86	1,082
522	Credit Intermediation and Related Activities	15,329	1.82	763
551	Management of Companies and Enterprises	12,702	1.66	746
541	Professional, Scientific, and Technical Services	55,819	1.59	7,472

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

The two-county Arapahoe/Douglas workforce area makes up the southeastern part of greater metro Denver. Like Adams County, Arapahoe County extends into the eastern plains along the I-70 corridor. Its urban area is located in the county's western one third. Municipalities in the urban portion of Arapahoe County include Centennial, Greenwood Village, Englewood, Littleton, Sheridan, and Aurora.

Arapahoe and Douglas counties are a national hub for telecommunications and broadcasting, as well as financial services. Centennial Airport is the second busiest general aviation airport in the United States, with over 900 landings and takeoffs per day. Because of this, 746 companies have located national or regional headquarters in the City of Centennial. The county is also a regional hub for professional, scientific and technical services, which include law and accounting firms, tax preparation services, architectural and engineering services, consultancies, and marketing and advertising companies.



**Boulder**

Top Industries by Employment Concentration, Boulder				
NAICS	Description	2020 Jobs	2020 Location Quotient	2019 Payrolled Business Locations
334	Computer and Electronic Product Manufacturing	8,583	6.19	112
511	Publishing Industries (except Internet)	5,190	5.16	174
312	Beverage and Tobacco Product Manufacturing	1,006	2.64	53
902	State Government	17,207	2.45	18
541	Professional, Scientific, and Technical Services	34,429	2.39	4,325
518	Data Processing, Hosting, and Related Services	1,092	2.36	162
451	Sporting Goods, Hobby, Musical Instrument, and Book Stores	1,382	1.80	108
325	Chemical Manufacturing	1,858	1.67	53
454	Nonstore Retailers	1,587	1.62	153
517	Telecommunications	1,514	1.61	30

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

Boulder is a regional and national hub for advanced manufacturing in technology and biosciences, as well as being home to a number of software publishers. Top industry concentrations in Boulder's professional, scientific and technical services sector include architectural and engineering services, specialized design, computer systems design and a number of consultancies.

In addition, because Boulder is home to three national laboratories, the Center for Atmospheric Research (NCAR), the Oceanic and Atmospheric Administration (NOAA) and the National Institute of Standards and Technology (NIST), which houses the atomic clock that is the standard for official time in the United States, as well as the University of Colorado, the county is also a national hub for scientific research and development companies.

**Broomfield**

Top Industries by Employment Concentration, Broomfield				
NAICS	Description	2020 Jobs	2020 Location Quotient	2019 Payrolled Business Locations
517	Telecommunications	2,733	13.86	13
314	Textile Product Mills	376	11.24	3
337	Furniture and Related Product Manufacturing	1,050	9.32	6
511	Publishing Industries (except Internet)	1,378	6.55	25
518	Data Processing, Hosting, and Related Services	622	6.43	35
551	Management of Companies and Enterprises	3,766	5.73	62
334	Computer and Electronic Product Manufacturing	1,346	4.63	8
237	Heavy and Civil Engineering Construction	1,143	3.66	16
448	Clothing and Clothing Accessories Stores	909	2.43	71
519	Other Information Services	225	2.29	9

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

Broomfield is a regional hub for telecommunications, with Level 3 as the major employer. A variety of IT companies have offices there, including Code Blue, Webroot, and Avnet. Advanced manufacturing also is highly concentrated in the region, with Brocade Communications Systems and Frontline Aerospace.

It is also home to a number of regional and corporate headquarters, including Vail Resorts, Noodles and Company, SCL Health and Cabela's.

Denver

Top Industries by Employment Concentration, Denver				
NAICS	Description	2020 Jobs	2020 Location Quotient	2019 Payrolled Business Locations
211	Oil and Gas Extraction	5,749	11.46	167
481	Air Transportation	14,967	8.26	29
491	Postal Service	246	4.47	3
712	Museums, Historical Sites, and Similar Institutions	2,187	3.47	21
518	Data Processing, Hosting, and Related Services	3,965	3.17	342
523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities	8,975	2.45	825
533	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	178	2.19	24
515	Broadcasting (except Internet)	1,858	1.92	34
213	Support Activities for Mining	2,404	1.84	137
312	Beverage and Tobacco Product Manufacturing	1,890	1.83	79

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

Skytrax ranks Denver International Airport as the best in the United States. It is the fifth busiest airport in the country with 64 million passengers traveling through each year. Nearly 15,000 people are employed in the air transportation sector in the City and County of Denver. Denver also has high concentrations of employment in oil and gas, financial services and data processing.

Known as the Gateway to the Rockies, the City and County of Denver is also a national and international tourist destination, and offers visitors a variety of services, including shopping, a convention center and numerous attractions including twenty-one museums and historical sites.

Jefferson, Gilpin and Clear Creek (Tri-County)

Top Industries by Employment Concentration, Tri-County				
NAICS	Description	2020 Jobs	2020 Location Quotient	2019 Payrolled Business Locations
486	Pipeline Transportation	611	6.96	6
533	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	163	4.11	20
518	Data Processing, Hosting, and Related Services	2,351	3.85	125
312	Beverage and Tobacco Product Manufacturing	1,937	3.84	34
339	Miscellaneous Manufacturing	3,511	3.11	69
327	Nonmetallic Mineral Product Manufacturing	1,697	2.29	18
336	Transportation Equipment Manufacturing	6,224	2.06	21
451	Sporting Goods, Hobby, Musical Instrument, and Book Stores	1,641	1.62	137
541	Professional, Scientific, and Technical Services	29,558	1.55	4,444
713	Amusement, Gambling, and Recreation Industries	4,890	1.53	206

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

Jefferson County is the home of a variety of advanced manufacturing companies, including Lockheed Martin's Waterton Canyon guided missile and space vehicle manufacturing campus, and Coors Tek, Inc. in Golden, which manufactures technical ceramics for aerospace, automotive, chemical, electronics, medical, metallurgical, oil and gas, semiconductor and many other industries. Coors brewery is also located in Golden.

Jefferson County also has substantial employment in the professional, scientific and technical sector, with the highest employment concentrations in engineering services, scientific research and development, consultancies and specialized design services. Voters approved limited gambling in Colorado, and Gilpin County offers visitors a variety of casinos in picturesque Central City and Blackhawk.

Larimer

Top Industries by Employment Concentration, Larimer				
NAICS	Description	2020 Jobs	2020 Location Quotient	2019 Payrolled Business Locations
312	Beverage and Tobacco Product Manufacturing	1,535	4.49	51
902	State Government	24,742	3.93	36
334	Computer and Electronic Product Manufacturing	4,105	3.30	45
451	Sporting Goods, Hobby, Musical Instrument, and Book Stores	1,827	2.65	109
333	Machinery Manufacturing	2,707	2.04	37
518	Data Processing, Hosting, and Related Services	773	1.87	64
326	Plastics and Rubber Products Manufacturing	1,490	1.73	27
511	Publishing Industries (except Internet)	1,313	1.46	82
453	Miscellaneous Store Retailers	1,639	1.45	165
238	Specialty Trade Contractors	10,190	1.43	948

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

Larimer is the northernmost county in the CCPR. Colorado State University's main campus is located in Fort Collins. The county is home to a number of large and small breweries, including Anheuser-Busch, Inc. A variety of advanced machinery, electronics and computer manufacturing also exists in the county, with the highest employment concentrations in engine equipment, and in analytical laboratory and other precise measuring and testing instruments.

Pikes Peak (El Paso and Teller Counties)

Top Industries by Employment Concentration, Pikes Peak				
NAICS	Description	2020 Jobs	2020 Location Quotient	2019 Payrolled Business Locations
901	Federal Government	50,824	4.75	134
813	Religious, Grantmaking, Civic, Professional, and Similar Organizations	14,778	2.21	247
511	Publishing Industries (except Internet)	2,624	1.52	110
721	Accommodation	6,869	1.48	164
212	Mining (except Oil and Gas)	564	1.29	7
451	Sporting Goods, Hobby, Musical Instrument, and Book Stores	1,666	1.26	115
453	Miscellaneous Store Retailers	2,710	1.25	251
334	Computer and Electronic Product Manufacturing	2,982	1.25	42
712	Museums, Historical Sites, and Similar Institutions	500	1.25	16
541	Professional, Scientific, and Technical Services	30,739	1.24	3,966

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

El Paso and Teller counties are the southernmost counties in the CCPR. Colorado Springs is the main urban Center, and is home to a number of US military facilities, including Fort Carson and the U.S. Air Force Academy. A number of engineering services that support defense, including Stresscon, Titan Systems, Northrop Grumman and Aecom Global operate in the county.

Colorado Springs is also a national and international destination for tourists. The Broadmoor is a five-star hotel that offers access to a variety of tourist attractions including Cave of the Winds, Garden of the Gods, Pikes Peak and the Broadmoor Seven Falls.

### Existing Occupations

This table shows occupation families adding the most jobs, as well as providing an annual growth rate to show which have grown the fastest.

In addition, the location quotient for each family is provided. Note that LQ can be calculated for any industry or any occupation.

Occupational Families Adding the Most Jobs, Colorado Central Planning Region, 2010-2019						
SOC	Description	2010 Jobs	2019 Jobs	2010 - 2019 Change	Annual Growth Rate	2019 Location Quotient
13	Business and Financial Operations	135,052	188,780	53,728	3.8%	1.48
35	Food Preparation and Serving Related	155,914	203,823	47,909	3.0%	1.01
15	Computer and Mathematical	77,636	118,720	41,084	4.8%	1.69
41	Sales and Related	221,532	261,109	39,577	1.8%	1.09
53	Transportation and Material Moving	100,671	135,893	35,222	3.4%	0.82
11	Management	90,498	122,723	32,225	3.4%	0.89
47	Construction and Extraction	91,082	122,690	31,608	3.4%	1.08
29	Healthcare Practitioners and Technical	93,704	125,248	31,544	3.3%	0.93
39	Personal Care and Service	70,277	100,579	30,302	4.1%	0.94
43	Office and Administrative Support	298,697	319,939	21,242	0.8%	0.93
25	Education, Training, and Library	108,841	126,905	18,064	1.7%	0.93
49	Installation, Maintenance, and Repair	72,155	86,877	14,722	2.1%	0.92
51	Production	70,966	82,351	11,385	1.7%	0.59
31	Healthcare Support	46,820	57,103	10,283	2.2%	0.88
27	Arts, Design, Entertainment, Sports, and Media	42,312	52,475	10,163	2.4%	1.20
17	Architecture and Engineering	49,784	59,554	9,770	2.0%	1.47
21	Community and Social Service	31,178	39,819	8,641	2.8%	0.98
33	Protective Service	40,316	48,218	7,902	2.0%	0.90
37	Building and Grounds Cleaning and Maintenance	72,981	79,656	6,675	1.0%	0.91
19	Life, Physical, and Social Science	22,962	28,941	5,979	2.6%	1.48
23	Legal	19,077	23,022	3,945	2.1%	1.15
45	Farming, Fishing, and Forestry	4,382	7,491	3,109	6.1%	0.42
55	Military-only	26,828	24,803	(2,025)	-0.9%	1.79
	Totals	1,943,668	2,416,721	473,053	2.4%	

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

For occupations, LQ is a measure of employment concentration in those occupational areas relative to the national average. So, for the military occupation location quotient of 1.79, we would read, "Military occupations in the CCPR are 1.79 times more concentrated than the national average."

Note that besides military occupations, significant concentrations include business and financial (1.48), computer and mathematical (1.69), architecture and engineering (1.47), and life, physical and social science (1.48).



The top occupational family concentrations are shown by workforce area in the table immediately below.

Top Five Concentrated Occupational Families by Workforce Area, 2010-2019						
Workforce Area	Description	2010 Jobs	2019 Jobs	2010 - 2019 Change	Annual Growth Rate	2019 Location Quotient
Adams County	Construction and Extraction	13,174	20,297	7,123	4.9%	1.77
	Transportation and Material Moving	17,864	27,170	9,306	4.8%	1.61
	Installation, Maintenance, and Repair	7,811	11,450	3,639	4.3%	1.20
	Healthcare Practitioners and Technical	8,274	15,255	6,981	7.0%	1.12
	Life, Physical, and Social Science	956	2,185	1,229	9.6%	1.10
Arapahoe/Douglas	Computer and Mathematical	18,374	30,064	11,690	5.6%	2.01
	Business and Financial Operations	31,310	45,287	13,977	4.2%	1.67
	Architecture and Engineering	10,843	12,477	1,634	1.6%	1.44
	Sales and Related	55,607	66,598	10,991	2.0%	1.31
	Arts, Design, Entertainment, Sports, and Media	8,860	10,806	1,946	2.2%	1.16
Boulder	Life, Physical, and Social Science	5,026	6,483	1,457	2.9%	3.79
	Computer and Mathematical	10,765	15,293	4,528	4.0%	2.49
	Architecture and Engineering	7,006	8,603	1,597	2.3%	2.42
	Arts, Design, Entertainment, Sports, and Media	5,026	6,096	1,070	2.2%	1.59
	Business and Financial Operations	12,233	16,531	4,298	3.4%	1.48
Broomfield	Computer and Mathematical Occupations	2,980	4,913	1,933	5.7%	3.76
	Architecture and Engineering Occupations	1,035	1,226	191	1.9%	1.88
	Business and Financial Operations Occupations	2,684	4,429	1,745	5.7%	1.72
	Sales and Related Occupations	5,327	6,014	687	1.4%	1.56
	Life, Physical, and Social Science Occupations	376	390	14	0.4%	1.39
Denver	Legal	8,257	9,832	1,575	2.0%	2.08
	Business and Financial Operations	37,257	53,358	16,101	4.1%	1.77
	Computer and Mathematical	17,346	29,270	11,924	6.0%	1.76
	Arts, Design, Entertainment, Sports, and Media	10,973	13,944	2,971	2.7%	1.35
	Architecture and Engineering	10,031	12,525	2,494	2.5%	1.30
Jefferson (Tri-County)	Architecture and Engineering	7,318	8,878	1,560	2.2%	1.89
	Life, Physical, and Social Science	3,227	3,669	442	1.4%	1.62
	Computer and Mathematical	8,689	12,051	3,362	3.7%	1.48
	Business and Financial Operations	17,463	21,564	4,101	2.4%	1.46
	Construction and Extraction	13,026	16,442	3,416	2.6%	1.25
Larimer	Life, Physical, and Social Science	2,863	4,030	1,167	3.9%	2.64
	Architecture and Engineering	4,305	5,374	1,069	2.5%	1.70
	Construction and Extraction	8,093	10,978	2,885	3.4%	1.24
	Food Preparation and Serving Related	13,835	18,404	4,569	3.2%	1.17
	Arts, Design, Entertainment, Sports, and Media	3,038	3,822	784	2.6%	1.12
Pikes Peak	Military-only	20,788	18,765	(2,023)	-1.1%	9.02
	Computer and Mathematical	12,859	16,335	3,476	2.7%	1.54
	Community and Social Service	7,057	8,972	1,915	2.7%	1.47
	Business and Financial Operations	18,967	23,810	4,843	2.6%	1.24
	Arts, Design, Entertainment, Sports, and Media	6,788	7,688	900	1.4%	1.17

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



Regional Collaboration

### Existing and Emergent In-Demand Occupations

An effective way to look at emerging in-demand occupations is to use the increase in average hires. The tables below show the highest increases in hires by educational attainment level. For example, the first table in the series, immediately below, shows the ten occupations requiring no formal educational credential that had the greatest increase in hires. On the first row, the reader sees that in 2019, employers in the CCPR hired 35,773 more combined food preparation and serving workers than they did in 2010.

*These tables reflect pre-pandemic trends. Data on average monthly hires is not yet available for March and April, and as the economy begins to recover, it is likely occupations with the most robust hiring may change.*

Occupations With Greatest Increase in Hires by Educational Attainment Level, Colorado Central Planning Region					
SOC	No Formal Educational Credential	2010 Hires	2019 Hires	Increase in Hires	Median Hourly Earnings
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	42,230	78,003	35,773	\$11.43
35-3031	Waiters and Waitresses	39,165	62,789	23,624	\$10.21
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	16,282	38,815	22,533	\$14.50
41-2031	Retail Salespersons	47,328	69,830	22,502	\$12.15
41-2011	Cashiers	34,609	52,793	18,184	\$11.58
35-2014	Cooks, Restaurant	17,501	32,446	14,945	\$13.78
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	9,137	16,781	7,645	\$11.29
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	26,073	33,013	6,940	\$13.01
37-3011	Landscaping and Groundskeeping Workers	14,296	20,146	5,850	\$15.13
47-2061	Construction Laborers	10,221	15,535	5,314	\$16.71

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

Combined Food Preparation and Serving Workers experienced the highest emergent demand in the region for occupations requiring no formal educational credential.

Occupations With Greatest Increase in Hires by Educational Attainment Level, Colorado Central Planning Region					
SOC	High School or Equivalent	2010 Hires	2019 Hires	Increase in Hires	Median Hourly Earnings
39-9021	Personal Care Aides	11,812	24,045	12,233	\$11.98
43-4051	Customer Service Representatives	23,220	35,273	12,053	\$16.73
43-5081	Stock Clerks and Order Fillers	15,190	26,185	10,995	\$13.94
41-3099	Sales Representatives, Services, All Other	14,210	23,639	9,429	\$28.36
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	10,067	17,713	7,647	\$17.93
53-3033	Light Truck or Delivery Services Drivers	6,901	13,021	6,119	\$16.76
43-9061	Office Clerks, General	24,578	29,868	5,291	\$18.80
47-2111	Electricians	5,458	10,518	5,061	\$25.90
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	5,551	10,166	4,614	\$32.58
43-4171	Receptionists and Information Clerks	9,865	14,374	4,509	\$15.40

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

Occupations With Greatest Increase in Hires by Educational Attainment Level, Colorado Central Planning Region					
SOC	Vocational Certificate or Some College	2010 Hires	2019 Hires	Increase in Hires	Median Hourly Earnings
53-3032	Heavy and Tractor-Trailer Truck Drivers	9,518	15,329	5,811	\$22.72
31-1014	Nursing Assistants	8,407	12,690	4,284	\$15.73
43-3031	Bookkeeping, Accounting, and Auditing Clerks	13,281	16,713	3,432	\$20.45
31-9011	Massage Therapists	1,839	4,713	2,874	\$21.21
31-9092	Medical Assistants	4,071	6,498	2,427	\$17.44
39-5012	Hairdressers, Hairstylists, and Cosmetologists	4,676	6,906	2,230	\$13.53
31-9091	Dental Assistants	3,087	5,103	2,017	\$19.58
49-3023	Automotive Service Technicians and Mechanics	4,850	6,355	1,505	\$21.81
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	2,248	3,581	1,333	\$25.13
29-2061	Licensed Practical and Licensed Vocational Nurses	1,960	2,719	759	\$25.42

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

Occupations With Greatest Increase in Hires by Educational Attainment Level, Colorado Central Planning Region					
SOC	Associates Degree	2010 Hires	2019 Hires	Increase in Hires	Median Hourly
25-2011	Preschool Teachers, Except Special Education	3,955	5,280	1,325	\$14.38
29-2056	Veterinary Technologists and Technicians	1,275	2,460	1,185	\$17.63
23-2011	Paralegals and Legal Assistants	1,991	2,854	863	\$27.80
31-2021	Physical Therapist Assistants	601	1,271	670	\$27.28
29-2021	Dental Hygienists	1,242	1,765	523	\$42.01
31-2011	Occupational Therapy Assistants	272	600	328	\$28.05
49-9062	Medical Equipment Repairers	307	465	158	\$27.59
17-3011	Architectural and Civil Drafters	980	1,137	157	\$27.59
17-3029	Engineering Technicians, Except Drafters, All Other	596	699	103	\$30.57
29-2032	Diagnostic Medical Sonographers	186	267	81	\$40.87

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

Occupations With Greatest Increase in Hires by Educational Attainment Level, Colorado Central Planning Region					
SOC	Bachelors Degree	2010 Hires	2019 Hires	Increase in Hires	Median Hourly
13-2011	Accountants and Auditors	11,940	18,162	6,222	\$35.68
13-1199	Business Operations Specialists, All Other	15,084	20,239	5,156	\$36.53
15-1132	Software Developers, Applications	6,897	11,574	4,678	\$50.47
13-1161	Market Research Analysts and Marketing Specialists	6,332	10,642	4,310	\$32.10
11-1021	General and Operations Managers	14,812	18,742	3,930	\$54.30
13-1071	Human Resources Specialists	5,572	8,913	3,341	\$31.45
15-1199	Computer Occupations, All Other	3,183	6,286	3,102	\$48.00
29-1141	Registered Nurses	8,791	11,418	2,627	\$35.48
13-1111	Management Analysts	3,883	5,844	1,961	\$42.39
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	1,807	3,412	1,605	\$21.94

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

Occupations With Greatest Increase in Hires by Educational Attainment Level, Colorado Central Planning Region					
SOC	Masters	2010 Hires	2019 Hires	Increase in Hires	Median Hourly Earnings
29-1171	Nurse Practitioners	311	820	509	\$51.43
21-1022	Healthcare Social Workers	987	1,436	449	\$24.27
29-1071	Physician Assistants	678	932	253	\$49.53
21-1013	Marriage and Family Therapists	274	506	232	\$31.73
21-1023	Mental Health and Substance Abuse Social Workers	650	842	192	\$22.35
15-2041	Statisticians	293	475	182	\$40.09
29-1122	Occupational Therapists	839	997	159	\$41.46
21-1015	Rehabilitation Counselors	784	866	82	\$20.63
11-9033	Education Administrators, Postsecondary	537	593	56	\$44.08
29-1151	Nurse Anesthetists	83	136	53	\$83.95

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

Occupations With Greatest Increase in Hires by Educational Attainment Level, Colorado Central Planning Region					
SOC	Doctoral or Professional	2010 Hires	2019 Hires	Increase in Hires	Median Hourly Earnings
29-1123	Physical Therapists	1,073	1,364	291	\$38.57
25-1099	Postsecondary Teachers	8,313	8,513	200	\$30.57
29-1051	Pharmacists	991	1,094	103	\$61.15
29-1131	Veterinarians	495	586	91	\$45.00
29-1021	Dentists, General	359	419	60	\$66.29
29-1081	Podiatrists	44	100	56	\$53.73
19-1042	Medical Scientists, Except Epidemiologists	517	556	39	\$28.05
29-1069	Physicians and Surgeons, All Other	466	495	29	\$103.21
19-3031	Clinical, Counseling, and School Psychologists	810	837	27	\$40.45
29-1181	Audiologists	71	93	22	\$40.88

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



## Highest Occupational Demand in Local Areas

Top Five Occupations by Increase in Hires by Workforce Area, 2010-2019						
Workforce Area	Description	2010 Hires	2019 Hires	Increase in Hires	Annual Growth Rate	2019 Location Quotient
Adams County	Laborers and Material Movers, Hand	4,008	13,697	9,688	14.6%	1.34
	Fast Food and Counter Workers	4,341	9,303	4,963	8.8%	0.92
	Driver/Sales Workers and Truck Drivers	5,317	9,630	4,313	6.8%	2.09
	Retail Salespersons	3,577	6,757	3,180	7.3%	0.97
	Building Cleaning Workers	2,944	5,741	2,797	7.7%	0.93
Arapahoe/Douglas	Fast Food and Counter Workers	10,480	18,514	8,033	6.5%	0.91
	Retail Salespersons	11,981	17,713	5,731	4.4%	1.23
	Laborers and Material Movers, Hand	4,820	9,638	4,818	8.0%	0.55
	Waiters and Waitresses	7,827	12,183	4,356	5.0%	0.93
	Personal Care Aides	2,609	6,872	4,264	11.4%	0.83
Boulder	Fast Food and Counter Workers	4,560	7,389	2,830	5.5%	0.92
	Waiters and Waitresses	3,770	5,455	1,685	4.2%	1.04
	Retail Salespersons	3,403	4,816	1,413	3.9%	0.90
	Cooks	2,912	4,279	1,366	4.4%	1.18
	Cashiers	2,854	3,814	960	3.3%	0.69
Broomfield	Food Preparation and Serving Related Occupations	2,863	4,449	1,586	5.0%	0.85
	Business and Financial Operations Occupations	1,142	2,284	1,141	8.0%	1.92
	Office and Administrative Support Occupations	2,770	3,723	953	3.3%	0.90
	Sales and Related Occupations	4,080	5,027	946	2.3%	1.40
	Personal Care and Service Occupations	717	1,656	939	9.8%	0.85
Denver	Fast Food and Counter Workers	9,831	17,792	7,961	6.8%	0.78
	Waiters and Waitresses	9,530	17,262	7,732	6.8%	1.20
	Laborers and Material Movers, Hand	8,181	14,979	6,798	7.0%	0.75
	Cooks	6,556	11,716	5,159	6.7%	1.16
	Retail Salespersons	7,330	11,315	3,985	4.9%	0.71
Jefferson (Tri-County)	Fast Food and Counter Workers	6,198	10,670	4,471	6.2%	0.98
	Waiters and Waitresses	5,252	8,073	2,821	4.9%	1.18
	Retail Salespersons	7,064	9,755	2,691	3.7%	1.22
	Laborers and Material Movers, Hand	2,422	4,474	2,053	7.1%	0.52
	Cashiers	5,460	7,474	2,014	3.5%	0.99
Larimer	Fast Food and Counter Workers	4,505	8,395	3,890	7.2%	1.15
	Laborers and Material Movers, Hand	2,138	4,171	2,033	7.7%	0.66
	Waiters and Waitresses	3,669	5,571	1,902	4.7%	1.17
	Retail Salespersons	4,681	6,578	1,897	3.9%	1.33
	Cashiers	3,067	4,836	1,768	5.2%	0.94
Pikes Peak	Fast Food and Counter Workers	7,071	12,320	5,248	6.4%	0.87
	Retail Salespersons	7,345	10,822	3,478	4.4%	1.10
	Waiters and Waitresses	5,801	8,742	2,942	4.7%	1.00
	Customer Service Representatives	5,045	7,713	2,667	4.8%	1.32
	Cashiers	5,460	8,072	2,611	4.4%	0.80

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

This table shows the five occupations with the greatest increase in employment in each local area.

The next table shows the five occupations requiring any postsecondary training with the largest increase in hires for each local area.

When both tables are considered, it is clear that demand is increasing most for semi-skilled occupations in terms of gross count, but is also increasing with skilled occupations that serve in primary industries.

As recovery from the COVID-19 pandemic progresses, it is likely demand will shift either for or against some of the occupations in these tables. As this happens, the workforce areas will work with regional employers to ensure federal funds are targeted to the most critical occupations through traditional classroom training, work-based learning or apprenticeship strategies, as well as the unique occupational needs within each of the workforce areas.

Top Five Most Concentrated Occupations Requiring Any Postsecondary Training by Largest Increase in Hires by Workforce Area, 2010-2019						
Workforce Area	Description	2010 Hires	2019 Hires	Increase in Hires	Annual Growth Rate	2019 Location Quotient
Adams County	Heavy and Tractor-Trailer Truck Drivers	2,932	4,779	1,848	5.6%	2.37
	Postsecondary Teachers	323	1,406	1,083	17.8%	0.48
	Business Operations Specialists, All Other	992	1,959	967	7.9%	1.70
	Registered Nurses	728	1,556	827	8.8%	1.13
	Accountants and Auditors	792	1,514	722	7.5%	1.29
Arapahoe/Douglas	Accountants and Auditors	2,379	3,712	1,333	5.1%	1.69
	Business Operations Specialists, All Other	3,119	4,356	1,237	3.8%	2.27
	Nursing Assistants	1,391	2,592	1,201	7.2%	0.68
	Software Developers, Applications	1,715	2,848	1,133	5.8%	2.39
	Heavy and Tractor-Trailer Truck Drivers	1,256	2,257	1,001	6.7%	0.41
Boulder	Software Developers, Applications	1,247	1,762	515	3.9%	5.41
	Accountants and Auditors	1,050	1,562	513	4.5%	1.78
	Business Operations Specialists, All Other	1,117	1,610	492	4.1%	2.40
	Market Research Analysts and Marketing Specialists	736	1,202	466	5.6%	2.80
	Computer Occupations, All Other	229	658	429	12.4%	3.29
Broomfield	Software Developers, Applications	155	460	305	12.8%	5.70
	Business Operations Specialists, All Other	237	487	251	8.4%	2.84
	Accountants and Auditors	197	402	205	8.3%	1.79
	Market Research Analysts and Marketing Specialists	144	346	202	10.2%	2.87
	Heavy and Tractor-Trailer Truck Drivers	68	230	162	14.4%	0.28
Denver	Accountants and Auditors	3,661	5,818	2,157	5.3%	1.93
	Business Operations Specialists, All Other	3,968	5,928	1,960	4.6%	2.89
	Software Developers, Applications	1,571	3,136	1,565	8.0%	1.83
	Market Research Analysts and Marketing Specialists	1,681	3,079	1,398	7.0%	1.92
	General and Operations Managers	3,291	4,661	1,370	3.9%	1.01
Jefferson (Tri-County)	Accountants and Auditors	1,609	2,314	705	4.1%	1.56
	Nursing Assistants	1,064	1,658	594	5.1%	0.82
	Heavy and Tractor-Trailer Truck Drivers	703	1,102	399	5.1%	0.44
	Market Research Analysts and Marketing Specialists	779	1,143	363	4.3%	1.67
	Software Developers, Applications	741	1,101	360	4.5%	1.87
Larimer	Heavy and Tractor-Trailer Truck Drivers	716	1,185	469	5.8%	0.54
	Postsecondary Teachers	662	1,024	362	5.0%	1.55
	Nursing Assistants	877	1,216	338	3.7%	1.04
	Business Operations Specialists, All Other	869	1,118	249	2.8%	1.65
	Automotive Service Technicians and Mechanics	390	620	231	5.3%	1.02
Pikes Peak	Nursing Assistants	1,852	2,809	957	4.7%	0.93
	Heavy and Tractor-Trailer Truck Drivers	1,422	2,118	695	4.5%	0.52
	Software Developers, Applications	840	1,375	535	5.6%	2.13
	Market Research Analysts and Marketing Specialists	551	987	436	6.7%	1.05
	Accountants and Auditors	1,550	1,968	418	2.7%	1.16

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

## Question 2

*Provide an analysis of the knowledge and skills needed to meet the employment needs of the employers in the region, as well as for each area included in this planning region, including employment needs in in-demand industry sectors and occupations.*

*As the COVID-19 pandemic has progressed, we have seen some situational changes in demand. Generally, the critical skills that have emerged over the past two months have been related to the remote working technology, and those skills critical to keeping the infrastructure open, including more nurses, drivers, software developers, cybersecurity people and telemarketers. The tables immediately below, courtesy of EMSI (Economic Modeling Specialists, Inc.), show occupations with the most postings, occupations with the most growth in postings, and skills with the highest growing demand.*



Colorado Central Planning Region's Regional Plan

Jobs With Most Unique Postings April 18, 2020 to May 17, 2020, Central Planning Region					
SOC	Occupation	Latest 30 Days Unique Postings	% Change Last 30 Days	Latest 90 Days Unique Postings	% Change Last 90 Days
15-1132	Software Developers, Applications	6,979	(13.7%)	12,929	3.4%
29-1141	Registered Nurses	6,085	(19.4%)	12,340	3.8%
53-3032	Heavy and Tractor-Trailer Truck Drivers	5,468	(16.2%)	11,504	4.8%
15-1199	Computer Occupations, All Other	4,074	(15.1%)	7,542	3.3%
41-2031	Retail Salespersons	3,861	(10.5%)	6,821	(11.5%)
43-4051	Customer Service Representatives	3,521	(9.3%)	6,408	(9.1%)
41-1011	First-Line Supervisors of Retail Sales Workers	3,371	(5.1%)	5,862	(4.4%)
15-1142	Network and Computer Systems Administrators	3,110	(6.2%)	5,445	11.6%
11-2021	Marketing Managers	3,074	(13.6%)	5,436	(0.2%)
43-5081	Stock Clerks and Order Fillers	2,833	0.6%	4,921	29.3%
11-2022	Sales Managers	2,620	(8.6%)	4,613	0.8%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	2,496	(10.5%)	4,672	(9.8%)
13-2011	Accountants and Auditors	2,487	(19.9%)	4,927	(5.4%)
15-1151	Computer User Support Specialists	2,437	(12.5%)	4,335	(2.7%)
53-3033	Light Truck or Delivery Services Drivers	2,113	17.5%	3,465	(1.6%)
49-9071	Maintenance and Repair Workers, General	1,998	(5.1%)	3,608	(6.1%)
15-1121	Computer Systems Analysts	1,877	(13.1%)	3,416	6.1%
11-1021	General and Operations Managers	1,782	(10.4%)	3,138	(4.4%)
39-9011	Childcare Workers	1,777	(7.8%)	3,964	(18.6%)
15-1122	Information Security Analysts	1,775	(16.3%)	3,342	7.2%

Source: EMSI Job Posting Analytics

Jobs With Highest Growth in Number Unique Postings, April 18, 2020 to May 17, 2020, Central Planning Region					
SOC	Occupation	Latest 30 Days Unique Postings	% Change Last 30 Days	Latest 90 Days Unique Postings	% Change Last 90 Days
53-7051	Industrial Truck and Tractor Operators (Forklifts)	406	36.7%	646	76.0%
47-2031	Carpenters	271	24.9%	467	6.6%
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	441	19.5%	748	21.0%
53-3033	Light Truck or Delivery Services Drivers	2,113	17.5%	3,465	(1.6%)
37-3011	Landscaping and Groundskeeping Workers	590	15.7%	1,035	63.0%
31-1011	Home Health Aides	568	12.9%	933	19.0%
29-2061	Licensed Practical and Licensed Vocational Nurses	902	12.5%	1,434	32.5%
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	1,303	11.6%	2,173	57.6%
25-2021	Elementary School Teachers, Except Special Education	247	10.3%	381	53.0%
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	436	9.3%	725	21.8%
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	806	8.3%	1,428	15.6%
49-3023	Automotive Service Technicians and Mechanics	812	7.1%	1,397	(10.2%)
11-3061	Purchasing Managers	289	6.3%	480	(5.5%)
47-2061	Construction Laborers	349	6.1%	672	13.5%
51-9111	Packaging and Filling Machine Operators and Tenders	248	6.0%	442	0.9%
17-2072	Electronics Engineers, Except Computer	619	5.5%	1,085	27.2%
23-1011	Lawyers	759	4.4%	1,532	(4.7%)
43-4171	Receptionists and Information Clerks	602	2.9%	1,059	(8.2%)
51-9198	Helpers--Production Workers	319	2.9%	562	12.4%
15-1133	Software Developers, Systems Software	1,137	2.9%	1,964	4.1%

Source: EMSI Job Posting Analytics

This table shows industry groups with the highest number of unique postings and the highest growth in postings between April 18, 2020 and May 17, 2020.

Unique Job Postings by Industry Group, April 18, 2020 to May 17, 2020				
Industry Sector (2-Digit)	Latest 30 Days Unique Postings	Latest 30 Days Unique Postings % Change	Latest 90 Days Unique Postings	Latest 90 Days Unique Postings % Change
Administrative and Support and Waste Management and Remediation Services	26,663	(13.6%)	50,944	0.1%
Professional, Scientific, and Technical Services	21,835	(10.4%)	39,492	(2.4%)
Unclassified Industry	18,511	(26.1%)	42,846	29.3%
Retail Trade	17,926	(6.9%)	31,139	(4.0%)
Health Care and Social Assistance	16,067	(11.7%)	30,682	(2.0%)
Information	11,497	(8.6%)	19,843	(1.0%)
Manufacturing	11,097	(11.2%)	20,633	(7.9%)
Educational Services	9,926	54.2%	14,194	41.4%
Accommodation and Food Services	9,229	(6.6%)	16,770	(17.6%)
Finance and Insurance	6,917	(13.9%)	13,329	(12.8%)
Transportation and Warehousing	5,458	(15.2%)	10,703	(9.0%)
Construction	4,780	(4.4%)	8,353	2.7%
Real Estate and Rental and Leasing	3,912	(4.2%)	6,625	(8.2%)
Other Services (except Public Administration)	3,788	(9.3%)	7,080	(13.9%)
Public Administration	3,657	(12.3%)	6,932	0.8%
Wholesale Trade	2,614	(15.3%)	5,047	(11.5%)
Utilities	1,260	55.4%	1,717	65.3%
Arts, Entertainment, and Recreation	913	(15.9%)	1,705	(16.4%)
Mining, Quarrying, and Oil and Gas Extraction	571	(6.7%)	932	1.1%
Agriculture, Forestry, Fishing and Hunting	454	8.6%	729	13.0%
Management of Companies and Enterprises	301	(13.5%)	582	(13.1%)

Source: EMSI Job Posting Analytics

*There are many caveats at this early point in pandemic recovery. First, it may be expected, at least over the rest of this year, that occupations dependent on discretionary income may suffer. People who are unemployed or underemployed are likely to only spend on basic needs and defer discretionary expenditures. People who are working may choose to save their money until they are more confident in the recovery. High labor supply may cause wage levels and benefits to drop.*

*At the same time, positions that support technology, manufacturing, utilities, financial services, information and professional, scientific and technical services will likely continue to be stable or grow. We may also see parts of the retail industry continue growing – supermarkets, big box stores, online merchants and hardware/garden centers.*

*In addition, many issues are affecting the return to work – available childcare, the reopening of public schools, and in many cases there is no business to return to. According to the US Chamber of Commerce, as of April 3, 2020, over 26% of small businesses had closed down in response to the pandemic. At the date of this writing (May 18, 2020) the Los Angeles Times and Forbes are both reporting that 50% of small businesses may fail as a result of lower demand. Note that while the expected failure rate of new businesses over a five-year period is around 50%, many of the small businesses that may fail as a result of the pandemic are not new businesses.*

*The section below was written prior to the pandemic, and the tables were run in January 2020.*

This section will use real time labor market data to explore a variety of employment needs in the CCPR and in each local workforce area. It will begin by showing the educational attainment and experience levels currently required by employers.

It will then use projected annual openings and 2018 training completions (graduation) data to show the top shortfalls in the training pipeline by educational attainment level for the CCPR. *Data is not included here for local areas because it is not meaningful.* Colorado's state university and community college system regularly produces graduates that migrate throughout the eleven counties in the CCPR. For example, someone who graduated from CU Boulder in computer sciences can well end up working for a cybersecurity company in Colorado Springs after graduation. A graduate from the nationally known doctoral program in physical therapy at CSU in Fort Collins, could absolutely end up working for Children's Hospital on the Anschutz Campus in greater metro Denver.

In other words, data is taken from job postings during the last calendar year (2019) that shows skills required. This is shown side-by-side with data from resumes posted online in places like LinkedIn and Monster that mention these particular skills. This is a valuable way of looking at the bench-strength of the labor market in the CCPR and in local areas for key skills.

### Experience and Educational Attainment Requirements

Colorado Central Planning Region, Education Breakdown of Job Postings		
Education Level	Unique Postings	% of Total
Unspecified	600,047	53%
High school or GED	186,489	17%
Associate's degree	61,363	5%
Bachelor's degree	333,474	30%
Master's degree	83,521	7%
Ph.D. or professional degree	23,174	2%

Experience required is generally between 0 and 3 years (87% of postings not specifying experience or calling for 1 to 3 years' experience).

Colorado Central Planning Region, Experience Breakdown of Job Postings		
Minimum Experience	Unique Postings	% of Total
Unspecified	576,682	51%
0 - 1 Years	211,527	19%
2 - 3 Years	192,758	17%
4 - 6 Years	104,137	9%
7 - 9 Years	25,196	2%
10+ Years	16,516	1%

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

In the current labor market environment which is marked by full employment and increasingly acute labor shortages (to be explored further under Question 3 of this Plan), employers are increasingly questioning whether a successful candidate for a given occupation actually needs the

traditional educational attainment that 'has always been required.'

For example, in Boulder, the very first registered apprenticeship for software development was developed in the face of shortfalls in baccalaureate level graduates that have those specific skills.

While Sector Partnerships and Work-Based Learning will be covered in other areas of this plan, it is appropriate here to mention several other examples. The Greater Metro Denver Healthcare (Sector) Partnership has developed, and is in the process of developing, several new registered apprenticeships in allied health occupations, such as for medical assistants and surgical technologists.

Lockheed Martin worked with Jefferson (Tri-County) Workforce Centers and economic development partners to create a registered apprenticeship for circuit assemblers who must perform their work under a microscope. Under the new Aerospace and Aviation Sector Partnership launched with the help of Arapahoe/Douglas Works! it is likely the region will see consortia of engineering and manufacturing companies serving the aerospace industry develop even more apprenticeships, particularly for middle-skilled occupations such as engineering and manufacturing technicians or even industrial design technicians.

In addition, Xcel Energy offers a variety of apprenticeship opportunities, as well as the various construction trades, and companies in construction such as RK Mechanical. The number of participants in registered apprenticeships is expected to grow through two U.S. Department of Labor/Employment and Training Administration (DOL/ETA) apprenticeship grants that are currently in operation across Colorado, particularly in the CCPR where most existing apprenticeships in the state operate.

The Colorado Department of Human Services has also responded to employer and job seeker need through the Colorado Works Subsidized Training and Employment Program (STEP), which provides funds to subsidize training for recipients of Temporary Assistance for Needy Families (TANF) who are participating in the Colorado Works program. In the CCPR, STEP is operated through or in partnership with the workforce development system.

In spite of the new approaches to training skilled workers, 39% of the job postings in the CCPR during 2019 required a bachelors degree or above. This also holds true for the local workforce areas, which range between 28% (Larimer) to 46% (Boulder).



Here are tables for the local areas:

Adams County, Education Breakdown of Job Postings		
Education Level	Unique Postings	% of Total
Unspecified	64,539	57%
High school or GED	22,018	19%
Associate's degree	5,792	5%
Bachelor's degree	27,409	24%
Master's degree	6,446	6%
Ph.D. or professional degree	1,810	2%

Adams County, Experience Breakdown of Job Postings		
Minimum Experience	Unique Postings	% of Total
Unspecified	62,364	55%
0 - 1 Years	22,385	20%
2 - 3 Years	17,998	16%
4 - 6 Years	7,976	7%
7 - 9 Years	1,711	2%
10+ Years	1,229	1%

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

Arapahoe & Douglas Counties, Education Breakdown of Job Postings		
Education Level	Unique Postings	% of Total
Unspecified	135,481	50%
High school or GED	48,862	18%
Associate's degree	16,515	6%
Bachelor's degree	82,416	31%
Master's degree	18,765	7%
Ph.D. or professional degree	4,658	2%

Arapahoe & Douglas Counties, Experience Breakdown of Job Postings		
Minimum Experience	Unique Postings	% of Total
Unspecified	134,498	50%
0 - 1 Years	51,989	19%
2 - 3 Years	46,185	17%
4 - 6 Years	25,626	10%
7 - 9 Years	5,951	2%
10+ Years	4,090	2%

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

Boulder County, Education Breakdown of Job Postings		
Education Level	Unique Postings	% of Total
Unspecified	53,437	53%
High school or GED	13,872	14%
Associate's degree	4,211	4%
Bachelor's degree	32,762	32%
Master's degree	9,350	9%
Ph.D. or professional degree	3,923	4%

Boulder County, Experience Breakdown of Job Postings		
Minimum Experience	Unique Postings	% of Total
Unspecified	50,310	50%
0 - 1 Years	17,694	18%
2 - 3 Years	18,183	18%
4 - 6 Years	10,293	10%
7 - 9 Years	3,084	3%
10+ Years	1,464	1%

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

Broomfield County, Education Breakdown of Job Postings		
Education Level	Unique Postings	% of Total
Unspecified	64,539	57%
High school or GED	22,018	19%
Associate's degree	5,792	5%
Bachelor's degree	27,409	24%
Master's degree	6,446	6%
Ph.D. or professional degree	1,810	2%

Broomfield County, Experience Breakdown of Job Postings		
Minimum Experience	Unique Postings	% of Total
Unspecified	62,364	55%
0 - 1 Years	22,385	20%
2 - 3 Years	17,998	16%
4 - 6 Years	7,976	7%
7 - 9 Years	1,711	2%
10+ Years	1,229	1%

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





Larimer County, Education Breakdown of Job Postings		
Education Level	Unique Postings	% of Total
Unspecified	39,781	61%
High school or GED	11,015	17%
Associate's degree	3,171	5%
Bachelor's degree	13,510	21%
Master's degree	3,922	6%
Ph.D. or professional degree	920	1%

Larimer County, Experience Breakdown of Job Postings		
Minimum Experience	Unique Postings	% of Total
Unspecified	39,398	61%
0 - 1 Years	12,049	19%
2 - 3 Years	8,609	13%
4 - 6 Years	3,658	6%
7 - 9 Years	642	1%
10+ Years	528	1%

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

Jefferson, Gilpin & Clear Creek Counties, Education Breakdown of Job Postings		
Education Level	Unique Postings	% of Total
Unspecified	88,376	56%
High school or GED	27,393	17%
Associate's degree	8,385	5%
Bachelor's degree	43,102	27%
Master's degree	10,537	7%
Ph.D. or professional degree	3,037	2%

Jefferson, Gilpin & Clear Creek Counties, Experience Breakdown of Job Postings		
Minimum Experience	Unique Postings	% of Total
Unspecified	84,779	53%
0 - 1 Years	30,869	19%
2 - 3 Years	25,645	16%
4 - 6 Years	12,643	8%
7 - 9 Years	2,956	2%
10+ Years	1,977	1%

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

Denver County, Education Breakdown of Job Postings		
Education Level	Unique Postings	% of Total
Unspecified	142,994	52%
High school or GED	39,242	14%
Associate's degree	14,568	5%
Bachelor's degree	89,871	33%
Master's degree	21,334	8%
Ph.D. or professional degree	5,610	2%

Denver County, Experience Breakdown of Job Postings		
Minimum Experience	Unique Postings	% of Total
Unspecified	130,495	47%
0 - 1 Years	51,028	19%
2 - 3 Years	52,607	19%
4 - 6 Years	29,600	11%
7 - 9 Years	6,918	3%
10+ Years	4,909	2%

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

El Paso & Teller Counties, Education Breakdown of Job Postings		
Education Level	Unique Postings	% of Total
Unspecified	66,334	53%
High school or GED	21,433	17%
Associate's degree	7,817	6%
Bachelor's degree	37,277	30%
Master's degree	11,087	9%
Ph.D. or professional degree	2,765	2%

El Paso & Teller Counties, Experience Breakdown of Job Postings		
Minimum Experience	Unique Postings	% of Total
Unspecified	66,379	53%
0 - 1 Years	22,445	18%
2 - 3 Years	19,908	16%
4 - 6 Years	11,783	9%
7 - 9 Years	3,139	2%
10+ Years	1,961	2%

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

## Training Pipeline Shortfalls

*Pandemic update: The CCPR training pipeline will quite likely experience some significant changes. More coursework may be delivered virtually, and sector partnerships, as well as workforce developers, economic developers and industry associations will continue to switch to skill-based hiring and hybrid training that is conducted both in the classroom and on the worksite, at least in the longer term.*

Tables in this section were done by subtracting the projected annual openings for each occupation from the number of program completions (graduations) for the latest year available. A table is provided showing the top ten training pipeline shortfalls by level of postsecondary attainment. As mentioned previously, data is only shown for the CCPR as a whole because of the free movement of graduates from Colorado's universities and colleges throughout the region.



Top Training Pipeline Shortfalls by Educational Attainment Level in Industry, Colorado Central Planning Region					
SOC	Nondegree Postsecondary Certificate	Jobs	Annual Openings	Regional Completions (2018)	Surplus/ (Shortfall)
53-3032	Heavy and Tractor-Trailer Truck Drivers	19,643	2,692	0	(2,692)
31-1014	Nursing Assistants	17,950	2,500	1,155	(1,345)
39-5012	Hairdressers, Hairstylists, and Cosmetologists	12,073	1,799	1,065	(734)
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	4,177	547	10	(537)
31-9011	Massage Therapists	6,544	1,048	578	(470)
31-9091	Dental Assistants	7,029	987	523	(464)
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	5,533	717	299	(418)
29-2061	Licensed Practical and Licensed Vocational Nurses	5,026	606	190	(416)
25-4031	Library Technicians	2,192	359	0	(359)
49-3011	Aircraft Mechanics and Service Technicians	3,352	338	94	(244)

Source: IPEDS Data Compiled by EMSI

Top Training Pipeline Shortfalls by Educational Attainment Level in Industry, Colorado Central Planning Region					
SOC	Associate's Degree	Jobs	Annual Openings	Regional Completions (2018)	Surplus/ (Shortfall)
23-2011	Paralegals and Legal Assistants	5,152	693	227	(466)
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	2,098	262	0	(262)
29-2021	Dental Hygienists	3,912	372	201	(171)
19-4099	Life, Physical, and Social Science Technicians, All Other	1,295	180	13	(167)
19-4031	Chemical Technicians	943	110	0	(110)
49-9062	Medical Equipment Repairers	948	115	5	(110)
17-3029	Engineering Technicians, Except Drafters, All Other	1,471	168	64	(104)
17-3012	Electrical and Electronics Drafters	842	100	0	(100)
31-2021	Physical Therapist Assistants	1,309	237	146	(91)
53-2021	Air Traffic Controllers	795	82	0	(82)

Source: IPEDS Data Compiled by EMSI

Top Training Pipeline Shortfalls by Educational Attainment Level in Industry, Colorado Central Planning Region					
SOC	Bachelor's Degree	Jobs	Annual Openings	Regional Completions (2018)	Surplus/ (Shortfall)
13-1199	Business Operations Specialists, All Other	41,234	4,558	53	(4,505)
13-2011	Accountants and Auditors	36,035	4,050	1,482	(2,568)
13-1161	Market Research Analysts and Marketing Specialists	18,840	2,489	377	(2,112)
25-2021	Elementary School Teachers, Except Special Education	20,294	1,917	549	(1,368)
41-3031	Securities, Commodities, and Financial Services Sales Agents	11,482	1,293	18	(1,275)
15-1132	Software Developers, Applications	32,228	3,320	2,255	(1,065)
27-2022	Coaches and Scouts	6,702	1,162	200	(962)
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	14,443	1,313	518	(795)
13-1028	Buyers and Purchasing Agents	8,058	834	93	(741)
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	5,380	665	7	(658)

Source: IPEDS Data Compiled by EMSI

Top Training Pipeline Shortfalls by Educational Attainment Level in Industry, Colorado Central Planning Region					
SOC	Graduate Level or Professional Degree	Jobs	Annual Openings	Regional Completions (2018)	Surplus/ (Shortfall)
23-1011	Lawyers	14,515	960	606	(354)
21-1012	Educational, Guidance, School, and Vocational Counselors	4,280	537	276	(261)
21-1022	Healthcare Social Workers	2,730	361	152	(209)
25-4021	Librarians	1,672	201	72	(129)
29-1123	Physical Therapists	4,850	371	250	(121)
29-1127	Speech-Language Pathologists	3,384	311	200	(111)
29-1122	Occupational Therapists	2,901	257	150	(107)
21-1023	Mental Health and Substance Abuse Social Workers	1,621	225	152	(73)
29-1071	Physician Assistants	2,835	265	196	(69)
21-1015	Rehabilitation Counselors	1,567	193	144	(49)

Source: IPEDS Data Compiled by EMSI

As can be seen, shortfalls exist at all educational attainment levels, as do surpluses. In order to manage the training pipeline in a more business-relevant way, it is recommended that workforce development areas work through their business services teams to find the most critical shortfalls key sectors, and then mobilize business leaders in sector partnerships to work with postsecondary educators to address the needs. Many times it is appropriate for workforce development to act in a convening role to bring together training partners with business leaders in appropriate sectors.

For example, though labor force data suggested there was a substantial surplus of program completions of medical assistants hospital system leaders in the Greater Denver Healthcare Partnership said that the graduates of these programs were not qualified for the job in terms of what they were actually asking for. With the help of the workforce system in a convening role, a local community college was brought to the table, and worked with subject matter experts from the healthcare providers to change the curriculum so the school was producing graduates with the business-relevant skills necessary.

### Top Occupations and Certifications/Credentials Posted

In this section, tables are provided that show the total number, total unique number, median duration, and top certifications/credentials sought for jobs listed in 2019. Notice three of the top ten jobs listed are computer related. Though the information technology (IT) sector is highly concentrated in Boulder, Denver and Arapahoe/Douglas workforce areas, it is worth noting that only 45% of professionals working in computer related occupations are in the IT sector per se, while 55% work in other industries.

Top Jobs Currently Listed, Colorado Central Planning Region, January 2019 - December 2019				Top Credentials in Demand	
Occupation	Total Postings (Jan 2019 - Dec 2019)	Unique Postings (Jan 2019 - Dec 2019)	Median Posting Duration	Colorado Central Planning Region, January - December 2019	
Heavy and Tractor-Trailer Truck Drivers	298,766	54,861	27 days	Commercial Driver's License (CDL)	
Registered Nurses	308,524	43,565	29 days	Certified Nursing Assistant	
Software Developers, Applications	232,268	42,528	35 days	Master Of Business Administration (MBA)	
Computer Occupations, All Other	128,901	25,503	35 days	Licensed Practical Nurse	
Retail Salespersons	135,599	23,749	41 days	Bachelor of Science in Nursing (BSN)	
Customer Service Representatives	129,478	23,656	34 days	Project Management Professional Certification	
First-Line Supervisors of Retail Sales Workers	84,313	19,412	39 days	Certified Information Systems Security Professional	
Marketing Managers	70,007	17,767	35 days	CompTIA Security+	
First-Line Supervisors of Office and Administrative Support Workers	71,817	16,864	31 days	Associates Degree In Nursing	
Network and Computer Systems Administrators	93,137	16,250	34 days	Nurse Practitioner	

Source: EMSI Posting Analytics

## Colorado Central Planning Region's Regional Plan

Top Jobs Currently Listed, Adams County, January 2019 - December 2019				Top Credentials in Demand	
Occupation	Total Postings (Jan 2019 - Dec 2019)	Unique Postings (Jan 2019 - Dec 2019)	Median Posting Duration	Top Credentials in Demand, Adams County, January - December 2019	
Heavy and Tractor-Trailer Truck Drivers	39,700	7,796	29 days	Commercial Driver's License (CDL)	
Registered Nurses	32,331	4,470	30 days	Certified Nursing Assistant	
Retail Salespersons	17,245	3,119	41 days	Master Of Business Administration (MBA)	
Software Developers, Applications	14,176	3,055	30 days	Licensed Practical Nurse	
First-Line Supervisors of Retail Sales Workers	9,861	2,528	39 days	Bachelor of Science in Nursing (BSN)	
Customer Service Representatives	12,036	2,406	33 days	CDL Class B License	
Light Truck or Delivery Services Drivers	9,887	1,809	34 days	Associates Degree In Nursing	
Stock Clerks and Order Fillers	10,076	1,802	35 days	Certified Information Systems Security Professional	
Computer Occupations, All Other	8,129	1,794	31 days	Automotive Service Excellence (ASE) Certification	
First-Line Supervisors of Office and Administrative Support Workers	6,355	1,619	34 days	Certified Public Accountant	

Source: EMSI Posting Analytics

Top Jobs Currently Listed, Arapahoe & Douglas Counties, January 2019 - December 2019				Top Credentials in Demand	
Occupation	Total Postings (Jan 2019 - Dec 2019)	Unique Postings (Jan 2019 - Dec 2019)	Median Posting Duration	Top Credentials in Demand, Arapahoe & Douglas Counties, January - December 2019	
Registered Nurses	92,892	11,732	30 days	Commercial Driver's License (CDL)	
Software Developers, Applications	65,269	11,091	32 days	Certified Nursing Assistant	
Heavy and Tractor-Trailer Truck Drivers	48,611	9,640	29 days	Master Of Business Administration (MBA)	
Retail Salespersons	36,299	6,897	40 days	Bachelor of Science in Nursing (BSN)	
Computer Occupations, All Other	34,058	6,883	31 days	Licensed Practical Nurse	
Customer Service Representatives	34,141	6,529	34 days	Project Management Professional Certification	
First-Line Supervisors of Retail Sales Workers	22,625	5,450	38 days	Certified Information Systems Security Professional	
Network and Computer Systems Administrators	30,384	4,586	33 days	Associates Degree In Nursing	
First-Line Supervisors of Office and Administrative Support Workers	16,908	4,319	28 days	CompTIA Security+	
Marketing Managers	16,412	3,946	30 days	Certified Public Accountant	

Source: EMSI Posting Analytics

Top Jobs Currently Listed, Boulder County, January 2019 - December 2019				Top Credentials in Demand	
Occupation	Total Postings (Jan 2019 - Dec 2019)	Unique Postings (Jan 2019 - Dec 2019)	Median Posting Duration	Top Credentials in Demand, Boulder County, January - December 2019	
Heavy and Tractor-Trailer Truck Drivers	33,393	6,326	29 days	Commercial Driver's License (CDL)	
Software Developers, Applications	30,803	5,709	42 days	Certified Nursing Assistant	
Registered Nurses	18,098	3,228	29 days	Master Of Business Administration (MBA)	
Computer Occupations, All Other	12,728	2,626	42 days	Project Management Professional Certification	
Marketing Managers	8,529	2,442	39 days	Licensed Practical Nurse	
Retail Salespersons	11,290	1,820	42 days	Bachelor of Science in Nursing (BSN)	
Customer Service Representatives	8,141	1,536	36 days	Associates Degree In Nursing	
Personal Care Aides	5,894	1,435	29 days	Certified Information Systems Security Professional	
Sales Managers	5,888	1,434	43 days	ServSafe Certification	
First-Line Supervisors of Retail Sales Workers	6,681	1,434	43 days	Nurse Practitioner	

Source: EMSI Posting Analytics

Top Jobs Currently Listed, Denver County, January 2019 - December 2019				Top Credentials in Demand	
Occupation	Total Postings (Jan 2019 - Dec 2019)	Unique Postings (Jan 2019 - Dec 2019)	Median Posting Duration	Denver County, January - December 2019	
Software Developers, Applications	56,068	11,802	33 days	Commercial Driver's License (CDL)	
Registered Nurses	62,989	8,832	29 days	Master Of Business Administration (MBA)	
Heavy and Tractor-Trailer Truck Drivers	49,478	7,903	14 days	Certified Nursing Assistant	
Computer Occupations, All Other	36,029	7,378	35 days	Bachelor of Science in Nursing (BSN)	
Sales Managers	24,013	5,978	37 days	Licensed Practical Nurse	
Marketing Managers	22,315	5,779	38 days	Project Management Professional Certification	
Accountants and Auditors	27,039	5,471	34 days	Certified Public Accountant	
Customer Service Representatives	28,181	5,033	33 days	Certified Information Systems Security Professional	
First-Line Supervisors of Office and Administrative Support Workers	19,739	4,557	32 days	Nurse Practitioner	
Sales Representatives, Services, All Other	18,000	3,843	39 days	Professional Engineer	

Source: EMSI Posting Analytics

Top Jobs Currently Listed, Larimer County, January 2019 - December 2019				Top Credentials in Demand
Occupation	Total Postings (Jan 2019 - Dec 2019)	Unique Postings (Jan 2019 - Dec 2019)	Median Posting Duration	Larimer County, January - December 2019
Heavy and Tractor-Trailer Truck Drivers	29,113	5,590	29 days	Commercial Driver's License (CDL)
Registered Nurses	16,964	3,252	25 days	Certified Nursing Assistant
Retail Salespersons	10,880	1,977	41 days	Licensed Practical Nurse
First-Line Supervisors of Retail Sales Workers	6,023	1,537	43 days	Master Of Business Administration (MBA)
Customer Service Representatives	8,458	1,509	35 days	Bachelor of Science in Nursing (BSN)
Software Developers, Applications	7,458	1,123	35 days	Transportation Worker Identification Credential (TWIC) Card
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	11,284	1,089	30 days	Nurse Practitioner
Postsecondary Teachers	3,918	1,061	34 days	Doubles Endorsement
Childcare Workers	2,183	968	24 days	ServSafe Certification
Personal Care Aides	3,553	947	31 days	Hazmat Endorsement

Source: EMSI Posting Analytics

Top Jobs Currently Listed, El Paso & Teller Counties (Pikes Peak), January 2019 - December 2019				Top Credentials in Demand
Occupation	Total Postings (Jan 2019 - Dec 2019)	Unique Postings (Jan 2019 - Dec 2019)	Median Posting Duration	Top Credentials in Demand, El Paso & Teller Counties, January - December 2019
Heavy and Tractor-Trailer Truck Drivers	32,245	7,118	30 days	Commercial Driver's License (CDL)
Registered Nurses	41,826	5,871	29 days	CompTIA Security+
Software Developers, Applications	26,974	3,953	40 days	IAT Level II Certification
Network and Computer Systems Administrators	22,811	3,193	46 days	Certified Nursing Assistant
Customer Service Representatives	17,321	2,920	36 days	Certified Information Systems Security Professional
Computer Occupations, All Other	15,343	2,473	42 days	Licensed Practical Nurse
Retail Salespersons	15,588	2,437	44 days	GIAC Certifications
Information Security Analysts	17,048	2,329	47 days	Master Of Business Administration (MBA)
Computer User Support Specialists	14,217	2,102	37 days	Nurse Practitioner
First-Line Supervisors of Retail Sales Workers	9,911	1,995	41 days	Associates Degree In Nursing

Source: EMSI Posting Analytics

This data is available to workforce centers throughout Colorado, and will continue to be used as it evolves to target public funds to get the best return on investment in terms of employment and wage outcomes.

### Supply and Demand in Online Postings

The tables below are useful because they present a more robust picture of the actual dynamics of a tight labor market. The next section, addressing question 3 of this Plan, will provide more information around full employment, unfilled jobs, demographic changes and the racial and ethnic makeup of the labor force in the CCPR and each of its seven workforce areas

At this point, it is important to make a couple of observations concerning these tables. First, there are 'hard,' or job-specific skills such as merchandising, software development and JAVA programming language, and there are common, or 'soft,' skills – things like written communication, basic Microsoft office, customer service and problem solving. The tables present both in terms of percent frequency in postings and in profiles (online resumes).

But the percentages can be misleading. It is best to look at the four columns with a numerator and denominator. Take as an example Agile Software Development, which is in the far-left column of the table immediately below. You would read it thus:

- Of 1,126,816 job postings in the region between January and December 2019, 43,657 (4%) required the candidate to know Agile Software Development.
- Of the 2,011,415 online profiles, 36,299 (3%) mention Agile as a skill.

## Colorado Central Planning Region's Regional Plan

Supply & Demand, Top Hard and Common (Soft) Skills, January - December 2019 Colorado Central Planning Region									
Top Hard Skills	Frequency in Postings	Postings with Skill / Total Postings (Jan 2019 - Dec 2019)	Frequency in Profiles	Profiles with Skill / Total Profiles (2018 - 2020)	Top Common (Soft) Skills	Frequency in Postings	Postings with Skill / Total Postings (Jan 2019 - Dec 2019)	Frequency in Profiles	Profiles with Skill / Total Profiles (2018 - 2020)
Selling Techniques	5%	56,771 / 1,126,816	4%	70,419 / 2,011,445	Management	24%	267,803 / 1,126,816	31%	619,200 / 2,011,445
Accounting	5%	56,311 / 1,126,816	6%	112,873 / 2,011,445	Customer Service	20%	221,871 / 1,126,816	28%	572,138 / 2,011,445
Auditing	5%	52,544 / 1,126,816	3%	62,544 / 2,011,445	Sales	19%	219,255 / 1,126,816	25%	494,498 / 2,011,445
Merchandising	4%	50,318 / 1,126,816	3%	58,134 / 2,011,445	Communications	19%	211,230 / 1,126,816	1%	19,979 / 2,011,445
Restaurant Operation	4%	46,233 / 1,126,816	3%	53,664 / 2,011,445	Leadership	15%	172,342 / 1,126,816	26%	516,765 / 2,011,445
Agile Software Development	4%	43,657 / 1,126,816	2%	36,299 / 2,011,445	Operations	15%	166,162 / 1,126,816	11%	227,295 / 2,011,445
Nursing	4%	40,946 / 1,126,816	2%	33,354 / 2,011,445	Problem Solving	10%	111,557 / 1,126,816	2%	34,315 / 2,011,445
Customer Experience	3%	37,763 / 1,126,816	1%	21,174 / 2,011,445	Presentations	9%	102,001 / 1,126,816	4%	79,846 / 2,011,445
Basic Life Support	3%	34,369 / 1,126,816	1%	22,542 / 2,011,445	Valid Driver's License	8%	90,613 / 1,126,816	0%	228 / 2,011,445
Customer Relationship Management	3%	33,547 / 1,126,816	5%	105,906 / 2,011,445	Innovation	7%	83,077 / 1,126,816	0%	3,937 / 2,011,445
Automation	3%	32,619 / 1,126,816	1%	23,976 / 2,011,445	Written Communication	7%	82,268 / 1,126,816	0%	8,475 / 2,011,445
SQL (Programming Language)	3%	32,322 / 1,126,816	3%	62,125 / 2,011,445	Microsoft Excel	7%	81,063 / 1,126,816	17%	338,668 / 2,011,445
Project Management	3%	31,957 / 1,126,816	7%	149,537 / 2,011,445	Research	7%	76,576 / 1,126,816	12%	251,072 / 2,011,445
Cardiopulmonary Resuscitation (CPR)	3%	30,576 / 1,126,816	2%	47,818 / 2,011,445	Microsoft Office	6%	72,447 / 1,126,816	19%	374,580 / 2,011,445
Customer Satisfaction	3%	30,549 / 1,126,816	5%	96,003 / 2,011,445	Coordinating	6%	72,160 / 1,126,816	3%	67,609 / 2,011,445
Business Development	3%	30,214 / 1,126,816	6%	126,395 / 2,011,445	Troubleshooting (Problem Solving)	6%	63,769 / 1,126,816	3%	58,214 / 2,011,445
Java (Programming Language)	3%	29,679 / 1,126,816	2%	46,217 / 2,011,445	Interpersonal Skills	5%	61,883 / 1,126,816	1%	16,382 / 2,011,445
Software Development	3%	29,406 / 1,126,816	3%	50,666 / 2,011,445	Computer Literacy	5%	55,966 / 1,126,816	1%	29,538 / 2,011,445
Strategic Planning	3%	28,868 / 1,126,816	10%	194,454 / 2,011,445	Teamwork	5%	52,816 / 1,126,816	3%	69,954 / 2,011,445
Software Engineering	3%	28,679 / 1,126,816	2%	36,933 / 2,011,445	Verbal Communication Skills	4%	50,262 / 1,126,816	0%	9,016 / 2,011,445

Source: EMSI Job Posting Analytics

There are several conclusions we can make from the two pieces of information above:

1. The latest local unemployment statistics (November 2019 at this writing) estimate there are only 59,312 people who are unemployed in the entire CCPR.
2. The CCPR *has a total labor force of 2.2 million*, so we can infer that at least over 2.1 million people who are already working have resumes online, suggesting that they are quite willing to change jobs on the right terms.
3. The difference between the number of postings requiring the skill (43,657) and the number of online profiles with the skill (36,299), is more important that the percentages of postings and profiles. What we can see from this line is that there were more jobs requiring this skill than there were candidates who have it, a shortfall of 7,358 candidates. In terms of real-time labor market information, this is a real shortage suggesting that workforce developers in the region could work with employer groups who need this skill and postsecondary educators to offer this training to job candidates or even apprentices, should there be other skills also necessary but in short supply.

The tables below show the same information for each of the local workforce areas that make up the CCPR.

Supply & Demand, Top Hard and Common (Soft) Skills, January - December 2019 Adams County									
Skill	Frequency in Postings	Postings with Skill / Total Postings (Jan 2019 - Dec 2019)	Frequency in Profiles	Profiles with Skill / Total Profiles (2018 - 2020)	Skill	Frequency in Postings	Postings with Skill / Total Postings (Jan 2019 - Dec 2019)	Frequency in Profiles	Profiles with Skill / Total Profiles (2018 - 2020)
Merchandising	6%	6,654 / 113,663	3%	3,846 / 114,506	Management	21%	23,791 / 113,663	24%	27,507 / 114,506
Selling Techniques	5%	6,172 / 113,663	3%	3,050 / 114,506	Customer Service	21%	23,652 / 113,663	29%	33,062 / 114,506
Restaurant Operation	5%	5,340 / 113,663	3%	2,992 / 114,506	Sales	20%	22,486 / 113,663	21%	24,170 / 114,506
Accounting	4%	5,071 / 113,663	5%	6,180 / 114,506	Communications	18%	19,935 / 113,663	1%	754 / 114,506
Auditing	4%	4,912 / 113,663	3%	3,407 / 114,506	Operations	14%	15,436 / 113,663	10%	11,243 / 114,506
Nursing	4%	4,108 / 113,663	2%	2,051 / 114,506	Leadership	13%	14,838 / 113,663	18%	21,112 / 114,506
Warehousing	4%	4,031 / 113,663	1%	959 / 114,506	Valid Driver's License	9%	10,795 / 113,663	0%	6 / 114,506
Customer Experience	3%	3,857 / 113,663	1%	1,170 / 114,506	Problem Solving	9%	9,794 / 113,663	1%	1,581 / 114,506
Basic Life Support	3%	3,516 / 113,663	1%	1,332 / 114,506	Presentations	7%	8,404 / 113,663	3%	3,063 / 114,506
Cardiopulmonary Resuscitation (CPR)	3%	3,390 / 113,663	3%	3,091 / 114,506	Written Communication	6%	7,196 / 113,663	1%	615 / 114,506
Agile Software Development	3%	2,962 / 113,663	1%	1,026 / 114,506	Innovation	6%	7,071 / 113,663	0%	107 / 114,506
Customer Satisfaction	2%	2,839 / 113,663	5%	5,951 / 114,506	Microsoft Excel	6%	6,811 / 113,663	16%	17,879 / 114,506
Customer Relationship Management	2%	2,833 / 113,663	4%	4,346 / 114,506	Microsoft Office	6%	6,415 / 113,663	14%	16,466 / 114,506
Purchasing	2%	2,733 / 113,663	3%	3,441 / 114,506	Coordinating	5%	6,173 / 113,663	3%	3,036 / 114,506
Business Development	2%	2,412 / 113,663	3%	3,643 / 114,506	Computer Literacy	5%	5,801 / 113,663	2%	2,860 / 114,506
Automation	2%	2,384 / 113,663	1%	1,037 / 114,506	Research	5%	5,570 / 113,663	8%	8,862 / 114,506
Project Management	2%	2,352 / 113,663	4%	4,987 / 114,506	Teamwork	5%	5,319 / 113,663	3%	3,477 / 114,506
SQL (Programming Language)	2%	2,278 / 113,663	2%	2,230 / 114,506	Interpersonal Skills	5%	5,278 / 113,663	1%	1,145 / 114,506
Strategic Planning	2%	2,240 / 113,663	5%	5,880 / 114,506	Troubleshooting (Problem Solving)	5%	5,216 / 113,663	3%	3,202 / 114,506
Billing	2%	2,232 / 113,663	4%	4,941 / 114,506	Teaching	4%	4,498 / 113,663	4%	4,770 / 114,506

Source: EMSI Job Posting Analytics

## Colorado Central Planning Region's Regional Plan

Supply & Demand, Top Hard and Common (Soft) Skills, January - December 2019									
Arapahoe & Douglas Counties									
Skill	Frequency in Postings	Postings with Skill / Total Postings (Jan 2019 - Dec 2019)	Frequency in Profiles	Profiles with Skill / Total Profiles (2018 - 2020)	Skill	Frequency in Postings	Postings with Skill / Total Postings (Jan 2019 - Dec 2019)	Frequency in Profiles	Profiles with Skill / Total Profiles (2018 - 2020)
Merchandising	5%	14,363 / 268,339	3%	8,418 / 245,539	Management	25%	67,074 / 268,339	29%	71,604 / 245,539
Accounting	5%	14,218 / 268,339	7%	16,580 / 245,539	Customer Service	22%	59,330 / 268,339	29%	70,874 / 245,539
Selling Techniques	5%	13,483 / 268,339	4%	9,726 / 245,539	Communications	20%	52,702 / 268,339	1%	1,960 / 245,539
Auditing	5%	13,435 / 268,339	4%	8,939 / 245,539	Sales	19%	51,959 / 268,339	26%	63,037 / 245,539
Agile Software Development	5%	12,318 / 268,339	2%	3,936 / 245,539	Operations	16%	43,972 / 268,339	12%	29,827 / 245,539
Restaurant Operation	5%	12,189 / 268,339	3%	6,968 / 245,539	Leadership	16%	42,598 / 268,339	22%	53,432 / 245,539
Customer Experience	5%	12,132 / 268,339	1%	2,784 / 245,539	Problem Solving	11%	28,284 / 268,339	1%	3,607 / 245,539
Nursing	4%	10,862 / 268,339	2%	4,589 / 245,539	Presentations	9%	24,622 / 268,339	4%	10,295 / 245,539
Basic Life Support	3%	9,291 / 268,339	1%	2,811 / 245,539	Microsoft Excel	8%	21,984 / 268,339	16%	38,629 / 245,539
SQL (Programming Language)	3%	8,968 / 268,339	3%	7,673 / 245,539	Written Communication	8%	21,184 / 268,339	1%	1,451 / 245,539
Automation	3%	8,933 / 268,339	1%	3,127 / 245,539	Valid Driver's License	8%	21,022 / 268,339	0%	18 / 245,539
Java (Programming Language)	3%	8,121 / 268,339	2%	5,435 / 245,539	Innovation	7%	19,567 / 268,339	0%	344 / 245,539
Software Development	3%	7,958 / 268,339	2%	5,259 / 245,539	Coordinating	7%	19,334 / 268,339	4%	8,800 / 245,539
Customer Satisfaction	3%	7,841 / 268,339	5%	13,053 / 245,539	Microsoft Office	7%	19,070 / 268,339	15%	35,906 / 245,539
Project Management	3%	7,708 / 268,339	6%	15,640 / 245,539	Research	7%	18,663 / 268,339	9%	21,875 / 245,539
Cardiopulmonary Resuscitation (CPR)	3%	7,685 / 268,339	2%	5,716 / 245,539	Troubleshooting (Problem Solving)	6%	16,601 / 268,339	3%	6,143 / 245,539
Customer Relationship Management	3%	7,203 / 268,339	5%	13,058 / 245,539	Interpersonal Skills	6%	15,653 / 268,339	1%	2,858 / 245,539
Python (Programming Language)	3%	7,193 / 268,339	1%	1,346 / 245,539	Computer Literacy	5%	13,719 / 268,339	2%	5,705 / 245,539
Strategic Planning	3%	6,932 / 268,339	7%	16,762 / 245,539	Teamwork	5%	12,975 / 268,339	3%	6,955 / 245,539
Software Engineering	3%	6,920 / 268,339	2%	3,957 / 245,539	Verbal Communication Skills	5%	12,111 / 268,339	1%	1,730 / 245,539

Source: EMSI Job Posting Analytics

Supply & Demand, Top Hard and Common (Soft) Skills, January - December 2019									
Boulder County									
Skill	Frequency in Postings	Postings with Skill / Total Postings (Jan 2019 - Dec 2019)	Frequency in Profiles	Profiles with Skill / Total Profiles (2018 - 2020)	Skill	Frequency in Postings	Postings with Skill / Total Postings (Jan 2019 - Dec 2019)	Frequency in Profiles	Profiles with Skill / Total Profiles (2018 - 2020)
Software Engineering	6%	5,610 / 101,028	4%	3,709 / 98,202	Management	24%	23,747 / 101,028	29%	28,176 / 98,202
Selling Techniques	5%	5,441 / 101,028	3%	2,800 / 98,202	Sales	21%	20,829 / 101,028	23%	22,373 / 98,202
Python (Programming Language)	5%	5,041 / 101,028	3%	2,994 / 98,202	Communications	19%	19,153 / 101,028	1%	941 / 98,202
Agile Software Development	5%	4,934 / 101,028	3%	2,668 / 98,202	Leadership	16%	16,656 / 101,028	24%	23,459 / 98,202
New Product Development	4%	4,493 / 101,028	5%	4,625 / 98,202	Customer Service	16%	16,604 / 101,028	25%	24,126 / 98,202
Software Development	4%	4,341 / 101,028	4%	4,006 / 98,202	Operations	13%	13,446 / 101,028	10%	10,069 / 98,202
Accounting	4%	4,317 / 101,028	5%	4,732 / 98,202	Presentations	11%	10,683 / 101,028	5%	4,431 / 98,202
Auditing	4%	4,092 / 101,028	3%	2,460 / 98,202	Problem Solving	10%	10,286 / 101,028	2%	1,516 / 98,202
Merchandising	4%	3,942 / 101,028	3%	2,769 / 98,202	Innovation	9%	8,711 / 101,028	0%	246 / 98,202
Project Management	4%	3,876 / 101,028	8%	7,390 / 98,202	Written Communication	8%	7,988 / 101,028	0%	332 / 98,202
Linux	4%	3,850 / 101,028	3%	3,127 / 98,202	Research	8%	7,971 / 101,028	17%	16,894 / 98,202
Java (Programming Language)	4%	3,810 / 101,028	4%	4,204 / 98,202	Mentorship	7%	6,638 / 101,028	5%	4,903 / 98,202
Automation	4%	3,670 / 101,028	2%	1,612 / 98,202	Valid Driver's License	6%	6,409 / 101,028	0%	10 / 98,202
Business Development	3%	3,488 / 101,028	6%	6,111 / 98,202	Troubleshooting (Problem Solving)	6%	6,376 / 101,028	2%	2,252 / 98,202
Restaurant Operation	3%	3,458 / 101,028	3%	2,791 / 98,202	Interpersonal Skills	6%	6,196 / 101,028	1%	821 / 98,202
Forecasting	3%	3,390 / 101,028	2%	2,244 / 98,202	Microsoft Excel	6%	6,070 / 101,028	17%	16,389 / 98,202
Operating Systems	3%	3,371 / 101,028	2%	1,923 / 98,202	Coordinating	6%	5,824 / 101,028	3%	3,080 / 98,202
Customer Relationship Management	3%	3,334 / 101,028	5%	4,716 / 98,202	Teamwork	5%	4,984 / 101,028	3%	3,303 / 98,202
Customer Satisfaction	3%	3,310 / 101,028	4%	3,614 / 98,202	Microsoft Office	5%	4,962 / 101,028	18%	17,905 / 98,202
Customer Experience	3%	3,125 / 101,028	1%	794 / 98,202	Verbal Communication Skills	5%	4,817 / 101,028	0%	398 / 98,202

Source: EMSI Job Posting Analytics

Supply & Demand, Top Hard and Common (Soft) Skills, January - December 2019									
Denver County									
Skill	Frequency in Postings	Postings with Skill / Total Postings (Jan 2019 - Dec 2019)	Frequency in Profiles	Profiles with Skill / Total Profiles (2018 - 2020)	Skill	Frequency in Postings	Postings with Skill / Total Postings (Jan 2019 - Dec 2019)	Frequency in Profiles	Profiles with Skill / Total Profiles (2018 - 2020)
Accounting	6%	16,828 / 275,557	6%	58,449 / 966,316	Management	25%	70,203 / 275,557	35%	334,186 / 966,316
Auditing	5%	14,430 / 275,557	3%	33,464 / 966,316	Sales	20%	55,438 / 275,557	27%	260,615 / 966,316
Selling Techniques	5%	13,654 / 275,557	4%	38,735 / 966,316	Communications	20%	55,156 / 275,557	1%	11,428 / 966,316
Agile Software Development	4%	11,676 / 275,557	2%	21,792 / 966,316	Customer Service	18%	49,841 / 275,557	29%	283,634 / 966,316
Customer Relationship Management	4%	11,228 / 275,557	6%	60,709 / 966,316	Leadership	17%	45,698 / 275,557	29%	281,517 / 966,316
Business Development	4%	10,470 / 275,557	8%	79,439 / 966,316	Operations	15%	40,790 / 275,557	11%	108,991 / 966,316
SQL (Programming Language)	3%	9,269 / 275,557	4%	34,091 / 966,316	Problem Solving	11%	30,360 / 275,557	2%	18,473 / 966,316
Restaurant Operation	3%	9,206 / 275,557	3%	25,542 / 966,316	Presentations	10%	28,727 / 275,557	5%	44,006 / 966,316
Project Management	3%	9,005 / 275,557	9%	86,643 / 966,316	Innovation	9%	23,649 / 275,557	0%	2,374 / 966,316
Strategic Planning	3%	8,769 / 275,557	12%	119,069 / 966,316	Microsoft Excel	9%	23,489 / 275,557	18%	175,587 / 966,316
Nursing	3%	8,557 / 275,557	2%	14,993 / 966,316	Written Communication	8%	22,452 / 275,557	0%	3,529 / 966,316
Automation	3%	8,504 / 275,557	1%	11,818 / 966,316	Research	8%	22,044 / 275,557	15%	140,585 / 966,316
Forecasting	3%	8,146 / 275,557	3%	30,945 / 966,316	Valid Driver's License	8%	22,023 / 275,557	0%	114 / 966,316
Budgeting	3%	7,983 / 275,557	6%	62,701 / 966,316	Microsoft Office	8%	21,534 / 275,557	21%	205,143 / 966,316
Merchandising	3%	7,513 / 275,557	3%	26,951 / 966,316	Coordinating	7%	18,912 / 275,557	3%	33,737 / 966,316
Java (Programming Language)	3%	7,503 / 275,557	2%	23,020 / 966,316	Interpersonal Skills	6%	16,229 / 275,557	1%	6,493 / 966,316
Salesforce.Com	3%	7,502 / 275,557	3%	25,992 / 966,316	Troubleshooting (Problem Solving)	6%	15,578 / 275,557	3%	29,171 / 966,316
Customer Experience	3%	7,239 / 275,557	1%	11,619 / 966,316	Computer Literacy	6%	15,284 / 275,557	1%	9,201 / 966,316
Customer Satisfaction	3%	7,089 / 275,557	5%	47,624 / 966,316	Verbal Communication Skills	5%	14,025 / 275,557	0%	3,348 / 966,316
Warehousing	3%	7,055 / 275,557	0%	2,438 / 966,316	Microsoft PowerPoint	5%	13,217 / 275,557	12%	114,075 / 966,316

Source: EMSI Job Posting Analytics



## Colorado Central Planning Region's Regional Plan

Supply & Demand, Top Hard and Common (Soft) Skills, January - December 2019 Jefferson, Gilpin & Clear Creek Counties (Tri-County)									
Skill	Frequency in Postings	Postings with Skill / Total Postings (Jan 2019 - Dec 2019)	Frequency in Profiles	Profiles with Skill / Total Profiles (2018-2020)	Skill	Frequency in Postings	Postings with Skill / Total Postings (Jan 2019 - Dec 2019)	Frequency in Profiles	Profiles with Skill / Total Profiles (2018-2020)
Selling Techniques	5%	8,010 / 158,869	3%	2,966 / 96,401	Management	23%	36,937 / 158,869	26%	24,902 / 96,401
Accounting	5%	7,979 / 158,869	6%	5,420 / 96,401	Customer Service	20%	32,488 / 158,869	26%	24,953 / 96,401
Merchandising	5%	7,957 / 158,869	3%	2,927 / 96,401	Sales	19%	30,082 / 158,869	22%	21,270 / 96,401
Restaurant Operation	5%	7,346 / 158,869	3%	2,856 / 96,401	Communications	18%	29,129 / 158,869	1%	595 / 96,401
Auditing	5%	7,331 / 158,869	3%	2,999 / 96,401	Leadership	15%	23,095 / 158,869	19%	18,344 / 96,401
Nursing	4%	5,745 / 158,869	2%	1,593 / 96,401	Operations	14%	22,065 / 158,869	10%	9,917 / 96,401
Customer Experience	3%	5,004 / 158,869	1%	659 / 96,401	Problem Solving	9%	15,090 / 158,869	1%	1,301 / 96,401
Agile Software Development	3%	4,949 / 158,869	1%	970 / 96,401	Valid Driver's License	9%	13,550 / 158,869	0%	13 / 96,401
Basic Life Support	3%	4,527 / 158,869	1%	967 / 96,401	Presentations	8%	13,409 / 158,869	4%	3,552 / 96,401
Cardiopulmonary Resuscitation (CPR)	3%	4,433 / 158,869	2%	2,360 / 96,401	Written Communication	7%	11,034 / 158,869	0%	448 / 96,401
Project Management	3%	4,195 / 158,869	6%	5,314 / 96,401	Innovation	7%	10,786 / 158,869	0%	121 / 96,401
Customer Relationship Management	3%	4,099 / 158,869	4%	4,025 / 96,401	Research	7%	10,407 / 158,869	10%	9,627 / 96,401
Automation	3%	4,061 / 158,869	1%	1,015 / 96,401	Microsoft Excel	7%	10,339 / 158,869	15%	14,538 / 96,401
SQL (Programming Language)	3%	4,011 / 158,869	2%	2,191 / 96,401	Coordinating	6%	9,627 / 158,869	3%	2,914 / 96,401
Customer Satisfaction	3%	4,007 / 158,869	4%	3,960 / 96,401	Microsoft Office	6%	9,497 / 158,869	14%	13,839 / 96,401
Warehousing	2%	3,887 / 158,869	1%	523 / 96,401	Interpersonal Skills	5%	8,571 / 158,869	1%	966 / 96,401
Strategic Planning	2%	3,806 / 158,869	6%	6,061 / 96,401	Computer Literacy	5%	8,137 / 158,869	2%	2,084 / 96,401
Purchasing	2%	3,767 / 158,869	3%	3,117 / 96,401	Troubleshooting (Problem Solving)	5%	7,883 / 158,869	2%	1,982 / 96,401
Business Development	2%	3,703 / 158,869	4%	4,263 / 96,401	Teamwork	5%	7,343 / 158,869	3%	2,761 / 96,401
Billing	2%	3,466 / 158,869	4%	3,539 / 96,401	Verbal Communication Skills	4%	6,762 / 158,869	1%	542 / 96,401

Source: EMSI Job Posting Analytics

Supply & Demand, Top Hard and Common (Soft) Skills, January - December 2019 Larimer County									
Skill	Frequency in Postings	Postings with Skill / Total Postings (Jan 2019 - Dec 2019)	Frequency in Profiles	Profiles with Skill / Total Profiles (2018-2020)	Skill	Frequency in Postings	Postings with Skill / Total Postings (Jan 2019 - Dec 2019)	Frequency in Profiles	Profiles with Skill / Total Profiles (2018-2020)
Merchandising	6%	3,983 / 64,884	3%	4,434 / 158,342	Customer Service	21%	13,388 / 64,884	28%	44,159 / 158,342
Selling Techniques	5%	3,281 / 64,884	3%	4,272 / 158,342	Sales	19%	12,239 / 64,884	22%	34,541 / 158,342
Restaurant Operation	5%	3,272 / 64,884	3%	4,525 / 158,342	Management	18%	11,916 / 64,884	26%	41,875 / 158,342
Nursing	4%	2,840 / 64,884	2%	2,766 / 158,342	Communications	16%	10,100 / 64,884	1%	1,294 / 158,342
Basic Life Support	4%	2,717 / 64,884	1%	1,761 / 158,342	Leadership	11%	7,354 / 64,884	24%	37,663 / 158,342
Accounting	4%	2,388 / 64,884	4%	6,809 / 158,342	Operations	11%	7,303 / 64,884	8%	12,804 / 158,342
Cardiopulmonary Resuscitation (CPR)	4%	2,386 / 64,884	3%	4,726 / 158,342	Valid Driver's License	10%	6,455 / 64,884	0%	14 / 158,342
Auditing	3%	2,092 / 64,884	2%	3,241 / 158,342	Problem Solving	8%	4,985 / 64,884	2%	2,716 / 158,342
Customer Experience	3%	1,832 / 64,884	1%	1,249 / 158,342	Presentations	6%	4,155 / 64,884	3%	4,899 / 158,342
Warehousing	2%	1,585 / 64,884	0%	467 / 158,342	Research	5%	3,517 / 64,884	13%	21,319 / 158,342
Purchasing	2%	1,484 / 64,884	3%	4,374 / 158,342	Innovation	5%	3,442 / 64,884	0%	272 / 158,342
Caregiving	2%	1,469 / 64,884	0%	522 / 158,342	Written Communication	5%	3,382 / 64,884	0%	662 / 158,342
Customer Satisfaction	2%	1,418 / 64,884	4%	6,619 / 158,342	Coordinating	5%	3,164 / 64,884	3%	4,607 / 158,342
Cash Register	2%	1,352 / 64,884	1%	1,107 / 158,342	Teaching	5%	3,125 / 64,884	8%	13,091 / 158,342
Customer Relationship Management	2%	1,280 / 64,884	4%	6,060 / 158,342	Microsoft Excel	5%	3,072 / 64,884	16%	25,910 / 158,342
Food Services	2%	1,274 / 64,884	1%	1,704 / 158,342	Computer Literacy	4%	2,898 / 64,884	2%	2,551 / 158,342
Agile Software Development	2%	1,221 / 64,884	1%	2,079 / 158,342	Teamwork	4%	2,861 / 64,884	4%	6,652 / 158,342
Budgeting	2%	1,154 / 64,884	4%	6,603 / 158,342	Troubleshooting (Problem Solving)	4%	2,721 / 64,884	2%	3,862 / 158,342
Advanced Cardiovascular Life Support (ACLS)	2%	1,149 / 64,884	1%	1,076 / 158,342	Good Driving Record	4%	2,688 / 64,884	0%	2 / 158,342
Strategic Planning	2%	1,053 / 64,884	8%	12,516 / 158,342	Microsoft Office	4%	2,544 / 64,884	19%	29,326 / 158,342

Source: EMSI Job Posting Analytics

Supply & Demand, Top Hard and Common (Soft) Skills, January - December 2019 El Paso & Teller Counties (Pikes Peak)									
Skill	Frequency in Postings	Postings with Skill / Total Postings (Jan 2019 - Dec 2019)	Frequency in Profiles	Profiles with Skill / Total Profiles (2018-2020)	Skill	Frequency in Postings	Postings with Skill / Total Postings (Jan 2019 - Dec 2019)	Frequency in Profiles	Profiles with Skill / Total Profiles (2018-2020)
Nursing	4%	5,484 / 125,615	2%	5,518 / 310,076	Management	23%	28,639 / 125,615	27%	84,058 / 310,076
Selling Techniques	4%	5,356 / 125,615	3%	8,168 / 310,076	Customer Service	18%	22,962 / 125,615	27%	84,644 / 310,076
Auditing	4%	5,160 / 125,615	2%	7,276 / 310,076	Sales	17%	21,301 / 125,615	20%	62,929 / 310,076
Top Secret-Sensitive Compartmented Information (TS/SCI Clearance)	4%	5,147 / 125,615	2%	6,484 / 310,076	Communications	17%	20,929 / 125,615	1%	2,742 / 310,076
Basic Life Support	4%	4,951 / 125,615	1%	3,685 / 310,076	Operations	16%	20,056 / 125,615	13%	41,747 / 310,076
Merchandising	4%	4,872 / 125,615	3%	8,059 / 310,076	Leadership	14%	18,102 / 125,615	24%	75,702 / 310,076
Restaurant Operation	4%	4,601 / 125,615	2%	7,351 / 310,076	Problem Solving	8%	10,497 / 125,615	2%	4,689 / 310,076
Cardiopulmonary Resuscitation (CPR)	4%	4,585 / 125,615	3%	8,443 / 310,076	Presentations	8%	9,545 / 125,615	3%	8,707 / 310,076
Agile Software Development	3%	4,377 / 125,615	1%	3,202 / 310,076	Valid Driver's License	7%	9,361 / 125,615	0%	51 / 310,076
Accounting	3%	4,209 / 125,615	4%	13,303 / 310,076	Coordinating	6%	7,995 / 125,615	3%	10,616 / 310,076
Systems Engineering	3%	3,958 / 125,615	3%	8,432 / 310,076	Troubleshooting (Problem Solving)	6%	7,994 / 125,615	3%	10,706 / 310,076
Customer Experience	3%	3,767 / 125,615	1%	2,634 / 310,076	Innovation	6%	7,863 / 125,615	0%	432 / 310,076
Linux	3%	3,763 / 125,615	2%	4,668 / 310,076	Microsoft Excel	6%	7,709 / 125,615	15%	45,665 / 310,076
Software Engineering	3%	3,576 / 125,615	2%	4,897 / 310,076	Written Communication	6%	7,485 / 125,615	0%	1,353 / 310,076
Operating Systems	3%	3,568 / 125,615	2%	4,937 / 310,076	Microsoft Office	6%	7,196 / 125,615	17%	51,672 / 310,076
Software Development	3%	3,250 / 125,615	2%	6,297 / 310,076	Research	5%	6,894 / 125,615	9%	29,306 / 310,076
Customer Satisfaction	3%	3,238 / 125,615	5%	13,978 / 310,076	Interpersonal Skills	5%	6,205 / 125,615	1%	2,637 / 310,076
Automation	3%	3,163 / 125,615	1%	3,039 / 310,076	Integration	5%	6,061 / 125,615	4%	11,285 / 310,076
Java (Programming Language)	2%	3,115 / 125,615	2%	5,744 / 310,076	Computer Literacy	4%	5,625 / 125,615	2%	5,296 / 310,076
SQL (Programming Language)	2%	2,955 / 125,615	2%	7,370 / 310,076	Teamwork	4%	5,302 / 125,615	3%	8,867 / 310,076

Source: EMSI Job Posting Analytics

### Question 3

*Provide an analysis of the workforce in the region, as well as for each area included in this planning 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, and veterans.*

*For reasons cited above, we may expect the workforce recovery to be slow, as it was in the last recession, where jobs lost were not replaced fully until 2012, though the recession officially ended in July 2009. Right now, younger people have been most adversely affected. Millennials, who now make up 34% of the labor force, have lived through the 2008-2009 recession, and are now experiencing the current downturn. This may affect their spending and saving behavior.*

*Consumer confidence has taken two major blows in the last two decades, and this will likely leave a mark. Uncertainty among consumers and among businesses is projected to continue for some time into the post-pandemic recovery, and for those working, saving more and spending less will become the norm. This may drive efforts to increase solar and wind usage on a micro level, and lead to more home gardening and greater efforts at general preparedness.*

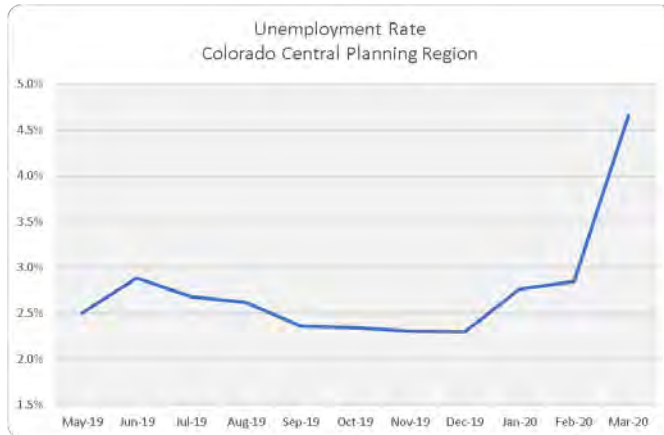
*Other concerns include workers in special populations, who may be more deeply affected longer as a result of COVID-19.*

- Mature workers 55 years or older traditionally have harder time reattaching to employment. As companies cut costs, they may cut more costly mature workers, and when this happens, the affected workers may not be able to find jobs at the same wage.*
- Individuals with disabilities may need hands on services and not be able to get them.*
- Individuals in the WIOA priority groups may need greater career services and training interventions to be employable. Since the pandemic began, and during the high unemployment we will experience during the recovery, it is likely that the number of persons receiving TANF (Temporary Assistance to Needy Families) assistance, as well as assistance from other safety net programs such as the Supplemental Nutritional Assistance Program (SNAP), will increase, perhaps substantially.*
- People dependent on transit systems may experience challenges returning to work as the Regional Transportation District (RTD) attempts to run with social distancing.*

*Remote working has proven itself and may well become far more mainstream than it has heretofore. This means the knowledge workforce may become more diffuse, and economic development efforts will be driven even more toward attracting high-skilled knowledge workers, who will increasingly choose to live where they wish and offer their services using the remote technologies in an increasingly networked economy.*

*The heavy emphasis on cloud computing, networking and remote work technology will drive higher demand for computer professionals, engineers, high-skilled technicians and may spur efforts to better secure high-speed internet systems.*

## Full Employment and the COVID-19 Pandemic



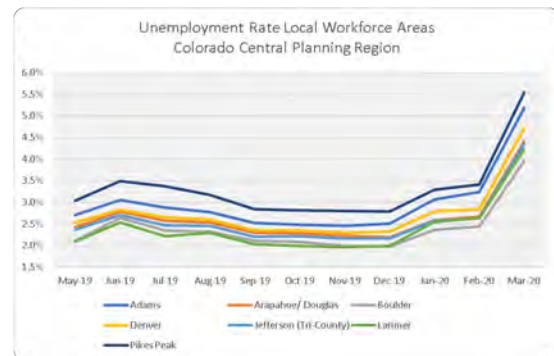
This line graph showing unemployment rates uses data from the BLS. The spike in unemployment between February and March is likely to steepen. With the known number of new and continuing unemployment claims, the April and May unemployment numbers may well be substantially higher, above 10%.

Economists at the Federal Reserve (Fed) currently consider full employment as being between 4.1 percent and 4.7 percent. As unemployment has stayed low over this period, which is the longest economic expansion in the United States since this data has been tracked, the estimate of just what exactly constitutes ‘full employment’ has been revised steadily downward.

If we take ‘full employment’ as being at 4.7%, the CCPR has been at full employment since July 2014. If it is at the Fed’s low estimate (4.1%), then employment in the CCPR went above full in April 2015. The line graph above shows that the CCPR has now gone to a 4.7% rate, again likely to climb over the next months.

This line graph shows the unemployment rate in the seven workforce areas that make up the CCPR.

While it is beyond the scope of this Plan to fully discuss inflation, it may well be pointed out that the labor market is a market, and as such is subject to the laws of supply and demand. If demand is higher than supply, then wages, benefits and other perks, such as signing bonuses, increase. If supply is higher than demand, the converse is true.



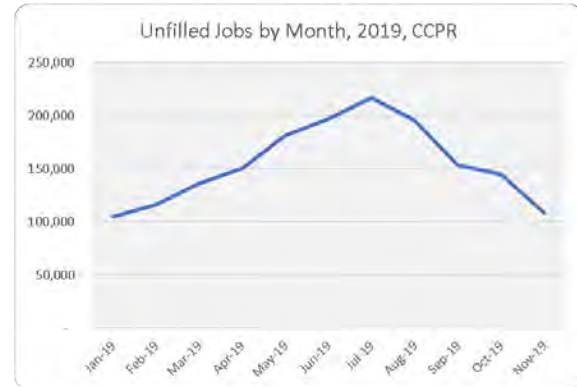
In the years before the pandemic, the region has also experienced very rapid inflation of home prices, as well as residential rent prices. A 2019 analysis of Douglas County rental housing found that nearly 90% of the people working in Douglas County could not afford to rent housing there at or below 30% of their gross income. However, with the pandemic rental vacancies have risen.

## Unfilled Jobs

*This section has been left as it was because there is still a skills gap, and the workforce development system is working with its partners through business led sector partnerships to ensure that federal workforce development monies are targeted toward critical business-relevant outcomes.*

By comparing the number of monthly job postings with the average number of monthly hires, it is possible to arrive at a reasonable estimate of the number of unfilled jobs in the CCPR. Using this method, there were an average of 155,075 unfilled jobs per month in the CCPR during 2019.

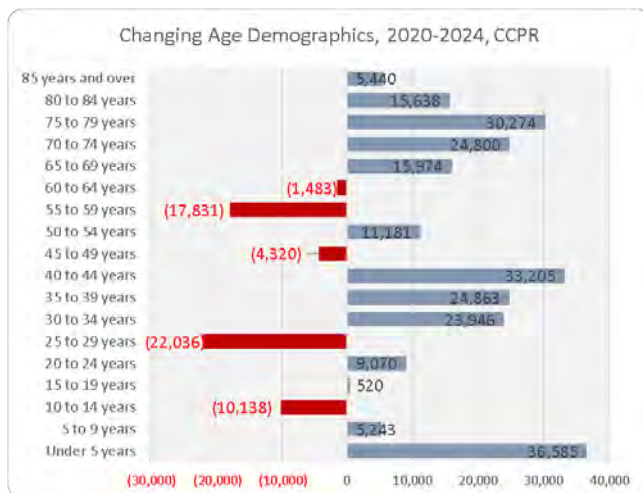
The line graph shows the number of unfilled jobs was at its lowest in January, with an estimated 104,993 jobs unfilled, and peaked at 217,120 unfilled jobs during the month of July.



With the new data capabilities available to local workforce development areas, this analysis can be done for all occupations, occupational families or individual occupations, and such analysis can be useful to inform discussion and set priorities within sector partnerships.

## Changing Age Demographics

Age demographics have been changing in Colorado over the last decade. During the 1990s, 2000s and into the 2010s, the CCPR attracted young, educated, high-skilled workers in substantial numbers. They came seeking opportunity. Now, as they leave the labor force, they are staying in the region, with house prices many are retiring in place.



This bar graph shows the patterns of population growth by age band. Note that 51% of the projected growth through 2024 is in the age bands 65 years old and over.

Because older consumers purchase more services than they do goods, the service portion of the economy is expected to grow, particularly in health care services.

Other areas for growth include food delivery from gig workers (Grub Hub), personal care

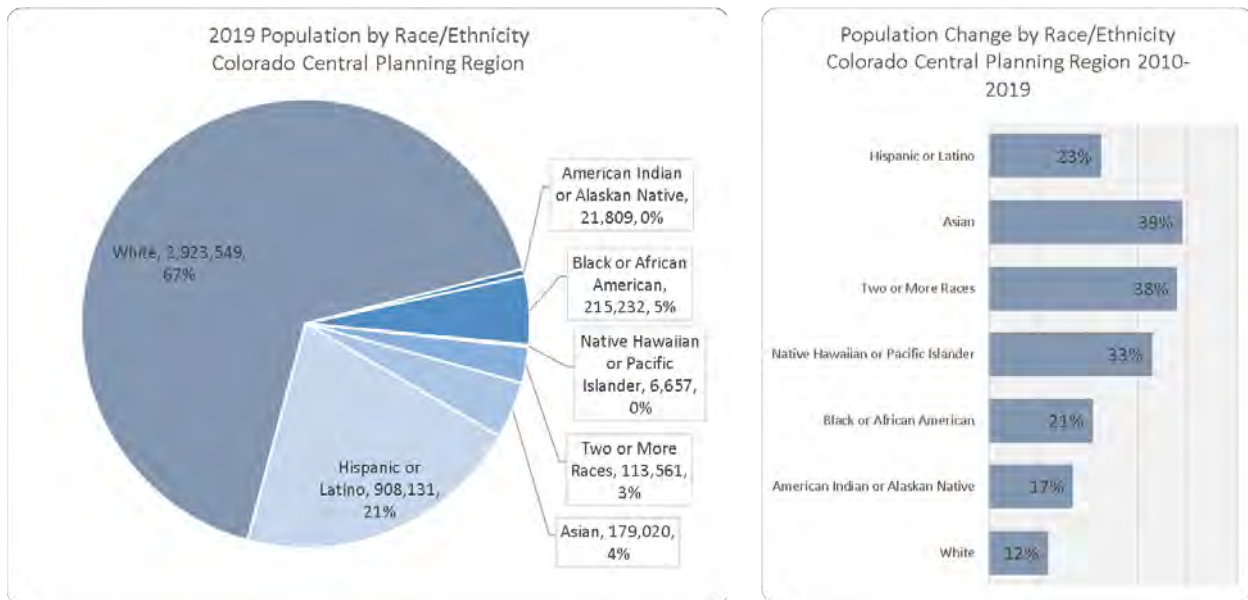
aides, fitness trainers, house cleaning services.

Supermarkets are now increasingly offering home delivery for groceries, or even in-store pickup, and customer bases are growing, and in-home entertainment options have been growing with more streaming opportunities.

In the meantime, key elements of the labor force are shrinking, particularly the 25 to 29 age group, and the 55 to 64 age groupings. This systemic pattern will leave local businesses with fewer entry-age workers, and suggests that efforts be made through economic development partners to increase net migration in those age groupings.

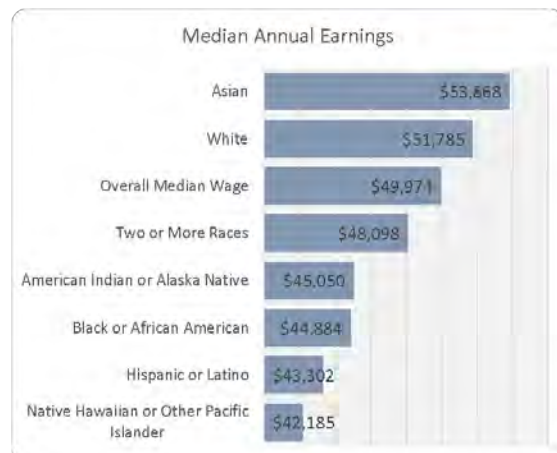
With existing data capabilities, each local area should work with economic development partners to identify patterns in population growth, and put strategies in place that will allow for the growth of services, as well as the sustainability of skilled workers in key primary industry sectors.

### Racial and Ethnic Makeup of Labor Force

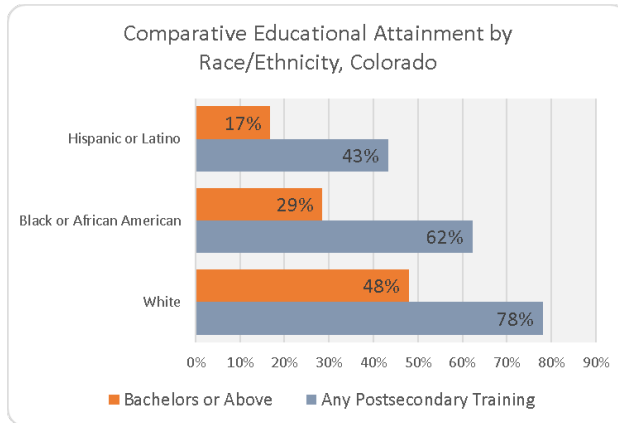


This pie chart and bar graph tell a story as well. The pie shows the number and percent of each racial and ethnic group in the CCPR. The bar chart shows projected growth rates for each of these groups. Notice that the highest growth is expected in the Asian and Two or More racial categories, while the Hispanic or Latino population is expected to grow by over 168,200 (23%) by 2024.

This bar graph shows these figures for the CCPR, important because of the disparity in educational attainment for racial and ethnic minorities, particularly black or African American and Hispanic or Latino. First, there is a very high positive correlation between educational attainment and earnings. Median earnings for workers by race/ethnicity may be derived from existing data sources by calculating the proportion of racial/ethnic minorities in each occupation group and then using wage data to estimate median earnings for each group.







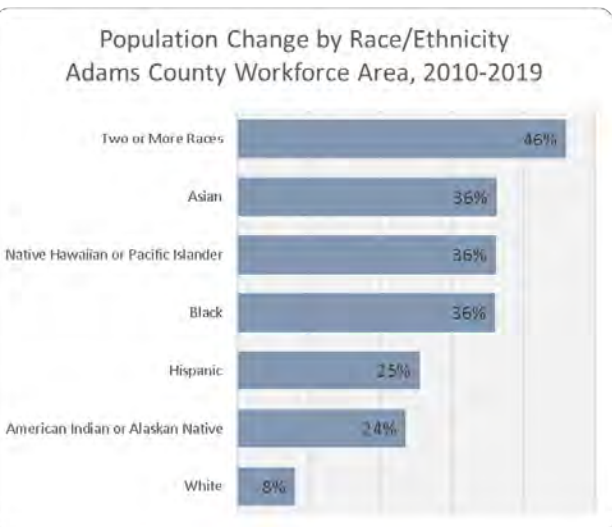
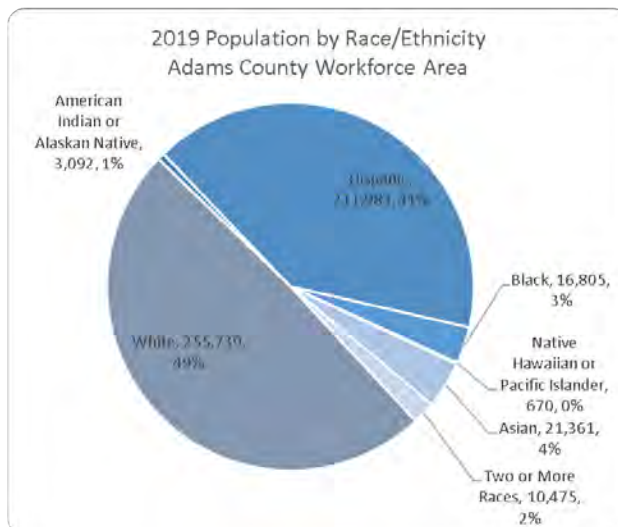
This graph uses data from the US Census to show comparative educational attainment by race/ethnicity in Colorado.

The disparity in educational attainment levels shown exists in all geographic areas within the state, including the CCPR and the local workforce areas that make it up.

Considering that 45% of job postings in the CCPR call for some level of postsecondary training, and

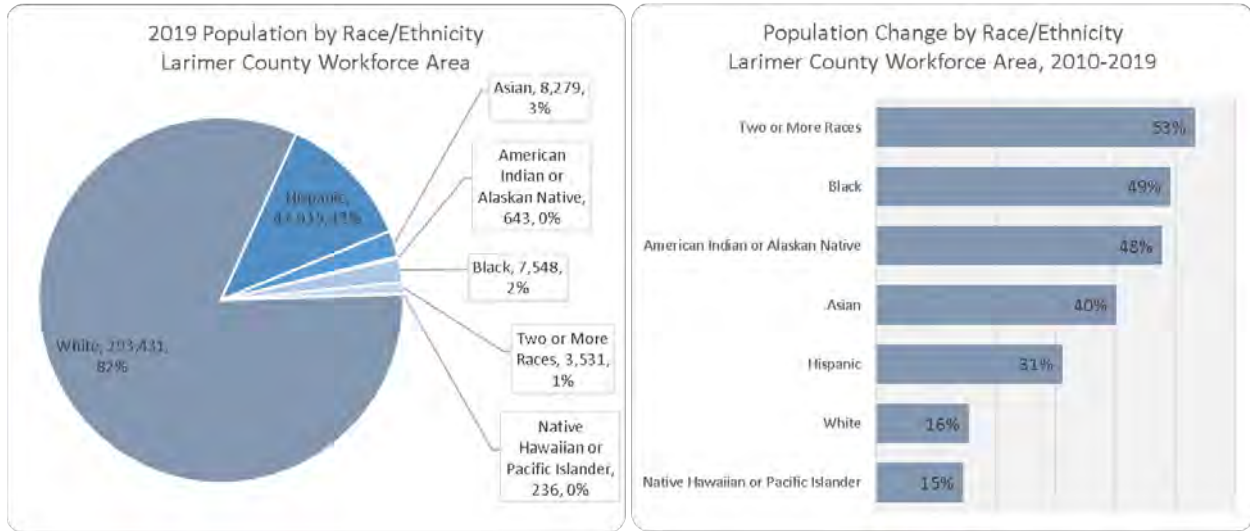
39% of postings call for a bachelor's degree or higher, it is vital for Colorado as a whole, as well as each local workforce area and its education partners, form strategies to systemically increase the educational attainment levels of racial and ethnic minorities. Those populations are growing at higher rates than the white population, and by 2050, according to the Colorado Demography Office, racial and ethnic minorities will make up 48% of the state's labor force.

### Adams County

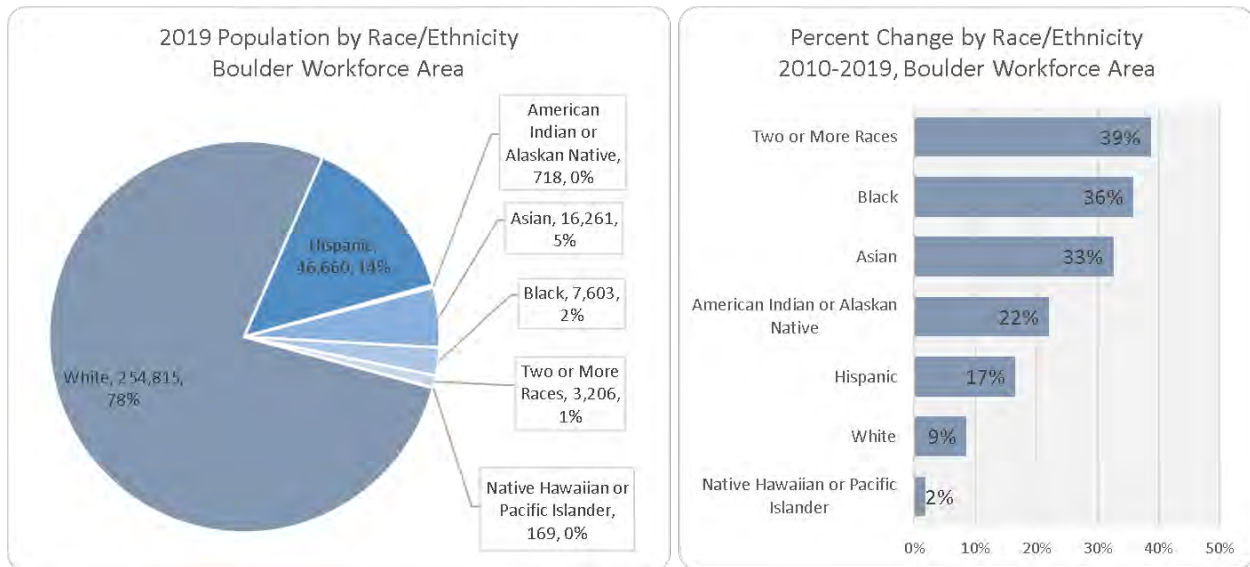




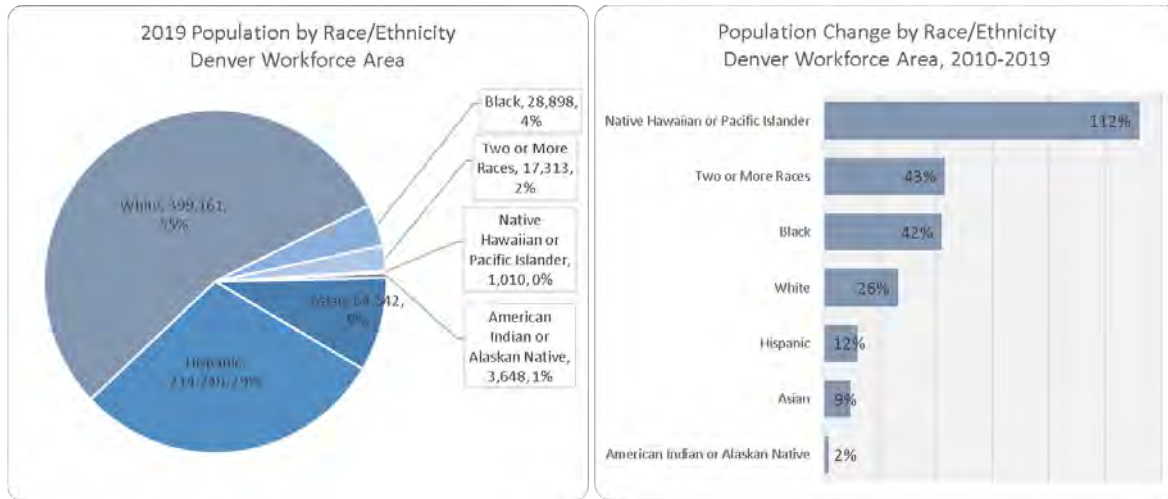
**Arapahoe/Douglas**



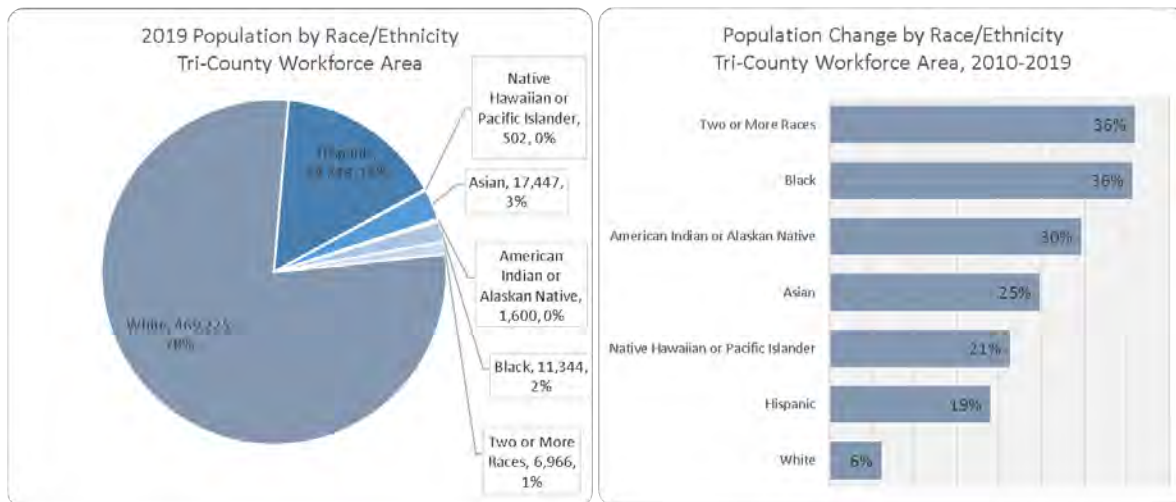
**Boulder**



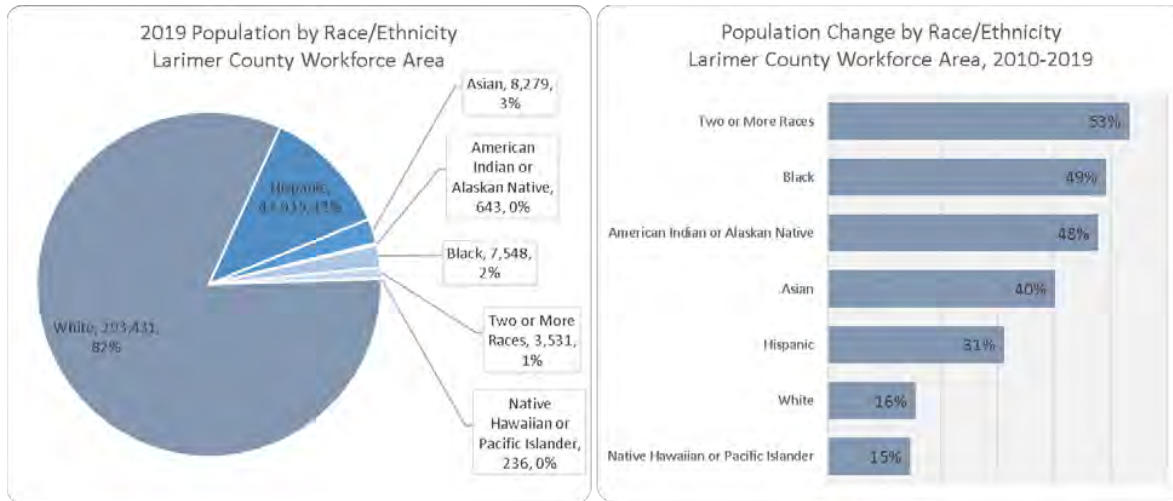
Denver



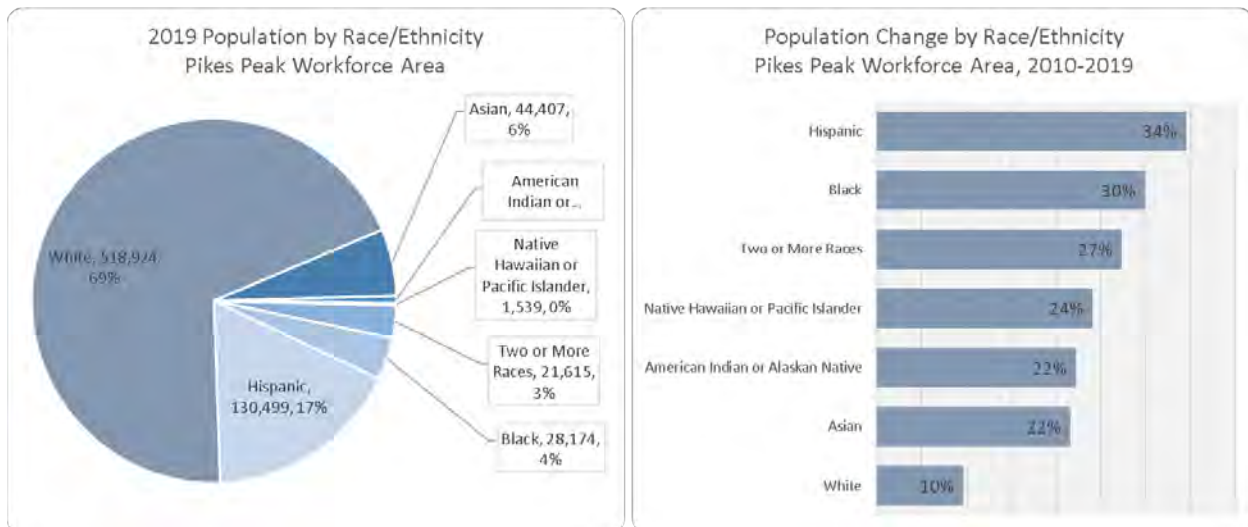
Jefferson, Clear Creek and Gilpin Counties (Tri-County)



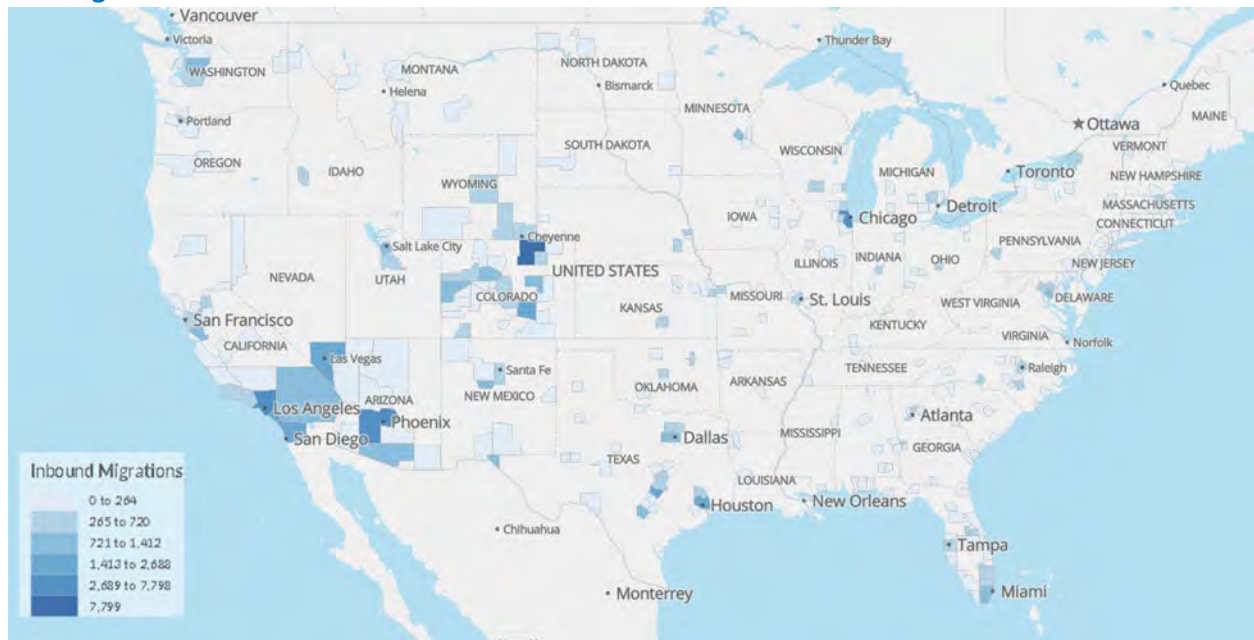
**Larimer County**



**El Paso and Teller Counties (Pikes Peak)**



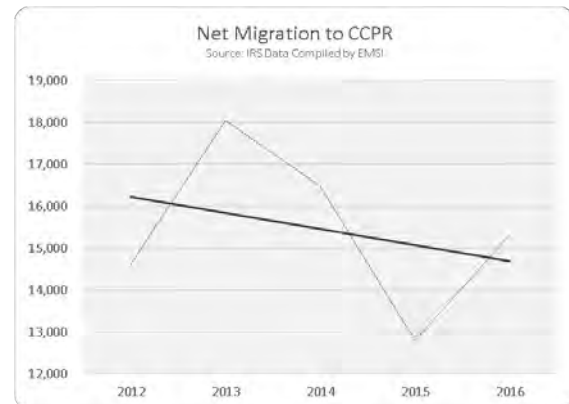
## Net Migration



This map, taken from EMSI, uses year-over-year tax return data from the Internal Revenue Service to show the origins of inbound migration into the CCPR.

The line graph shows that net migration into the CCPR is trending down since 2012.

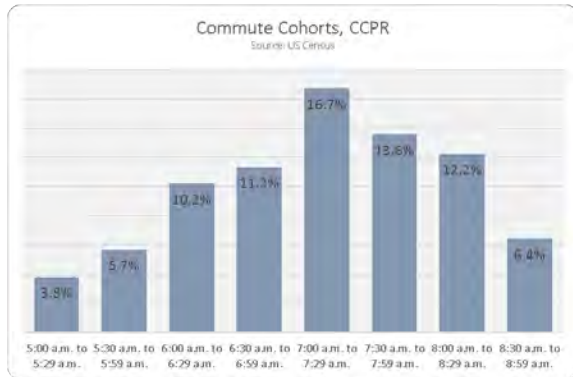
Local workforce areas, boards and their business services teams should work with economic development and sector partners to create strategies to increase net migration of high-skilled workers.



## Commute Patterns

LIVE IN County	WORK IN											
	Adams	Arapahoe	Boulder	Broomfield	Clear Creek	Denver	Douglas	El Paso	Gilpin	Jefferson	Larimer	Teller
Adams	64,380	23,491	15,029	8,187	93	56,366	5,902	3,838	718	26,409	3,268	68
Arapahoe	27,633	104,090	5,113	2,136	115	86,825	24,562	6,448	326	20,954	3,218	82
Boulder	7,037	5,639	77,573	4,623	53	11,875	2,191	2,088	101	7,092	4,068	24
Broomfield	4,939	1,912	7,740	4,253	18	5,736	706	427	55	3,859	541	9
Clear Creek	229	342	166	36	825	595	116	69	95	851	91	2
Denver	31,457	56,548	9,458	3,373	184	137,009	14,151	4,799	531	30,469	3,210	83
Douglas	7,763	45,009	3,047	1,340	70	33,119	39,796	4,994	108	13,803	1,635	110
El Paso	6,297	10,982	2,778	883	59	12,835	5,594	189,899	25	6,392	2,596	1,518
Gilpin	119	149	487	49	36	259	61	38	722	341	31	0
Jefferson	24,673	35,649	13,407	6,051	622	70,423	11,197	5,408	1,745	87,754	3,560	105
Larimer	4,894	4,674	9,350	913	48	7,728	1,891	2,760	15	4,178	87,763	40
Teller	178	430	77	47	8	596	236	3,195	15	316	77	3,532

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



This table shows intra-county commute patterns within the CCPR. Data is the latest available (2017).

Since 80% of all commuters travel to work between the hours of 5:00am and 8:59am, local workforce areas and their boards stakeholders in transportation strategies.

Business service teams can assist in overall strategies to address traffic volume by researching and providing information to businesses about the most effective strategies for worker retention, including flex

scheduling and telecommute options.

### Issues for Special Populations

Unemployment, Selected Populations, Colorado Central Planning Region	
Population	Estimated Rate
White	2.2%
Black/African American	3.9%
Asian	1.8%
Hispanic/Latino	2.9%
All Teens	8.3%
White, Age 16-19	7.4%
Black/African American, Age 16-19	13.5%
Hispanic/Latino, Age 16-19	11.2%
Individuals with Disability	4.9%

Source: US Bureau of Labor Statistics

Unemployment is generally low in the CCPR, with disparities in race/ethnicity and disability status. Unemployment for teens, particularly those who are black/African American, or Hispanic/Latino.

The WIDE group has been able to work with the Colorado Department of Labor and Employment for access to data on wage outcomes by special population, which can be used to improve

services.

### Veterans

Unemployment, Veterans, Colorado Central Planning Region	
Population	Estimated Rate
All Veterans	1.9%
Gulf-Era II Veterans	2.2%
Gulf-Era I Veterans	1.7%
Vietnam Era Veterans	2.3%
Other Service Periods	1.8%
Non-Veterans	2.3%

Source: US Bureau of Labor Statistics

The CCPR is known nationally for the quality of services to veterans. Generally, unemployment among veteran groups is low in the region, and local workforce boards, as well as business leaders in the region are committed to ensuring returning veterans are hired.

The CCPR is a particularly 'veteran-friendly' region due to the high concentrations of civilian employment in aerospace and homeland security. As the aerospace industry grows with the new Colorado spaceport, veterans will find even more opportunity in the regional economy.



*Question 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.*

#### Development and Implementation

The Workforce Development Areas that make up the Central Planning Region work closely together at all levels, from the Director, Operator and MIS groups, which all meet monthly, to the Business Services teams, which are coordinated throughout Colorado, and especially in the Central Planning Region.

There are a number of central themes in how the areas making up the CCPR approach business services along Colorado's front range.

- **All workforce development areas within the CCPR are now actively partnering with economic development, chambers of commerce, small business development centers, public health, educators, and other stakeholders, to create an information and services clearing house to aid local employers during pandemic recovery. All the workforce development areas have established strong community collaborations that will be maintained during and after the pandemic recovery. The workforce development boards and centers are now recognized throughout the CCPR as an integral part of the local economy.**
- **The Workforce Intelligence Data Expert group has expert members from all workforce areas in the CCPR, and acts to inform workforce areas and their partners with timely, consistent, pertinent, and accurate data to be used to aid in the pandemic recovery. The group works across the region to create a unified data approach to informing all customers in the CCPR. The group has also formed strong partnerships with the Colorado Department of Labor & Employment, the Colorado Demography Office and the Colorado Department of Higher Education. The WIDE group was selected to present at the National Association of Workforce Boards 2020 Forum as a result of its unified approach to services and commitment to assessing economic impact using evidence based outcomes.**
- Business services teams listen to their business customers using a variety of strategies:
  - Leaders from the Business Services Teams regularly meet virtually and discuss new intelligence from regional businesses.
  - Intelligence from in-person (virtual) contacts with business customers are shared in Connecting Colorado, and in area team meetings.
  - Job posting intelligence is regularly gathered by the Workforce Intelligence Data Expert (WIDE) group and shared throughout the region.
- The teams are often called upon to act in a convening role with business customers in setting up sector partnerships, or in guiding program efforts with job seekers in business and industry-relevant directions.
- Teams throughout the region now use a consultative approach with business customers, asking first what is needed, then working within or across multiple workforce development areas within the region to provide relevant services to the business, group of businesses or sector partnership.
- Business services have been standardized across Colorado so that service delivery and successes can be tracked in a meaningful way.
- Two areas in the region are piloting a hub approach to entering job orders in greater metro Denver.



- With the COVID-19 pandemic, teams switched to virtual services for both job seekers and business customers and have found that virtual services are more effective in many cases than the pre-pandemic brick and mortar strategies. This has proven true for workshops, job fairs, custom hiring events and consultative contacts by team members.
- Local directors in the CCPR have increasingly used a hub strategy for more efficient service delivery throughout the region. The hub approach allows funds intended to help in recovery to be put into the region rapidly with a minimum of bureaucratic hurdles. These hub strategies allow for the local areas in the region to take initiative in various cross-regional projects without service duplication. Some examples of the hub approach:
  - Virtual recruitment, workshops and job fairs are regularly provided using resources from multiple local workforce development areas.
  - Local areas are also cooperating around providing required rapid response services in the face of mass layoffs, particularly for those employers who have facilities in several counties within the CCPR.
  - Workforce development areas in the CCPR plan to use the hub approach for more efficient and flexible delivery of grant funds to the region. This began prior to the pandemic, but subsequent emergency and dislocated worker grants that serve job seekers throughout the region will be managed through individual areas acting as service hubs and fiscal agents, again with the coordination of CUWA.
- Work based learning and registered apprenticeships (RA) are stressed over more traditional occupational classroom training. Statewide RA consultants have been hired to deliver technical assistance and training to businesses statewide who desire to develop registered apprenticeship programs that result in industry recognized credentials. These RA Consultants also provide technical assistance and training to staff and partners of the workforce development system as needed on a statewide basis.
- Skill based job descriptions and hiring are increasingly being used by employers in all regions to fill critical positions, and Business Services teams throughout the CCPR have partnered with Skillful to deliver training.
- Local areas are also using technology to schedule remote appointments.



Employer Engagement & Sector Partnerships

The table below shows the sector partnerships that the various workforce development areas in the CCPR are participating in.

Sector Partnerships in Central Planning Region	
Sector Partnerships	Participating Regions
NOCO Health	Larimer
NOCO Manufacturing	Larimer
Aerospace & Aviation	Arapahoe/Douglas, Jefferson, Adams, Denver
Metro Denver Retail, Hospitality, Food & Beverage	Adams, Arapahoe/Douglas, Boulder, Denver, Jefferson
Colorado Tree Care (Arborist)	Denver
Greater Metro Denver Healthcare	Arapahoe/Douglas, Jefferson, Adams, Denver
Metro Denver Construction	Arapahoe/Douglas, Adams, Denver
Tech Talent	Arapahoe/Douglas, Jefferson, Adams, Denver
Metro Manufacturing	Arapahoe/Douglas, Jefferson, Adams, Denver
Early Childhood	Denver
Tech/Talent Boulder/Broomfield	Boulder
Boulder Healthcare	Boulder
COS Health	Pikes Peak
Colorado Springs Manufacturing	Pikes Peak
Colorado Springs Retail & Hospitality	Pikes Peak

Exploring Partnerships	Participating Regions
Finance	Adams

Emerging Partnerships	Participating Regions
Transportation	Adams

Strategies employed by the various workforce development areas in the CCPR for employer engagement include help for individual local businesses, including small businesses, cooperation between areas when appropriate, and may include development of and participation in sector partnership activities. In addition, these efforts, both cooperative and individual, may also include:

- Business education events.
- Intelligence on wage and labor force trends.
- Partnerships with Economic Development entities and Chambers of Commerce.
- Industry focus groups or panel discussions.
- Assistance in developing registered apprenticeships.
- Orientations for apprenticeship opportunities, and communications with staff serving job seekers on trends that can be shared during case management sessions.
- Assistance through disaster and employment recovery grants, as allowable and appropriate.

### Adams

The Adams County Workforce & Business Center focuses efforts on sector initiatives based on trends related to three areas that are monitored frequently:

1. Labor Supply
  - a. This involves taking regular inventory of the ONET codes of program-attached participants, and seeking out employers who hire people with those skills sets.
2. Labor Demand
  - a. The jobs posted most frequently are monitored to determine the skills and occupations that are in greatest need of workforce solutions.
  - b. The labor market information and wages associated with those jobs are shared with youth and job seekers transferring out of various sectors to generate an increased supply to meet this demand.
  - c. Upskilling strategies are designed to increasing the number of skilled and qualified workers to meet business need.
3. Cross-Regional Activity
  - a. Collaboration across workforce regions is key to maintaining a standardized service offering for both job seekers and employers. Such standardized cross-regional services may be made in support of a single business customer or a sector partnership.

### Arapahoe/Douglas

The Arapahoe/Douglas Works! business services team actively participates in the Greater Metro Denver Healthcare Partnership, Denver Metro Retail Partnership, Manufacturing Partnership and the Construction Partnership.

It is a co-convenor of the Tech Talent Denver Partnership and has worked with local and regional aerospace employers to launch the Aerospace and Aviation partnership.

The goal at Arapahoe/Douglas Works! is to participate and listen to industry needs, and to the needs of the individual business customer, including small, medium and large businesses. The business services team works to ensure business customers are receiving relevant training, the services they need, including work-based learning to fill critical staff needs.

Arapahoe/Douglas Works! has built out a Business and Economic Development Hub at its Lima Plaza facility in Centennial. Through this Hub, local businesses and economic developers may use temporary office space, and attend a variety of informational workshops ranging from tax credits to interviewing strategies. These services are now being offered virtually, though as the economy recovers, they will also once again be offered through the Hub.

Arapahoe/Douglas Works! also provides training for employers using the Skillful model of skills-based outreach and hiring. Skillful workshops are designed to help employers refine job descriptions for more efficient and effective outreach, and modify interviewing and hiring policies to identify skills rather than hiring by educational attainment level.

### Boulder

Through the Boulder County Talent Collaborative (formerly called the Boulder County Business Response Team), the Workforce Boulder County, along with other community partners, including local Chambers of Commerce, Front Range Community College, the Colorado Division of Vocational Rehabilitation, and our local public-school districts have partnered to address larger local area business needs.

Out of this collaborative, the following Sector initiatives have been launched:

- Healthcare Sector Group
- Boulder/Broomfield IT Sector Partnership
- New Medical Assistant Registered Apprenticeship

In addition, this group of partners has worked together to convene employers from the restaurant sector, manufacturing, and have partnered to support other local events that connect employers to talent.

### Denver

Denver Workforce Centers are involved in a number of sector partnerships. The Early Childhood Education Sector Partnership was formed to address lack of affordable childcare, childcare worker wage levels and preparation.

Other business led sector partnerships Denver participates in include Tech Talent, Retail, Construction, Metro Manufacturing, the Greater Metro Denver Healthcare Partnership and Aerospace/Aviation.

The Denver business services team routinely works across regions with other workforce development areas in both sector partnerships and to serve business customers with locations in multiple workforce development areas within the region.

The group is working with business customers in both financial services and transportation infrastructure to determine interest in forming sector partnerships serving these industry groupings.

### Jefferson

At the request of local manufacturers, the Jefferson County Business & Workforce Center worked in partnership with Jefferson County Economic Development Center to receive a bridge and growth grant through the Colorado Workforce Development Council that assisted in reconvening the Metro Manufacturing Sector Partnership.

The current initiative includes the partnerships and businesses necessary to successfully support the manufacturing industry in greater metro Denver. Arapahoe/Douglas and Denver workforce development areas are working in partnership to support the Metro Manufacturing Sector Partnership.

Jeffco is also a co-convenor of Tech Talent Denver Sector Partnership. Additionally, they actively participate in the Healthcare Sector Partnership as well as the Aviation and Aerospace Sector Partnership.

Jeffco also takes the lead across the Denver metro workforce areas in the recruitment and funding of new apprentices for the Lockheed Martin advanced manufacturing registered apprenticeship program.

### Larimer

Larimer County Economic and Workforce Development Center takes an active convening role with the NoCo Manufacturing and Health Sector Partnerships, and has over many years developed strong relationships with local businesses.

Each year, the Larimer County Economic and Workforce Development Center hosts a business roundtable to provide local businesses a forum in which they can network and share their concerns around workforce needs.

Larimer County Economic and Workforce Development Center also delivers Skillful workshops to help employers with a more efficient and effective skills-based outreach and hiring process.

### Pikes Peak

In Program Year 2019, the Pikes Peak Workforce Center participated in three business-led sector partnerships serving the Colorado Springs metro area:

- Retail/Hospitality
- Healthcare
- Manufacturing

The Pikes Peak Workforce Development Board approved the following in-demand industries—Professional, Scientific and Technical Services, Healthcare, Construction Trades, Manufacturing and Lifestyles, Hospitality, Tourism and Sports.

Prior to the pandemic, the strategy with the Hospitality/Retail sector partnership was to begin using Incumbent Worker Training funds to help upskill employees to create Career Pathways that will benefit workers and businesses in the industry, including The Broadmoor, The Lodge at Flying Horse and numerous smaller properties.

Due to the pandemic, some employers have reduced their levels of engagement in the partnerships temporarily, but in other areas there are more employers coming to the table due to the nature of their industries and the urgency around reopening. An example of this is the childcare partnership in greater metro Denver. As recovery occurs, sector partnerships will be reconvened as and when the business partners feel the need.

*Question 5: Describe how career pathways will be used to meet the needs of employers and support work-based learning opportunities.*

Generally, employers in sector partnerships work together to identify current and anticipate future training pipeline needs, and the workforce development center business services teams help them determine the most helpful strategies moving forward, including:

- Promoting career awareness in public school districts.
- Using the Skillful rubric to determine the specific skills needed in critical occupations.
- Developing combinations of postsecondary classroom training and work-based learning opportunities designed to impart those critical skills.
- Maintaining awareness of the need for industry-recognized credential attainment through these training pipeline interventions.

The Pikes Peak Workforce Center is supporting healthcare career pathways in the context of the Healthcare Sector Partnership by partnering with Pikes Peak Community College and Centura Health to promote their Medical Assistant Program Apprenticeship. The workforce center offered informational sessions, interview space and offered co-enrollment in WIOA to help fund the classroom training portion of the apprenticeship.

Lockheed Martin has actively expanded its Advanced Manufacturing Technician Apprenticeship Program (AMTAP), which is a United States Department of Labor Registered Apprenticeship. AMTAP trains candidates on skills to build electronics and prepares them for an exciting career in space operations. The AMTAP apprenticeship began in Lockheed's Waterton Canyon campus in Jefferson County, and has been successful, with outreach, recruitment and funding participation from Jefferson, Adams, Arapahoe/Douglas and Denver workforce centers.

During this training program, participants are paid and offered company benefits. The graduates earn a nationally recognized industry credential and have the opportunity for full-time employment at Lockheed Martin.

Other multi-area sector partnerships have created career pathways, such as the Greater Metro Denver and Northern Colorado Healthcare Partnerships, as well as the Early Childhood Education Sector Partnership. Career pathways continue to be developed through all of the active regional sector partnerships.

*Question 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.*

All workforce development areas within the CCPR are now actively partnering with economic development, chambers of commerce, small business development centers, public health, educators, and other stakeholders, to create an information and services clearing house to aid local employers during pandemic recovery. All the workforce development areas have established strong community collaborations that will be maintained during and after the pandemic recovery. This includes a strong data coordination effort through the WIDE group.

*Question 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. In addition:*

- *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;*
- *Describe how the planning region will strategically coordinate workforce investment activities with the provision of adult education and literacy activities under title II.*
- *Describe how the planning region will strategically coordinate workforce investment activities with the provision of vocational rehabilitation services under title IV.*



- *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.*
- *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);*

#### *Regional Themes*

An operations work group has been established within the CCPR to coordinate the delivery of workforce development services to all customers and stakeholders. This group creates a uniform strategy around:

- Acts as a resource and information hub for the workforce development system region wide as new initiatives are created and new grants are awarded
- Establishing standard MOUs, and standardizing operations under local policies
- Establish standardized service funding levels across the region
- Streamline service delivery across the region
- Coordinate the delivery of technical assistance, and inform operations across the region
- Deliver federal funding quickly and efficiently throughout the region by using a hub approach, whereby one area is designated as the fiscal agent and the other regions work together to coordinate services and meet project objectives and goals
- Standardized procedures across region for operating new grants

#### *Strategies & Services with Economic Development*

All workforce development areas within the CCPR are now actively partnering with economic development, chambers of commerce, small business development centers, public health, educators, and other stakeholders, to create an information and services clearing house to aid local employers during pandemic recovery. All the workforce development areas have established strong community collaborations that will be maintained during and after the pandemic recovery.

#### *Strategies & Services to Coordinate Programs with Adult Education & Literacy*

Some of the workforce development areas within the CCPR offer Adult Basic Education, GED preparation and English Language programming on site under financial MOUs as specified by the Workforce Innovation and Opportunities Act.

#### *Coordination with Division of Vocational Rehabilitation*

The workforce development areas in the CCPR and the Colorado Division of Vocational Rehabilitation (DVR) have developed MOUs that outline coordinated service delivery and co-location of DVR personnel in designated workforce centers. In addition, a designated DVR representative sits on the Business Services Executive and Leadership Teams. DVR personnel participate in all cross-training with workforce center staff. DVR personnel and local workforce center staff coordinate case management of customers who may be dual-enrolled in other programming to maximize wrap-around services.

#### *Linkages Between One-Stop Delivery and Unemployment Insurance*

Several of the CCPR workforce areas have established call centers to assist job seekers in accessing the unemployment insurance system and other resources in the community.

The WIDE group has coordinated with CDLE UI Division to provide timely data to inform strategies for recovery through local partnerships between the workforce development boards, one-stop centers, economic developers, chambers of commerce, the Small Business Development Centers, and other stakeholders throughout the CCPR.

*Coordinating Activities with Statewide Rapid Response*

Business and career services teams are facilitating regional Rapid Response workshops for businesses who anticipate laying off workers. These workshops inform affected employees about available services through local workforce areas. In addition, local workforce regions may help affected workers in businesses anticipating layoffs to obtain employment prior to release.

For example, a large investment firm in greater metro Denver was anticipating layoff of 800 people. Local workforce regions worked together to coordinate a 'reverse hiring event,' whereby they held a job fair for the affected employees to expose them to opportunities in other investment and financial services firms. This resulted in a substantial number of the affected employees being placed in new jobs prior to separation and saved substantial amounts in potential unemployment payments.

*Question 8: Provide a description of the replicated cooperative agreements (as defined in section 107(d)(11)) 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)(11)(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.

CDLE applied for a Disability Employment Initiative grant on behalf of several of the workforce areas within the CCPR. This has allowed workforce areas within the region to enhance services to individuals with disabilities, and evaluate programmatic and physical accessibility in the local workforce centers within the CCPR.

Launched in January 2018, Colorado Works Subsidized Training and Employment Program (CW STEP)

helped connect at-risk populations eligible for basic cash assistance under the Temporary Aid to Needy Families program to fully access workforce center services and gain work-based learning opportunities in demand fields at livable wages.

*Question 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 CCPR 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, which has been achieved through the State Operators Group.

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 braided wrap-around supportive services than are allowable under WIOA.

For example, state apprenticeship expansion grants now allow for supportive services to be funded for enrolled apprentices in USDOL registered apprenticeship programs. This includes transportation, equipment, tools, clothing and other relevant services necessary for success in the apprenticeship.

Several local areas within the CCPR are increasingly moving to debit cards rather than vouchers for delivery of supportive services and other customer expenses.

*Question 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.

*Question 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.

*Question 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.*

Though this effort was underway, the pandemic caused workforce centers in the CCPR to have to operate virtually for case management appointments, supportive services, and group orientations and intake. These efforts will continue as the recovery progresses and beyond.

The virtual approach has actually improved attendance at some events such as TANF/Colorado Works and Employment First orientations. For example, at Arapahoe/Douglas Works! attendance at TANF orientations has risen above 80% on average when in person attendance seldom exceeded 55%.

Tools being used include Zoom, Go to Meeting, Skype, Cisco Webex, MS Teams and several regions are using DocuSign to obtain virtual signatures. It is anticipated that a combination of these tools and virtual services with in-person services will be retained in the future.

*Questions 13 and 14: Briefly describe the activities and steps taken to develop this regional plan. 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.*

The development of this plan was coordinated by CUWA, and included assistance from various regional workforce development board staffs, and the statewide business services leadership team and operators team. Data for questions one through three was supplied by the WIDE group.

Leadership from the local areas making up the CCPR met and reviewed the plan and provided updates and edits. The draft plan will be shared by workforce area directors with their boards, then posted on the CWDC website for public comment. All comments will be incorporated as appropriate and the Final Plan will be submitted to CDLE by July 31, 2020.