Arapahoe/Douglas Local Area Plan 2022



WIOA Regional and Local Plan Template for PY20-23 Updates for PY22 and PY23 as Required by USDOL TEGL 04-21: State Plan Modifications

The Colorado Workforce Development Council, in partnership with the WIOA Title I-IV program administrators and other partner programs, is updating the WIOA state plan based on the following guidance:

Economic and Labor Market Information: Required to reassess economic and labor market information (LMI) and adjust strategies for what may now be a different set of growing and declining industries, occupations, and skills to address immediate response and ongoing recovery efforts. Need to adapt and adjust their workforce goals and strategic focus for those communities with disproportionately higher unemployment rates and lower earnings — particularly among underserved population groups, or individuals facing barriers to employment (e.g., low-income individuals, English language learners, individuals without housing, individuals with disabilities).

Reemployment: Need to examine how well their systems and operations across the WIOA one-stop partner programs, including Unemployment Insurance (UI), can work more seamlessly together to positively affect the shared goal of reemployment, particularly for individuals with barriers to employment, including individuals with disabilities.

Equity in service delivery and educational programming: Need to examine which population groups, particularly those identified in the LMI analysis as having higher unemployment and lower earnings than the overall population, experience inequities in access to and participation in public workforce programs that lead to quality jobs. Need to develop education, training, and career service strategies that better address and promote equity in recruitment, service design, implementation, and support services that aim to provide equitable access and outcomes to all communities seeking access to workforce services.

Enhance supportive service offerings: Need to update supportive service strategies. Supportive services are essential to ensure that youth and adults can stay engaged in program offerings and reach their educational and employment goals and are particularly critical for those with justice and child welfare system involvement, individuals with disabilities, individuals without housing, or those with limited English proficiency. Partnerships with community-based organizations with deep roots in underserved communities are key to improve outreach and supports for an equitable recovery.

INSTRUCTIONS: Planning Regions must review all segments of their plan narrative for alignment with the modified state plan that will be posted for public comment on January 20, 2022, and for updates related to the USDOL modification requirements. All updates to the plan narrative must be yellow-highlighted so that reviewers can easily identify the new information.

Planning Region: Colorado Central Planning Region

Local Areas Included in this Planning Region: Adams, Arapahoe/Douglas, Boulder, Broomfield, Denver, Jefferson (Tri-County), Larimer, and Piles Peak (Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, El Paso, Gilpin, Jefferson, Larimer, and Teller counties)

OVERVIEW

The Arapahoe/Douglas Workforce Development Board (WDB) is dedicated to identifying and promoting workforce development strategies that positively impact the economic well-being of Arapahoe County, Douglas County and the Metro Denver region.

OUR VISION is sustainable employment through strategic human capital investments that produce positive economic returns for our business/industry and our communities.

OUR MISSION is to create a best-in-class regional system that is responsive to business/industry that results in a skilled workforce equipped with a work ethic, academic proficiency, and occupational specific talent that rivals our competition.

OUR VALUES: Members of the Arapahoe/Douglas Workforce Development Board honor the following Core Values:

- Visionary Leadership that advocates human capital development;
- Service Excellence grounded in professionalism and respect;
- Innovative responses to workforce needs, that drive economic vitality;
- Stewardship of assets and resources focused on local and regional community priorities;
- Collaboration with regional workforce, education and economic development partners;
- Dedication to building and sustaining a strong regional economy, and the well-being of our business/industry base;
- Results that are best-in-class and provide the highest rate of return on public investment.

The WDB serves as strategic leader and convener of employers, workforce development professionals, education providers, economic development agencies and other stakeholders to drive innovation, programmatic synchronization, and alignment of required One-Stop partner investments at the state, regional and local level. The WDB, cognizant of the powerful role ascribed to them in the law, operates independently of other entities and exercises strong leadership in the workforce development agenda and strategy of the state, region and/or local area. With a solid role as change agent, the WDB leads the development of strong, vibrant regional economies where businesses thrive and people want to live and work.

The WDB uses data in new and more effective ways to drive strategic planning and operational efficiency; decisions are data-driven to ensure that workforce investment, educational and economic development strategies are based on accurate assessments of regional labor markets. The WDB works together with other local boards and the State Council to maintain a data collection system and conduct analyses on a quarterly basis, or more often if needed, to identify employer needs for talent, as well as which industries anticipate growth, and determine to what extent the talent pool meets employer requirements. Decisions about talent development approaches, including which training programs to fund, are based on these analyses. Good workforce intelligence is critical to periodic evaluations of the workforce system as a whole, which is the basis for continuous improvement opportunities. The WDB uses data from multiple sources, including economic development agencies.

The WDB strategic priorities for 2021 – 2024 are as follows:

- Strengthen the long-term vitality of the workforce development system by creating and building on sustainable partnerships and alternative funding solutions.
- Building a sound economic infrastructure through development of skills-based learning endeavors, registered apprenticeships, and long-term learning to meet the demands of business/industry and job seekers within the region.
- Enhance responsive data-driven products and services in collaboration with local, regional, and national partners.

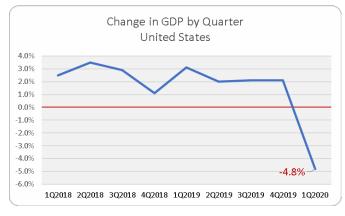
The WDB serves the workforce needs of Arapahoe and Douglas Counties, which together make up the southeastern portion of Colorado's Denver Aurora Metro Area. This infrastructure of the region includes the Arapahoe/Douglas Workforce Development Board, the Arapahoe/Douglas Works! Workforce Center, economic developers, real estate developers, local governments, public transit, utilities and P-20 education. It is this public-private partnership which has made the Denver Metro Area one of the most diversified economies in the United States; a magnate for young families and young adults due to world-class business parks, public transportation, infrastructure, international passenger and commercial air transportation, ample recreation opportunities, clean air and water, and a vibrant, expanding economy that grows jobs. The economy is diverse, vibrant and growing due to the region's high quality of life, which has attracted an educated, skilled labor force that has in turn allowed the region to become a hub for several advanced high-tech sectors.

When initially written, Colorado, the Colorado Central Planning Region (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 this landscape dramatically, which resulted in a substantial update to this plan.

The original portion of the plan, which is 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. Additionally, 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 moreover, 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. Furthermore, 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.

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.

New Unemployment Claims as a Percent of the Labor Force Date Range: 3/1/2020 - 5/2/2020				
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 are significantly lower than the number in the table on the prior 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.

New Unemployment Claims from 3/1/2020 - 5/2/2020, Colorado				
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%

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

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

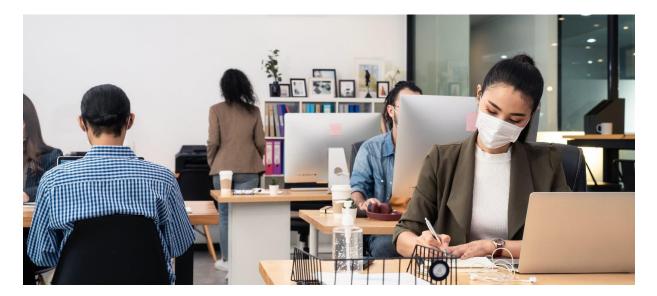


New Unemployment Claims by Occupational Group

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		
	Subtotal of Worker Earnings Lost over 9-week Period		\$1,434,693,780		
	Unemployment Payment Offset		\$1,036,000,000		
	Net Reduction in Worker Earnings		\$398,693,780		
Sources	:: EMSI QCEW, Non-QCEW & Self-Employed Class of Worker and CDLE Unemployme	nt Insurance Division			

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

Essentially this means that businesses in Colorado have foregone, or lost, an estimated \$400 million in revenues over the nine weeks from March 1 through May 2, 2020.

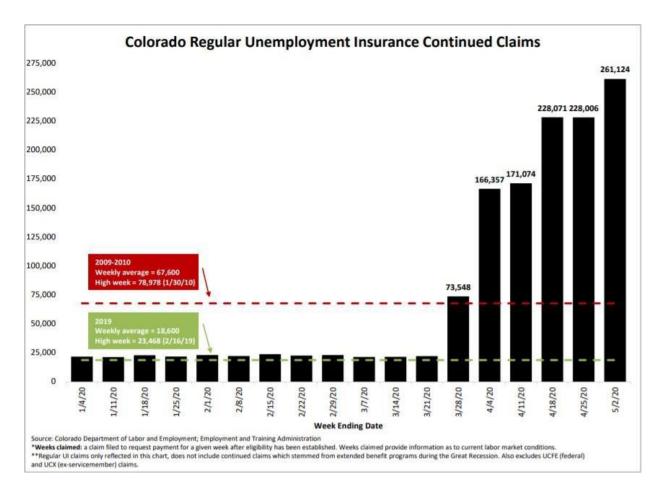
A reduction in demand of this magnitude will have lasting effects across the economy, even if all workers could be absorbed back into employment immediately upon relaxing the stay-at-home restrictions, which likely will not be the case.

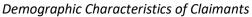
- Hospitality and recreation, which includes hotels, casinos, various tourist attractions and amusement parks, may not recover until the end of 2021, and may not be able to operate at full pre-pandemic capacity until likely a vaccine is developed and made widely available.
- While restaurants and bars may reopen, they will have to practice social distancing. Even with relaxation of regulations allowing more patio dining, sales will likely 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 likely affect the rate at which individuals return to work.

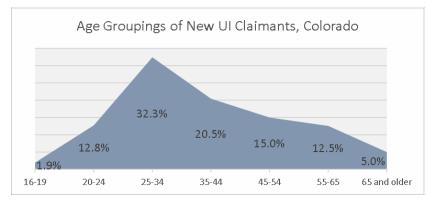
Reabsorption of Unemployment Claimants into Economy

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.

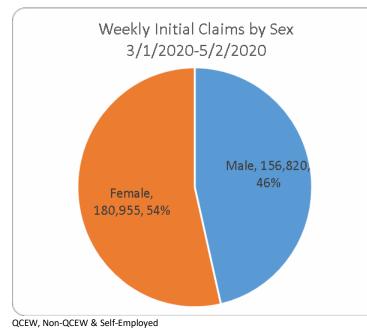






The mass layoffs in the early part of the pandemic affected hospitality and recreation, and retail the most. Because the labor force in these industries tends to be younger, the 25-34 age grouping is disproportionately represented in the new claimant population.

Gender Disparity

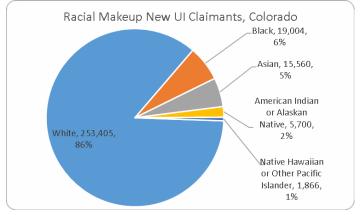


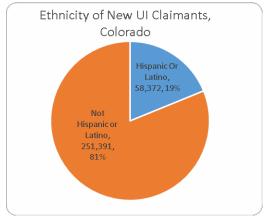
Men made up 52.9% of the state's workforce and women 47.1% prior to the pandemic. The pie chart shows that women have been disproportionally affected by the pandemic. This is because the majority of workers in the hardest hit industry groups are female.

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

Source: EMSI

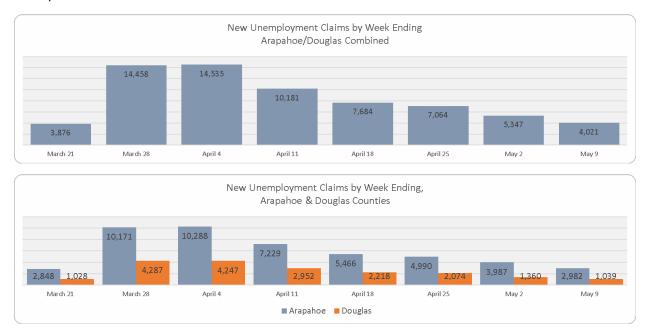
Race/Ethnicity of Claimants



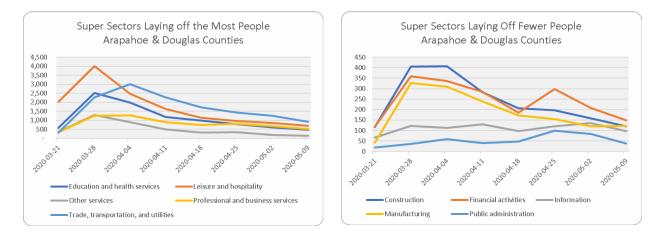


Initial Effects of COVID-19 Pandemic: Arapahoe/Douglas Workforce Area

Between March 1, 2020 and May 9, 2020, there have been 68,026 new unemployment claims in Arapahoe and Douglas counties. The bar graphs below show that claims spiked during the weeks ending March 28 and April 4.

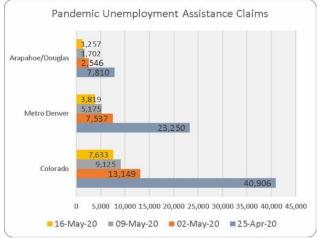


While the workforce, training pipeline, sector partnerships and other cooperative efforts that have kept the economy growing in the Arapahoe/Douglas Workforce Development Area remain robust, the mass layoffs resulting from the COVID-19 pandemic have to date only lightly touched some industry groups, but have decimated others.



The CARES Act Pandemic Unemployment Assistance (PUA) program creates a temporary federal unemployment insurance program for individuals not otherwise eligible for UI benefits, including the self-employed, independent contractors, gig economy workers, those seeking part-time employment, and individuals lacking sufficient work history but who would be able to work and looking for work were it not due to COVID-19.

The largest spike in the PUA claims happened the week ending April 25, but this was due to the buildup in claims prior to when they were processed.

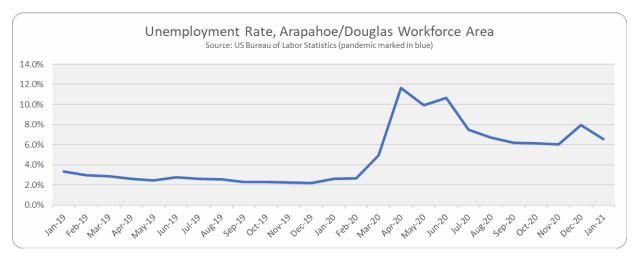


Data Updates

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 Arapahoe/Douglas Workforce Development Area, 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.

The section below was written in January 2020, and has been left intact because it shows the fundamental strength of the economy in the Colorado Central Planning Region and in the two-county Arapahoe/Douglas area.



Pandemic Effects in Arapahoe/Douglas Workforce Area Updated April 2021

The pandemic accelerated several trends in the Arapahoe/Douglas Workforce Area's labor force:

- Continuous shortages of several key occupations, including registered nurses, software developers, and truck drivers.
- The rapid increase in the number of people teleworking, and improvements in virtual technology, created a digital skill gap among a number of job seekers.
- A higher rate of growth in jobs requiring higher level skills and educational attainment, and slower growth in jobs that traditionally require lower levels of skill and educational attainment.

Hardest Hit Sectors

The hardest hit industry groups in the Arapahoe/Douglas Workforce Area were accommodation and food service, administrative support, arts, entertainment, and recreation, and retail. Prior to the pandemic, much of the wholesale and transportation supply line was geared to send food and paper supplies to restaurants, hotels, and drinking establishments. When the shutdown occurred in April and May 2020, the consumer supply infrastructure had to be adjusted so that these supplies could be rerouted to supermarkets, big box, and warehouse stores.

This table estimates the number and percent of the Arapahoe/Douglas Workforce Area's workforce still jobless by industry sector.

Estimated Number and Percent Jobless by Industry Sector, Arapahoe/Douglas				
NAICS	Description	2021 Jobs	December 2020 Jobless	Estimated Percent Jobless
72	Accommodation and Food Services	37,698	9,625	25.5%
56	Administrative Support, Waste Management-Remediation	34,828	5,229	15.0%
62	Health Care and Social Assistance	61,548	4,620	7.5%
23	Construction	38,374	4,246	11.1%
44	Retail Trade	52,946	4,231	8.0%
54	Professional, Scientific, and Technical Services	55,036	3,260	5.9%
61	Educational Services	10,051	1,965	19.6%
52	Finance and Insurance	41,549	1,945	4.7%
51	Information	24,240	1,896	7.8%
42	Wholesale Trade	20,378	1,821	8.9%
81	Other Services (except Public Administration)	25,886	1,442	5.6%
71	Arts, Entertainment, and Recreation	9,669	1,279	13.2%
31	Manufacturing	11,073	1,084	9.8%
53	Real Estate and Rental and Leasing	11,105	842	7.6%
55	Management of Companies and Enterprises	12,643	771	6.1%
48	Transportation and Warehousing	9,109	690	7.6%
90	Government	56,124	668	1.2%
21	Mining, Quarrying, and Oil and Gas Extraction	988	107	10.8%
11	Agriculture, Forestry, Fishing and Hunting	672	42	6.3%
22	Utilities	457	21	4.6%
	Totals	514,374	45,784	8.9%

Sources: EMSI Developer

Hardest Hit Occupational Groups

Estimated Number and Percent Jobless by Occupational Group, Arapahoe/Douglas					
SOC	Description	2021 Jobs	December 2020 Jobless	Estimated Percent Jobless	
35	Food Preparation and Serving Related	38,485	10,670	27.7%	
11	Management	28,089	5,278	18.8%	
41	Sales and Related	61,604	5,221	8.5%	
47	Construction and Extraction	26,445	3,405	12.9%	
43	Office and Administrative Support	60,569	2,575	4.3%	
13	Business and Financial Operations	48,703	2,569	5.3%	
31	Healthcare Support	20,047	1,961	9.8%	
25	Education, Training, and Library	26,990	1,581	5.9%	
53	Transportation and Material Moving	30,231	1,508	5.0%	
39	Personal Care and Service	17,950	1,452	8.1%	
49	Installation, Maintenance, and Repair	18,274	1,321	7.2%	
15	Computer and Mathematical	31,045	1,303	4.2%	
27	Arts, Design, Entertainment, Sports, and Media	10,990	1,261	11.5%	
51	Production	11,440	1,217	10.6%	
29	Healthcare Practitioners and Technical	25,127	1,145	4.6%	
37	Building and Grounds Cleaning and Maintenance	15,537	1,136	7.3%	
17	Architecture and Engineering	12,877	715	5.6%	
21	Community and Social Service	7,652	434	5.7%	
23	Legal	5,076	389	7.7%	
33	Protective Service	10,043	325	3.2%	
19	Life, Physical, and Social Science	4,243	206	4.9%	
45	Farming, Fishing, Forestry	756	93	12.3%	
	Totals	512,173	45,765	8.9%	

This table provides the same estimate of the number and percent jobless in the region by major occupational grouping.

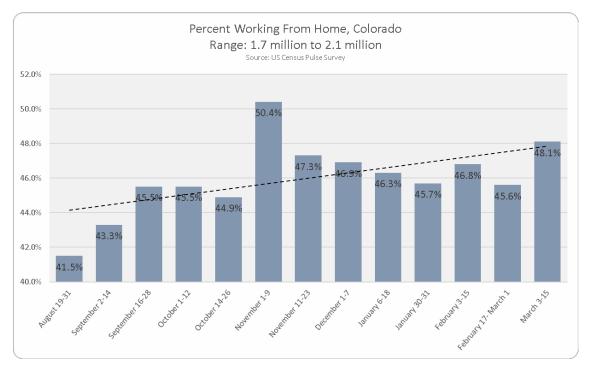
Food preparation and serving related occupations have consistently been the hardest hit.

Other hard-hit occupations include staff in brick-and-mortar retail outlets, education, healthcare support, personal care and service, and persons employed in entertainment and recreation occupations.

Sources: EMSI Developer

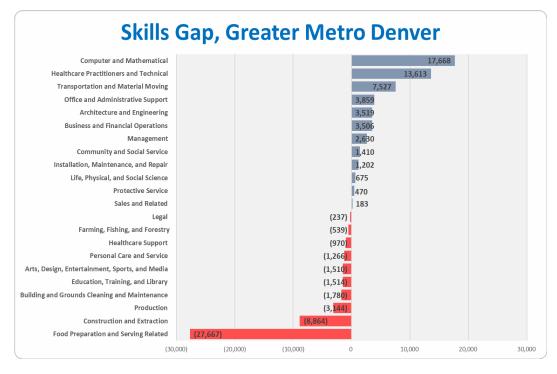
Teleworking

This bar graph from the US Census Household Pulse Survey shows the percent of Colorado's labor force working from home during the pandemic. To put this in perspective, the US Census American Community Survey reports that in2019, 274,765 (9.3%) of Coloradans worked from home. This is already affecting commercial real estate, with 7.4% of businesses decreasing the amount of leased office space.



Emergent Skill Gap

This bar graph shows the skill gap that has emerged as a result of the pandemic. Because of commute patterns, greater metro Denver is used. In December 2020, there were 17,668 more unique job postings in computer and mathematical occupations than there were people to fill them. Conversely, there were 27,667 more unemployed people in food preparation and serving occupations than there were jobs posted.

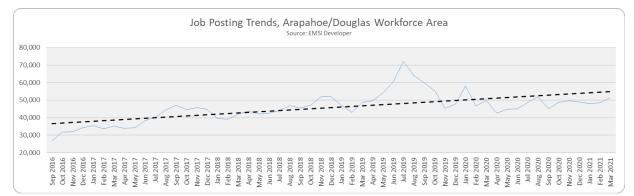


The table estimates the top unfilled jobs in the region during December at a more granular level. The workforce centers that make up the region are engaging employers through sector partnerships to expand the number of apprenticeship opportunities available to job seekers, and are working to address the digital skill gap among many of the job seekers seeking help through the workforce system.

			Percent
		Unique	Change
SOC	Occupation	Postings	over Prior
			30 Days
29-1141	Registered Nurses	3,486	(7.6%
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	2,248	(10.4%
53-3032	Heavy and Tractor-Trailer Truck Drivers	1,762	(6.8%
11-2031	Retail Salespersons	1,245	3.19
L5-1299	Computer Occupations, All Other	1,218	(10.1%
41-1011	First-Line Supervisors of Retail Sales Workers	1,122	2.0%
43-4051	Customer Service Representatives	1,017	6.09
L5-1244	Network and Computer Systems Administrators	786	(5.6%
11-2021	Marketing Managers	723	(9.5%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	721	(4.2%
53-7065	Stockers and Order Fillers	718	3.3%
35-3023	Fast Food and Counter Workers	637	(0.2%
53-3033	Light Truck Drivers	614	27.9%
31-1128	Home Health and Personal Care Aides	589	2.1%
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	583	10.6%
15-1232	Computer User Support Specialists	581	(5.5%
L3-2011	Accountants and Auditors	573	0.0%
39-9011	Childcare Workers	572	12.6%
19-9071	Maintenance and Repair Workers, General	549	6.25
15-1211	Computer Systems Analysts	470	(2.7%

Job Postings Trending Up

With the increasing numbers of Coloradans who have received the vaccine and loosening restrictions, job postings are trending up.



These tables give insight into the job market within the Arapahoe/Douglas Workforce Area. Of note are the high percentages of job posting that do not specify educational attainment or experience levels. Several workforce centers in the region are using Skillful curriculum to teach employers how to use skill-based hiring techniques.

Job Postings by Industry Sector, December 2020				
Colorado Central Planning Region				
Industry Sector (2-Digit)	Unique Postings	Median Posting Duration		
Administrative Support, Waste Management and Remediation	45,472	29		
Unclassified Industry	36,649	24		
Professional, Scientific, and Technical Services	36,394	30		
Retail Trade	26,020	38		
Health Care and Social Assistance	25,170	31		
Information	24,901	42		
Manufacturing	18,362	32		
Transportation and Warehousing	13,633	23		
Accommodation and Food Services	13,606	43		
Finance and Insurance	10,808	29		
Educational Services	7,835	32		
Other Services (except Public Administration)	7,193	24		
Construction	5,658	31		
Public Administration	5,244	25		
Real Estate and Rental and Leasing	4,348	31		
Wholesale Trade	3,530	33		
Arts, Entertainment, and Recreation	1,183	30		
Utilities	809	29		
Mining, Quarrying, and Oil and Gas Extraction	527	32		
Management of Companies and Enterprises	478	33		
Agriculture, Forestry, Fishing and Hunting	446	32		
Total Across All Industries	288,266	30		

Source: EMSI Developer

Education (Experience Break	down 1ct Our	artor 2021		
Education/Experience Breakdown, 1st Quarter 2021 Arapahoe/Douglas Workforce Area				
Education Level	Unique	% of Total		
	Postings	70 01 10tai		
No Education Listed	44,845	50%		
High school or GED	15,284	17%		
Associate's degree	9,113	10%		
Bachelor's degree	24,038	27%		
Master's degree	6,936	8%		
Ph.D. or professional degree	3,003	3%		
Minimum Experience	Unique Postings	% of Total		
No Experience Listed	51,193	57%		
0 - 1 Years	12,372	14%		
0 - 1 Years 2 - 3 Years	12,372 15,420	14% 17%		
2 - 3 Years	15,420	17%		

Source: EMSI Job Posting Analytics

Top Qualifications Sought				
Arapahoe/Douglas Workforce Area, Last 30 Days				
Qualification	Unique			
Qualification	Postings			
Commercial Driver's License (CDL)	1,531			
Certified Nursing Assistant	674			
Bachelor of Science in Nursing (BSN)	577			
Master of Business Administration (MBA)	504			
Licensed Practical Nurse	470			
Bachelor of Science in Business	411			
Associates Degree in Nursing	259			
Nurse Practitioner	251			
Certified Pharmacy Technician	242			
Project Management Professional Certification	229			
CompTIA Security+	228			
Certified Information Systems Security Professional	214			
Series 7 General Securities Representative License (Stockbroker)	191			
American Registry of Radiologic Technologists (ARRT) Certified	188			
Critical Care Registered Nurse (CCRN)	185			
Automotive Service Excellence (ASE) Certification	183			
Licensed Clinical Social Worker (LCSW)	182			
CDL Class B License	167			
Cisco Certified Network Associate	165			
Food Handler's Card	163			
Source: EMSI Job Posting Analytics				

Arapahoe/Douglas Local Plan 16

Regional Plan Questions/Responses

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

The Colorado Central Planning Region

Employment Concentrations,	Colorado Ce	ntral Planning	Region	
		Average	Payrolled	
County	2020 Jobs	Earnings Per	Business	
		Job	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.

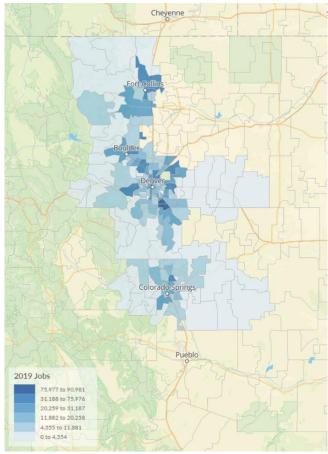
The CCPR contains four metropolitan statistical areas: these are Fort Collins (Larimer), Boulder, Denver (Adams, Jefferson, Gilpin, Clear Creek, Arapahoe and Douglas), and Colorado Springs (El Paso and Teller).



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.

Regional 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%		

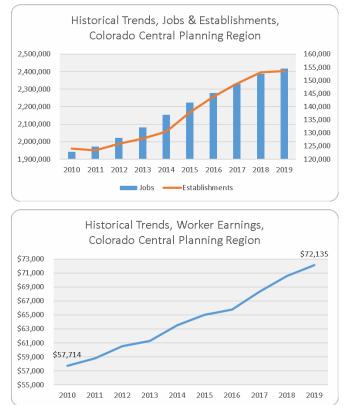
Source: EMSI - QCEW, Non-QCEW, Self-Employed & Extended Proprietor Class of Worker

	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

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.

Historical Trends



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 the Arapahoe/Douglas Workforce Area

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).

Growth Projections through 2026

These tables were originally run in early 2020, and have now been updated to project industry growth in Arapahoe and Douglas counties through 2026. Projections are published by the U.S. Bureau of Labor Statistics (BLS). Note that in the 2008-2009 recession, as well as the pandemic recession, unemployment significantly outpaced the projections that existed at those times. Generally, BLS updates this data periodically so it better takes economic downturns into account.

	Regional Industry	Growth Proje	ctions (Updat	ed April 20, 2	022), Arapah	oe/Douglas V	Vorks! Work	force Area				
NAICS	Description	2020 Jobs	2021 Jobs	2022 Jobs	2023 Jobs	2024 Jobs	2025 Jobs	2026 Jobs	2020 - 2026 Change	Annual Growth Rate	2020 Location Quotient	2021 Payrolled Business Locations
11	Agriculture, Forestry, Fishing and Hunting	668	698	726	751	773	794	809	142	2.8%	0.10	64
21	Mining, Quarrying, and Oil and Gas Extraction	874	790	753	726	707	694	695	(179)	-3.2%	0.49	141
22	Utilities	431	441	450	456	462	466	467	36	1.2%	0.24	21
23	Construction	38,661	39,518	40,657	41,626	42,478	43,226	43,760	5,099	1.8%	1.31	3,246
31	Manufacturing	11,180	11,439	11,790	12,090	12,355	12,587	12,754	1,574	1.9%	0.28	635
42	Wholesale Trade	19,687	19,620	19,843	20,047	20,237	20,417	20,570	883	0.6%	1.06	2,857
44	Retail Trade	52,334	53,859	54,229	54,581	54,920	55,236	55,548	3,214	0.9%	1.05	2,682
48	Transportation and Warehousing	9,810	10,250	10,886	11,413	11,862	12,221	12,483	2,673	3.5%	0.47	638
51	Information	23,661	23,617	23,838	24,053	24,264	24,469	24,673	1,012	0.6%	2.56	922
52	Finance and Insurance	42,227	42,591	43,702	44,635	45,442	46,115	46,607	4,379	1.4%	1.95	2,868
53	Real Estate and Rental and Leasing	11,110	11,355	11,633	11,876	12,094	12,281	12,438	1,327	1.6%	1.26	2,344
54	Professional, Scientific, and Technical Services	56,003	57,368	59,472	61,295	62,921	64,352	65,468	9,465	2.3%	1.59	8,228
55	Management of Companies and Enterprises	12,205	11,857	12,100	12,308	12,491	12,656	12,770	565	0.6%	1.64	966
56	Administrative and Support and Waste Management and Remediation Services	32,515	32,872	32,860	32,913	33,010	33,140	33,362	848	0.4%	1.06	2,354
61	Educational Services	9,933	10,436	10,844	11,212	11,550	11,816	12,115	2,182	2.9%	0.75	640
62	Health Care and Social Assistance	61,612	63,119	66,067	68,701	71,120	73,364	75,187	13,574	2.9%	0.93	3,544
71	Arts, Entertainment, and Recreation	8,538	8,680	8,961	9,277	9,619	9,977	10,391	1,854	2.8%	1.19	487
72	Accommodation and Food Services	34,481	35,770	36,675	37,679	38,756	39,885	41,162	6,681	2.6%	0.95	2,012
81	Other Services (except Public Administration)	25,692	25,872	26,395	26,923	27,456	28,014	28,540	2,847	1.5%	0.99	2,901
90	Government	55,902	55,680	56,781	57,841	58,875	59,859	60,841	4,939	1.2%	0.73	227
		507,524	515,833	528,663	540,405	551,392	561,567	570,641	63,116	1.7%		37,772

Source: EMSI Burning Glass

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.

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.

2019 Payrolled Business Locations
70
,120
50
0
0
03
79
,833
02
2,408

Source: EMSI - QCEW, Non-QCEW & 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 moreover, 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.

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.



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, Col	orado Centra	al Planning R	egion, 201	10-2019	
				2010 -	Annual	2019
SOC	Description	2010 Jobs	2019 Jobs	2019	Growth	Location
				Change	Rate	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 <i>,</i> 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%	
	lotals	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 previous occupational family concentrations are shown by workforce area in the table immediately below.

	Top Five Concentrated Occupational Families by Workforce Area	a,2010-2019				
Workforce Area	Description	2010 Jobs	2019 Jobs	2010 - 2019 Change	Annual Growth Rate	2019 Location Quotient
	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
Adams County	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
	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
Arapahoe/Douglas	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
	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
Boulder	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		1.48
	Computer and Mathematical Occupations	2,980	4,913	1,933		3.76
	Architecture and Engineering Occupations	1,035	1,226	191		1.88
Droomfield	Business and Financial Operations Occupations	2,684	4,429	1,745		1.00
вгооппец	Sales and Related Occupations	5,327	6,014	687		1.56
	Life, Physical, and Social Science Occupations	376	390	14		1.30
	Legal	8,257	9,832	1,575		2.08
	Business and Financial Operations	37,257	53,358	16.101	1	1.77
Donvor	Computer and Mathematical	17,346	29,270	11,924		1.76
Denver	Arts, Design, Entertainment, Sports, and Media	10,973	13.944	2,971		1.35
	Architecture and Engineering	10,975	12,525	2,971		1.30
					Growth Rate 4.9% 4.8% 4.3% 7.0% 9.6% 5.6% 4.2% 1.6% 2.0% 2.2% 2.3% 2.3% 2.3% 2.2% 2.0% 2.3% 2.2% 2.0% 2.3% 2.2% 3.4% 5.7% 1.9% 5.7% 1.4% 0.4% 2.0% 4.1% 6.0% 2.7% 2.5% 3.9% 2.5% 3.4% 3.2% 2.6% -1.1% 2.7% 2.6%	
	Architecture and Engineering	7,318	8,878	1,560	1	1.89
	Life, Physical, and Social Science Computer and Mathematical	3,227 8,689	3,669 12,051	442 3,362		1.62 1.48
Jefferson (Tri-County)						
Broomfield Denver Jefferson (Tri-County)	Business and Financial Operations Construction and Extraction	17,463 13,026	21,564 16,442	4,101 3,416		1.46 1.25
				1		
	Life, Physical, and Social Science	2,863	4,030	1,167		2.64
	Architecture and Engineering	4,305	5,374	1,069		1.70
Larimer	Construction and Extraction	8,093	10,978	2,885	1	1.24
	Food Preparation and Serving Related	13,835	18,404	4,569		1.17
	Arts, Design, Entertainment, Sports, and Media	3,038	3,822	784		1.12
	Military-only	20,788	18,765	(2,023)	1	9.02
	Computer and Mathematical	12,859	16,335	3,476		1.54
Pikes Peak	Community and Social Service	7,057	8,972	1,915		1.47
	Business and Financial Operations	18,967	23,810	4,843		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

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 Le	vel, Colorado	Central Plan	ning Regio	n
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 Le	evel, Colorado	Central Plan	ining Regio	n
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 L	evel, Colorado	o Central Plar	ning Regio	n
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
Sourco: EMS	LOCEW Non-OCEW & Self-Employed Class of Worker	,			

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

1	Occupations With Greatest Increase in Hires by Educational Attainment Level, Colorado Central Planning Region						
SOC	Associate Degree	2010 Hires	2019 Hires	Increase	Median		
500				in Hires	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 L	evel, Colorado	o Central Plar	nning Regio	n
SOC	Bachelor 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 V	Vorkforce Area, 2010-2	019			
Workforce Area	Description	2010 Hires	2019 Hires	Increase in Hires	Annual Growth Rate	2019 Locatior Quotien
	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
Adams County	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
	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
Arapahoe/Douglas	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
	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
Boulder	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
	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
Broomfield	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
	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
Denver	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
	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
Jefferson (Tri-County)	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
	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
Larimer	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
	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
Pikes Peak	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 & 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 registered apprenticeship strategies, as well as the unique occupational needs within each of the workforce areas.

Top Five Most C	oncentrated Occupations Requiring Any Postsecondary Training by	Largest Increase in I	Hires by Work	force Area, 2	010-2019	
Workforce Area	Description	2010 Hires	2019 Hires	Increase in Hires	Annual Growth Rate	2019 Location Quotient
	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
Adams County	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
	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
Arapahoe/Douglas	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
	Software Developers, Applications	1,247	1,762	515	3.9%	5.41
	Accountants and Auditors	1,050	1,562	513	4.5%	1.78
Boulder	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
	Software Developers, Applications	155	460	305	12.8%	5.70
	Business Operations Specialists, All Other	237	487	251	8.4%	2.84
Broomfield	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
	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
Denver	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
	Accountants and Auditors	1,609	2,314	705	4.1%	1.56
	Nursing Assistants	1,064	1,658	594	5.1%	0.82
Jefferson (Tri-County)	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
	Heavy and Tractor-Trailer Truck Drivers	716	1,185	469	5.8%	0.54
	Postsecondary Teachers	662	1,024	362	5.0%	1.55
Larimer	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
	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
Pikes Peak	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 & Self-Employed Class of Worker

2. Provide an analysis of the knowledge and skills needed to meet the employment needs of the employers in the region, 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 industry sectors. 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 infrastructure open, including more nurses, drivers, software developers, cybersecurity staff 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.

Jobs With Most Unique Postings, Last 30 Days, Metro Denver					
SOC	Occupation	Unique Postings	Percent Change from Prior 30 Days		
15-1132	Software Developers, Applications	5,596	(3.4%)		
29-1141	Registered Nurses	4,347	(15.5%)		
53-3032	Heavy and Tractor-Trailer Truck Drivers	4,078	(7.4%)		
15-1199	Computer Occupations, All Other	3,320	(9.0%)		
41-2031	Retail Salespersons	3,014	(0.7%)		
43-5081	Stock Clerks and Order Fillers	2,879	45.3%		
43-4051	Customer Service Representatives	2,824	0.3%		
41-1011	First-Line Supervisors of Retail Sales Workers	2,614	0.4%		
Nov-21	Marketing Managers	2,514	(7.5%)		
15-1142	Network and Computer Systems Administrators	2,323	(0.7%)		
Source: EN	ISI Job Posting Analytics				

Note that the two-county Arapahoe/Douglas area makes up the southeast portion of greater metro Denver, and due to commute patterns, the residents in the twocounty area work throughout that area. Therefore, it is more relevant to present job posting data for greater metro Denver than it is for Arapahoe and Douglas only counties. The thirty-day period in this and subsequent tables ended May 28, 2020 with the 'Prior 30 Days' period ending April 28, 2020.

When the pandemic struck and mass layoffs began because of the 'stayat-home' order, certain skills were in high demand. These at first had to do with information technology, particularly individuals who had skills in creating or improving virtual meeting capabilities, broadband employees, drivers, and order pullers. This table shows changes as people are gradually returning to work.

Skills Posted by Percent Increase, Last 30 Days, Metro Denver					
Skill or Qualification	Unique Postings	Percent Change over Prior 30- Day Period			
Development Aid	328	32.3%			
Artisan	404	27.8%			
Brakes	373	27.7%			
Sorting	995	25.5%			
Drywall (Installation And Repair)	384	24.7%			
Certified Plant Engineer	356	23.6%			
Results Focused	417	20.2%			
Insurance Sales	309	19.3%			
Employee Assistance Programs	325	17.3%			
Carpentry	1,019	17.1%			

Source: EMSI Job Posting Analytics



Unique Job Postings Last 30 Days by Industry, Metro Denver					
		Percent			
Industry Sector (2-Digit)	Unique Postings	Change from			
	Postings	Prior 30 Days			
Administrative and Support and Waste Management and Remediation Services	20,735	(9.2%)			
Professional, Scientific, and Technical Services	16,781	(9.0%)			
Unclassified Industry	15,070	(7.2%)			
Retail Trade	14,276	1.3%			
Health Care and Social Assistance	12,539	(12.4%)			
Educational Services	10,719	127.0%			
Information	8,904	(4.7%)			
Manufacturing	7,656	(9.3%)			
Accommodation and Food Services	6,988	(4.8%)			
Finance and Insurance	5,675	(9.4%)			
Transportation and Warehousing	4,087	(8.2%)			
Construction	3,938	(0.5%)			
Other Services (except Public Administration)	3,233	4.0%			
Real Estate and Rental and Leasing	3,097	0.1%			
Public Administration	2,838	(5.5%)			
Wholesale Trade	2,156	(9.2%)			
Utilities	1,057	80.4%			
Arts, Entertainment, and Recreation	758	(12.3%)			
Mining, Quarrying, and Oil and Gas Extraction	392	(11.5%)			
Agriculture, Forestry, Fishing and Hunting	355	14.9%			
Management of Companies and Enterprises	184	(17.5%)			

This table shows the industry sectors with the highest number of job postings over the thirty-day period ending May 28, 2020 with the prior thirty-day period ending April 28, 2020.

The rate of postings has grown in several industries, such as educational services, because schools are gearing up for the 2020-2021 academic year.

Utilities have also increased their rate of job postings, particularly for plant operators. This is primarily due to retirements of skilled baby boomers.

Retail and Other Services have also increased postings as shops and other storefront businesses gradually open.

Source: EMSI Job Posting Analytics

This table tells the same story. Schools at both K-12 and postsecondary levels are hiring for the next academic year.

Telecommunication and cable broadcasting firms are hiring.

As people return to work, non-COVIDrelated healthcare personnel are being called back. Aerospace hiring is also up from the prior thirty days.

Information technology companies continue to hire strongly and the metro area's power utility XCEL Energy has over doubled its new job postings.

Top Companies Posting, Last 30 Days, Metro Denver					
Company	Unique Postings	Change over Last 30-Day Period			
Colorado School of Mines	6,595	5536.8%			
Charter Communications, Inc.	1,343	37.0%			
Oracle Corporation	1,245	(25.0%)			
Amazon.com, Inc.	1,207	66.0%			
Robert Half International Inc.	1,160	(19.2%)			
Spectrum Reporting LLC	1,051	10.2%			
Centurylink, Inc.	1,012	6.3%			
Centura Health	858	(23.3%)			
Lockheed Martin Corporation	835	1.0%			
The Home Depot	793	31.7%			
Growing People and Companies	675	33.1%			
Twilio Inc.	653	1.4%			
XCEL Energy Inc.	646	124.3%			
University of Colorado	639	(29.3%)			
Soliant Health, Inc	578	(26.5%)			
Aerotek, Inc.	563	0.7%			
Dish Network L.L.C.	546	(1.1%)			
Adams 12 Five Star Schools	526	(0.9%)			
SCL Health - Front Range, Inc.	518	(3.5%)			
Davita Inc.	507	(11.2%)			
Source: EMSL Job Posting Analytics					

Source: EMSI Job Posting Analytics

Cautious employers also seem to be using recruiting agencies such as Robert Half and Growing People and Companies.

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 to continue growing, such as 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 some cases, the business(es) may have shutdown entirely. 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

In spite of the new approaches to training skilled workers, 39% of the job postings in the CCPR during 2019 required a bachelor's degree or above. This also holds true for the local workforce areas, which range between 28% (Larimer) to 46% (Boulder). In the Arapahoe/Douglas area, 40% of all jobs posted require a bachelor's degree or more.

Colorado Central Planning Region, Education Break down 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%			

Colorado Central Planning Region, Experience Breakdown of Job Postings				
Minimum Experience Unique Postings % of T				
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

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

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.'

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 Tota			
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

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.

Two state-funded apprenticeship consultants are housed at Arapahoe/Douglas Works! They operate under the auspices of the Colorado Urban Workforce Alliance, and work with employers throughout the state who wish to set up registered apprenticeships but need help in completing the process to do so.

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 Com- pletions (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 Com- pletions (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 Com- pletions (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 Pro	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 Com- pletions (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 Re	gion, 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						

Top Jobs Currently Listed, Arapahoe & Douglas Countie	Top Jobs Currently Listed, Arapahoe & Douglas Counties , January 2019 - December 2019							
Occupation		Total PostingsUnique Postings(Jan 2019 - Dec 2019)(Jan 2019 - Dec 2019)		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				
irst-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				
irst-Line Supervisors of Office and Administrative Support Workers	16,908	4,319	28 days	CompTIA Security+				
Aarketing Managers	16,412	3,946	30 days	Certified Public Accountant				
ource: 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.

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)		s 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%	84,315 / 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	

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

- 1. 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.
- 2. 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.

Supply & Demand, Top Hard and Common (Soft) Skills, January - December 2019										
		Arapahoe	& Douglas Co	unties						
Skill	Frequency in Postings	Postings with Skill / Total Postings (Jan 2019 - Dec 2019)	Frequency i Profiles	Profiles with Skill / Total Profiles (2018 2020)	Skill	Frequency in Postings	Postings with Skill / Total Postings (Jan 2019 - Dec 2019)	Frequency in Profiles		
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										

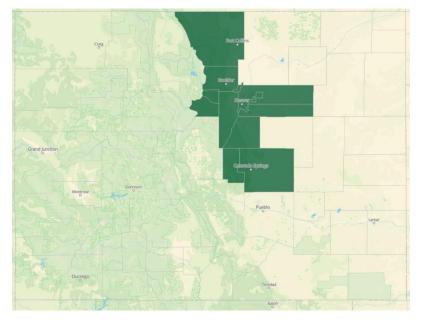
This table shows the same skill supply and demand in the Arapahoe/Douglas area.

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, New Americans (defined as Coloradans who arrived in the U.S. as immigrants or their children) and veterans;

Analysis of Regional Economic Conditions Overall

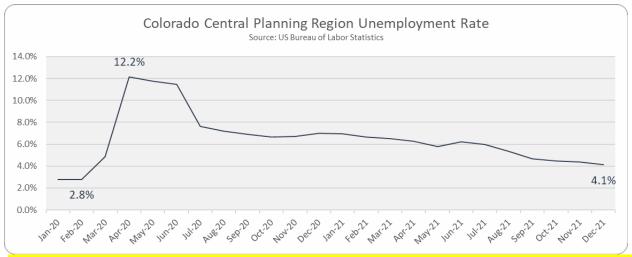
Updated April 2022

When updated in April 2021, this report provided a number of updates on how the COVID-19 pandemic had affected the labor force and economy in the Colorado Central Planning Region, which includes Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, El Paso, Gilpin, Jefferson, Larimer and Teller counties. The region is known as Colorado's Urban Front Range.



In 2021, the Colorado Central Planning Region (CPR) had 79% of Colorado's employment, with a total of 2,405,577 jobs (including 329,010 self-employed). The line graph shows that the CPR lost 265,141 jobs between February 2020 and April 2020, but had recovered 98% of those jobs by June 2021, which is the latest data available at this writing.

High Unemployment and Skill Gaps



Unemployment in the CPR spiked in April 2020, and remained in double digits through June 2020, but then trended down for the rest of that year and through 2021. As recovery progressed, people returned to work, many to different jobs than they had prior to the pandemic. In January 2022, the unemployment rate in the CPR continued to trend down to 3.9%.

The workforce development areas making up the CPR addressed the skill gaps caused by the high pandemic unemployment, and the increasingly virtual world of job search, training and work in a variety of ways, including developing data tools and other resources to help unemployed workers upskill. Some of these strategies included:

- Implementing programming that assisted unemployed workers lacking digital skills acquire the technology, access to broadband internet services, and help in conducting an effective online job search.
- 2. Providing workforce development staff training and tools to assist them in helping customers transfer their existing skills into successful new employment.
- 3. Online learning was utilized to a much greater extent, and inroads were made to help unemployed job seekers gain new skills such as the partnership with Catalyte allowing customers from various programs operated by Arapahoe/Douglas Works! to take the initial assessment, and provide support services while they received the online training, followed by job placement as a junior software developer.
- 4. Workforce centers used a "hub" approach, and began conducting virtual job fairs and hiring events for job seekers throughout the CPR that provided exposure to employers with open positions, and opportunities to enter new career pathways.

Sample training tool for workforce center staff at Arapahoe/Douglas Works! to assist unemployed job seekers from all occupation groups to identify other occupations where skill transfer potential is high:

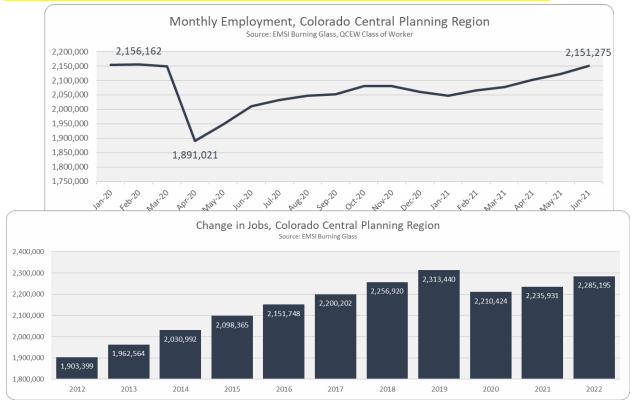
		S	kill Transfera	bility Tables,	Building Clear	ning and Groun	ds Maintenance	Occupations				
			I	Earnings, Jobs	, Change and A	Annual Openin	gs	ONET Group, Job of Layoff				
O*NET	Fam.	O*NET Occupation	Median Hourly Earnings 💌	2020 Jobs* ~	2025 Jobs* ~	2020-2025 Change*	Estimated Annual Openings ⁴ •	371	372	373	Column1 Col	
37-3011.00	37	Landscaping and Groundskeeping Workers	\$16.93	11,813	12,297	485	1,545	82	87	100		
53-7062.00	53	Laborers and Freight, Stock, and Material Movers, Hand	\$16.17	499	532	32	68	84	87	97	-	
51-9198.00	51	HelpersProduction Workers	\$15.41	862	913	51	100	83	89	96		
51-4071.00	51	Foundry Mold and Coremakers	\$15.45	1,091	1,051	(40)	93	82	88	96		
51-6011.00	51	Laundry and Dry-Cleaning Workers	\$14.01	183	162	(20)	18	89	95	95		
45-2092.01	45	Nursery Workers	\$14.76	2,521	3,055	534	512	86	92	95		
35-9021.00	35	Dishwashers	\$13.55	5,212	5,021	(191)	766	82	92	95		
51-6021.00	51	Pressers, Textile, Garment, and Related Materials	\$14.78	650	629	(21)	69	79	91	95		
47-3014.00	47	HelpersPainters, Paperhangers, Plasterers, and Stucco Masons	\$18.53	182	209	27	28	81	89	95		
53-7061.00	53	Cleaners of Vehicles and Equipment	\$17.00	20,202	22,052	1,849	2,934	82	89	95		
47-2131.00	47	Insulation Workers, Floor, Ceiling, and Wall	\$21.21	355	381	26	41	83	83	95		
51-9197.00	51	Tire Builders	\$14.06	2,240	2,304	64	320	80	82	95		
49-3093.00	49	Tire Repairers and Changers	\$22.13	374	389	15	31	85	81	95		
47-5071.00	47	Roustabouts, Oil and Gas	\$18.41	135	152	18	21	81	78	95		
37-2011.00	37	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$14.11	21,604	22,123	519	2,807	84	96	94		
53-7064.00	53	Packers and Packagers, Hand	\$25.27	70	69	(1)	7	82	93	94		

The table above shows the top 15 occupations in which the skills of an unemployed landscaping and groundskeeping worker (highlighted yellow) would transfer with very little learning curve. Many unemployed individuals from the hospitality industry found new work in warehouses and with online retailers as stock pickers and packagers. More found work in greenhouses and nurseries, including those serving Colorado's retail and medical cannabis industries.

Scarce Labor Force

This created a new challenge for businesses in the region, who by the end of 2021 were faced with a scarce labor market full of candidates with high expectations around salary, benefits, flexibility, and who often required some on-the-job training to gain the skills regional businesses actually needed to remain competitive.

The chart and bar graph below illustrate the increase in the number of people in the CPR who have gone back to work, often in jobs different from those they left during the pandemic.

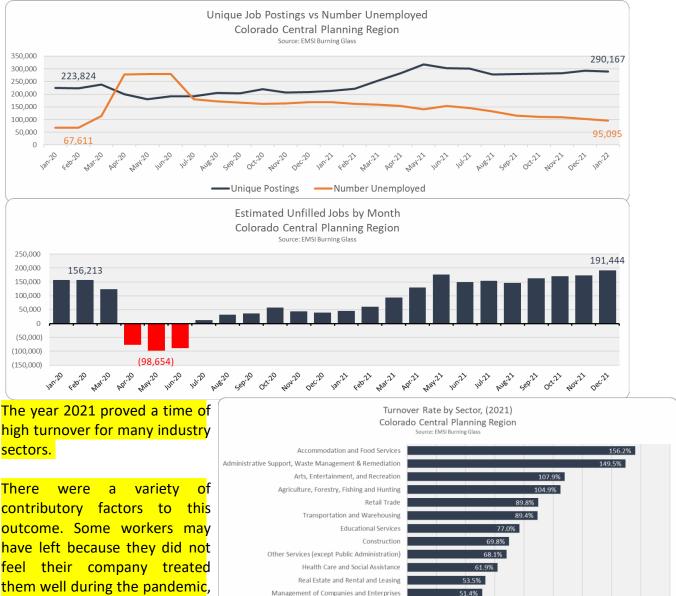


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During the recovery, Colorado's workforce development system has proven integral to regional businesses, economic developers, chambers of commerce, sector leaders, and other stakeholders, and is now positioned to continue to support the region in the current scarce labor market.

Unfilled Jobs

Data in the line graphs below shows the increasing gap between number of jobs posted in the CPR and the number of people looking for work.



Mining, Quarrying, and Oil and Gas Extraction

Professional, Scientific, and Technical Services

Manufacturing

Wholesale Trade

Government

Information Finance and Insurance

Utilities

47.0%

46 5%

46.0%

43.3%

43.1% 36.3%

35.1%

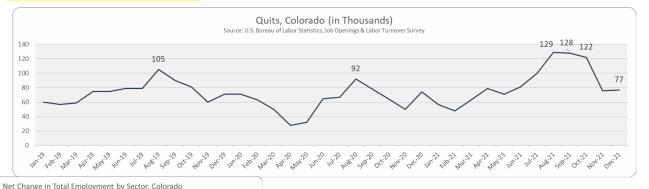
15.4%

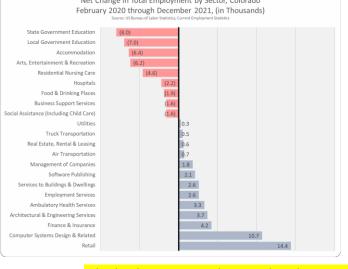
them well during the pandemic, while others left for jobs that provided higher pay, better benefits, or more flexibility.

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The Great Resignation

During the three-month period beginning August 2021 and ending October 2021, nearly 380,000 Coloradans left their jobs and moved on to other opportunities. The bar graph shows that in December 2021, 34,000 more people separated from their jobs in Colorado than were hired, in the face of 208,000 job openings.



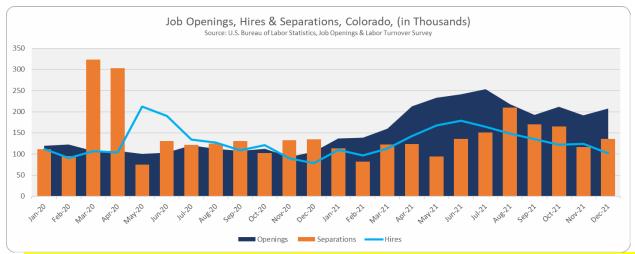


All these factors – the shrinking number of unemployed people, the growing number of unfilled job openings, and high levels of separations from jobs throughout the state are concerning.

What is of greater concern is the net change in employment by sector. Public education, nursing care centers and hospitals have all lost substantial numbers of jobs since the pandemic began.

New Workforce Strategies in a New Employment Market While workforce centers have educated job seekers for many years about the 'hidden employment market,' by

which they mean those jobs that are filled before they are ever posted, there is increasing recognition by employers of a 'hidden candidate market,' which includes those job seekers that are being served through various workforce programs – job seekers that might not have been visible in another time.



Now, employers throughout the CPR are depending on the region's workforce centers to tap into this hidden candidate market in a variety of ways, and to assist in the rapid reskilling and upskilling of people to enter critical jobs quickly.

Work-Based-Learning, Telework & Automation

Locally-run business services teams in the CPR's workforce centers have assisted employers with work-based-learning strategies, which can include internships, subsidized on-the-job training, and apprenticeships.

At this writing, the CPR has 954 people in work-based-learning activities. This is 75% of work-based-learning currently happening in Colorado.

CPR workforce centers have developed strong working relationships with local chambers, economic developers, sector leaders and educators. This has allowed Wagner-Peyser business services teams throughout the region to better understand the needs of local employers in this rapidly changing labor market, and work with partners to identify solutions.

soc	Occupation Family	2022 Jobs	Percent Teleworking Successfully in January 2021	Potential Telework Capacity
13	Business and financial operations	213,431	53.8%	114,82
15	Computer and mathematical	133,393	67.6%	90,17
43	Office and administrative support	278,039	24.8%	68,95
25	Education, training, and library	133,216	44.5%	59,28
11	Management	130,501	36.6%	47,76
41	Sales and related	245,643	17.0%	41,75
17	Architecture and engineering	64,805	45.7%	29,61
27	Arts, design, entertainment, sports, and media	54,908	42.0%	23,06
21	Community and social services	44,391	44.9%	19,93
29	Healthcare practitioners and technical	130,809	13.1%	17,13
23	Legal	26,200	57.7%	15,11
19	Life, physical, and social science	32,633	45.6%	14,88
39	Personal care and service	75,983	7.7%	5,85
35	Food preparation and serving related	172,445	2.3%	3,96
33	Protective service	44,035	8.8%	3,87
53	Transportation and material moving	183,930	2.1%	3,86
31	Healthcare support	92,151	4.0%	3,68
47	Construction and extraction	120,607	2.8%	3,37
49	Installation, maintenance, and repair	88,273	3.5%	3,09
51	Production	80,916		2,75
37	Building and grounds cleaning and maintenance	75,701		2,12
45	Farming, fishing, and forestry	7.680		10
-	Totals	2,429,690		575.18

The Arapahoe/Douglas Works! Business Services Team has developed a toolkit for local businesses to help them stay competitive in

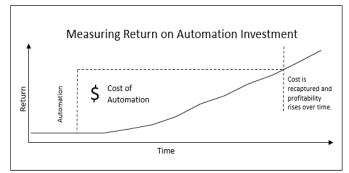
the current scarce labor market. These include work-based-learning, automation and telework strategies.

This table uses pandemic data from the Bureau of Labor Statistics to estimate the teleworking capacity of the overall labor force in the CPR. Businesses can determine which functions can work remotely, and can compensate for scarce labor by increasing the geographic scope of their outreach.

In addition, focus groups were done with businesses, sector leaders, economic

developers, chambers of commerce, and business services staff and new industry profiles were developed for the key sectors in the region, with the template shared among the various CPR workforce centers, as well as Weld County, Mesa and the Rural Consortium. The new industry profiles, which presently include Aerospace & Aviation, Air Transportation, Biosciences, Broadband, Construction, Engineering Services, Finance & Insurance, Healthcare, Hospitality, Information Technology, Manufacturing, and Retail have those data elements most meaningful to businesses in today's rapidly changing labor market. The profiles are housed on the <u>Arapahoe/Douglas Works</u>! website, and accessible throughout the CPR.

This figure is from the toolkit developed by the Arapahoe/Douglas Works! Business Services Team to help employers determine if automation can leverage scarce labor to keep productivity output up. The team at Arapahoe/Douglas Works! is developing a set of resources that can be applied in a consultative approach to help businesses implement these various strategies.



	Comparative Regional Economy								
Measure	Central Planning Region	Adams	Arapahoe/Douglas	Boulder	Broomfield	Denver	Jefferson (Tri- County)	Larimer	Pikes Peak
Population (2021)	4,451,218	527,353	1,032,867	329,621	73,985	748,218	604,985	367,419	766, 769
GRP	\$339,189,884,190	\$29,155,189,009	\$79,673,916,731	\$31,410,646,794	\$8,757,571,072	\$89,326,925,935	\$36, 736, 879, 985	\$21,001,977,143	\$43, 126, 777, 521
Exports	\$307,299,935,765	\$34,094,074,270	\$66,954,102,722	\$30, 382, 560, 497	\$9,869,616,561	\$97,938,269,849	\$45, 706, 610, 611	\$22,414,687,666	\$62, 168, 762, 422
Imports	\$235,970,725,498	\$34,574,973,908	\$68,905,152,605	\$24,457,312,601	\$7,402,919,572	\$54,584,011,537	\$46, 118, 339, 137	\$21,854,463,129	\$50, 569, 509, 331
Labor Force (Dec 2021)	2,477,676	284,235	581,032	199,627	41,531	436,110	355,434	207,229	372,478
Participation Rate (Dec 2021)	69.8%	70.0%	5 71.2%	72.4%	69.3%	70.7%	71.4%	68.1%	64.9%

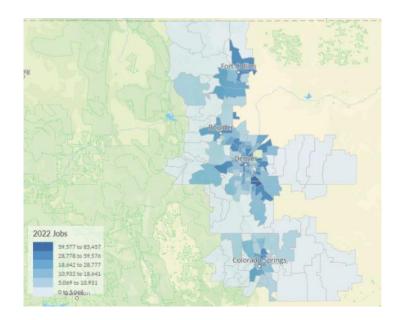
Current Comparative Economic Conditions

Source: EMSI Burning Glass

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Current CPR Employment Concentrations

In 2021, the Colorado Central Planning Region (CPR) had 79% of Colorado's total employment, with a total of 2,405,577 jobs (including 329,010 self-employed). The map shows employment concentrations throughout the region.



Historical Trends (2012 – 2021)





The CPR added 360,361 new jobs, and 42,250 establishments, over the decade ending in 2021. Employment during the decade grew at 1.8% annually. During the same decade, wages and salaries rose \$17,624 per year (34.2%), while supplements, which includes the cost of employer-paid benefits, increased by \$2,660 (28.8%). Wages and salaries, and supplements, grew at 3.3% and 2.9% annually, respectively

Comparative Data by Workforce Area within CPR (2012 through 2021): Adams County Workforce & Business Center

- Jobs increased 39.9% to 250,025.
- Establishments, or payrolled business locations, increased 39.5% to 12,511.
- Wages and salaries rose 36.5% to \$59,340 annually.
- The average cost of supplements, or employer-paid benefits rose 38.8% to \$11,330 annually.

<mark>Arapahoe/Douglas Works!</mark>

- Jobs increased 19.1% to 515,833.
- Establishments, or payrolled business locations, increased 31.4% to 37,772.
- Wages and salaries rose 28.5% to \$72,320 annually.
- The average cost of supplements, or employer-paid benefits rose 21.4% to \$11,729 annually.

Workforce Boulder County

- Jobs increased 13.6% to 209,207.
- Establishments, or payrolled business locations, increased 29.9% to 17,060.
- Wages and salaries rose 40.6% to \$75,260 annually.
- The average cost of supplements, or employer-paid benefits rose 33.1% to \$12,822 annually.

Broomfield Workforce Center

- Jobs increased 18.6% to 41.918.
- Establishments, or payrolled business locations, increased 43.1% to 3,126.
- Wages and salaries rose 40.7% to \$97,394 annually.
- The average cost of supplements, or employer-paid benefits rose 30.6% to \$15,082 annually.

<mark>Denver Workforce Center</mark>

- Jobs increased 13.5% to 551,845.
- Establishments, or payrolled business locations, increased 43.4% to 37,484.
- Wages and salaries rose 39.5% to \$81,356 annually.
- The average cost of supplements, or employer-paid benefits rose 30.7% to \$14,309 annually.

Larimer County Workforce Center

- Jobs increased 21.5% to 187,858.
- Establishments, or payrolled business locations, increased 33.4% to 13,537.
- Wages and salaries rose 36.0% to \$55,735 annually.
- The average cost of supplements, or employer-paid benefits rose 33.4% to \$10,193 annually.

Pikes Peak Workforce Center

- Jobs increased 16.9% to 374,695.
- Establishments, or payrolled business locations, increased 32.0% to 22,326.
- Wages and salaries rose 25.9% to \$56,480 annually.
- The average cost of supplements, or employer-paid benefits rose 23.8% to \$8,805 annually.

Jefferson County Business & Workforce Center

- Jobs increased 8.6% to 274,197.
- Establishments, or payrolled business locations, increased 24.1% to 22,840.
- Wages and salaries rose 37.3% to \$65,032 annually.
- The average cost of supplements, or employer-paid benefits rose 33.7% to \$12,036 annually.

Analysis Specific to Arapahoe/Douglas Workforce Area Follows:

Background

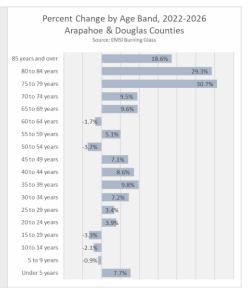
The following is an analysis of the overall economic conditions in the Arapahoe/Douglas Workforce Development Area, and covers existing and emerging in-demand industry sectors, and occupations; employment needs of employers in these sectors and occupations; the knowledge and skills demanded by local employers; employment and unemployment data, population demographics including educational attainment levels, data on diversity, equity and inclusion.

Aranahoe and Douglas

Population and Growth



Arapanoe and Douglas
counties have a robust
labor force, with 449,260
people aged 25 to 54.
This concentration of
prime working age
people is 1.12 times
greater than the national
average. In addition, the
two counties have high
concentrations of
Millennials and Gen X,
with a substantial
number of Gen Z growing
into the labor force.



Concentrations of Working Age People								
Generation	Arapahoe & Douglas Counties	Concentration Relative to US						
Gen Z (10-25 years)	210,923	0.96						
Millennials (26-41 years)	232,464	1.11						
Gen X (42-57 years)	227,762	1.18						
Boomers II (58-67 years)	117,015	0.93						
Boomers I (68-76 years)	73,243	0.85						
Source: EMSI Burning Glass								

Between 2016 and 2021, the population in Arapahoe and Douglas counties added 64,582 (6.7%) people, growing to 1,032,867 by 2021, which is just over 17.5% of Colorado's total population that year. Over the next five years, the population in the two-county region is expected to grow 5.2%, adding another 54,664 people. The 65+ age groupings will add 23,849 people, making up 45.6% of the total expected 5-year growth.

Educational Attainment

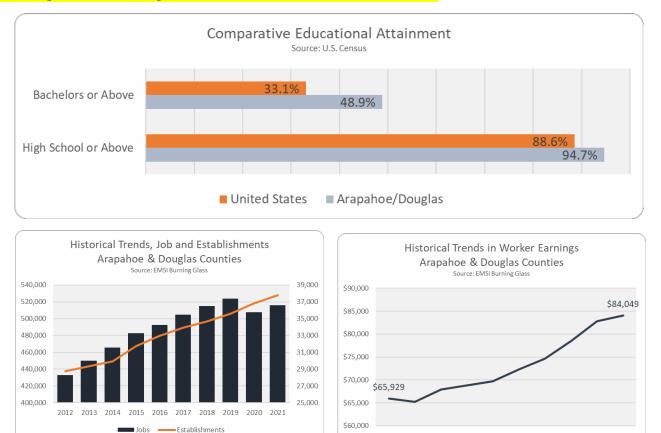
Population 3 Years and Older Enrolled in School						
Arapahoe & Douglas Counties						
Level	Number					
Nursery school, preschool	17,129					
Kindergarten	13,244					
Elementary school (grades 1-8)	109,316					
High school (grades 9-12)	59,865					
College or graduate school	56,017					
C	20 5 14 5-1					

Source: US Census, American Community Survey 2016-2020 5-Yr Est.

One of the main things that make Arapahoe and Douglas counties especially attractive to incoming and expanding businesses is the highly skilled, tech savvy, and remote-**capable labor** force. Over 56,000 residents are currently enrolled in postsecondary education programs. The bar chart shows that educational attainment, both at high school and over, and at the bachelor's level and over, is significantly above the national average. Colorado is ranked the second most highly educated state in the nation.

Historical Trends

- Arapahoe and Douglas counties lost 16,340 jobs in 2020 and gained back 8,308 in 2021.
- The number of establishments went up both years, 1,231 in 2020, and 959 in 2021.
- Average worker earnings rose \$4,252 in 2020, and \$1,267 in 2021.



Industries That Added the Most Jobs

The table shows the top ten industries that added the most jobs during the last decade. Overall, Arapahoe and Douglas counties added 82,776 jobs over the last decade, an annual growth rate of 2.0%. The average annual job growth between 2012 and 2019 was 12,972 jobs. From 2020 - 2021, the region lost 8,032 jobs.

2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

	Industries Adding the Most New	/ Jobs, Arapa	hoe & Dougl	as Counties			
NAICS	Description	2012 Jobs	2021 Jobs	2012 - 2021 Change	Location Quotient	2021 Payrolled Business Locations	2021 Total Sales
622310	Specialty (except Psychiatric and Substance Abuse) Hospitals	1,535	6,385	4,850	8.29	14	\$1,152,019,546
722513	Limited-Service Restaurants	10,977	14,588	3,611	1.06	749	\$1,365,687,344
541512	Computer Systems Design Services	5,351	8,787	3,436	2.42	1,333	\$1,738,977,430
624120	Services for the Elderly and Persons with Disabilities	2,815	6,074	3,259	0.89	345	\$238,885,022
621610	Home Health Care Services	2,440	5,507	3,067	1.09	152	\$411,499,048
551114	Corporate, Subsidiary, and Regional Managing Offices	8,576	11,109	2,533	1.54	934	\$3,317,815,031
541511	Custom Computer Programming Services	5,031	7,476	2,444	2.15	1,125	\$1,446,252,794
238210	Electrical Contractors and Other Wiring Installation Contractors	3,218	5,374	2,156	1.56	405	\$1,041,712,220
452311	Warehouse Clubs and Supercenters	4,890	6,992	2,102	1.36	25	\$684,809,503
611110	Elementary and Secondary Schools	2,104	4,148	2,044	1.06	28	\$201,732,425
Source: EMSI Bun	ning Glass						

Current Economy

Comparative Regional Economies									
Region	Population (2021)	Labor Force (2021)	Jobs (2021)	Cost of Living	GRP	Imports	Exports		
Arapahoe/Douglas	1,032,867	583,933	515,882	114.8	\$79,673,916,731	\$68,905,152,605	\$66,954,102,722		
Denver-Aurora-Lakewood, CO	3,034,894	1,733,332	1,642,934	115.3	\$244,755,013,646	\$168,249,755,501	\$216,864,162,311		
Colorado	5,895,455	3,217,455	3,048,281	111.1	\$403,636,183,150	\$294,986,671,461	\$360,769,798,052		
Source: EMSI Burning Glass									

Arapahoe/Douglas Percent of Larger Economies											
Region	Population (2021)	Labor Force (2021)	Jobs (2021)	Cost of Living	GRP	Imports	Exports				
Denver-Aurora-Lakewood, CO	34.0%	33.7%	31.4%	99.6%	32.6%	41.0%	30.9%				
Colorado	17.5%	18.1%	16.9%	103.3%	19.7%	23.4%	18.6%				
Source: EMSI Burning Glass											

Arapahoe and Douglas counties contribute significantly to the economies in metro Denver and statewide.

Several additional observations of the current economy in the two-county region:

- Median household income \$90,678
- The median earnings for a full-time worker in Arapahoe County is:
 - \$57,825 for males
 \$
 - \$49,545 for females (\$0.86 per dollar men make)
- The median earnings for a full-time worker in Douglas County is:
 - \$93,092 for males
 - \$62,949 for females (\$0.68 per dollar men make)
- 34,447 (10%) worked from home in Arapahoe County; 29,268 (16%) worked from home in Douglas County
- In the two counties, 62,884 people are without health insurance. Of these, 58.6% (36,843) are employed.

Projected Growth

Arapahoe and Douglas counties are expected to add 41,977 jobs in the five-year period ending in 2026, an annual growth rate of 1.9%. The three sectors expected to add the most jobs, healthcare, professional, scientific and technical, and accommodation & food service will account for 47% of that projected growth.

soc	Description	2022 Jobs	2026 Jobs	2022 - 2026 Change	2022 Location Quotient	2021 Payrolled Business Locations	2021 Total Sales
62	Health Care and Social Assistance	66,067	75,187	9,120	0.95	3,544	\$8,647,765,235
54	Professional, Scientific, and Technical Services	59,472	65,468	5,996	1.59	8,228	\$12,506,474,469
72	Accommodation and Food Services	36,675	41,162	4,487	0.97	2,012	\$2,993,036,78
90	Government	56,781	60,841	4,060	0.73	227	\$17,698,301,552
23	Construction	40,657	43,760	3,103	1.32	3,246	\$9,042,599,950
52	Finance and Insurance	43,702	46,607	2,905	1.93	2,868	\$21,472,424,573
81	Other Services (except Public Administration)	26,395	28,540	2,145	0.98	2,901	\$2,260,342,014
48	Transportation and Warehousing	10,886	12,483	1,596	0.48	638	\$1,624,487,563
71	Arts, Entertainment, and Recreation	8,961	10,391	1,430	1.21	487	\$964,331,88
44	Retail Trade	54,229	55,548	1,319	1.04	2,682	\$6,874,621,710
61	Educational Services	10,844	12,115	1,271	0.78	640	\$785,466,43
31	Manufacturing	11,790	12,754	964	0.29	635	\$3,562,717,554
51	Information	23,838	24,673	835	2.48	922	\$19,351,426,28
53	Real Estate and Rental and Leasing	11,633	12,438	804	1.27	2,344	\$9,354,664,195
42	Wholesale Trade	19,843	20,570	727	1.05	2,857	\$8,900,328,95
55	Management of Companies and Enterprises	12,100	12,770	670	1.58	966	\$3,907,694,665
56	Administrative and Support and Waste Management and Remediation Services	32,860	33,362	502	1.02	2,354	\$4,831,641,64
11	Agriculture, Forestry, Fishing and Hunting	726	809	83	0.11	64	\$329,331,27
22	Utilities	450	467	18	0.25	21	\$316,012,08
21	Mining, Quarrying, and Oil and Gas Extraction	753	695	(58)	0.45	141	\$3,052,786,71
	Totals	528,663	570,641	41,977	1.19	37,772	\$138,476,455,53

Wage Ranges Top 20 Jobs

	Bench Strength and Wage Scal	es, Top 20								
			Percent of			D.1. 40	D.1. 35		0.1.75	
soc	Description	2022	Total	Avg. Annual	Avg. Hourly	Pct. 10 Hourly	Pct. 25 Hourly	Median Hourly	Pct. 75 Hourly	Pct. 90 Hourly
SUC	Description	Jobs	Employ- ment in	Openings	Earnings	Earnings	Earnings	Earnings	Earnings	Earnings
			Region	Opennigs	Carrings	Carriings	Carriings	Carriings	Carriings	Carrings
11-1021	General and Operations Managers	7,138		768	\$73.99	\$26.87	\$40.29	\$63.21	\$99.26	\$140.81
13-1161	Market Research Analysts and Marketing Specialists	4,970	2.3%	626	\$38.70	\$19.34	\$26.25	\$34.91	\$48.37	\$64.49
13-1198	Project Management Specialists and Business Operations Specialists, All Other	11,532	1.7%	1,014	\$43.87	\$23.00	\$29.72	\$40.06	\$53.37	\$68.80
13-2011	Accountants and Auditors	7,873	1.2%	811	\$41.63	\$22.71	\$28.26	\$37.12	\$50.40	\$64.91
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	12,230	1.9%	1,300	\$53.52	\$32.54	\$40.20	\$52.69	\$65.10	\$78.03
25-2021	Elementary School Teachers, Except Special Education	5,470	2.8%	511	\$28.98	\$20.13	\$22.88	\$28.06	\$34.69	\$40.72
29-1141	Registered Nurses	8,055	1.8%	674	\$37.31	\$26.47	\$30.69	\$36.44	\$43.65	\$49.74
31-1128	Home Health and Personal Care Aides	10,065	1.4%	2,027	\$14.06	\$12.02	\$12.21	\$13.27	\$14.94	\$17.87
35-3023	Fast Food and Counter Workers	12,348	2.1%	3,004	\$12.90	\$12.02	\$12.04	\$12.33	\$13.47	\$14.88
35-3031	Waiters and Waitresses	5,596	1.2%	1,243	\$14.80	\$12.02	\$12.03	\$12.12	\$12.50	\$24.50
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	6,199	1.5%	981	\$15.26	\$12.06	\$12.50	\$13.81	\$16.22	\$19.82
41-2011	Cashiers	8,773	1.0%	1,621	\$14.36	\$12.03	\$12.23	\$13.27	\$15.62	\$18.73
41-2031	Retail Salespersons	14,490	1.5%	2,182	\$16.50	\$12.02	\$12.16	\$13.60	\$16.25	\$23.78
41-3091	Sales Representatives of Services	7,752	1.3%	980	\$40.83	\$14.74	\$21.23	\$31.92	\$50.57	\$81.80
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific	5,157	0.9%	549	\$42.05	\$16.59	\$24.00	\$35.70	\$51.90	\$75.62
43-3031	Bookkeeping, Accounting, and Auditing Clerks	5,143	1.0%	627	\$22.88	\$13.68	\$17.32	\$22.01	\$27.02	\$31.97
43-4051	Customer Service Representatives	10,881	2.2%	1,466	\$19.89	\$12.74	\$14.79	\$18.33	\$23.44	\$29.56
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	6,374	2.3%	733	\$21.05	\$13.77	\$16.82	\$20.47	\$24.54	\$29.36
43-9061	Office Clerks, General	7,115	1.5%	934	\$22.42	\$13.00	\$16.18	\$21.29	\$26.81	\$33.15
53-7065	Stockers and Order Fillers	9,761	1.0%	1,655	\$16.67	\$12.71	\$13.89	\$15.79	\$18.69	\$21.78
Source: EMSI B	urning Glass									

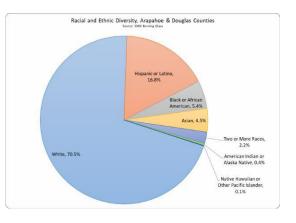
Due to the timeframes in which wage data is collected and collated, Colorado's 2022 change in minimum wage to \$12.56 per hour, and for tipped employees, \$9.54 per hour, may not be accurately reflected in some of the wages listed in the table. In addition, House Bill 1210 was passed in late 2019, and allowed local governments to set higher wages. These municipal minimum wages will not be accurately reflected in some of the wage of the wages listed in the table.

Hires, Separations & Turnover for Top Jobs

	Hires, Separations and Turnover, Top Jobs, Arapahoe & Douglas Counties										
SOC	Description	Percent of Total Employment in Region	2022 Jobs	2021 Hires	2021 Separations	2021 Turnover Rate					
35-3031	Waiters and Waitresses	1.1%	5,596	8,942	10,040	180.5%					
35-3023	Fast Food and Counter Workers	2.3%	12,348	18,975	20,692	173.9%					
41-2011	Cashiers	1.7%	8,773	10,696	11,601	132.9%					
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	1.2%	6,199	6,667	6,193	102.5%					
53-7065	Stockers and Order Fillers	1.9%	9,761	9,641	9,565	99.7%					
41-2031	Retail Salespersons	2.8%	14,490	13,787	14,326	99.6%					
31-1128	Home Health and Personal Care Aides	1.8%	10,065	9,779	9,333	98.9%					
43-9061	Office Clerks, General	1.4%	7,115	5,498	5,691	81.6%					
43-4051	Customer Service Representatives	2.1%	10,881	7,656	7,939	73.5%					
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	1.2%	6,374	4,167	4,629	73.4%					
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	1.5%	7,752	5,372	5,402	70.6%					
43-3031	Bookkeeping, Accounting, and Auditing Clerks	1.0%	5,143	3,322	3,536	69.8%					
13-2011	Accountants and Auditors	1.5%	7,873	3,824	4,094	53.0%					
11-1021	General and Operations Managers	1.3%	7,138	3,861	3,611	52.1%					
13-1161	Market Research Analysts and Marketing Specialists	0.9%	4,970	2,693	2,477	51.4%					
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1.0%	5,157	2,625	2,497	48.9%					
13-1198	Project Management Specialists and Business Operations Specialists, All Other	2.2%	11,532	4,654	4,804	42.5%					
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	2.3%	12,230	5,045	4,060	34.6%					
29-1141	Registered Nurses	1.5%	8,055	2,396	2,409	31.1%					
25-2021	Elementary School Teachers, Except Special Education	1.0%	5,470	1,800	1,618	30.3%					

Diversity, Equity, and Inclusion

	Arapahoe and Douglas Counties									
		Arapahoe &	Urban							
	Workforce Age Bands	Douglas	Front							
		Counties	Range							
14 to 18		2.7%	2.3%							
19 to 24		9.1%	9.9%							
25 to 34		22.7%	23.6%							
35 to 44		22.6%	22.0%							
45 to 54		20.3%	19.6%							
55 to 64		16.0%	16.1%							
65+		6.6%	6.5%							



Source: EMSI Burning Glass

Nationally 12.1% of the workforce is aged 14-24, while 7.0% is 65 years or older. In the two-county Arapahoe/Douglas area, over 34,101 people are at or over the traditional retirement age, with another 8,248 reaching age 65 each year. However, many are working past age 65 and even age 70 for a variety of reasons, including financial need.

Racially diverse executive teams provided an advantage of 35% higher EBIT and 33% more long-term value creation. Maintaining a diverse workforce is imperative for modern organizations to succeed. Companies with a diverse staff are better positioned to meet the needs of diverse customer bases, and the cash flows of diverse companies are 2.3 times higher than those of companies with more monolithic staff. Diverse companies are 70% more likely to capture new markets than organizations that do not actively recruit and support talent from under-represented groups. – Market Watch,

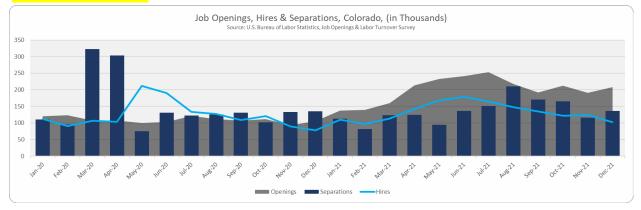
Both Arapahoe and Douglas counties offer families in all race and ethnicity groups the opportunity for incomes above the national average, and above average income growth potential. The subsequent bar charts came from the U.S. Census American Community Survey 5-Year Estimates. They show the percent growth in family income by race/ethnicity between 2015 and 2020 for the two counties. Reader should note that information on family income was not available for one racial grouping in Douglas County in 2015 and 2016.



	Median Income, Families, Arapahoe County											
Year	All Families	Two or More Races	White	Asian	Some Other Race	Hispanic/ Latino	Black / African American	White Alone (Non- Hispanic)	Indigenous American / Alaskan Native	Native Hawaiian / Pacific Islander		
2015	\$76,437	\$58,503	\$84,845	\$76,484	\$41,104	\$46,837	\$49,959	\$90,661	\$71,927	\$73,257		
2016	\$80,002	\$62,706	\$88,221	\$77,052	\$43,283	\$50,471	\$54,044	\$93,514	\$73,913	\$75,625		
2017	\$84,049	\$72,839	\$93,182	\$80,074	\$47,677	\$54,642	\$58,148	\$98,370	\$73,681	\$81,188		
2018	\$89,953	\$81,969	\$99,134	\$83,318	\$52,074	\$58,780	\$63,363	\$104,643	\$73,365	\$72,424		
2019	\$94,344	\$91,858	\$103,367	\$85,217	\$77,731	\$63,495	\$68,773	\$108,152	\$81,397	\$74,215		
2020	\$98,402	\$80,796	\$107,406	\$90,035	\$62,136	\$67,865	\$69,023	\$111,690	\$84,625	\$102,404		
Percent Change	28.7%	38.1%	26.6%	17.7%	51.2%	44.9%	38.2%	23.2%	17.7%	39.8%		
Annual Growth	5.2%	6.7%	4.8%	3.3%	8.6%	7.7%	6.7%	4.3%	3.3%	6.9%		
Source US Census , ACS B19	113 Series, 5-Yea	r Es timates										

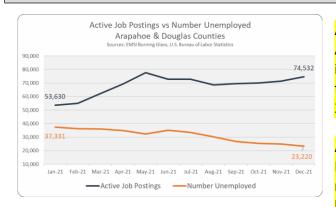
	Median Income, Families, Douglas County											
Year	All Families	Two or More Races	White	Asian	Some Other Race	Hispanic / Latino	Black / African American	White Alone (Non- Hispanic)	Indigenous American / Alaskan Native	Native Hawaiian / Pacific Islander		
2015	\$115,309	\$107,059	\$115,921	\$112,674	\$88,814	\$95,434	\$103,698	\$117,345	\$66,635	Not Avail		
2016	\$118,953	\$123,365	\$119,802	\$111,116	\$84,663	\$97,392	\$109,244	\$121,563	\$61,806	Not Avail		
2017	\$124,371	\$127,721	\$125,526	\$113,582	\$89,028	\$103,384	\$119,205	\$127,361	\$66,818	\$169,32		
2018	\$129,717	\$139,280	\$130,927	\$117,544	\$91,972	\$109,836	\$123,155	\$132,707	\$95,950	\$174,063		
2019	\$134,931	\$141,466	\$135,900	\$125,493	\$78,432	\$113,039	\$125,500	\$137,453	\$89,167	\$220,809		
2020	\$137,589	\$133,750	\$138,679	\$127,356	\$115,441	\$111,432	\$108,839	\$139,928	\$89,625	\$250,000		
Percent Change	19.3%	24.9%	19.6%	13.0%	30.0%	16.8%	5.0%	19.2%	34.5%	47.6%		
Annual Growth	3.6%	4.6%	3.7%	2.5%	5.4%	3.1%	1.0%	3.6%	6.1%	13.9%		
Source US Census, ACS B19	113 Series , 5-Yea	r Estima tes										

Scarce Labor Market





We have a very tight labor market, even though the number of employees is still about a million and a half below prepandemic levels and even further below the prepandemic trend, (but) self-employment is up by a lot, around 600,000 more workers than the average in 2019. It also does seem as if part of the Great Reshuffling has involved Americans concluding that they could improve their lives by starting their own businesses. – Paul Krugman



According to the U.S. Bureau of Economic Analysis, the real gross domestic product (GDP) increased at an annual rate of 6.9 percent in the fourth quarter of 2021, following an increase of 2.3 percent in the third quarter.

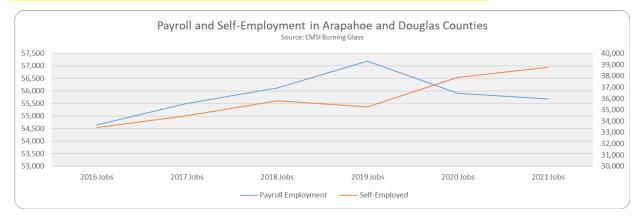
At the same time, in December 2021, the U.S. Department of Labor reported that just over 1 million more people left their jobs than were hired, in the face of 9.95 million job openings.

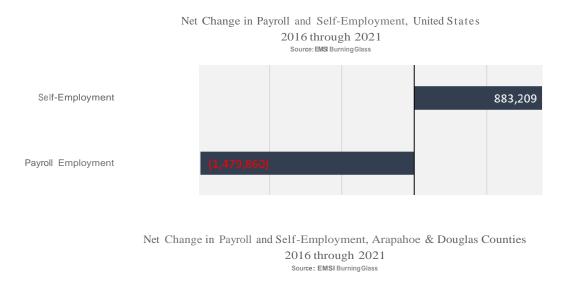
Scarcity in the labor market is expected to continue into the foreseeable future.

In Colorado the same month, 34,000 more people left their jobs than were hired, in the face of 208,000 job openings. At this writing, resignations seem to be tapering off, but labor still continues to be scarce, and economist Paul Krugman notes in a New York Times editorial dated April 5, 2022, is now referring to current conditions as the 'Great Reshuffling.'

Comparative Changes in Payroll and Self-Employment

In Arapahoe and Douglas counties, employment is still around 1,500 below pre-pandemic levels, but self-employment grew by just over 3,500 people between 2019 and 2021.





Self-Employment						5,324	
Payroll Employment	1,02	25					
(D	1,000	2,000	3,000	4,000	5,000	6,000

Gaps in Training Pipeline by Education Level

The reader should be mindful that several major university campuses are located outside of the greater metro Denver region, notably the University of Colorado, Colorado State University, and University of Northern Colorado. Industry leaders in greater Metro Denver routinely collaborate with public partners in the community to address training needs in nontraditional and outside-ofthe-box ways. Now, training for an occupation may well be a combination of hands-on experience mixed with classroom training, some in-person and some virtual.

	Postsecondary Certificate or Non-Degree Credential								
		Annual	Regional						
SOC	Occupation	Openings	Completions	Shortfall					
			(2020)						
53-3032	Heavy and Tractor-Trailer Truck Drivers	3,400	0	(3,400)					
31-1131	Nursing Assistants	2,715	1,378	(1,337)					
31-9011	Massage Therapists	1,144	194	(950)					
39-5012	Hairdressers, Hairstylists, and Cosmetologists	1,885	1,013	(872)					
31-9091	Dental Assistants	1,141	381	(760)					
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	727	275	(452)					
29-2061	Licensed Practical and Licensed Vocational Nurses	525	181	(344)					
49-3011	Aircraft Mechanics and Service Technicians	398	130	(268)					
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	434	245	(189)					
29-2053	Psychiatric Technicians	116	2	(114)					
Sourco - EMS	Burning Glass								

Source: EMSI Burning Glass

	Associate Degree								
		Annual	Regional						
SOC	Occupation	Openings	Completions (2020)	Shortfall					
23-2011	Paralegals and Legal Assistants	761	273	(488)					
29-1292	Dental Hygienists	319	73	(246)					
31-2021	Physical Therapist Assistants	239	67	(172)					
29-2034	Radiologic Technologists and Technicians	308	173	(135)					
29-2032	Diagnostic Medical Sonographers	115	8	(107)					
31-2011	Occupational Therapy Assistants	116	18	(98)					
53-2021	Air Traffic Controllers	87	8	(79)					
29-2031	Cardiovascular Technologists and Technicians	55	0	(55)					
49-2021	Radio, Cellular, and Tower Equipment Installers and Repairers	65	13	(52)					
29-1126	Respiratory Therapists	152	103	(49)					

Source: EMSI Burning Glass

	Bachelors Degree								
		Annual	Regional						
SOC	Occupation	Openings	Completions	Shortfall					
			(2020)						
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	5,718	3,626	(2,092)					
27-2022	Coaches and Scouts	926	93	(833)					
13-1028	Buyers and Purchasing Agents	927	121	(806)					
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	734	34	(700)					
41-3031	Securities, Commodities, and Financial Services Sales Agents	1,104	467	(637)					
53-2011	Airline Pilots, Copilots, and Flight Engineers	657	103	(554)					
11-9021	Construction Managers	1,214	748	(466)					
13-1151	Training and Development Specialists	842	429	(413)					
25-9044	Teaching Assistants, Postsecondary	395	0	(395)					
25-9099	Educational Instruction and Library Workers, All Other	340	0	(340)					
Source: EMS	l Burning Glass								

Source: EMSI Burning Glass

Apprenticeable Occupations

Colorado now has its own apprenticeship office, and was the recipient of \$10 million to fund the Innovation, Diversity & Equity in Apprenticeship (IDEA) grant, which provides a vital resource for Colorado businesses.

The Colorado Urban Workforce Alliance, housed at Arapahoe/Douglas Works!, has six apprenticeship navigators who can help businesses throughout the state with creating registered apprenticeship programs, with the additional possibility of additional subsidies to help with training costs.

This is especially important for businesses who cannot find qualified candidates, but can find people who would be a good fit, but need assistance in training them. Many occupations are apprenticeable, and the Business Services Team at Arapahoe/Douglas Works! can help businesses determine if this may be a good strategy.

	Apprenticeable Jobs, Arapahoe & Douglas Counties, Top 25 Jobs	by Percent Total E	mployment			
SOC	Description	Jobs	Average Annual Openings	Percent of Total Employment	Median Hourly Earnings	Apprentice- able
11-1021	General and Operations Managers	7,138	768	1.3%	\$63.21	Yes
13-1161	Market Research Analysts and Marketing Specialists	4,970	626	0.9%	\$34.91	Yes
13-1198	Project Management Specialists and Business Operations Specialists, All Other	11,532	1,014	2.2%	\$40.06	Yes
13-2011	Accountants and Auditors	7,873	811	1.5%	\$37.12	Yes
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	12,230	1,300	2.3%	\$52.69	Yes
25-2021	Elementary School Teachers, Except Special Education	5,470	511	1.0%	\$28.06	No
29-1141	Registered Nurses	8,055	674	1.5%	\$36.44	Yes
31-1128	Home Health and Personal Care Aides	10,065	2,027	1.8%	\$13.27	Yes
35-2014	Cooks, Restaurant	4,640	922	0.9%	\$14.53	Yes
35-3023	Fast Food and Counter Workers	12,348	3,004	2.3%	\$12.33	No
35-3031	Waiters and Waitresses	5,596	1,243	1.1%	\$12.12	No
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	6,199	981	1.2%	\$13.81	Yes
39-9011	Childcare Workers	4,537	694	0.9%	\$13.38	Yes
41-2011	Cashiers	8,773	1,621	1.7%	\$13.27	No
41-2031	Retail Salespersons	14,490	2,182	2.8%	\$13.60	No
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	7,752	980	1.5%	\$31.92	No
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	5,157	549	1.0%	\$35.70	Yes
43-1011	First-Line Supervisors of Office and Administrative Support Workers	4,546	502	0.9%	\$30.14	No
43-3031	Bookkeeping, Accounting, and Auditing Clerks	5,143	627	1.0%	\$22.01	Yes
43-4051	Customer Service Representatives	10,881	1,466	2.1%	\$18.33	Yes
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	6,374	733	1.2%	\$20.47	Yes
43-9061	Office Clerks, General	7,115	934	1.4%	\$21.29	Yes
47-2061	Construction Laborers	4,893	585	0.9%	\$18.74	Yes
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	4,601	735	0.9%	\$17.71	Yes
53-7065	Stockers and Order Fillers	9,761	1,655	1.9%	\$15.79	No
Source: EMSI	Burning Glass					

Other Innovative Solutions in a Scarce Labor Market

There are several strategies businesses can use in today's scarce labor market. By working with the local workforce development system, businesses can tap into the hidden candidate market. The Arapahoe/Douglas Works! <u>Business Services Team</u> offers a no-cost consultative approach for businesses to determine and implement the best strategies.

- 1. Automation.
- 2. Remote working.
- 3. Contracting work out (outsourcing).

4. Work-based learning (paid and unpaid internships, on-the-job training, and apprenticeship.

Additional services include candidate screening & skill assessment, hiring events, and job fairs. Services are virtual or in-person depending on business need.

Automation

	Automation Potential, All Jobs, Arapahoe & Douglas Counties						
SOC	Occupation	Employed in Industry Group (2022)	Automation Index				
35	Food Preparation and Serving Related	37,805	125.9				
47	Construction and Extraction	27,490	123.1				
37	Building and Grounds Cleaning and Maintenance	15,669	122.5				
51	Production	11,249	113.8				
53	Transportation and Material Moving	32,975	110.9				
45	Farming, Fishing, and Forestry	782	110.0				
49	Installation, Maintenance, and Repair	19,084	108.9				
33	Protective Service	9,233	98.7				
43	Office and Administrative Support	60,633	98.1				
39	Personal Care and Service	17,950	96.1				
41	Sales and Related	60,846	95.0				
31	Healthcare Support	21,587	95.0				
27	Arts, Design, Entertainment, Sports, and Media	11,603	89.7				
13	Business and Financial Operations	51,343	89.5				
29	Healthcare Practitioners and Technical	26,749	88.3				
17	Architecture and Engineering	13,959	87.0				
25	Educational Instruction and Library	27,166	85.9				
11	Management	29,354	85.1				
19	Life, Physical, and Social Science	4,511	84.5				
23	Legal	5,530	84.0				
15	Computer and Mathematical	32,089	83.4				
21	Community and Social Service	8,146	82.3				
Source	: EMSI Burning Glass						

When staff are difficult to find, automation may be a strategy that can help a business maintain productivity and output.

EMSI Burning Glass has developed an automation index, which has a base of 100. An automation index greater than 100 indicates a higher-than-average risk of automation; an automation index less than 100 indicates a lowerthan-average risk of automation.

Automation seldom replaces staff 1:1, but it can leverage operations so a business can run successfully with fewer staff. A real example is a tire store chain in Lone Tree, which upgraded its internet presence so that customers could choose and purchase tires online, and even set up the service

appointment. This has allowed the center to serve more customers with the same number of staff.

Remote Working

Remote working is another strategy businesses can use to ensure they have the staff they need in key skill areas. This table was constructed using estimated employment by occupational family in the two-county Arapahoe/Douglas area, and then applying ratios using data collected by the U.S. Bureau of Labor Statistics during the pandemic. Ratios from January 2021 were chosen, because during that month, everyone who could successfully telework was teleworking.

Many businesses have looked at their business functions, and determined which staff could work remotely, and obtained the virtual technology to allow them to do so. For

	Occupation	Employed in		Percent
SOC		Industry Group (2022)	Potential Remote Workforce	Working Remote January 2021
13 Busines	s and Financial Operations	51,346	27,624	53.8%
15 Comput	er and Mathematical	32,091	21,694	67.6%
43 Office a	nd Administrative Support	60,641	15,039	24.8%
25 Educatio	onal Instruction and Library	27,166	12,089	44.5%
11 Manage	ment	29,356	10,744	36.6%
41 Sales ar	nd Related	60,854	10,345	17.0%
17 Archited	cture and Engineering	13,959	6,379	45.7%
27 Arts, De	sign, Entertainment, Sports, and Media	11,603	4,873	42.0%
21 Commu	nity and Social Service	8,146	3,658	44.9%
29 Healthc	are Practitioners and Technical	26,751	3,504	13.1%
23 Legal		5,530	3,191	57.7%
19 Life, Ph	ysical, and Social Science	4,511	2,057	45.6%
39 Persona	I Care and Service	17,950	1,382	7.7%
35 Food Pr	eparation and Serving Related	37,812	870	2.3%
31 Healthc	are Support	21,591	864	4.0%
33 Protecti	ve Service	9,234	813	8.8%
47 Constru	ction and Extraction	27,492	770	2.8%
53 Transpo	rtation and Material Moving	32,982	693	2.1%
49 Installat	tion, Maintenance, and Repair	19,085	668	3.5%
37 Building	g and Grounds Cleaning and Maintenance	15,671	439	2.8%
51 Product	ion	11,251	383	3.4%
45 Farming	g, Fishing, and Forestry	783	11	1.4%
Totals		525,807	128,089	24.4%

Source: EMSI Burning Glass

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example, many business and government entities have developed hybrid schedules with whole sections of staff working remotely part- or full-time. A full-time teleworking strategy allows a business to increase its recruitment reach.

Note: the telework data does not differentiate between hybrid and full-time remote work.

Contracting/Outsourcing

Contracting and outsourcing encompasses a number of strategies businesses can use together or singly. Strategies include:

1. Reaching out to staffing companies to recruit and fill positions. This has the advantage of the staffing company being the employer of record, but the business may pay a premium to cover costs of the staffing company as well as the wages.

		Average Annual Salary by Coun	try, Commonly Outsource	ed Jobs		
Region	Location	Junior Software	Senior Software	Accountant	Call Center	Manufacturing
Region	LOCATION	Developer	Developer	Accountant	Representative	Assembler
	India	\$4,744	\$16,266	\$3,382	\$2,477	\$2,500
	China	\$14,291	\$34,805	\$14,876	\$8,487	\$15,910
	Malaysia	\$10,020	\$21,790	\$12,277	\$9,827	\$12,485
A =: =	Thailand	\$10,063	\$33,243	\$11,978	\$13,836	\$8,738
Asia	Indonesia	\$4,153	\$16,800	\$14,000	\$6,989	\$5,667
	Philippines	\$5,963	\$13,118	\$6,414	\$4,055	\$3,084
	Taiwan	\$23,789	\$36,044	\$25,231	\$21,929	\$19,548
	Asian Average	\$10,432	\$24,581	\$12,594	\$9,657	\$9,705

Sources:Payscale.com, Daxx, Glass Door, and EMSI-Burning Glass

Average Annual Salary by Country, Commonly Outsourced Jobs								
Region	Location	Junior Software	Senior Software	Accountant	Call Center	Manufacturing		
Region		Developer	Developer	Accountant	Representative	Assembler		
Central	Brazil	\$12,235	\$26,845	\$12,154	\$7,475	\$8,512		
& South	Chile	\$26,491	\$36,653	\$28,598	\$19,523	\$7,519		
America	Mexico	\$19,774	\$25,631	\$15,630	\$11,348	\$7,009		
America	South & Central America Average	\$19,500	\$29,710	\$18,794	\$12,782	\$7,680		

Sources:Payscale.com, Daxx, Glass Door, and EMSI-Burning Glass

Average Annual Salary by Country, Commonly Outsourced Jobs								
Declar	l anation	Junior Software	Senior Software	A	Call Center	Manufacturing		
Region	Location	Developer	Developer	Accountant	Representative	Assembler		
	Bulgaria	\$13,689	\$36,134	\$9,379	\$13,329	\$16,283		
Eastern	Poland	\$18,006	\$44,220	\$15,399	\$13,966	\$7,980		
Europe	Ukraine	\$14,721	\$49,800	\$7,342	\$3,840	\$5,452		
	East European Average	\$15,472	\$43,385	\$10,707	\$10,378	\$9,905		

- 2. Contracting with firms in the administrative and support services subsector to take over various business functions, such as office operations, facilities, human resources, and business support. Many of these firms work in the United States, but a number also offer the services of workers in Central America, Eastern Europe, and Asia. Common outsourced occupations include junior and senior software developers, call center personnel. Businesses using this strategy should be mindful that a) firms that offer services from workers worldwide are similar to staffing companies in that the business customer pays the outsourcing company a fee that includes their own expenses and profits, as well as the foreign worker wages, and b) in some cases, quality might be an issue, or unforeseen events such as the current war in Ukraine, which is disrupting a significant segment of this market.
- 3. Another strategy, closer to home, is to tap into the local chambers of commerce, who may well have members on their rolls who can fulfill functions a business cannot find staff to do. For example, an organization needing software developers might contract with a chamber member whose business is software development.

4. A final strategy is to tap into the gig economy. For example, during the pandemic, supermarkets in the region entered into agreements with a national firm called Instacart that employs gig workers to shop and deliver groceries to customers. Restaurants that did not have the capacity to deliver contracted with Uber to deliver meals.

	Concentrated Talent Clusters, Arapahoe & Douglas Co	unties	
SOC	Description	2022 Jobs	Location Quotient
17-2050	Civil Engineers	3,380	3.10
41-3030	Securities, Commodities, and Financial Services Sales Agents	4,100	2.60
15-1240	Database and Network Administrators and Architects	5,637	2.57
13-2050	Financial Analysts and Advisors	3,241	2.39
17-2070	Electrical and Electronics Engineers	2,503	2.36
41-3090	Miscellaneous Sales Representatives, Services	7,752	2.28
13-1190	Miscellaneous Business Operations Specialists	11,532	2.19
15-1250	Software and Web Developers, Programmers, and Testers	13,854	2.06
13-1160	Market Research Analysts and Marketing Specialists	4,970	1.94
15-1290	Miscellaneous Computer Occupations	2,605	1.86
41-3020	Insurance Sales Agents	4,195	1.73
13-2070	Credit Counselors and Loan Officers	2,063	1.73
13-1030	Claims Adjusters, Appraisers, Examiners, and Investigators	1,908	1.69
15-1230	Computer Support Specialists	4,819	1.64
13-2010	Accountants and Auditors	7,873	1.63
15-1210	Computer and Information Analysts	4,102	1.61
13-2090	Miscellaneous Financial Specialists	2,548	1.52
13-1150	Training and Development Specialists	1,643	1.46
13-1110	Management Analysts	4,162	1.29
13-1070	Human Resources Workers	3,299	1.25
ource: EMSI 8	Buming Glass		

Talent Clusters: Remote and In-Person

Economic Developers, and businesses considering a move to, or expansion in, the Arapahoe/Douglas area, will find a tech-savvy, talented labor force that is highly concentrated in key skill areas.

This is advantageous particularly for businesses recruiting key talent to work remotely. During the pandemic, the U.S. Census Bureau reported that half of Colorado's labor force was successfully working from home.

Source: EMSI Burning Glass

The table above shows the number of people working in key occupations, and the *location quotient*, which is a measure of employment concentration in relation to the national average. For Civil Engineers, then, we would read, "In Arapahoe and Douglas counties, the employment concentration of civil engineers is 3.10 times higher than the national average."

Concentrated Technical Talent by Key Skill – 2022 Jobs and (Location Quotient)

Business and Financial

- Project management specialists 11,532 (2.19)
- Accountants and auditors 7,873 (1.63)
- Market research analysts and marketing specialists 4,970 (1.94)
- Financial and investment analysts and risk specialists 2,548 (1.52)
- Personal financial advisors 2,380 (2.49)

Computer Sciences

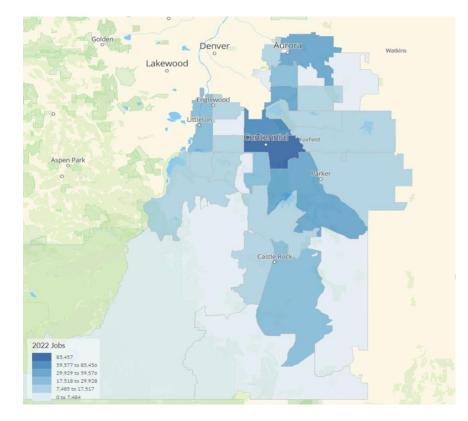
- Software developers 12,230 (2.26)
- Computer user support 3,595 (1.56)
- Systems Analysts 3.052 (1.50)
- Network and computer systems administrators 2,955 (2.50)
- Network architects 1,804 (3.28)

Engineering

- Civil engineers 3,380 (3.10)
- Electronics engineers 1,782 (4.19)
- Architects 739 (1.68)
- Computer hardware engineers 571 (2.54)
- GIS, surveying and mapping technicians 476 (2.52)

The region also has high bench strength in sales engineering, securities, commodities and financial services sales, and technical sales.

Employment Concentration This heat map and table show the highest employment concentrations in Arapahoe and Douglas counties.



			ion by Zip Code	5
ZIP	Arapah Municipality	oe & Douglas (2022 Jobs	Counties Current Wages & Salaries	Current Supplements
80112	Englewood	85,457	\$94,324	\$14,587
80111	Englewood	59,577	\$88,980	\$13,479
80134	Parker	31,378	\$66,299	\$10,343
80011	Aurora	30,152	\$61,869	\$10,467
80014	Aurora	29,929	\$64,182	\$10,793
80110	Englewood	24,135	\$64,921	\$10,257
80120	Littleton	21,220	\$72,877	\$12,125
80124	Lone Tree	20,521	\$65,214	\$10,504
80012	Aurora	19,007	\$55,453	\$9,799
80104	Castle Rock	17,518	\$74,578	\$11,413
80129	Littleton	16,323	\$83,207	\$12,645
80016	Aurora	15,641	\$56,752	\$10,223
80015	Aurora	14,760	\$56,435	\$10,862
80122	Littleton	14,153	\$60,111	\$10,545
80126	Littleton	13,865	\$66,764	\$10,673
80138	Parker	13,253	\$72,711	\$11,641
80108	Castle Rock	13,033	\$62,455	\$10,235
80113	Englewood	11,920	\$62,714	\$11,377
80013	Aurora	11,629	\$59,302	\$11,598
80010	Aurora	11,464	\$56,124	\$9,891
80109	Castle Rock	11,309	\$70,717	\$11,626
Source: EMSI	Burning Glass			

Commuting Patterns

Arapahoe and Douglas counties make up a larger labor shed. A 'labor shed' is that geographic area within which people are willing to commute to go to work. This table shows these commute patterns for greater metro Denver, Boulder and Larimer counties.

To read this table for Arapahoe County, we see that 105,051 people who live in Arapahoe County also work in the county. Another 89,806 Arapahoe County residents drive into Denver each morning, and 21,920 commute to Jefferson County to work. For Douglas County, we see that 43,951 people live and work in the county, and 46,186 commute to Arapahoe County to work.

The bar chart below shows morning commute information for the working population over 16 in Arapahoe and Douglas counties. Each weekday in 2019:

• 63,715 people in the two counties worked from home.

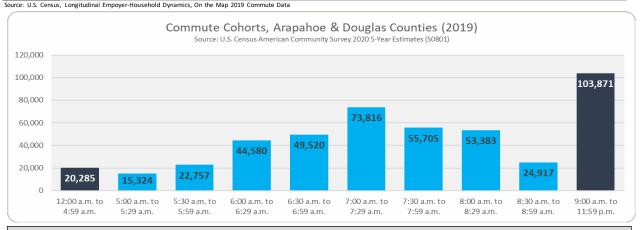
• 464,313 commuted to work, and of these, 393,336 drove alone in a car, truck or van.

Of these, 253,274 (73.2%) drove alone during rush hour (5:00 a.m. to 8:59 a.m.) and another 92,526 (26.7%) commuted during off hours.

 Commuting consumed an average of one hour per workday, or 251 hours for the year, at an average commute cost per worker of \$6,058. According to the U.S. Department of Energy, this added just under 1.4 million metric tonnes of CO2 emissions to the atmosphere.

 The 63,715 people working from home saved an average of \$6,058, and reduced CO2 emissions by 225,551 metric tonnes.

			Commute	Patterns, Denv	/er-Aurora-Lak	ewood Metro	politan Area, (Colorado		
Live In					Wor	k In				
	Adams	Arapahoe	Broomfield	Clear Creek	Denver	Douglas	Elbert	Gilpin	Jefferson	Park
Adams	67,461	23,769	8,476	127	58,495	5,880	161	633	28,660	30
Arapahoe	30,221	105,051	2,055	126	89,806	25,821	387	318	21,920	84
Broomfield	5,254	1,991	4,431	17	6,140	668	18	48	4,428	8
Clear Creek	209	328	43	886	615	140	8	95	871	8
Denver	33,212	57,456	3,690	197	154,971	14,691	155	439	33,642	103
Douglas	8,398	46,186	1,123	94	35,268	43,951	5,028	115	15,371	71
Elbert	924	2,758	129	3	1,965	2,152	1,468	8	859	4
Gilpin	105	140	33	48	274	47	2	740	385	2
Jefferson	24,880	35,181	6,187	752	75,124	11,166	175	1,568	93,704	268
Park	136	602	47	44	912	270	11	6	1,314	1,061



For every day a worker works remotely, they save \$24.13 in commute costs, emit 31.1 pounds less CO2 into the atmosphere, and get back one hour they would otherwise have spent commuting.

Real Time Labor Market Information

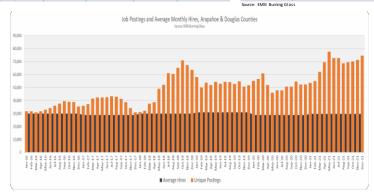
The tables and graphs below are from EMSI Burning Glass Job Posting Analytics. They reflect labor demand in 2021 within Arapahoe and Douglas Counties.

SOC	Occupation	Unique Postings 2021	Number Employers Competing 2021	Annual Median Advertised Salary	Salary Observations Count	Online Profiles Updated Since 2020
29-1141	Registered Nurses	17,381	695	\$79,616	11,343	7,00
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	8,305	883	\$109,824	2,780	8,97
15-1299	Computer Occupations, All Other	7,657	870	\$98,560	2,946	5,28
41-2031	Retail Salespersons	7,311	836	\$31,104	4,743	3,68
43-4051	Customer Service Representatives	6,479	1,260	\$37,504	4,543	7,62
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	5,634	1,287	\$54,912	3,565	3,57
11-9198	Personal Service Managers, All Other	5,381	1,036	\$93,184	1,957	16,96
41-1011	First-Line Supervisors of Retail Sales Workers	5,059	730	\$40,064	2,818	1,19
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	4,033	582	\$35,456	2,971	83
53-3032	Heavy and Tractor-Trailer Truck Drivers	3,956	530	\$58,240	2,484	1,80
35-3023	Fast Food and Counter Workers	3,849	326	\$31,104	2,386	75
31-1131	Nursing Assistants	2,969	227	\$37,504	1,919	1,01
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	2,952	826	\$39,552	2,093	4,84
11-9111	Medical and Health Services Managers	2,938	530	\$87,296	1,541	3,02
19-9071	Maintenance and Repair Workers, General	2,908	689	\$41,600	1,882	1,24
31-1128	Home Health and Personal Care Aides	2,906	252	\$33,408	2,051	1,27
53-7065	Stockers and Order Fillers	2,706	335	\$34,432	1,824	1,37
29-2098	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other	2,457	388	\$42,624	1,706	85
11-9051	Food Service Managers	2,425	328	\$47,360	1,048	62
11-1021	General and Operations Managers	2,331	573	\$75,520	1,232	15,01

Top Hard Skills Posted in 2021, Arapahoe & Douglas Counties							
Hard Skill	Unique Postings	Number Employers Competing	Annual Median Advertised Salary	Salary Observations Count			
Basic Life Support	19,741	546	\$77,184	14,955			
Nursing	19,727	675	\$77,184	14,268			
Cardiopulmonary Resuscitation (CPR)	17,204	893	\$62,592	13,020			
Merchandising	14,048	811	\$33,408	7,709			
Accounting	13,914	1,500	\$56,192	8,663			
Auditing	13,237	1,840	\$57,472	7,306			
Microsoft Mail	11,648	1,561	\$48,256	7,108			
Finance	11,573	1,216	\$66,432	6,746			
Customer Experience	11,333	918	\$41,600	5,372			
Warehousing	10,441	1,046	\$37,504	6,791			
Selling Techniques	10,379	1,183	\$38,528	5,618			
Restaurant Operation	10,335	788	\$33,408	5,656			
Agile Methodology	9,533	757	\$109,440	3,507			
Life Support	8,336	60	\$79,232	7,555			
Billing	8,228	1,321	\$45,184	5,028			
Automation	7,778	1,022	\$85,888	3,404			
Data Entry	7,430	1,330	\$40,320	5,097			
Invoicing	7,223	1,229	\$45,184	4,746			
Product Knowledge	7,132	679	\$37,504	3,646			
Advanced Cardiovascular Life Support (ACLS)	6,716	282	\$79,744	4,488			

Top Credentials/Certificates Posted in 2021, Arapahoe & Douglas Counties					
Skill or Qualification	Unique Postings	Number Employers Competing			
Top Secret-Sensitive Compartmented Information (TS/SCI Clearance)	5,033	232			
Security Clearance	4,860	259			
Commercial Driver's License (CDL)	4,053	498			
Bachelor of Science in Nursing (BSN)	3,834	180			
Certified Nursing Assistant	3,800	342			
Licensed Practical Nurse	2,214	344			
Bachelor of Science in Business	2,034	430			
Master of Business Administration (MBA)	1,837	348			
Associate Degree in Nursing	1,757	75			
Secret Clearance	1,341	114			
Food Handler's Card	1,298	94			
Nurse Practitioner	1,246	221			
Project Management Professional Certification	1,143	245			
CompTIA Security+	1,122	155			
American Registry of Radiologic Technologists (ARRT) Certified	1,015	62			
Series 7 General Securities Representative License (Stockbroker)	1,004	52			
Certified Medical Assistant	1,000	180			
Critical Care Registered Nurse (CCRN)	969	24			
Certified Information Systems Security Professional	922	167			
Certified Pharmacy Technician	896	92			
Source: EMEL Burging Class					

ource: EMSI Burning Glass



This bar chart illustrates the continuing imbalance between the demand for skilled workers and the supply. When the orange bars are taller than the dark blue 'average hires' background, it suggests a number of positions had to go unfilled. Job postings began substantially exceeding the average hires in Arapahoe and Douglas counties in March 2018.

New Americans in the Economy

New Americans make a significant contribution to economy in Arapahoe and Douglas counties. Overall, they:

- Have \$3.1 billion in purchasing power (2018).
- Paid \$1.2 billion in taxes (2018)

Immigrants in the Economy, Arapahoe/Douglas Region							
Immigrants in the Economy	Combined	Arapahoe	Douglas				
Immigrant Residents (2019 ACS)	123,225	97,566	25,659				
Entered 2010 or later (2019 ACS)	28,990	22,386	6,604				
Entered before 2010 (2019 ACS)	94,235	75,180	19,055				
Share of Population (2019 ACS)	12.6%	15.1%	7.6%				
Taxes Paid (NAE)	\$1.17 B	\$825.4 M	\$345.3 M				
Purchasing Power (NAE)	\$3.1 B	\$2.3 B	\$824.8 M				
Number Immigrant Entrepreneurs (NAE)	7,974	6,759	1,215				
Eligible Immigrant Voters (NAE)	48,454	37,608	10,846				

Sources: New American Economy Report (NAE), US Census American Community Survey (2019 ACS)

These tables, from the New American Economy Report, show the sectors and occupational groupings with the most foreign-born workers. Note that the data is not available for either of these at the county level.

Sectors with the Most Foreign Born Workers		
Denver-Aurora-Lakewood	Percent	
Construction	28.5%	
Manufacturing	22.7%	
Administrative Support	21.4%	
Tourism, Hospitality and Recreation	17.8%	
Agriculture	16.3%	

Occupations with Highest Share of Foreign-Born Workers Colorado Statewide		
Occupation	Percent	
Maids and Housekeeping Cleaners	49.0%	
Cooks	28.3%	
Carpenters	27.5%	
Food Preparation Workers	26.6%	
Miscellaneous Production Workers	25.4%	
Source: New American Economy Report (NAE)		

Source: New American Economy Report (NAE)

Educational Attainment New Americans 25 and Older Arapahoe/Douglas Workforce Area			
Level	Number	Percent	
Number	104,985	100.0%	
Less than high school graduate	19,706	18.8%	
High school graduate or GED	23,671	22.5%	
Some college or associate's degree	19,863	18.9%	
Bachelor's degree	23,991	22.9%	
Graduate or professional degree	17,754	16.9%	
Percent High School or above	85,279	81.2%	
Percent Bachelors or above	41,745	39.8%	
Source: US Census			

The foreign-born, or New American population in Arapahoe and Douglas counties is more highly educated than the national average, with nearly 40% having a bachelors degree or above. Also, the number with associate level degrees is over double the state average. 4. Describe the development and implementation of sector initiatives for indemand industry sectors or occupations for the planning region, and explain how sector partnerships will be utilized to facilitate the engagement of employers, including small employers and employers in in-demand industry sectors and occupations, in workforce development programs.

The Arapahoe/Douglas Works! Business Services Team has maintained our involvement in Sector Partnerships. The Business Services Team actively participates in the Greater Metro Denver Healthcare Partnership, Denver Metro Retail Partnership, Manufacturing Partnership and the Construction Partnership. This team is also a co-convener of the Tech Talent Denver Partnership and the Aerospace and Aviation partnership. Arapahoe/Douglas Works! is an active member of the Colorado Space Coalition, and has recently joined the Aerospace Alley Education Committee. Sector Partnerships involve both large and small businesses, and the goal of the Arapahoe/Douglas Works! Business Services Team is to participate and listen to industry needs and respond effectively to those needs. This ensures our customers are receiving business-relevant training and work-based learning opportunities.

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

Arapahoe/Douglas Works! uses career pathways in targeted, in-demand industries to create pipelines for talent in support of local economic development. Specifically, the childcare industry is unique in where wages are low, quality is variable, and demand is high. Arapahoe/Douglas Works! identified credentials that can be used to increase the effectiveness and the value of childcare workers, which increases their wages and the quality of their care. We have also increased the number of childcare workers while decreasing turnover, which is a necessary step in providing relief for demand. Arapahoe/Douglas Works! incorporates this model when appropriate for other businesses and industries to address local economic needs.

Career pathways are discussed routinely at sector partnership meetings, and the critical needs of employers are identified. The Arapahoe/Douglas Works! Business Services Team works with local employers participating in sector partnerships to address critical workforce needs through work-based learning and other strategies.

Moreover, Arapahoe/Douglas Works! has partnered with the Aurora, Castle Rock, and African Chambers of Commerce to train "Business Services Liaisons" within each chamber. These Liaisons are entered into a unique Workforce Specialist Registered Apprenticeship sponsored by the Colorado Department of Labor and Employment. This partnership has provided a line of communication directly from Arapahoe/Douglas Works! to the Chambers, as well as an opportunity for participants to obtain training and support in the field.

The Business Services Team has access to labor market information, employers and job seeker feedback. This information is used to assist businesses with the creation of work-based learning partnerships, and the communication of work-based learning opportunities to our job seekers.

6. Describe other strategies and services that will be used in the planning region to support a local workforce development system that meets the needs of businesses in the planning region.

The Arapahoe/Douglas Works! Business Services Team and Workforce Development Board Team convene business Task Forces in both Arapahoe and Douglas Counties. These taskforces are made up of representatives from Chambers of Commerce, Economic Development, the Small Business Development Centers, Manufacturers Edge and Municipalities within Arapahoe and/or Douglas County. The information shared within these Task Forces helps to define the strategies that are needed to sustain economic strength in our area.

The Arapahoe/Douglas Works! team has added an Economic Development Coordinator to the Business Services Team to work with sector partnerships, economic development partners, and education partners in the Arapahoe and Douglas County communities to ensure activities are organized and focused on the needs of our businesses within the region.

- 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:
 - a. Describe the strategies and services that will be used in the planning region to better coordinate workforce development programs and services with regional economic development services and providers;

Business relevant, workforce intelligence is vital to better coordinate workforce development programs with economic development and other business/industry groups. A member of the Arapahoe/Douglas Workforce Board staff currently co-chairs the statewide Workforce Intelligence Data Expert (WIDE) group, which focuses its efforts on using both traditional and real-time labor market data to inform discussions among workforce and economic development leaders about the best strategies to target workforce development funds to create optimal growth and economic recovery.

The Business Leadership Team meets on a monthly basis to strategize how to provide the best and most effective services to local employers. Arapahoe/Douglas Works! also works together with neighboring business services teams on projects identified by regional workforce center directors.

Moreover, the Colorado Urban Workforce Alliance and the Colorado Operators Group each respectively work on a regional basis to ensure complimentary regional services strategies are employed and supported to ensure a maximum impact for customers and business/industry.

In addition, the Arapahoe/Douglas Works! Business Services Team has worked with the Arapahoe/Douglas Workforce Development Board, local economic developers, chambers of commerce, educators, the Small Business Development Centers, Manufacturers Edge, and other stakeholders to form an Economic Recovery Task Force, in both Arapahoe and Douglas County, which fields a coherent regional response to economic recovery from the COVID-19 pandemic. During and after recovery, this Task Force, and the relationships, that have been developed will continue to ensure the sustained economic vitality of the area.

workforce investment activities with the provision of adult education

and literacy activities under title II.

Locally, Arapahoe/Douglas Works! Partners with mandatory and non-mandatory adult education partner entities to streamline service delivery to referred and mutual customers. Through this partnership, marketing is shared, processes are evaluated, and funding is leveraged, when possible.

Arapahoe/Douglas Works! partners with Arapahoe Community College and the Community College of Aurora through the Workforce Development Board, but also on projects such as the Virtual Work Readiness Program developed with Arapahoe Community College, and the Business Boost training program being developed with Arapahoe/Douglas Works!, the Small Business Development Center and the Community College of Aurora.

c. Describe how the planning region will strategically coordinate workforce investment activities with the provision of vocational rehabilitation services under title IV.

Arapahoe/Douglas Works! coordinates the provision of vocational rehabilitation services under Title IV; local area plans include memoranda of understanding with service providers for these activities, and when appropriate, local areas will address these services using a regional-level service model. Locally, Arapahoe/Douglas Works! regularly collaborates with the Division of Vocational Rehabilitation to streamline and enhance service delivery, cross-train staff, share resources and data, and staff difficult customer cases. Moreover, the Division of Vocational Rehabilitation is co-located at our main one-stop location in Centennial to further enhance our partnership and customer service delivery.

d. Describe the strategies and services that will be used in the planning region to strengthen linkages between the one-stop delivery system and unemployment insurance programs.

The WIDE group maintains contacts with a variety of Colorado groups, including the Unemployment Insurance Division (UI) of the Colorado Department of Labor & Employment. This has resulted in the UI group providing the most relevant and sought-after data on new unemployment claims by sector, by occupation, by demographic and overall. This timely data has helped workforce and economic development groups move forward with a focused approach to recovery.

Additionally, Arapahoe/Douglas Works! participates in regularly occurring meetings with UI that focus on changes within the UI programming and offers opportunities for dialogue around troubleshooting system and claimant issues. There is also local area collaboration across the region, and state that has resulted in a more uniform approach to assisting UI claimants with resolving issues and offering services. A collective spreadsheet was created to inform UI staff of the availability and types of services being offered within each local area.

e. Describe the strategies and services that will be used in the planning region to better coordinate workforce development programs and services with community-based organizations, including, where applicable, refugee resettlement agencies that serve priority populations, including individuals with barriers and New Americans. The Arapahoe/Douglas Workforce Development Board is coordinating activities with sister workforce development areas in the Colorado Central Planning Region, under the auspices of the Colorado Urban Workforce Alliance, to create a hub approach to services that leverages technology, staff and streamlines service delivery. Part of this effort is to create a multi-workforce-area hub for providing Rapid Response services to businesses.

The Business Services Team is performing regularly scheduled virtual rapid response workshops. Invitations to workshops are sent through email to new connecting Colorado participants.

Data from the statewide rapid response team is reviewed during board meetings. If current investment activities do not support the current trends, the board works to adjust funding, or to obtain funding, to address the need in such areas as incumbent worker training to avert layoffs.

Updated April 2021

Arapahoe/Douglas Works! is part of Colorado Central Planning Region (CCPR), and has worked with sister workforce centers in the region to develop a number of strategies and services that will be used to better coordinate workforce development programs and services with community-based organizations, including, where applicable, refugee resettlement agencies that serve priority populations, including individuals with barriers and New Americans. Several efforts to ensure equity and inclusivity for individuals accessing services have been developed, including providing technology access and training to individuals where there is a gap, specifically individuals that are deemed New Americans.

Growing List of Partners

Several of the workforce centers, including Arapahoe/Douglas Works!, have strong partnerships in the community that serve New Americans, including, but not limited to:

- County Human Services departments
- K-20 Educators
- Adult and Family Literacy Programs
- Learning Source
- Catholic Charities of Denver
- Focus Points Family Resource Center
- Lutheran Family Services
- Asian Pacific Development Center
- Mi Casa
- A variety of others

Statewide Toolkit

By looking at practices that are currently growing throughout the CCPR, the various workforce areas are developing effective service approaches for their constituents based local need. New opportunities, best practices, and emerging strategies are shared by the local workforce areas through:

- Statewide Directors
- Colorado Operators Group
- Workforce Intelligence Data Expert
- Other venues as appropriate

This ensures systemic success throughout the Colorado Workforce Centers through a cohesive approach that is localized for businesses and job seekers throughout the CCPR.

Workforce regions, including CCPR regions, have begun the process of developing a toolkit to serve New Arapahoe/Douglas Local Plan 69 Americans. This work, led by Weld County and the Immigrant and Refugee Center of Northern Colorado, will survey local workforce regions throughout the state and create a toolkit of resources and services to assist New Americans. This toolkit is anticipated to include training workshops, resources, fact sheets and access to other information that can be shared and localized throughout Colorado.

In addition, local workforce areas within the CCPR are conducting focus groups to get a better understanding of how best to serve New Americans in a local workforce area and share any resources developed across the CCPR region.

Regional Collaboration

An example of a regional collaboration is the Early Childhood Education (ECE) Pre-Apprenticeship Initiative designed to create career pathways for New Americans. This pre-apprenticeship feeds the Early Childhood Education (ECE) Registered Apprenticeship program through Red Rocks Community College and Lutheran Family Services. Adams County Workforce and Business Center was able to pay for English as a Second Language (ESL) classes for a group of Afghani refugees that required unique support. This initiative is a great example of how workforce was able to best utilize input from employers and educators to offer targeted assistance where it could help.

A second cohort expanded the reach for the ECE Pre-Apprenticeship Initiative across six local workforce regions in the CCPR, including Arapahoe/Douglas Works! This pre-apprenticeship initiative continues to open career pathways for participants while assisting a group of employers in filling open positions with qualified individuals.

Business Services Teams routinely work with local businesses to address language needs of incumbent workers, and customize training programs to accommodate persons for whom English is not the first language.

Addressing Digital Divide

In an effort to combat the digital divide that was exacerbated during the pandemic, Denver Workforce and Economic Development began a partnership with its library system for a computer loaner program. This partnership, which includes more than 400 computers and hotspots, allows individuals to check out the technology they need to be used for education, training, or employment related activities. Like a library book, they are checked out through the system, and then "cleaned" when returned for use with another customer. Options to purchase used computers at a discount are also available through this initiative. Library partnerships are now being explored by other workforce areas in the CCPR.

Arapahoe/Douglas Works! is looking to utilize the Supportive Services Program (HB 19-1107) to support customers needing access to technology to secure and maintain employment. In addition, a partnership with Arapahoe Community College offers workforce related digital skills classes to help job seekers, including New Americans, be able to fully participate in the post-pandemic labor force.

Accessing Information in a Variety of Languages

Local workforce centers in the CCPR have also begun working to expand multi-lingual access for customers, including implementing kiosks in certain areas, the translation of documents into a variety of languages (including Unemployment Information (UI) documents) and delivering virtual training programs in alternate languages.

Each region has identified the top languages spoken by customers, and has developed a language

assistance plan in which key eligibility and information documents have been translated into those languages. (See local language assistance plans).

In addition, translation services are made available to workforce center customers requiring those services.

Adult Basic Education partners offer access to English Language Learning (ELL) classes designed to promote conversational English in the workplace.

Future Goals

During the remainder of the period of this plan, workforce centers in the CCPR, including Arapahoe/Douglas Works!, will continue to push for the system of record, Connecting Colorado, to have the ability to be used by individuals in their native language and have the ability to capture documents safely and securely from the customers that are needed for program enrollment. Currently, a number of Connecting Colorado documents are being translated into a number of alternate languages. By continuing to work toward equity, this will allow the system to assist individuals in a variety of ways.

f. 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);

The Arapahoe/Douglas Workforce Development Board is coordinating activities with sister workforce development areas in the Colorado Central Planning Region, under the auspices of the Colorado Urban Workforce Alliance, to create a hub approach to services that leverages technology, staff and streamlines service delivery. Part of this effort is to create a multi-workforce-area hub for providing Rapid Response services to businesses.

Data from the statewide rapid response team is reviewed during board meetings. If current investment activities do not support the current trends, the board works to adjust funding, or to obtain funding, to address the need in such areas as incumbent worker training to avert layoffs.

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;

Please visit <u>https://www.adworks.org/index.php/about-us/workforce-board/governance/</u> to view all agreements between the Arapahoe/Douglas Workforce Development Board and other local entities as described in this section.

Arapahoe/Douglas Works! provides specialized services to individuals with disabilities through the Ticket to Work program, offering enhanced career guidance and job search resources for Social Security disability beneficiaries age 18 through 64 who want to work and seek to gain financial independence. Additionally, our community partner Division of Vocational Rehabilitation is co-located at our main one-stop location allowing for seamless service delivery for customer referrals, staff cross-training, and process improvements. Arapahoe/Douglas Works! provides ongoing training for staff to enhance all services provided to individuals with disabilities, utilizing local partners for development and education support, such as Continuum of Colorado, Division of Vocational Rehabilitation, and Service Animals, and Introduction to Intellectual and Developmental Disabilities. Arapahoe/Douglas Works! staff also collaborate with partners for case conferencing and resources to enhance services provided to individuals with disabilities.

9. If determined appropriate by the planning region, describe the coordination of transportation and other supportive services or discuss why these are not appropriate for the planning region at this time.

The Central Planning Region's strategy for the coordination of transportation and other supportive services will center on using the collective voice of the region to approach agencies and negotiate competitive rates. This should improve the accessibility and affordability of these services to its customers. The region anticipates that the size and volume of its customer base will contribute to its ability to negotiate the best possible value for these services.

Locally, Arapahoe/Douglas Works! sources appropriate supportive services through community partner networks and through leveraging resources through other programming. If appropriate, WIOA resources may be used to mitigate the barrier when appropriate and allowable.

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 methodology for our local area's administrative cost arrangements are detailed in our Cost Allocation Plan; please find our Cost Allocation Plan attached. Additionally, we are in the process of conducting an extensive review of our Cost Allocation Plan utilizing a contracted firm with this subject matter expertise. Any updates will be incorporated as necessary and appropriate.

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.

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.

The pandemic accelerated the movement of Arapahoe/Douglas Works! toward technology-enabled, virtual services. To assist with this effort, the Arapahoe County Information Technology Department has aided Arapahoe/Douglas Works! with the development of a virtual case management and workflow system that complements our current systems, Connecting Colorado and CBMS. Moreover, virtual platforms such as Zoom, Microsoft Teams, Skype, Cisco WebEx and GoToMeeting are now used for a variety of services including: facilitated workshops, customer intake, virtual hiring events, customer appointments and partner convening. We have seen several positive returns due to the expansion of our virtual service delivery, as an example, TANF/Colorado Works orientation attendance has increased from 45% to over 70%.

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

Arapahoe/Douglas Works! has continued to expand options for virtual service delivery, such as implementing the Premier Virtual Job Fair platform, and offering regional virtual career readiness workshops through various platforms.

13. Briefly describe the activities and steps taken to develop this regional plan. The

Colorado Central Planning Region's four-year plan was developed using a multi-area approach under the auspices of the Colorado Urban Workforce Alliance (CUWA). The WIDE group co-chair from the Arapahoe/Douglas area completed questions 1-3, which were then vetted by the remaining WIDE Group members. CUWA coordinated the collection of information on business services and operational questions.

14. Describe the process used by the local boards in this planning region to provide an opportunity for public comment, including comment by representatives of businesses and comment by representatives of labor organizations, and input into the development of the plan prior to its submission.

Arapahoe/Douglas Works! will post the plan for public comment on its website (<u>www.adworks.org</u>), provide a copy to CWDC to post on their website, inform the release for comment through its Workforce Development Board and Business Services newsletters, as well as announce the release on Arapahoe/Douglas Works! social media platforms.

Local Plan Questions/Responses

The Colorado Workforce Development Council issues annual guidance for performance incentive funds and the reporting required to be eligible for those funds, when offered. The questions asked for that process are incorporated into the local area plan below.

Additional guidance regarding performance incentives and reporting will be provided in a separate Policy Guidance Letter.

1. Provide an analysis of the workforce development activities (including education and training) in the local area, including an analysis of the strengths and weaknesses of such services, and the capacity to provide such services, to address the identified education and skill needs of the workforce and the employment needs of employers in the local area.

Arapahoe/Douglas Works! is a full-service, one-stop workforce center providing Wagner-Peyser career services, WIOA Title I programming, business services, Employment First, Colorado Works and discretionary grant programming. Arapahoe/Douglas Works! supports hundreds of participants in educational, credential-based training and work-based learning activities annually, with a focus on our locally defined, in-demand industries. Participants are enrolled in one or more programs in order to increase access and funding for training, intensive case management, and supportive services. Additionally, thousands of individuals receive Career Services annually, which includes, but is not limited to, resume preparation, interview assistance, networking and career exploration activities.

Arapahoe/Douglas Works! partners with community colleges and local training providers to upskill the local workforce to meet the needs of the economy. Arapahoe/Douglas Works! is intensely focused on ensuring resources and educational opportunities are available to address the massive technology gap that has resulted from the pandemic. Arapahoe/Douglas Works! will continue to partner with State and local organizations to ensure tools and training are accessible to those in need. Arapahoe/Douglas Works! stands ready to meet the credentialing needs of the local Workforce.

Additionally, Arapahoe/Douglas Works! continues to seek out, and build upon existing relationships with nonprofit organizations that primarily serve underrepresenting populations to ensure continuity of service delivery.

2. Describe the local board's strategic vision and goals for preparing an educated and skilled workforce (including youth, individuals with barriers to employment, and New Americans), including goals relating to the performance accountability measures based on primary indicators of performance described in section 116(b)(2)(A) in order to support economic growth and economic self-sufficiency.

Arapahoe/Douglas Works! has an increased emphasis on staff training and development, working toward skill and knowledge gains that will foster performance measurement achievement as well as using tools that align service delivery to best meet the needs of customers, including but not limited to youth, individuals with barriers to employment, and New Americans, in developing and pursuing short and long- term career development goals that support economic self-sufficiency. This emphasis addresses the A/D Works! goal to support staff with professional development training and resources, including regularly scheduled staff training opportunities throughout each year. Training opportunities for staff development include, but may not be limited to: the Foundations of Workforce Development (which covers 9 core competency areas), Virtual Excellence for providing virtual service delivery, meetings, and workshops, and Lunch & Learn events that focus on topics of critical skills for customer service, case management, community partnerships, LMI, programmatic updates, communication strategies, and wellbeing guides and resources that can be utilized by staff individually and with their customers. By providing staff with support, information, and increased learning opportunities, they are better equipped to serve youth, individuals with barriers to employment, and New Americans, in a robust and informed manner. This also relates to the goal of increased cross training of staff and community partners to foster collaboration and enhanced program knowledge to better serve customers through any entry into the workforce center.

Arapahoe/Douglas Works! has actively worked to enhance customer interactions in a more relational, individual-focused manner, moving away from transactional relations, resulting in greater engagement with individuals with barriers, youth and New Americans. A foundational endeavor in pursuit of this work is to serve customers utilizing the Human Centered Design Goal4 It! Methodology from Mathematica in order to provide science-informed, individual-focused goal planning and process that builds self-regulation skills. This methodology is science-informed to be focused on intrinsic motivation, planning for potential challenges during goal pursuit, accountability, and envisioning the end result to make goal achievement more likely and beneficial. Goal4 It! builds self-regulation skills that can benefit customers in all aspects of life, helping them become more self-sufficient and confident in their goals and abilities to deal with stressors. Goal4 It! has been implemented agency wide, and all case managers are trained in the methodology, resulting in an emphasis on establishing resilience and trouble-shooting problems with the customers. All case managers are also supported in the use of the methodology as demonstrated by the use of the methodology in one-on-one supervision sessions, team and agency meetings.

With the use of the Goal4 It! model, along with other intentional program design changes, we have decreased silos and barriers for co-enrollment and cross-programmatic services by utilizing the shared methodology, allowing easier access to services for youth, individuals with barriers to employment, and New Americans, and collaboration amongst staff. The agency worked collaboratively with the Colorado Department of Labor and Employment and the Colorado Department of Human Services to develop and update A/D Works! forms utilizing the Goal4 It! Methodology, and standardized as many required documents as allowable based on program regulations to save time for the customer and reduce duplication of information gathering. Case management across programs is now more coordinated and efficient, and therefore, better meeting the needs of the customer through a consistent agency-wide methodology and language. A/D Works! continues to pursue opportunities for braiding of funding streams to provide services to more customers with barriers, working to co-enroll customers that are eligible for multiple programs, resulting in more robust and holistic supports and as well as access to diverse funding streams. This access also allows for customers to receive additional services not provided through one funding stream, whether due to restrictions in use of funding or restrictions in funding amounts.

Arapahoe/Douglas Works! has innovated nationally recognized remote service delivery processes and streamlined paperwork for use in a remote environment. Some of these groundbreaking transformations in service delivery include forms that can be filled out remotely on a mobile device, signed, and returned to the case manager as the customer becomes ready for the program rather than during a structured appointment. Customer appointment duration has decreased, and engagement has significantly increased. For instance, show rates in the TANF/Colorado Works program has increased from around 35% to nearly 71% since the implementation of remote service delivery has occurred. Customers also benefit from a more streamlined service delivery that is targeted to their goals rather than bulky program activities that may not meet their needs. Moreover, Ticket to Work services are expanding and more case managers are receiving the training

necessary to provide employment and benefits services to individuals with disabilities. Additionally, as in alignment with these efforts, A/D Works! partnered with our web developer to enhance our website to better ensure greater accessibility to our customers with disabilities. A/D Works! is committed to creating additional opportunities for virtual services that decrease barriers to service while fostering skills and knowledge that job seekers can use in remote work settings.

Arapahoe/Douglas Works! has developed a standardized internal monitoring and reporting process that aligns audit reviews to encompass federal, state and local compliance metrics assuring compliance with program funded expenses and service delivery. Monitoring reports are delivered to agency management on a quarterly basis and include program file audit results and emphasize areas of strength and opportunities within program service provision. Internal trainings are consistently offered and assist program staff with policy interpretation and application and data quality control within the state database of record Connecting Colorado. Additionally, the agency is working towards moving supportive service processes from all programs onto a shared electronic platform designed by the Arapahoe County IT Department that will improve efficiency with reviewing and approving critical supports, provide consistency across programs, and broaden customers' access to those supports. Also, the Colorado Works (TANF) team restructured in order to dedicate staff to primarily focus on performance. As a result, Arapahoe County has exceeded the Work Participation Rate for 10 out of the last **12** months, with A/D Works! cases having exceeded it for 12 months consecutively. This performance continues to impress the Colorado Department of Human Services as the measure has become exceptionally challenging to meet during a pandemic.

Arapahoe/Douglas Works! will look to continue to increase participation in work-based learning opportunities. Efforts to support this strategy include continuing the practice of having Business Development Representatives (BDRs) integrated into program service delivery design, to recruit job seekers and refer them to the appropriate programs for enrollment and support through internships, OJTs, and apprenticeships. BDRs are part of the orientation for many of the work-based learning programs to ensure the customers receive a thorough overview of the service and can immediately begin to develop important relationships between the BDRs and customers. As an example, the BDR team has been an integral part of developing a technology course in conjunction with Arapahoe Community College and the Division of Vocational Rehabilitation after the need for technology upskilling was identified as a critical component to future successes of customers, especially those attached to Human Services and those with barriers to employment. A/D Works will look to continue to utilize innovative solutions to provide upskilling and training opportunities for workers to address local industry workforce gaps, especially as it relates to the economic impact of COVID-19 through collaborative initiatives with community partners, businesses and industry.

3. Describe the strategies and services that will be utilized to facilitate engagement of employers, including small employers and employers in in-demand industry sectors and occupations, in workforce development programs. Specifically:

a) What outreach activities are planned to increase business engagement in your local area?

Business taskforces will continue to meet monthly and work together to identify resources that are available and are able to support businesses that need it. Two taskforces are active, one in Douglas County and one in Arapahoe County. These taskforces are made up of business support organizations such as economic development groups, chambers of commerce, business librarian, and local municipalities.

Outreach will be conducted through participation in local business groups, such as the Denver South Business Resource Group, and through contacting businesses that create Connecting Colorado accounts, through the WARN Act, business/industry roundtables, and through our social media platforms. In all cases, the Business Services Team uses a consultative approach to determine and then respond effectively to business needs. Moreover, the Business Services Team continually participates in a convening role in Sector Partnerships, and it will use available technology to focus on providing up-to-date information on current labor market issues and provide business relevant training events. The team will also continue to perform Discovering A/D Works! Business Services Employer Workshops to inform businesses of available services.

The Aurora Chamber of Commerce and the Castle Rock Chamber of Commerce have successfully completed the partnership supporting workforce development professionals. Business Service Liaisons will continue to participate in Business Services Team meetings on a regular basis to stay connected and up to date on workforce resources available to the business community. We will continue our partnership with the African Chamber of Commerce through November 2022 and then transition graduated apprentices to work in the Chamber of Commerce and continue to work with the Business Services Team.

b) How will the Business Services Team be utilized for this purpose?

The Business Services Team is broken down into program specific and industry specific areas and are crosstrained to maximize agility in responding to evolving employer needs. The Business Development Representatives participate in various sector partnerships. Each Business Development Representative has access to EMSI which allows them to access in depth labor market data for businesses, and they are able to research topics using EMSI as well.

Staff meetings with the Business Services Team include Chamber of Commerce representatives, Regional Veterans Representative and the regional Division of Vocational Rehabilitation Business Outreach Specialist. During the meetings, strategy sessions are held to ensure we are meeting the needs of our business community. If gaps are identified, mutual solutions are developed.

c) How will the members (particularly business members) of the LWDB and Youth Council/committee support these efforts?

Members of the local Workforce Development Board and our Task Forces support engagement of employers and identification of Industry sectors and occupations by providing their firsthand account and expertise of the local economy. These individuals are able to share their experiences, which includes the needs of their business and the needs of other employers throughout the local area. Board members also suggest new businesses to reach out to for membership and potential partnerships for new initiatives, such as the Business Recovery Task Force. This task force was created to assist local businesses with their recovery efforts due to the COVID-19 pandemic.

The Arapahoe/Douglas Workforce Development Board Task Forces are re-evaluated each year, during our annual strategic planning, to ensure the Board is focusing on the priorities of businesses and community needs, and to strategize around efforts that will assist in economic vitality.

d) How will sector partnerships be utilized for this purpose?

Sector Partnerships are imperative to support our engagement of employers. This platform allows Business Services Teams throughout the region to listen to employer needs and strategize the use of our services to address those needs. An Economic Development Coordinator position has been added to ensure leadership of and activity with sector partnerships are organized and consistent. A review of in demand industries will be done annually to determine if new sector partnerships should be developed or if current sector partnerships should be completed.

e) What are your objectives and goals for these activities?

The Business Services Team goal is to build strong, long-lasting relationships with the local business community. These relationships allow us to partner with employers to create opportunity and provide innovative solutions to the needs of our workforce. We want to be top of mind with all of our business support organizations. We want them to refer every business that has a workforce need to Arapahoe/Douglas Works! for support.

- 4. Discuss the implementation of initiatives designed to meet the needs of employers in the local area that support the local board's strategy, including:
- a) Work-Based Learning Programs: Explain how you will utilize and promote, incumbent worker training programs, on-the-job training programs, customized training programs, internships, or other activities for PY22 and PY23, and identify targets for work-based learning activities for your youth, adults/dislocated workers, transitional jobs, and incumbent workers.

Arapahoe/Douglas Works! uses career pathways in targeted, in-demand industries to create pipelines for talent in support of local economic development. Specifically, the childcare industry is unique in where wages are low, quality is variable, and demand is high. Arapahoe/Douglas Works! collaborates on a regional initiative to build a talent pipeline for early childhood education providers through a local registered apprenticeship. In collaboration with other workforce center partners, non-profits, and the community college system, Arapahoe/Douglas Works! has identified individuals who are qualified and interested in skill development, training providers with customizable curriculum, and business partners ready to employ skilled talent to meet local community needs for early childhood educations providers. This pipeline continues to be supported as a necessary piece of local economic development. Arapahoe/Douglas Works! utilizes the sector partnership and pipeline model with other industries and business partners, to include aerospace, advanced manufacturing, technology, construction and trades, and medical/healthcare to address local economic needs.

Career pathways are discussed routinely at sector partnership meetings, and the critical needs of employers are identified. The Arapahoe/Douglas Works! Business Services Team works with local employers participating in sector partnerships to address critical workforce needs through work-based learning and other strategies.

The Business Services Team will continue to conduct Discovering A/D Works! Business Services Workshops; this workshop is communicated to all new employers creating a Connecting Colorado account. These workshop invitations are also shared through our monthly newsletter. Additionally, follow up material is

provided to businesses we meet with, which includes information around all of our services and details regarding work-based learning programs.

The Business Services Supervisor/Manager participates in the Denver South Business Resource Partnership. This partnership is made up of economic developers, chambers of commerce, the Small Business Development Center, Arapahoe Library and Manufacturers Edge. Speaking engagements and business meetings through referrals are made from this group. This partnership has been instrumental in forming a coherent community response to layoffs caused by the pandemic, and will join the efforts of the Arapahoe/Douglas Workforce Development Business Recovery Task Forces to facilitate community recovery.

Incumbent worker training will be a target activity in our region for this program year. The COVID-19 Pandemic has created skill gaps within the current the workforce. Workforce funding will be made available to assist businesses with the upskilling needs of their workforce.

b) Apprenticeships: USDOL and CDLE are emphasizing the importance of apprenticeships. Please provide a detailed response which includes the steps you will take to increase apprenticeship opportunities for your customers during the next program year.

Work-based learning and registered apprenticeships are stressed over more traditional occupational classroom training. Statewide Registered Apprenticeship 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 Registered Apprenticeship Consultants also provide technical assistance and training to staff and partners of the workforce development system, as needed, on a statewide basis, to include:

- o Virtual and in-person assistance to businesses and workforce specialists
- Providing ongoing Technical Assistance
- Supporting local business outreach that is focused on new program development with employers/sponsors who do not currently have registered apprenticeships
- Serving as Subject Matter Expert in presentations to new employers/sponsors or related instruction providers
- Host training activities for businesses on registered apprenticeships
- Provide support to sector partnerships as needed
- Support Arapahoe/Douglas Works! through grants such as COHELPS, COTECH, and any new CDLE grants
- Continue to identify opportunities for system alignment with local workforce centers and CDLE
- Conduit/bridge for two-way communication from CDLE to Arapahoe/Douglas Works!

• Collaborate with other state agencies and partners The Arapahoe/Douglas Works!

The Business Services Team will:

- Talk with employers that have a talent pipeline need about apprenticeships as a possible solution to their long term needs
- Present apprenticeships during Sector Partnership meetings
- $\circ~$ Promote apprenticeships, when appropriate, in our general communications with businesses
- Work regionally to promote active apprenticeship cohort needs

Collaboration among WIOA programming and CW/EF will occur and will result in informational events for customers to learn more about apprenticeships overall, as well as specific apprenticeship programs. Apprenticeships will be promoted to Colorado Works/TANF and Employment First participants as a segment of work-based learning opportunities.

Arapahoe/Douglas Works! remains a leader in apprenticeship initiatives throughout the state and nation, and as a result, continues to receive new and innovative grant funding to support the efforts. The HUB model, operated under Arapahoe/Douglas Works! leadership continues to generate momentum that has spurred growth in registered apprenticeships in a variety of industries throughout the state.

c) Sector Partnerships Participation: Explain how you will utilize the relationships built by your Business Services Team to enhance or expand participation in Sector Partnerships and also expand business services efforts. <u>Indicate PY22 and PY23</u> <u>specific planned objectives and measurable outcomes.</u>

The Business Services Team will continue to respond to business needs through sector partnerships during this planning period. It will participate in sector partnerships, focus workforce development resources and continue to be relevant by actively listening to the needs of the businesses. These needs will be studied to identify what resources we can provide to properly assist businesses in providing solutions with the objective of getting the most up-to-date labor market information, through data platforms and vetted local-business intelligence, increasing our ability to open up work-based learning opportunities for our customers, assist local businesses in building registered apprenticeships and help to strategically manage the local workforce to meet current and projected employer need.

d) Sector Partnerships - Status and Objectives: In your local area or with partner local areas, what sector partnerships are you engaged in or do you plan to engage in during PY22 and PY23? Indicate the current status of your partnerships, (active, emerging, or exploring), plus PY22 and PY23 planned objectives and measurable outcomes. Note: For Sector Partnership Information, please visit: https://www.colorado.gov/cwdc/sector-partnerships

The Business Services Team actively participates in the Greater Metro Denver Healthcare Partnership, Denver Metro Retail Partnership, Manufacturing Partnership and the Construction Partnership. We are a co-convener of the Tech Talent Denver Partnership, and the Aerospace and Aviation partnership.

The goal of the Business Services Team is to participate and listen to key industry needs and work to ensure business customers are receiving relevant training and work-based opportunities. The objective is to create a diverse network of employers that will lead to focused responses that best use federal and state workforce development funds to achieve business-relevant outcomes and keep the local economy thriving and growing. An Economic Development Coordinator position was added to the Business Services Team to ensure a consistent organized approach to sector partnerships in our region continue.

e) Career Pathways: Explain how you will utilize information gathered through your Business Services Team to provide a baseline for consideration of new or enhanced Sector Partnerships, and how this information will be used to inform changes to or development of Career Pathways in your Local Area. <u>Indicate specific PY22 and</u> <u>PY23 planned objectives and measurable outcomes.</u>

The Business Services Team participates in grant program meetings to provide support for customers, and to also educate its members around current labor market needs to ensure the team, and other local business services teams, are offering a coordinated response. Arapahoe/Douglas Works! Business Service Representatives also participate in Sector Partnerships to influence the creation of new talent pipelines. During this planning period, we intend to use federal and state workforce development funds to provide the services that best match what is needed by local employers, currently, and moving forward. This may include work-based learning, registered apprenticeships, classroom training, information, workshops and a variety of other services needed by local employers.

f) Skills Based Hiring: Explain what services are offered to employers to implement skills-based hiring practices, which could include assistance with job postings, interview procedures, onboarding mechanisms, or referrals to outside training resources on this topic.

The Arapahoe/Douglas Works! Business Services Team has a presentation titled "Discovering A/D Works! Business Services!" This workshop is delivered on a monthly basis, and targets the business community. Within this workshop, we present a skills-based approach to job postings and share a job posting generator that helps a business write a skills-based job postings.

Additionally, Arapahoe/Douglas Works! is partnering with businesses to revamp job postings to create efficiencies in the hiring process. Some companies will begin to embed a skills-based assessment directly into their postings and this will help to more accurately identify qualified candidates.

5. Describe how the local board, working with the entities carrying out core programs, will expand access to employment, training, education, and supportive services for eligible individuals, particularly eligible individuals with barriers to employment,

including how the local board will facilitate the development of career pathways and co-enrollment, as appropriate, in core programs, and improve access to activities leading to a recognized postsecondary credential (including a credential that is an industry-recognized certificate or certification, portable, and stackable); Arapahoe/Douglas Works! will expand access to employment, training, education and supportive services by evaluating local priority designations and identifying programs with similar missions and customers in order to braid funding and increase support for individuals receiving services. Arapahoe/Douglas Works! partners with organizations in the local area, providing services to individuals in priority groups and individuals with barriers to employment. Broadly, these organizations include Refugee Assistance programs, Department of Corrections reentry services programs, and Department of Human Services Public benefits programs and local schools. Co-enrollment is an effective strategy for increasing success and providing additional support for customers. As a result, Arapahoe/Douglas Works! has a goal of co- enrolling 100% of TAA customers into WIOA programming. Additionally, every WIOA Youth and WIOA Adult participant meeting eligibility for both programs will be co-enrolled, as needed and appropriate. As industry recognized credentials are important for upskilling and increasing wages for participants, Arapahoe/Douglas Works! will only support classroom training that provides access to industry- recognized certificates or credentials for WIOA participants.

Moreover, Arapahoe/Douglas Works! has refined supportive services policies to ensure alignment across programs so that customers will have access to a more robust menu of supportive services offerings while alleviating duplication. Arapahoe/Douglas Works! will also continue to promote, recruit and deliver training cohorts in a collaborative manner that ensures co-enrollments occur when appropriate. Cohorts are developed in targeted industries such as manufacturing, aerospace and healthcare, and in many cases, are connected to registered apprenticeships to ensure optimal outcomes.

6. Describe the strategy to work with adult education providers funded under Title II of WIOA and Vocational Rehabilitation to align resources available to the local area, to achieve the strategic vision and goals described in question 5.

Arapahoe/Douglas Works! has active partnerships with adult education providers in the local area and provides and receives referrals in support of participant success. At a minimum, every customer must have a high school diploma, equivalent or GED for accessing other programming. As a result, if an individual is identified to be in need of adult education services, the first step in their service delivery plan will be to begin working with adult education providers and their case manager to obtain a high school diploma, equivalent or GED. This minimum education level is a requirement in order to have greater access to sustainable wages.

Arapahoe/Douglas Works! also provides in-house GED support services, providing one-stop service delivery for workforce center customers, including public assistance recipients. Arapahoe/Douglas Works! GED instructor works collaboratively with internal agency programs, Adult Education Providers, as well as with DVR, resulting in more accessibility to Adult Education and GED programs.

7. Describe the strategies and services that will be utilized to strengthen linkages between the one-stop delivery system and unemployment insurance programs.

Arapahoe/Douglas Works! has remained open for in-person services since May 2020 and continues to serve UI claimants from all over the region requiring assistance with their claims. Arapahoe/Douglas Works! also serves a high number of customers virtually and utilizes all tools available, including the UI Chat and UI Hotline services to work with UI to help resolve UI customers' issues.

8. Describe how the local board will coordinate workforce investment activities carried out in the local area with economic development activities carried out in the planning region, and promote entrepreneurial skills training and microenterprise services;

Members of the Arapahoe/Douglas Workforce Board staff, and our Business Services Supervisor, are members of the Denver South Business Resource Group, which includes economic development and chamber of commerce partners within the two-county area, as well as the Small Business Development Center and Manufacturers Edge. Selected regional postsecondary training providers also participate and the group is now working with an Arapahoe/Douglas Workforce Development Board Task Force to aid economic recovery in both Arapahoe and Douglas counties.

The Small Business Development Center, Community College of Aurora and Arapahoe/Douglas Works! are working together to develop a "Business Boost" training program. This program will be a series of eight, 45minute videos to help small and micro size businesses learn about important topics to help them run their business. These videos will be available through the ADWorks.org website any time, day or night, and always free of charge.

9. Provide a description of the workforce development system in the local area that identifies the programs that are included in that system. Also describe how you will partner with the required WIOA partners to increase awareness of career pathways and the critical role that workforce development plays in ensuring that all Coloradans have access to educational and career pathways that result in meaningful employment.

As career pathways and work-based learning opportunities are developed, the Arapahoe/Douglas Works! Business Services Representatives share this information with workforce programs through workforce center distribution lists via email, partner meeting announcements, the Arapahoe/Douglas Works! website and social media platforms. The Workforce Development Board meetings provide a platform that allows communication to mandatory partners to raise awareness of new career pathways and work- based learning opportunities, and to help foster insight into how the system can best respond as a whole, intended by the Workforce Innovation and Opportunities Act.

- **10.** Describe the one-stop delivery system in the local area, in particular:
- a) Identify the locations of the comprehensive physical one-stop centers (at least one) within your local area; also list the locations of your network of affiliate sites, both physical and electronically linked, such as libraries.
- Main one-stop location: Lima Plaza 6974 S. Lima Street, Centennial 80112

- Aurora Satellite: Altura Plaza 15400 E 14th Place, Aurora 80011
- Aurora Satellite for Parents to Work Customers Only: CentrePoint Plaza 14980 E. Alameda Drive, Aurora 80012
- Oxford Vista Aurora Satellite: 15001 E Oxford Ave, Aurora, 80014
- Castle Rock Satellite: Arapahoe Community College Sturm Collaboration Campus 4500 Limelight Ave, Castle Rock 80109

b) Identify your key strategies for integrating the core programs (WIOA Title I, II, III, and IV programs), as well as all required partner programs, within the local one-stop system of comprehensive and affiliate offices.

WIOA Title I and III services are comprehensively provided by Arapahoe/Douglas Works! staff as outlined in this plan. Another physically co-located entity providing services at Arapahoe/Douglas Works! is Job Corps. Job Corps referrals are provided directly to Job Corps staff members through warm handoffs at our Altura Plaza location. TANF and SNAP case management services are accessible at all locations. A resource space accessible to the general public is also housed within the GOALS campus, a residential housing program designed to serve families experiencing homelessness. Another public resource center is located within the Arapahoe Community College, Sturm Campus, in Castle Rock. Also, Arapahoe/Douglas Works! is one of four local areas to implement the Disability Program Navigator Program, increasing workforce program accessibility for individuals with disabilities, as well as working directly with DVR. The DPN and DVR staff regularly meet to align services, streamline processes, and co-enroll customers. Additionally regular cross-training and program discussions occur to ensure regular enhancement of program service delivery. Other mandatory and non-mandatory partnerships are fostered through regular communication, the sharing of marketing and program materials, cross-training, development and refinement of referral processes, and data sharing. Arapahoe/Douglas Works! has begun to conduct informational surveys of partners to streamline referral processes and increase awareness of services and resources available.

c) Describe the roles and resource contributions of each of the one-stop partners.

The approach taken by the Arapahoe/Douglas Workforce Development Board has allowed services to be integrated throughout the one-stop service delivery system in the Arapahoe/Douglas local area. The Arapahoe County Community Resources Administrative Division, which has been designated by the Chief Local Elected Official/Board of County Commissioners (CLEO/BOCC) as the Fiscal Agent to receive the following funding allocations through CDLE and other partners, which may include, but may not be limited to:

- A. Employment Support Funds;
- B. Wagner-Peyser;
- C. Governor's Summer Job Hunt;
- D. TAA Case management;
- E. Formula funding for Adult, Dislocated Worker and Young Adult programming;
- F. Enhanced and other discretionary funding;
- G. Funding under contract or grant agreements with other local governments and other entities;
- H. Douglas County TANF/CW, SNAP E&T/EF, DCYEP; and,

I. Arapahoe County TANF/CW, SNAP E&T/EF, and PTW.

Other in-kind or cash resource contributions from our one-stop partners are outlined in Memoranda of Understandings, and are reviewed and amended as needed and appropriate.

d) Describe how the local board will facilitate access to services provided through the one-stop delivery system, including in remote areas, through the use of technology and through other means; include your intended use of virtual job fairs, the upcoming virtual job shadowing capability, and other innovative strategies and initiatives to streamline and enhance services, as well as increase access.

Arapahoe/Douglas Works! has been providing virtual job fairs through and Connecting Colorado, and we have increased our virtual presence by providing virtual workshops to businesses and jobseekers through our website utilizing Zoom, Mentimeter, Microsoft Teams, and GoToMeeting. Arapahoe/Douglas Works! uses a platform called Premier Virtual that allows large-scale job fairs to be completed in a virtual environment.

During the pandemic, Arapahoe/Douglas Workforce Development Board meetings have been held virtually, via webinar, and customer one-on-one assistance is provided in-person and virtually utilizing the aforementioned virtual platforms and/or phone. Arapahoe/Douglas Works! has implemented the use of the YouCanBook.Me platform and has it embedded to the website to provide better accessibility to workforce services by appointment. The platform has been shared with multiple community partners to streamline the referral process to receive basic career services and potential triage for intensive services. The Arapahoe/Douglas Works! YouCanBook.Me appointment links have also been added to Arapahoe Community College's website. Additionally, program forms have been transferred from paper to electronic fillable forms to ensure customers can receive the same delivery of service in a timely and efficient manner.

e) Identify the types of assessments and assessment tools that will be utilized within the one-stop delivery system and how these assessments will be coordinated across participating programs to avoid duplication of effort and multiple assessments of customers being served by more than one partner program.

The Mathematica Goal4 It! methodology is utilized across all Arapahoe/Douglas Works! programs and services to promote and maintain consistency in customer-focused goal planning, activity and review. This methodology offers the use of a "Stepping Stones" assessment to identify areas of need and priorities for setting goals. The process involves setting a goal based on personal motivation, making a detailed plan how to work toward the goal, including identification of and response to challenges that may occur along the goal path, and review and revision of the goal plan and activity along the way. This methodology also results in review and revision of our processes to ensure smooth transitions, lack of repetition, and fosters collaboration between programs. It offers a shared language and process, no matter which programs serve a customer.

Furthermore, Arapahoe/Douglas Works! uses a variety of assessments to identify skills and aptitudes to identify the strongest candidates for employers and to determine how they best fit into the workplace.

These assessments are coordinated, marketed and scheduled through our Business and Assessment Center (BAC) across all programs within Arapahoe/Douglas Works!, and to the general public as a resource to identify skills, aptitude and behaviors.

• SHL Assess tests behavioral and skills for employers to identify candidates and for individuals to assess their skillsets.

• YouScience measures an individual's aptitudes and skills to connect talent with in-demand careers.

• Self-Directed Search is a career assessment and exploration tool that matches an individual's aspirations, activities, and talents to the career choices and educational opportunities that fit the customer best.

• Testing Adults for Basic Education (TABE) is a comprehensive and reliable academic assessment product in adult basic education in three core subject areas: Reading, Mathematics, and Language.

• Barriers to Employment Success Inventory (BESI) gives individuals a quick and easy way to identify the hurdles and obstacles that stand in the way of job success.

• True Colors system is a model of personality identification that recognizes a person's true character, and translates complex temperament theory into practical information and actionable programs.

Additionally, Arapahoe/Douglas Works! has partnered with Douglas County Emergency Rental Assistance in the Pathways to Employment Program. The Pathways to Employment program requires participants to take the MyNextMove career assessment prior to workforce center staff meeting individually with participants to translate the results of the assessment and develop an individualized employment plan with the individual based on the results.

f) A description of how entities within the one-stop delivery system, including your centers, one-stop operators and the one-stop partners, will comply with section 188, if applicable, and applicable provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) regarding the physical and programmatic accessibility of facilities, programs and services, technology, and materials for individuals with disabilities, including providing staff training and support for addressing the needs of individuals with disabilities.

Arapahoe/Douglas Works! is dedicated to the principals of equal employment opportunity in any term, condition or privilege of employment. Arapahoe/Douglas Works! is in compliance with Section 188 of WIOA, which prohibits discrimination against all individuals in the United States on the basis of race, color, religion, sex (including pregnancy, childbirth, and related medical conditions, transgender status, and gender identity), national origin (including limited English proficiency), age, disability, or political affiliation or belief, or against beneficiaries on the basis of either citizenship status or participation in any WIOA Title I-financially assisted program or activity. This language is also listed on all major outreach material, including the Arapahoe/Douglas Works! website <u>www.adworks.org</u>.

Additionally, Arapahoe/Douglas Works! has implemented the Disability Program Navigator role. This Disability Program Navigator coordinates services with the Division of Vocational Rehabilitation, Continuum of Colorado, and the Colorado Institute for the Blind through all workforce programs, which supports the

needs of and empowers individuals with disabilities. The Disability Program Navigator is responsible for facilitating training and providing support to staff when working with individuals with disabilities.

g) A description of how the local board will ensure the continuous improvement of eligible providers of services through the system and ensure that such providers meet the employment needs of local employers, and workers and jobseekers;

The Arapahoe Douglas Workforce Development Board has identified the following strategies to assure continuous improvement of services for the local employers, workers and job seekers:

•The establishment of taskforces, and other partnerships for Arapahoe and Douglas Counties with the intent to identify the needs of local business and job seekers and develop or convene partnerships that are conducive towards relevant solutions that will produce positive outcomes related to service delivery and the continued success of local business and job seekers;

•Data informed reports that include; Workforce Trends, Economic Competitiveness, Industry and Competitive Wage Intelligence and Industry Specific Profiles;

• Customized assistance for employers to recruit, hire, upskill and retain talent;

•Business Relocation information and assistance that includes but not limited to occupational supply, average salary of local employment pools and understanding the job shed;

•And, the Maximizing Area Talent for Competitive Hires (M.A.T.C.H.) program—a solution- oriented workbased learning (WBL) strategy that is pivotal in saving employers valuable recruitment time and money. Employers that participate in WBL activities such as internship or on-the-job learning may receive reimbursement of employee wages to offset the extraordinary cost of training new or less experienced hires.

h) Provide a description of how training services under chapter 3 of subtitle B will be provided in accordance with section 134(c)(3)(G), including, if contracts for the training services will be used, how the use of such contracts will be coordinated with the use of individual training accounts under that chapter and how the local board will ensure informed customer choice in the selection of training programs regardless of how the training services are to be provided.

Arapahoe/Douglas Works! utilizes customer choice in training provider selection through the Colorado Eligible Training Provider List (ETPL). Training providers who are not on the ETPL, and are not locally approved, cannot be funded by WIOA programming. Individual Training Accounts are used rather than contracted service providers. The WIOA Youth program procures youth element providers for the provision of specific youth elements not provided by Arapahoe/Douglas Works!.

Arapahoe/Douglas Works! does not anticipate providing contracted training services under Chapter 3 of Subtitle B. WIOA Adult and Dislocated Worker participants will be required to complete a comprehensive research activity identified as the Training Request Packet (TRP) with regards to selecting a training program that will likely lead to successful employment that is both competitive and is at a livable wage. The Arapahoe/Douglas Works! program manager, in coordination with the case managers, will review and approve the TRP to establish the individual training account.

The Young Adult WIOA participants may be issued ITAs through the Eligible Training Provider List (ETPL), or through training providers who responded successfully to the most recent competitive process as specified in Section 107 (d) of the Workforce Innovation and Opportunity Act. Work-based learning activities (WBL) such as on-the-job training (OJT) will be executed using an OJT contract and will include information on, but not limited to, the OJT start/end date, employee pay rate and employer reimbursement amount. Work experience (WE) activities are similar to an internship in that it will allow a participant with limited work experience to increase/gain/upskill in an occupation; however, unlike the OJT, there is no expectation that the employee in the WE be retained after the WE activity has ended. Work experience activities are executed using a MATCH agreement.

Arapahoe/Douglas Works! has also established, within policy, the allowance of a 'hybrid' form of training services that may include both an occupational/classroom training component and an OJT or WE activity.

Furthermore, the Arapahoe Douglas Workforce Development Board has also identified in-demand occupations and wage competiveness analysis reports that are made available to Arapahoe/Douglas Works! customers to assure well-informed customer choice with regards to selecting employment and training opportunities that lead to livable wage employment.

i) Outreach to Individuals with Barriers to Employment: Describe how you will engage your LWDB and Youth Council/committee to increase the awareness of the services offered to <u>returning veterans</u>, <u>out-of-school youth</u>, <u>individuals with</u> <u>disabilities</u>, <u>long-term unemployed</u>, <u>and other targeted groups</u>? What additional strategies will be utilized to reach out to these groups? What are your objectives and goals for this effort?

The Arapahoe/Douglas Workforce Development Board and Arapahoe/Douglas Works! prioritizes outreach and service delivery to individuals with barriers to employment through a variety of mechanisms. Collectively, we ensure that our community partnerships are fostered and new relationships are built on an ongoing basis. Additionally, through these collective relationships, we discuss a variety of topics, which may include, but may not be limited to, referral processes, service delivery, programming, supportive services, training and work-based learning opportunities. Moreover, we collaborate with our partners to discuss how to best mitigate barriers to employment, and how to ensure all customers are on a pathway to success. As an example, Arapahoe/Douglas Works! partnered with Arapahoe Community College and the Division of Vocational Rehabilitation to make available a Virtual Work Readiness class to customers with barriers to employment, including individuals impacted by COVID, individuals with housing barriers, and individuals receiving public assistance. Moreover, as an effort to help address the digital divide with this population, a laptop was also provided. Another example is Arapahoe/Douglas Works! has partnered with Arapahoe and Douglas Counties Emergency Rental Assistance Programs to provide workforce services and opportunities to underemployed individuals that have also been impacted by COVID that are unable to pay rent.

Arapahoe/Douglas Works! has provided career services to incarcerated individuals at the Douglas County Jail through the Collaborative Program for Integration since 2014. In order to increase services to justice involved individuals Arapahoe/Douglas Works! is involved in several collaborations to outreach to targeted groups, such as the recent partnership through the Pathway Home grant with Pikes Peak and the Denver workforce centers that works to provide eligible, incarcerated individuals in state correctional facilities or local jails with workforce services prior to release, and to continue services after release by transitioning the

participants into reentry programs in the communities to which they will return. Projects are job-driven and build connections to local employers that will transition justice-involved participants to secure employment and reduce the recidivism rate. Arapahoe/Douglas Works! has established a Workforce Coordinator/Navigator position to continue to increase the awareness of services offered and expand existing partnerships.

The Arapahoe/Douglas Workforce Development Board maintains a Veterans Taskforce, which includes board members, Career Services, and JVSG staff. The Arapahoe/Douglas Works! Workforce Development Board Veteran Taskforce focuses the efforts of board members, Career Services and the JVSG staff in providing job search and professional training opportunities to Veterans. The taskforce efforts have resulted in a partnership with the Airman and Family Readiness Center at Buckley Air Force Base. The JVSG staff and Arapahoe/Douglas Works! collaboratively work to conduct outreach activities to ensure Veterans, transitioning service members, and qualified individuals have access to employment coaching, including resume preparation, interview technique, job search, networking skills, and information/enrollment in workshops and job fairs/hiring events. Career Services staff regularly partner with CDLE and USDOL and other organizations to provide career readiness training opportunities to targeted populations. For instance, Arapahoe/Douglas Works! conducts a monthly Veterans Spouses Networking Event where local employers and job seeking veterans are able to discuss career opportunities.

Arapahoe/Douglas Works! maintains three Human Services grants in Arapahoe County: Colorado Works, Employment First, and Parents to Work (PTW) programs. Arapahoe/Douglas Works! also maintains three Human Services grants in Douglas County: Colorado Works, Employment First, and the Douglas County Youth Employment Program (DCYEP). These programs all provide intensive case management for TANF recipients, SNAP recipients, DC Youth, or child support involved non-custodial parents. These programs have placed participants in classroom training, work-based learning opportunities and apprenticeships. Arapahoe/Douglas Works! has implemented work-based learning for EF participants, something newly allowable. These EF placements in WBL are some of the first in state history. These programs also provide industry recognized credentials and training, as well as supportive services like transportation, rental assistance, books & supplies, GED services, auto repairs, incentives, and much more. In order to maximize outcomes and braid funding, CW, EF, DCYEP, and PTW are part of our internal pilot to co-enroll participants into WIOA and other discretionary grants, as appropriate. Colorado Works participants that find employment are also enrolled in our Post-TANF program, providing them additional support for 6 months after they have become over-income for TANF. Employment First participants are eligible for job retention three months after they become over income for SNAP. During these times in job retention and Post-TANF, participants are eligible for additional supportive services and case management in order to minimize the Cliff Effect and support self-sufficiency.

In collaboration with the Federal Reserve, the Employment First Program and Career Services are piloting a Cliff Effect tool with SNAP/EF customers. This tool is designed to provide participants with the information they need to make informed decisions around their benefits and how to avoid the Cliff Effect through training, WBL, and livable wages. They are able to make informed career path decisions to put them on the best trajectory towards self-sufficiency and mitigate the Cliff Effect.

Arapahoe/Douglas Works! is also a contributing partner of the Change the Trend collaboration working to end homelessness in the tri-city area (Littleton, Sheridan, and Greenwood Village). Additionally, we are partner in the GOALS program with Arapahoe Human Services and The Family Tree to provide supports to families experiencing homelessness. The residential setting uniquely offers workforce services onsite.

In partnership with DVR, Arapahoe/Douglas Works! continues to work with Arapahoe Community College to scale a technology training and virtual work readiness program for participants, including those with disabilities.

Events and initiatives organized by these groups are shared at the Arapahoe/Douglas Workforce Development Board meetings, newsletters, the Arapahoe/Douglas Works! website (<u>www.adworks.org</u>) and its social media platforms.

Arapahoe/Douglas Works! has partnered with Housed Working and Healthy to address the homeless challenges in the Denver Metro area. The core components of their program is everyone has a safe place to call home, is earning paycheck and if needed, is receiving mental health services. This program provides a culinary quick start program through Emily Griffith. Customers are placed into un-paid work experiences. Arapahoe/Douglas Works! leverages WIOA and other discretionary grans to support training and other supportive services needed with the goal of job placement in careers with advancement opportunities and benefits.

Arapahoe/Douglas Works! has partnered with The Road Called Strate by offering Work Based Learning opportunities for our justice involved customers. This program is leveraged throughout the agency and is another example of effective co-enrollment strategies.

As a result of the competitive analysis reports mentioned above, Arapahoe/Douglas Works! implemented two different initiatives to address the in-demand occupations list. Arapahoe/Douglas Works! has contracted with CompTIA to provide IT certifications to young adults with high barriers. The goal is to prepare young adults for entry-level roles in IT Support. Through this initiative, WIOA Funds and discretionary grant funds will be leveraged to fund this training as well as appropriate supportive services. Arapahoe/Douglas Works! has also partnered with MedCerts. MedsCerts provides on-line healthcare trainings. Upon completion, customers receive certifications and credentials to obtain employment as medical assistants, medical secretaries, and patient care representatives.

Over the past year, Arapahoe/Douglas Works! program supervisors have worked diligently to create processes and procedures to co-enroll customers within interagency programs especially between our human service grants (EF/TANF) and CDLE grants (WIOA). The objective of this initiative was to collaborate on co-enrolling program participants in order to provide additional wrap-around case management and funding support to minimize barriers and meet education and training goals.

It has resulted in:

- Increased number of co-enrollment participants from previous program year
- Cross training between the different programs
- Workforce Specialists working together to provide for support for each other and for customers
- Continuity of Services
- More resources and referrals
- Human centered design approach utilizing Goal4It
- Minimized impact of the Cliff Effect
- The first WBL placements for the Employment First Program

j) Describe your specific outreach strategies to eligible New Americans and your objectives for this effort. In addition, what strategies will you deploy to ensure your services and programs effectively serve eligible New Americans?

Arapahoe/Douglas Works! has partnered with Lutheran Family Services, Denver Metro area judicial districts and services groups, and other local non-profits and community groups to identify services and referral systems for New Americans that are eligible for services through our programs. The objective of these programs and partnerships is to increase employability and earnings, as well as promote community integration among New Americans. Several of our programs have provided occupational skills training to first generation Americans, on-the-job training placements, and English Language Assistance to individuals who are learning the language. Arapahoe/Douglas Works! is a leader in the state in serving New Americans through WIOA programming. In partnership with the judicial districts and services teams, we are developing partnerships to support occupational skills training and career development for individuals who are victims of human trafficking. This partnership has required significant integration and continues to be developed. For job seekers who are not eligible for our services due to a lack of lawful presence documentation, Arapahoe/Douglas Works! has partnered with community development organizations, such as Servicios de la Raza, for direct referrals in order to meet the unique needs of individuals without documentation.

Arapahoe/Douglas Works! has been actively involved in the Afghan Response and Support Work Group, providing insight to support newly arriving refugees through employment services. We are working closely with the various resettlement agencies to develop referral processes and provide training on workforce services. Arapahoe/Douglas Works! has provided presentations to the Afghan community working with new arrivals and has also connected business and industry to the resettlement agencies and their customers. The Business Services Team is leading the initiative to develop and implement training for businesses interested in employing New Americans, especially refugees.

11.Provide a description of how the local board will coordinate education and workforce investment activities carried out in the local area with relevant secondary and postsecondary education programs and activities to coordinate strategies, enhance services, and avoid duplication of services;

Over the last decade, the Arapahoe/Douglas Workforce Development Board has made the effort to develop substantial expertise in local labor market trends and has developed industry profiles and saturation tables that are in use throughout greater metro Denver area. The ITA request process requires the use of this data, in addition to informational interviews and researching current job listings. This has contributed directly to meeting within compliance or exceeding state performance common measures outcomes.

In the realm of coordinating workforce development with educational activities, the Arapahoe/Douglas Workforce Development Board believes these efforts must be business/industry driven, or at a minimum validated with key sector leaders. Without business input, coordination efforts are not as effective and as sustainable. Therefore, the WDB will continue to work collaboratively with postsecondary programs in the region to ensure that the coursework being offered is relevant to industry needs.

This issue still exists with many occupations in the region supporting the various key sectors. The Arapahoe/Douglas Workforce Development Board works with its education partners regularly in concert with other workforce areas and CUWA to make necessary adjustments in curriculum for critical positions.

Arapahoe/Douglas Works! opened a satellite office co-located with Arapahoe Community College Sturm Campus in an effort to connect students to workforce services and employment opportunities in the individuals' field of study. Arapahoe Community College's Sturm cam pus programs focus on in demand industries. The partnership streamlines access to employment opportunity following graduation.

12. Provide a description and assessment of the type and availability of adult and dislocated worker employment and training activities in the local area; in particular identify how the local area will expand services to dislocated workers utilizing all sources of formula and discretionary funds targeted to the dislocated worker population.

Arapahoe/Douglas Workforce Development Board and Arapahoe/Douglas Works! has implemented a customer-centered design methodology endorsed by the United States Department of Labor and Employment. This practice implements a customer-centered approach to processes, strategies, procedures, and services. It focuses upon innovation to address the needs of the end-user.

Arapahoe/Douglas Works! Adult and Dislocated Worker programming will focus on targeted populations which may include, but is not limited to, Veterans, Justice Involved, Low- Income, Benefits-Attached, Single Parents, UI Exhaustees, Displaced Homemakers, Homeless, Refugees, Individuals with Disabilities, Individuals with barriers, those without a High School Diploma, those who are Basic-skills Deficient and those who speak English as a second language.

Arapahoe/Douglas Works! offers a variety of services available to Adult and Dislocated Worker customers. Individual career services, available to all Arapahoe/Douglas Works! Adult and Dislocated Worker customers will include, but are not limited to; the career village, the career resource center, labor market information, staff facilitated workshops, job search and training provider information. Staff assisted career services will include, but is not limited to; orientation, intake, eligibility determination, skill assessment, job search and placement assistance, labor market, navigation, and job referrals. Staff assisted intensive one-on-one career services will include, but are not limited; to comprehensive assessment, counseling, case management and pre-vocational services.

Arapahoe/Douglas Works! has a training policy with tuition assistance for occupational training for Adult and Dislocated Worker eligible customers, targeted in the industries of Aerospace, Aviation, Bioscience, Broadband, Construction, Engineering, Finance and Insurance, Healthcare, Hospitality, Information Technology and Manufacturing. Arapahoe/Douglas Works! will focus on training and work-based learning opportunities within these regional targeted industries; work-based learning opportunities, which may include, but are not limited to; work training experiences for eligible customers, as well as OJT contracts, and pre-apprenticeship and apprenticeship opportunities, as appropriate. Arapahoe/Douglas Works! will focus on training related placements and career pathways.

Arapahoe/Douglas Works! meets regularly with partner organizations to inform external agencies about current program-funded services. When appropriate, Arapahoe/Douglas Works! conducts offsite and virtual

informational and intake sessions to heighten awareness about career services and to help to mitigate customer impacts.

Arapahoe/Douglas Works! works very closely with CDLE and Unemployment Insurance to expand services to dislocated workers. Monthly reports are pulled and outreach tools via email and mail are sent to UI recipients informing them of services offered at Arapahoe/Douglas Works! included but not limited to career resource center, labor market, staff facilitated workshops, job search and training provider information. In addition, the Business Service Development Team will outline all services offered through the Workforce Centers at Rapid Response sessions, as well.

13.Provide a description and assessment of the type and availability of youth workforce investment activities in the local area, including activities for youth who are individuals with disabilities, which description and assessment shall include an identification of successful models of such youth workforce investment activities; in addition, indicate how services to out-of-school youth will be expanded and enhanced to incorporate additional work-based learning opportunities.

Arapahoe/Douglas Works! Youth/Young Adult programming will focus talent development strategies on targeted populations, which may include, but is not limited to; Veterans, Justice Involved, Low-Income, Benefits-Attached, Pregnant and/or Parenting Youth/Young Adults, Homeless, Refugees, Individuals with Disabilities, those without a High School Diploma, those who are Basic Skills Deficient, and those who speak English as a second language.

Arapahoe/Douglas Works! offers a variety of services available to Youth/Young Adult customers. Individual career services, available to all Arapahoe/Douglas Works! Youth/Young Adult customers, will include, but are not limited to; the career village, career resource center, labor market information, staff facilitated workshops, job search, and training provider information. Staff-assisted career services will include, but is not limited to; orientation, intake, eligibility determination, skill assessment, job search and placement assistance, labor market navigation and job referrals. Staff assistance one-on-one intensive career services will include, but are not limited to; comprehensive assessment, counseling, case management, and prevocational services.

Arapahoe/Douglas Works! has a tiered training policy with additional tuition assistance for occupational training for WIOA Adult, Dislocated Worker and Youth/Young Adult eligible customers, targeted in the industries of Aerospace, Aviation, Bioscience, Broadband, Construction, Engineering, Finance/Insurance, Healthcare, Hospitality, Information Technology and Manufacturing. Arapahoe/Douglas Works! will focus on training and work-based learning opportunities within these regional targeted industries; work-based learning opportunities, which may include, but are not limited to, work training experiences for eligible customers, as well as OJT contracts, and pre-apprenticeship and apprenticeship opportunities, as appropriate. Arapahoe/Douglas Works! will focus on increasing training related placements and career pathways.

Arapahoe/Douglas Works! meets regularly with partner organizations to inform external agencies about current program-funded services. When appropriate, Arapahoe/Douglas Works! conducts offsite and virtual informational and intake sessions to heighten awareness about career services and to help to mitigate customer impacts. Arapahoe/Douglas Works! also has representation on the State Youth Council and is

actively engaged in the planning and delivery of activities supported by the State Youth Council, such as the Colorado Youth Career Fair.

Arapahoe/Douglas Works! has contracted with CompTIA to provide IT certifications to out-of-school young adults with high barriers. The goal is to prepare young adults for entry-level roles in IT Support. Another initiative is Certified Full Stack Web Developer training. Through this initiative, Arapahoe/Douglas Works! is partnering with another Workforce local area and Regis University. This will give students the opportunity to gain valuable software development skills to set them on their way towards a successful IT career path. This program is targeting recently graduated high school students. Through both of these initiatives, WIOA Young Adult/Adult Funds and discretionary grant funds will be leveraged to fund these trainings as well as appropriate supportive services.

In addition, Arapahoe/Douglas Works! has partnered with Master's Apprentice to expand on additional work-based learning activities for Out of School youth. Master's Apprentice is a preapprenticeship program that assists our customers, included our young adult customers, with exposure to careers in the skilled trades career pathways, including registered apprenticeship. This includes hands-on experience and classroom experience.

Arapahoe/Douglas Works! has partnered with Cherry School District by provided funding through Apprenticeship Grants and WIOA funding for the Future Educator Registered Apprenticeship Program. The participants are mostly high school students who are receiving college credit and are participating in the registered apprenticeship program as Teacher Aides to enter into the education career pathway.

Arapahoe/Douglas Works! has partnered with local high school districts, specifically the special education department to provide summer work based learning activities to juniors and seniors who have disabilities. The high schools provide the work experience site and activities and the WIOA programs assist with paying the participants to complete the work experience duties as well as supporting them with supportive services. Once the students have successfully completed the work experience activities, they will continue to work with their workforce specialist to provide drop-out prevention services with the goal of earning their high school diploma.

There is also an electronic initiative that recently began in collaboration including Arapahoe/Douglas Works!, TH Pickens, and a local aerospace manufacturer that specializes in the manufacturing of products of the highest quality with quick delivery and reasonable prices. They manufacture and supply the aerospace, aircraft and military industries with quality products and services and work with entities such as NASA. They are a certified contract manufacturer and design and manufacture ground support test systems which launch rockets that go into space. Arapahoe/Douglas Works! is connecting individuals, mostly young adults, \with work-based learning opportunities through various discretionary grants such as TEC-P and HB1264 RUN. The 60-90 day training with offer opportunities where participants can learn skills such as soldering, crimping, troubleshooting and working on circuits, and eventually placing them in a position to work on and build specialized products. The goal is to get participants upskilled to the NASA level certification and standards of processes. This opportunity will help set them up for success in the future, giving them an assortment of job specific skills, soft skills and certifications they can take with them, if/when they decide to advance in their careers.

Additionally, Arapahoe/Douglas Works! has created a WIOA Young Adult Ambassador Program, where the ambassador is responsible for creating and fostering relationships with internal and external community partners. The ambassador position will serve as a recruiter and promoter for the WIOA Young Adult Program. This will be a work experience activity and will be funded through the WIOA program. This activity will also allow young adults to gain exposure to the world of work and gain transferable skills across all industries.

14.Provide a description of how the local board will coordinate workforce investment activities carried out under this title in the local area with the provision of adult education and literacy activities under title II in the local area, including a description of how the local board will carry out, consistent with subparagraphs (A) and (B)(i) of section 107(d)(11) and section 232, the review of local applications submitted under title II.

The Arapahoe/Douglas Workforce Development Board will develop cooperative service agreements with the Colorado Department of Education identified providers including, Focus Points Family Resource Center, the Learning Source, and the Asian Pacific Development Center to enhance adult basic education and literacy. The Arapahoe/Douglas Workforce Center, the designated provider for Wagner-Peyser and U.S.C. Title 38, and Career Services for WIOA Adult and WIOA Dislocated Worker and Youth/Young Adult, TANF/CW and SNAP E&T/EF as well as other grant funded workforce development programs, will continue to offer GED prep internally but will also explore basic adult education and literacy options through these vendors as customer needs are identified.

15.Provide a description of how the local board will coordinate workforce investment activities carried out under this title in the local area with the provision of transportation, including public transportation, and other appropriate supportive services in the local area.

Locally, Arapahoe/Douglas Works! sources appropriate supportive services through community partner networks and through leveraging resources through other programming. If appropriate, WIOA resources may be used to mitigate the barrier when appropriate and allowable.

16.Provide a description of plans and strategies for, and assurances concerning, maximizing coordination of services provided by the State employment service under the Wagner-Peyser Act (29 U.S.C. 49 et seq.) and services provided in the local area through the one-stop delivery system, to improve service delivery and avoid duplication of services.

Arapahoe/Douglas Works! maintained compliance to state and county protocols with a partial shutdown of facilities. In order to serve customers, Arapahoe/Douglas Works! employed a customer/community centered strategic plan to coordinate the one-stop delivery to our customers by providing Wagner-Peyser services in office and remotely: The call center success led to an increase of Career Service staff taking customer calls while working remotely. In addition, Career Service Advisors are working in the office to

provide computer and unemployment services to customers. Customers are also served by phone and virtual platforms to provide one-on-one support. Career Services staff offer a full range of virtual workshops, adding four workshops for the Generations@ Work Program, to allow customers to participate in workshops while complying with state Stay at Home orders. Arapahoe/Douglas Works! provides an array of business intelligence on our website (www.adworks.org), including detailed industry profiles and other labor market essentials that job seekers and businesses can access in a "self-service" fashion. Employers can also post their job openings as a web employer in Connecting Colorado or through us.jobs. Businesses can access all 11 core business services and the most utilized services include job fairs, hiring events, assessments and screening. Per State PGL (recently updated WP-2016- 04), once an employer has been verified and meets the minimum requirements, they will be eligible to receive any of the core services. Virtual service delivery will continue as a means to offset customer barriers such as transportation and child care, and to help increase the various entry points for service delivery access.

Virtual service delivery will continue as a means to offset customer barriers such as transportation and childcare, and to help increase the various entry points for service delivery access.

17.Identify the administrator/administrative entity responsible for the disbursal of Title I and III funds in the local area, as determined by the chief elected official or the Governor, and the fiscal agent if different.

The Arapahoe County Government's Community Resources Administrative Services Division has been designated by the Arapahoe County Board of County Commissioners as the Fiscal Agent for Arapahoe/Douglas Works! to receive all funding allocations. Moreover, our One-stop Operator and our Workforce Development Board help to ensure fiscal compliance with all corresponding rules and regulations for all WIOA funds received.

18.A description of the competitive process to be used to award the sub-grants and contracts in the local area for activities carried out under this title.

The Arapahoe/Douglas Workforce Development Board has designated Arapahoe/Douglas Works! as its primary service provider. Arapahoe/Douglas Works! is a division of the Arapahoe County Community Resources Department, and offers all workforce development services for WIOA Title I and III, for special populations such as TANF/CW and SNAP E&T/EF customers, and a variety of special projects and populations, which may include but may not limited to: justice involved participants, veterans, mature workers, refugees, and homeless individuals. Other services provided through Arapahoe/Douglas Works!, or its partners are skill assessments for businesses, GED preparation, ESL classes, interpretive services and assistive technology for disabled customers.

The Arapahoe/Douglas Workforce Development Board is appointed annually by the CLEO/BOCC for one and two year appointments. The Arapahoe/Douglas Workforce Development Board has identified, and through an Arapahoe County and Douglas County Intergovernmental Agreement, designated Arapahoe/Douglas Works! as its main service provider of Career Services to Adults and Dislocated Workers under Section 134, Wagner-Peyser and U.S.C. Title 38 services; Talent Enhancement services through a contractual arrangement with the Arapahoe County Government and Douglas County Departments of Human Services – includes TANF/CW, SNAP E&T/EF, and PTW (Arapahoe County only), as well as special and grant funded programs.

Arapahoe County, on behalf of the Arapahoe Douglas Workforce Development Board, was seeking responses for alternative secondary school services (or dropout recovery services), mentoring services, and occupational skill training (which included priority consideration for training programs that led to recognized postsecondary credentials that were aligned with in-demand industry sectors or occupations in the local area involved).

Additionally, the Arapahoe/Douglas Workforce Development Board released an RFP for the One-Stop Operator function to ensure that MOUs with required partners and service providers are in place and current. The vendor selected for this function was SHG Advisors.

19.Provide a description of the local levels of performance negotiated with the Governor and chief elected official pursuant to section 116(c), to be used to measure the performance of the local area and to be used by the local board for measuring the performance of the local fiscal agent (where appropriate), eligible providers under subtitle B, and the one-stop delivery system, in the local area.

Local levels of performance accountability have been negotiated for PY20 as allowable under Section 116(c) of the Workforce and Innovation Opportunity Act (WIOA) and in coordination between the Arapahoe/Douglas Workforce Development Board (ADWDB) and CDLE. Performance accountability is intended to assess the effectiveness and successful outcomes related to serving customers within the workforce development system's WIOA Title I Adult program, Dislocated Worker program, Youth program and WIOA Title III Wagner-Peyser Act. Performance accountability is measured utilizing CDLE's statewide database Connecting Colorado. Currently, Connecting Colorado is programmed for PY20 locally negotiated standards. Upon completion of PY21 local level negotiations, CDLE will program Connecting Colorado accordingly.

As, the designated service provider, Arapahoe/Douglas Works! is currently meeting within compliance, and/or exceeding all locally negotiated performance accountability measures for PY20.

Performance Measure by Program	PY20 Local Negotiated Levels	PY20 State Negotiated Levels	PY21 State Negotiated Levels
Adult Emp-2nd Quarter	75.08%	76.00%	76.00%
Adult Emp-4th Quarter	74.00%	75.00%	75.00%
Adult Median Earnings	\$7,600	\$7,061	\$7,061
Adult Credential	62.00%	70.00%	70.00%
Adult Measurable Skill Gains	65.00%	62.50%	62.50%
DW Emp-2nd Quarter	74.50%	76.40%	76.40%
DW Emp-4th Quarter	75.00%	76.90%	76.90%
DW Median Earnings	\$10,000	\$9,000	\$9,000
DW Credential	59.00%	67.00%	67.00%

Current WIOA Standards are as follows (Arapahoe/Douglas Works! anticipates similar negotiated levels for PY22):

DW Measurable Skill Gains	58.60%	58.60%	58.60%
Youth Emp-2nd Quarter	67.50%	67.00%	67.00%
Youth Emp-4th Quarter	74.00%	71.00%	71.00%
Youth Median Earnings	\$4,100	\$3,954	\$3,954
Youth Credential	66.00%	63.00%	63.00%
Youth Measurable Skill Gains	56.00%	58.80%	58.80%
WP Emp-2nd Quarter	57.00%	57.00%	57.00%
WP Emp-4th Quarter	65.00%	65.00%	65.00%
WP Median Earnings	\$5,600	\$5,600	\$5,600

20.Provide a description of the actions the local board will take, if any, toward achieving the High Performing Board designation as outlined in the Colorado High Performing Local Workforce Development Board Rubric (PGL GRT-2019-01, Attachment 3).

The Arapahoe/Douglas Workforce Development Board will strive to achieve a High Performing Board designation by recruiting members made up of diverse and knowledgeable community representatives (demonstrating key industries and within WIOA law), re-evaluating and revising membership onboarding and orientation, as needed, and providing/tracking membership community engagement, activities and accomplishments of goals set out by the board through our annual strategic planning and strategic priorities.

- 21.Use of evidence in decision making and program implementation Colorado is focused on enhancing its use of evidence to inform workforce development strategies and to influence the design and execution of initiatives. By measuring progress and the results of implementation, the state overall and each local area will be able to collect data that can move our work along an evidence continuum. When we refer to an 'evidence-based' program or strategy, it is helpful to have a shared definition. Evidence of effectiveness exists on a spectrum, including:
- a) Strong evidence: meaning at least two evaluation reports have demonstrated that an intervention or strategy has been tested nationally, regionally, at the statelevel, or with different populations or locations in the same local area using a welldesigned and well-implemented experimental design evaluation (i.e., Randomized Controlled Trial (RCT)) or a quasi-experimental design evaluation (QED) with statistically matched comparison (i.e., counterfactual) and treatment groups. See <u>https://clear.dol.gov/</u> for full definitions of strong or moderate study design. The overall pattern of evaluation findings must be consistently positive on one or more key workforce outcomes. The evaluations should be conducted by an independent entity external to the organization implementing the intervention.

- b) Moderate evidence: meaning at least one evaluation report has demonstrated that an intervention or strategy has been tested using a well-designed and wellimplemented experimental or quasi-experimental design showing evidence of effectiveness on one or more key workforce outcomes. The evaluations should be conducted by an independent entity external to the organization implementing the intervention.
- c) Preliminary evidence: meaning at least one evaluation report has demonstrated that an intervention or strategy has been tested using a well-designed and wellimplemented pre/post-assessment without a comparison group or a postassessment comparison between intervention and comparison groups showing evidence of effectiveness on one or more key workforce outcomes. The evaluation may be conducted either internally or externally.
- d) Pre-preliminary evidence: meaning there is program performance data for the intervention showing improvements for one or more key workforce outputs or outcomes.

For interventions at each tier of evidence, it is important to leverage administrative data analysis or increasingly rigorous evaluation to build new evidence, improve programs and participant outcomes, and progress to the next tier.

Please describe which level of evidence applies to the overall approach of your local area in implementing programs. If any specific programs have a higher use of evidence than your programs overall, please highlight those programs. Additionally, would your local area be interested in receiving technical assistance on the application of evidence-based practices to workforce development?

The Arapahoe/Douglas Workforce Development Board primarily uses a quasi-experimental time series analysis that uses UI median wage data from the second quarter prior to enrollment, quarter of enrollment, second and fourth quarters post exit, and the eighth, twelfth and sixteenth quarters post exit to determine the effectiveness of services on wage outcomes for individuals exiting programs during various userspecified timeframes. This Interrupted Time Series Analysis (ITS) is being used throughout Colorado to determine the effectiveness of the various federally funded job training and labor exchange programs. During the course of the four years that encompass this plan, studies will be conducted using these wage outcomes for a number of program years to assess the strength of causality, particularly in the face of various program changes, for example tracking the changes in outcomes between Workforce Investment Act programming and the subsequent Workforce Innovation and Opportunity Act programming. Arapahoe/Douglas Works! is participating in the statewide evaluation training and implementation work group and will continue to consider methods for evaluation.

22. Describe the process used by the local board, consistent with subsection (d), 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 local plan, prior to submission of the plan.

Arapahoe/Douglas Works! will post the plan for public comment on its website, <u>www.adworks.org</u>, provide a copy to CWDC to post on their website, inform the release for comment through its Workforce Development Board and Business Services newsletters as well as announce the release on Arapahoe/Douglas Works! social media platforms.

Acronyms

AARP: American Association of Retired Persons	LMI: Labor Market Information
ABE: Adult Basic Education	LQ: Location Quotient
AD: Adult	MDMA: Metro Denver Manufacturing Alliance
ADA: Americans with Disabilities Act	MIS: Management Information System
BDR: Business Development Representative	MOU: Memorandum of Understanding
BOCC: Board of County Commissioners	MSA: Metropolitan Statistical Area
BSN: Bachelor of Science and Nursing	NAICS: North American Industry Classification System
CDE: Colorado Department of Education	NEG: National Emergency Grant
CDHS: Colorado Department of Human Services	ONET: The Occupational Information Network
CDLE: Colorado Department of Labor and Employment	PST: Professional, Scientific, Technical
CEB: Cooperative Executive Board	RFI: Request for Information
CIP: Classification of Instructional Program	RFP: Request for Proposal
CLEO: Chief Local Elected Official	RESEA: Re-employment Services and Eligibility Assessment
CUWA: Colorado Urban Workforce Alliance	SNAP E&T: Supplemental Nutrition Assistance Program
CW: Colorado Works	SOC: Standard Occupational Classification
CWDC: Colorado Workforce Development Council	TABE: Test of Adult Basic Education
COPEP: Colorado Parent Employment Program	TANF: Temporary Assistance for Needy Families
DVR: Division of Vocational Rehabilitation	Tec-P: Technology Employment in Colorado Partnership
DW: Dislocated Worker	U.S.C.: United States Code
GED: General Equivalency Diploma	USDOL: United States Department of Labor
GMDHP: Greater Metro Denver Healthcare Partnership	Vets: Veteran Services
EF: Employment First	WDB: Workforce Development Board
EMSI: Economic Modeling Specialists International	WIA: Workforce Investment Act
ESL: English as a Second Language	WIOA: Workforce Innovation and Opportunity Act
ETPL: Eligible Training Provider List	WIW: Workforce Investment Works
IGA: Intergovernmental Agreement	WP: Wagner Peyser
ITA: Individual Training Accounts	WTE: Work Training Experience

Key Definitions

Americans with Disabilities Act: A federal law providing for comprehensive civil rights protection to individuals with disabilities in areas of employment, public accommodations, state and local government services and telecommunications. (PL101-336)

Adult Basic Education: Academic instruction and education services below the postsecondary level that increase an individual's ability to—(A) read, write, and speak in English and perform mathematics or other activities necessary for the attainment of a secondary school diploma or its recognized equivalent; (B) transition to postsecondary education and training; and (C) obtain employment."

Application: The process which requires the physical attainment of all necessary eligibility documentation regarding citizenship, age, income, selective service registration (if applicable) plus basic skills assessment for math and reading levels. Upon completion of eligibility determination, and signing of the application, eligible customers are placed into the applicant pool for consideration for enrollment into intensive services.

Apprenticeships: An employer-driven model that combines on-the-job learning with related classroom instruction that increases an apprentice's skill level and wages.

Assessment: A judgment of vocational interests, abilities, previous education and work experience, income requirements, and personal circumstances.

Barriers to Employment: Conditions that may make employment difficult for certain individuals. Individuals with such barriers may include: single parents, displaced homemakers, youth, public assistance recipients, older workers, substance abusers, teenage parents, veterans, ethnic minorities, and those with limited English speaking ability or a criminal record or with a lack of education, work experience, credentials, transportation or child care arrangements.

Basic Education: Instruction usually conducted in an institutional setting that is directed towards imparting the basic skills of communication, computation, problem solving, health, consumer development, and citizenship. Instruction for youth could include, but not be limited to, enrollment in a secondary school. Adult Basic Education (ABE) would include upgrading the same basic skills, however, it is directed towards adults who are generally classified as functionally illiterate, undereducated, or whose inability to speak, read or write the English language constitutes a substantial impairment of their ability to get or retain employment commensurate with their readability. Such instruction is designed to raise the level of education of such individuals with a view to making them less likely to become depend on others, to improving their ability to benefit from occupational training and other wise increasing their opportunities for more productive and profitable employment.

Basic Literacy Skills: Reading, writing, mathematics, problem solving and interpersonal skills training that enable adults to communicate in English, use math, obtain a high school diploma or GED and become productive, employable citizens Basic Skills Deficient and Deficient in Basic Literacy Skills.

Basic Skills Deficient: An individual has English reading, writing, or computing skill at or below the eighth grade level on a generally accepted standardized test or a comparable score on a criterion-referenced test. (WIA Section 101 (4))Deficient in Basic Literacy Skills: Is an individual who, at a minimum, meets the definition of Basic Skills Deficient; or is unable to compute or solve problems, read write, or speak English at a level necessary to function on the job, in the individual's family, or in society. (20 CFR Part 664.205(a))

Board of County Commissioners: A county commission (also known as a board of county commissioners) is a group of elected officials charged with administering the county government in some states of the United States. County commissions are usually made up of three or more individuals.

Career Pathways: A series of connected education and training programs, work experiences, and student support services that enable individuals to secure a job or advance in an in-demand industry.

Career Services: Career Services Career services for adults and dislocated workers must be available in at least one Job Center in each local workforce development area. There are three types of career services, as identified in §678.430 of the NPRMs: Basic career services; Individualized career services; and Follow-up services.

Case Management/Intensive Service: A customer-centered approach in delivery of services, designed to: 1. Prepare and coordinate comprehensive employment plans, identifying barriers to participation and employment; devise service strategies for customers to ensure access to workforce investment activities and supportive services, using, where feasible, computer-based technologies; and 2. Assist in the enrollment of customers into allowable activities designed to enhance employability (i.e. motivation, assessment, job preparation workshops, educational classes and/or training, and/or employment services), providing job development and placement services, and assisting individuals and families in accessing community services, addressing emergency assistance and crisis intervention and immediate needs (i.e. food, housing, clothing, and transportation); and 3. Provide job and career counseling during program participation and after job placement.

Categorical Income Eligibility: Categorical Income Eligibility may be used to determine whether a customer is income eligible for intensive and training services. The applicant meeting categorical eligibility for income must meet all the other eligibility criteria. Applicants are deemed to have met the income eligibility requirements if the applicant that: 1. Receives or a member of a household that receives, or has been determined eligible

to receive, SNAP/food stamps within the six (6) month period prior to applicant to a WIA program; 2. Receives, or is a member of a household that receives cash payments under a Federal, State, or local income-based public assistance program such as TANF, RCA, GA or SSI; 3. Homeless; 4. Youth in state-sponsored foster care or youth aging out of state-sponsored foster care.

Chief Local Elected Official: The chief elected executive officer of a unit of general local government in a local area.

Connecting Colorado: A website where job seekers can post their resumes and search for job openings. Employers can post job listings in the nation's largest online labor exchange, create customized job orders, and search resumes.

Core Services: Services available to all customers (universal access) of the One-Stop Center or affiliate partner agency. Core services include self-help services and services requiring minimal staff assistance as described under Section 134 (d) (2) of the Act. Note: When staff assistance is required to provide supportive services to Core service customers, registration is required and counted for performance measurement purposes.

Credentials: A credential is a nationally recognized degree or certificate or state recognized credential. Credentials include, but are not limited to, a high school diploma, GED, or other recognized equivalents, post- secondary degrees/certificates, recognized skill standards, licensure or industry-recognized certificates (i.e., ASE car repair, Hazmat, CNA, CDL, Boiler Operator, Flag Person, Heavy Equipment Operator, etc.), and all state education agency recognized credentials. (This definition applies to current WIA statutory adult, older youth and dislocated worker measures only it does not apply to the common measures).

Customer: A Customer is any person seeking assistance to find employment or training, whether employed or unemployed, and employers who need qualified workers for their company or training for the workers who are already employed with them.

Customer-Centered: Services and improvements to the system are made based on customer feedback.

Customer-Centered Design/Human Centered Design: Human Centered Design framework expands the range of research techniques to help build more accurate profiles and deeper understanding of job-seekers, students, and employers. This results in concrete solutions with a sharper focus on solving problems.

Customized Training: Training that is designed to meet the special requirements of an employer (including a group of employers); 2. Training that is conducted with a commitment by the employer to employ an individual on successful completion of the training; and 3. Training for which the employer pays for not less than 50 percent of the cost of training. The training may occur at the employer's site or may be provided by a training vendor able to meet the employer's requirements. Such training usually requires a

commitment from the employer to hire a specified number of trainees who satisfactorily complete the training.

Disabled Veteran: A veteran who is entitled to compensation under laws administered by the Veterans Administration, or an individual who was discharged or released from active duty because of service-connected disability.

Disadvantaged Adults: Educationally or skills disadvantaged adults are those persons who score below 8th grade level on standardized tests. They required educational assistance to bring their basic skills to a level that would make them eligible for secondary (high school) education or to hold a job with Basic English and math skills.

Discretionary Grant: Priority Selection for Career Services and Training Services Funded with WIOA Statewide (10%) Discretionary Grants/Contracts for purposes of WIOA statewide (10%) discretionary funds, the Governor has determined that these funds will be prioritized as follows: 1. Eligible veterans and spouses; 2. Unemployed individuals; 3. Low-income individuals; 4. Other Colorado job seekers. As indicated by the first priority, recipients of WIOA 10% discretionary grants and contracts will continue to provide priority selection of veterans for career and training services as required under P.L. 107- 288 "Jobs for Veterans Act" and in alignment with Workforce System Policy 1009 Revision 2. In applying this policy to 10% funded projects, veterans who are unemployed and/or low-income, have priority over all other individuals served under these projects.

Dislocated Worker: An individual who: has been terminated or laid off from their job, or who received a notice of termination or layoff, from their employer; is eligible for or has exhausted their unemployment payments; or has been employed for a duration sufficient to demonstrate, to the appropriate entity at a one-stop center, attachment to the workforce, but cannot get unemployment compensation because of low earnings or having done work for an employer not covered under a State unemployment compensation law; and is unlikely to return to a previous industry or occupation; has been terminated or laid off, or has received a notice of termination or layoff, from employment as a result of any permanent closure of, or any substantial layoff at, a plant, facility or enterprise; is employed at a facility which the employer has made a general announcement that such facility will close within 180 days; or for purpose of eligibility to receive services other than training services, intensive services or supportive services, is employed at a facility at which the employer has made a general announcement that such facility will close; was selfemployed (including employment as a farmer, rancher, or a fisherman) but is unemployed as a result of general economic conditions in the community in which the individual resides or because of natural disasters, is a displaced homemaker; or is the spouse of a member of the Armed Forces on active duty and who has experienced a loss of employment as a direct result of relocation to accommodate a permanent change in duty station of such member; or is the spouse of a member of the Armed Forces on active duty and who meets the criteria.

DOL, USDOL: The U.S. Department of Labor, including its agencies and organizational units.

Economic Development: Local planning and zoning commissions or boards, community development agencies, and other local agencies and institutions responsible for regulating, promoting, or assisting in local economic development.

Eligible Provider: The term "eligible provider", used with respect to: 1. Training services, means an organization, such as a public or private college and university, or community-based organization whose application has been approved for the State list of training services as identified; 2. Intensive services, means a provider who is identified or awarded; 3. Youth activities, means a provider who is awarded a grant or a contract; 4. Other workforce investment activities, means a public or private entity selected to be responsible for such activities, such as a one-stop operator designated or certified.

Eligible Training Provider List (ETPL): A statewide collection of providers that are approved to give services through the One-Stop system. These lists contain consumer information, including cost and performance information for each of the providers, so that customers can make informed choices on where to use their Individual Training Accounts.

English as a Second Language (ESL): English language education for adults whose inability to understand, speak, read, or write the English language is a barrier to their ability to get or keep employment. This also has effects on their real ability to function in society or successfully complete the citizenship application process.

Firewall: Separation as a part of the procurement process.

GED-General Equivalency Diploma: A high school equivalency diploma, which is obtained by passing the General Educational Diploma Equivalency Test that, measures skills and knowledge generally associated with four years of traditional high school instruction.

In-Demand Industry Sector or Occupation: An industry sector that has a substantial current or potential impact (including through jobs that lead to economic self-sufficiency and opportunities for advancement) on the State, regional, or local economy, as appropriate, and that contributes to the growth or stability of other supporting businesses, or the growth of other industry sectors; or an occupation that currently has or is projected to have a number of positions (including positions that lead to economic self-sufficiency and opportunities for advancement) in an industry sector so as to have a significant impact on the State, regional, or local economy, as appropriate.

Individual with a Barrier to Employment: A member of one or more of the following populations: displaced homemakers; low-income individuals; Indians, Alaska Natives, and Native Hawaiians, as such terms are defined in section 166; **p**ersons with disabilities, including youth who with disabilities; older individuals; ex-offenders; homeless individuals as defined in the Violence Against Women Act of 1994, or homeless children and youths as

defined in the McKinney-Vento Homeless Assistance Act; youth/young adults who are in or have aged out of the foster care system; person who are English language learners, individuals who have low levels of literacy, and individuals facing substantial cultural barriers; eligible migrant and seasonal farmworkers; persons within 2 years of exhausting lifetime eligibility under part A of title IV of the Social Security Act; single parents including single pregnant women; long-term unemployed person; and such other groups as the Governor involved determines to have barriers to employment.

Individual with a Disability: 1. In general. An individual with any disability (as defined in section 3 of the Americans with Disabilities Act of 1990 (42 U.S.C. 12`02)). 2. Individuals with Disabilities. More than one individual with a disability.

Individual Training Accounts (ITA): An expenditure account established on behalf of an eligible customer in WIA Title IB adult, youth and dislocated worker programs to purchase training services from eligible providers they select in consultation with the case manager, counselor or coordinator.

Intensive Services: Services available to adults and dislocated workers who have completed one or more Core Services and are still unable to gain employment OR who are employed and have been determined in need of services to get a better job in order to gain self-sufficiency. Intensive Services include individual career planning, resume preparation, job clubs, career counseling, internships, and comprehensive assessments. Basic education, ESL, and basic computer literacy are also sometimes considered intensive. Note: All customers in intensive services must be registered and are counted for performance measurement purposes.

Internships: WIOA considers an internship to be a form of paid or unpaid work experience, defined as an opportunity for exposure to the requirements of a particular occupation or industry, the work environment and the behavioral expectations for success on the job. Such work experiences are not expected to provide formal training for occupational skills, although some skills may be learned.

Justice Involved: An adult or juvenile who is or has been subject to any stage of the criminal justice process, and for whom services under this Act may be beneficial; or who requires assistance in overcoming artificial barriers to employment resulting from a record of arrest or conviction.

Labor Force: The total of all civilians classified as employed and unemployed and members of the Armed Forces stationed in the United States. (Bureau of Labor Statistics Bulletin 2175).

Labor Market Area: An economically integrated geographic area within which individuals can reside and find employment within a reasonable distance or can readily change employment without changing their residence. Such an area shall be identified in accordance with criteria used by the Bureau of Labor Statistics of the Department of Labor in defining such areas or similar criteria established by a Governor.

Labor Market Information: Labor Market Information (LMI) must be provided to customers in every program. LMI generally involves four major areas of information, which include national job trends (including supply and demand), local job opportunities, education and skill requirements for jobs, and job seeking skills (writing resumes, job interview techniques, etc.).

Life Skills: Those skills which are included in adult literacy dealing with such topics as consumer economics, government and law, occupational knowledge, community resources, and health that are included into an educational agency's basic literacy skills course of study.

Local Area: The local workforce development area(s) designated by a Governor for delivery of WIOA services.

Lower Living Standard Income Level: The income level (adjusted for regional, metropolitan, urban, and rural differences and family size) determined annually by the Secretary of Labor based on the most recent lower living family budget issued by the Secretary.

Local Workforce Development Board: A local workforce development board established under section 107 of WIOA, as one of the 10 federally recognized local areas in Colorado.

Low Income Individuals: The term "low-income individual" means a person who: 1. receives, or is a member of a family that receives, cash payments under a Federal, State, or local income-based public assistance program;

2. received an income, or is a member of a family that received a total family income, for the 6-month period before application for the program involved (besides unemployment compensation, child support payments, payments described in subparagraph (A), and oldage and survivors insurance benefits received under section 202 of the Social Security Act (42 U.S.C. 402) that, for their family size, is not more than the higher of—(i) the poverty line, for an equivalent period; or (ii) 70 percent of the lower living standard income level, for a similar period; 3. belongs to a household that receives (or has been decided within the 6-month period before application for the program to be eligible to receive) food stamps according to the Food Stamp

Act of 1977 (7 U.S.C. 2011 et seq.); 4. is a homeless person, as defined in subsections (a) and (c) of section 103 of the Stewart B. McKinney Homeless Assistance Act (42 U.S.C.

11302); 5. is a foster child for whom State or local government payments are made; or 6. in cases permitted by rules decided by the Secretary of Labor, is a person with a disability whose own income meets the requirements of a program described in subparagraph (1) or of subparagraph (2), but who is a member of a family whose income does not meet such requirements.

Mature Worker: An individual age 55 or older.

Occupational Skills Training: Includes both (1) vocational education which is designed to provide individuals with the technical skills and information required to perform a specific job or group of jobs, and (2) on-the-job training.

ONET: The Occupational Information Network for use matching the title of an occupation with its 5 or 6-digit occupational code (<u>http://online.onetcenter.org/</u>).

On-the-Job-Training: Training by an employer that is provided to a paid customer while 1. Engaged in productive work in a job that: 2. Provides knowledge or skills essential to the full and adequate performance of job; 3. Provides reimbursement to the employer of up to 50 percent of the wage rate of the customer, for the extraordinary costs of providing the training and the additional supervision related to the training; and 4. Is limited in duration as appropriate to the occupation for which the customer is being trained; taking into account the content of the training, the prior work experience of the customer, and the service strategy of the customer, as appropriate.

Pre-Apprenticeship: Services and programs, often including classroom instruction, designed to prepare individuals to enter and succeed in Registered Apprenticeship programs. These programs should have a documented partnership with at least one Registered Apprenticeship program sponsor and together, they expand the customer's career pathway opportunities with industry-based training coupled with classroom instruction.

Public Assistance: Federal, State or Local government support provided to families for which eligibility is determined by a needs or income test. Includes TANF, childcare, food stamps (SNAP), housing assistance, work subsidies, and allowances or other cash payments to meet living expenses.

Quintiles: Are often used to create cut-off points for a given population. For example, a government sponsored socio-economic study may use quintiles to determine the maximum wealth a family could possess in order to belong to the lowest quintile of society. This cut-off point can then be used as a prerequisite for a family to receive a special government subsidy aimed to help society's less fortunate.

Regional Areas: This term does not have a specified meaning for Colorado. In WIOA, the terms are local area (the 10 federally recognized geographic areas that receive WIOA

funding and are responsible for the administration and delivery of WIOA programs and services) or regional planning area (a group of local areas that have agreed to coordinate service delivery and develop regional WIOA plans).

Registered Apprenticeships: An employer-driven model that combines on-the-job learning with related classroom instruction that increases an apprentice's skill level and wages and is registered/approved with the US Department of Labor.

Sector Partnerships: Brings together employers, at a regional level, from the same industry with the education, training and other community support programs needed to implement solutions and services that ensure the target industry thrives.

Supplemental Nutrition Assistance Program (SNAP): Provides supplemental food and nutrition assistance to low income individuals. Replaced Food Stamp program.

Standing Committee: A component of a local Workforce Development Board that is chaired by a board member, includes other community members, and focuses on a specific issues, such as youth or one-stop operations

Talent Development: Developing and guiding customer's skills, knowledge and abilities through understanding, managing and developing their talents in the best possible way; in conjunction with occupational training, classroom training and work-based learning strategies.

Temporary Assistance to Needy Families (TANF): Is a federal program providing cash, medical or food assistance for parents and children.

Trade Adjustment Assistance (TAA): Trade Adjustment Assistance service and allowances provided for achieving reemployment of adversely affected workers, including TRA, training, and other re-employment services, and job search allowance and relocation allowances.

Trade Readjustment Allowance (TRA): A weekly allowance payable to an affected worker with respect to such worker's unemployment.

Training Services: The education and employment training services to be offered at no cost to One-Stop system customers who have been unable to get a job after having received one or more core services and one or more intensive services.

Veteran: An individual who served in the active military, naval, or air service, and who was discharged or released from such service under conditions other than dishonorable.

Veteran (Recently separated): Any veteran who applies for participation under this title within 48 months after the discharge or release from active military, naval, or air service.

Vocational Rehabilitation: Is a process/program which enables persons with functional, psychological, developmental, cognitive and emotional impairments or health disabilities to overcome barriers to accessing, maintaining or returning to employment or other useful occupation.

Wagner-Peyser: Employment Service programs – Employment Service basic labor exchange and other services funding source.

Welfare and/or Public Assistance Recipient: A person who, during the course of the program year, receives or is a member of a family who receives cash welfare or public assistance payments under a Federal, State, or local welfare program.

WIOA Adult: An individual who is age 18 or older.

WIOA: Is a comprehensive legislation that reaffirms, reforms, and modernizes the public workforce system, bringing together and enhancing several key employment, education, and training programs. WIOA resources, services, and leadership tools for the workforce system to help individuals find and maintain good jobs and improves employer prospects for success in the global marketplace. It ensures that the workforce system operates as a comprehensive, integrated and streamlined system to provide pathways to prosperity for those it serves and continuously improves the quality and performance of its services.

Work Training Experience: A temporary activity (generally six months or less) which provides a person with the opportunity to gain the skills and knowledge necessary to perform a job, including work habits and behaviors, and which may be combined with classroom or other training.

Work-based Learning: Experiential learning opportunities that take place within a business or onsite with an employer.

Workforce Development: Is an American economic development approach that attempts to enhance a region's economic stability and prosperity by focusing on people rather than businesses. It is essentially a human resources strategy.

Youth/Young Adults: Means an individual between ages 16-24 who meets the Title I of WIOA Youth/Young Adult program eligibility.