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

Developed in accordance with the Workforce Innovation and Opportunity Act

March 25, 2016

Colorado Central Planning Region

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

Executive Summary

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

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

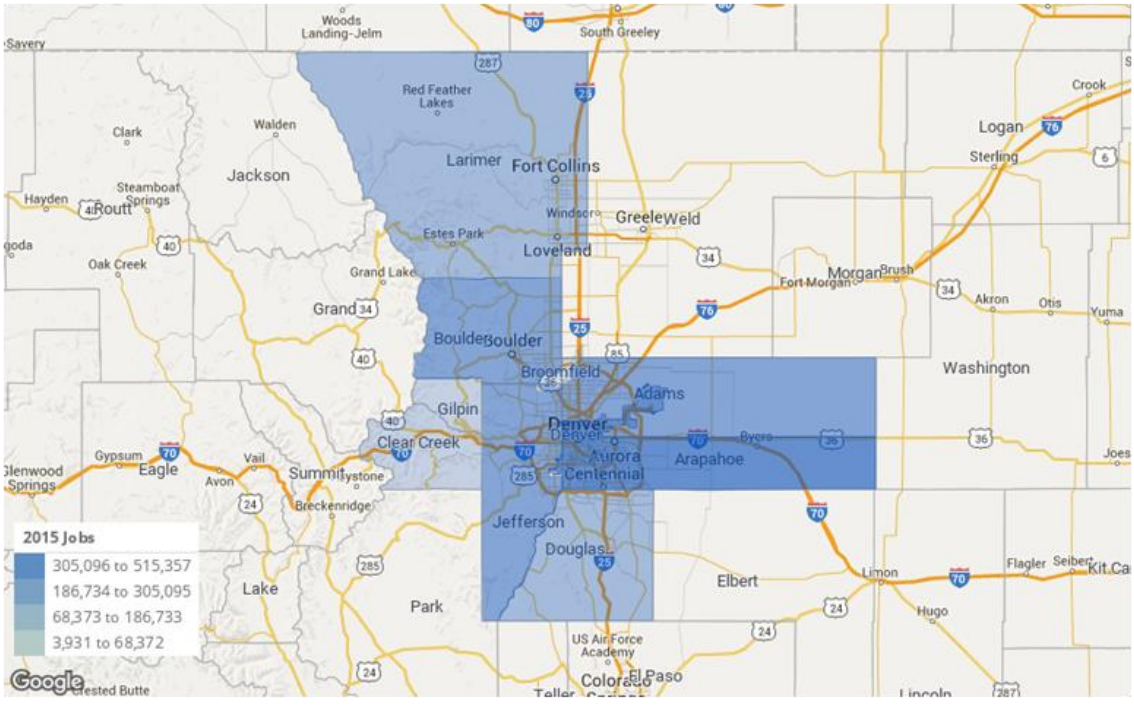
To ensure all relevant stakeholders were involved in the development of this plan, the Colorado Central Planning Region invited local workforce development boards, local elected officials and key partners from the Central Planning Region to participate in multiple planning and feedback sessions.

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

Planning Region: Colorado Central Planning Region

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

FIGURE 1: REGIONAL CONCENTRATION OF EMPLOYOMENT



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

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

1. PROVIDE AN ANALYSIS OF THE REGIONAL ECONOMIC CONDITIONS.

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

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

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

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

Overall Economy

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

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

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

Table 1: Regional Industry Growth Projections

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

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

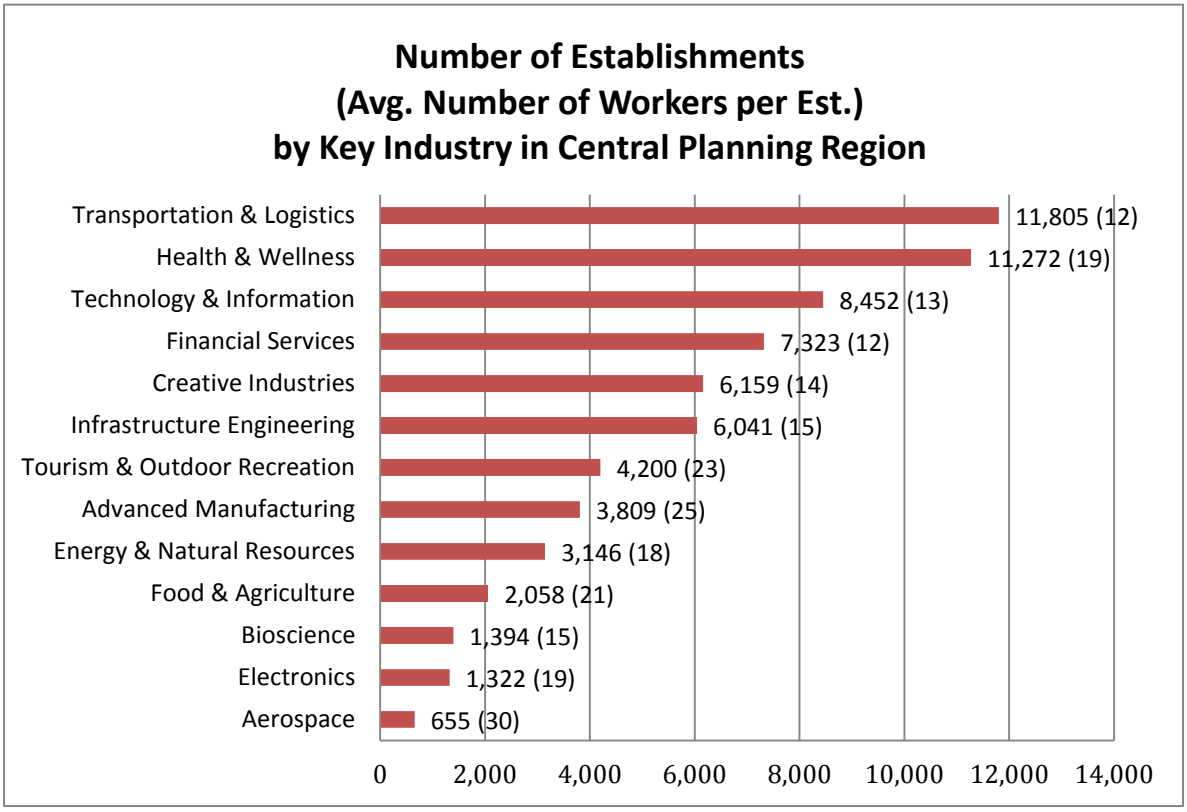
An examination of this data reveals the following observations about the Central Planning Region's existing in-demand industry sectors and occupations:

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

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

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

Figure 2: Number of Establishments by Key Industry



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

Figure 3: 2015 Employment by Key Industry

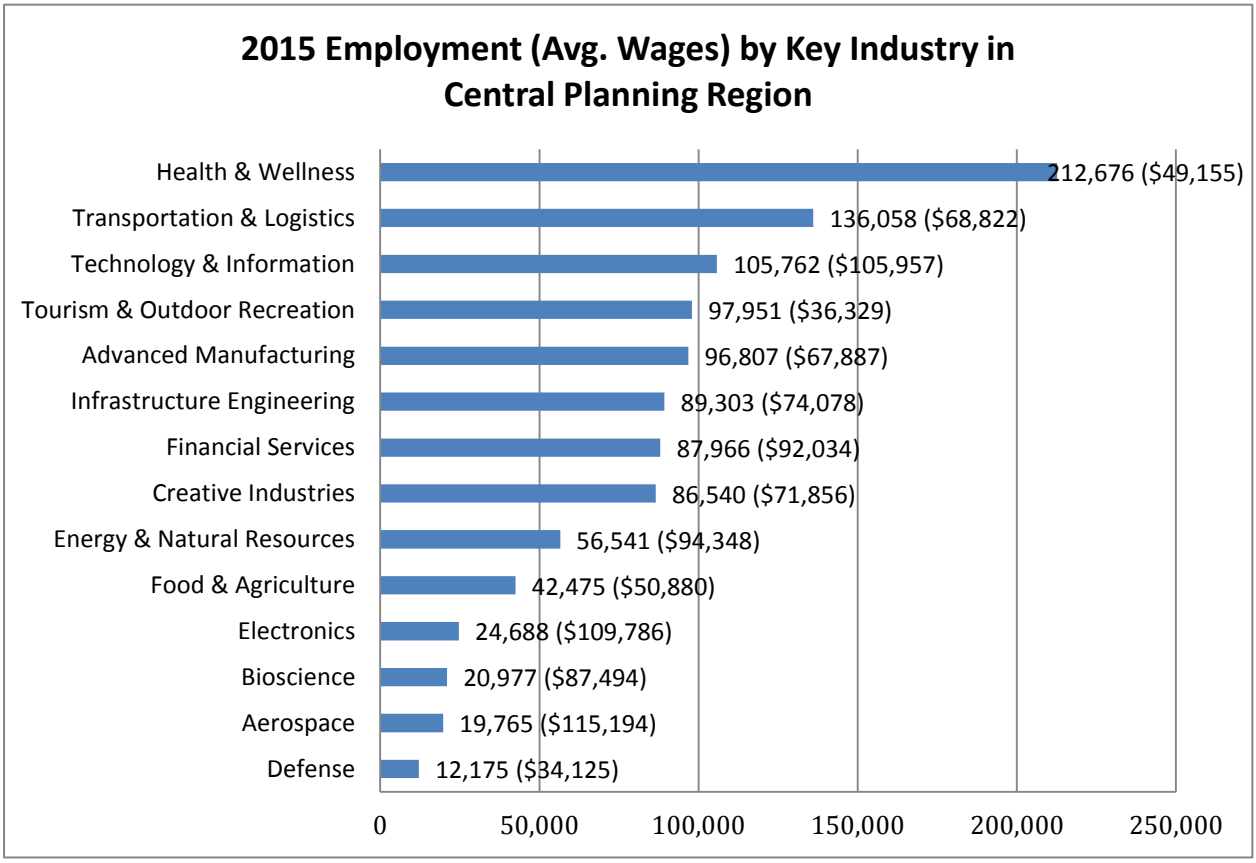


Table 2, on the following page, depicts the top ***20 key industry sectors*** in the Central Planning Region. These key sectors are diverse, but they tend to be somewhat concentrated in high technology sectors. The Central Planning Region will pay close attention to the projection for telecommunications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

Table 2: Regional Industry Sector Growth Projections

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

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

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

Table 3: All Sector Staffing Patterns

All Sector Staffing Patterns, Central Planning Region								
SOC Code	Description	2016 Jobs	2020 Jobs	Change	% Change	% of Industry	Median Hourly Earnings	Typical Entry Level Education
41-2031	Retail Salespersons	56,050	58,792	2,742	5%	3.0%	$11.03	Less than high school
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	48,830	53,609	4,779	10%	2.5%	$9.09	Less than high school
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	46,063	49,192	3,129	7%	2.4%	$17.78	High school diploma or equivalent
35-3031	Waiters and Waitresses	36,415	38,737	2,322	6%	1.9%	$9.07	Less than high school
41-2011	Cashiers	33,228	34,784	1,556	5%	1.8%	$9.59	Less than high school
13-1199	Business Operations Specialists, All Other	33,009	34,350	1,341	4%	1.7%	$34.78	High school diploma or equivalent
43-4051	Customer Service Representatives	33,180	36,518	3,338	10%	1.7%	$15.88	High school diploma or equivalent
29-1141	Registered Nurses	32,611	35,699	3,088	9%	1.7%	$33.93	Associate's degree
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	30,166	32,795	2,629	9%	1.6%	$11.16	Less than high school
11-1021	General and Operations Managers	29,376	31,477	2,101	7%	1.5%	$52.84	Bachelor's degree
13-2011	Accountants and Auditors	28,138	29,929	1,791	6%	1.5%	$33.76	Bachelor's degree
43-9061	Office Clerks, General	27,522	29,753	2,231	8%	1.4%	$16.56	High school diploma or equivalent
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	23,739	24,672	933	4%	1.3%	$28.08	High school diploma or equivalent
43-5081	Stock Clerks and Order Fillers	22,978	23,667	689	3%	1.2%	$12.43	Less than high school
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	22,942	24,632	1,690	7%	1.2%	$12.13	Less than high school
43-3031	Bookkeeping, Accounting, and Auditing Clerks	22,073	23,631	1,558	7%	1.2%	$18.54	High school diploma or equivalent
25-1099	Postsecondary Teachers	21,905	23,687	1,782	8%	1.1%	$30.92	Doctoral or professional degree
15-1132	Software Developers, Applications	20,112	21,514	1,402	7%	1.1%	$47.42	Bachelor's degree
41-3099	Sales Representatives, Services, All Other	17,968	18,992	1,024	6%	0.9%	$26.12	High school diploma or equivalent
37-2012	Maids and Housekeeping Cleaners	18,027	19,448	1,421	8%	0.9%	$8.97	Less than high school

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

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

Table 4: Key Sector Staffing Patterns

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

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

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

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

Table 5: Top Jobs Currently Listed

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

Source: Wanted Analytics

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

Table 6: Top Skills & Certifications in Demand

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

Source: Wanted Analytics

Difficult to Hire Occupations

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

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

Table 7: Training Pipeline Completions to Hires Ratio

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

Sources: EMSI 2015.3 QCEW, Non-QCEQ & Self-Employed Class of Worker, Real Time Job Posting Data from Career Builder & 2014 IPEDS Data
*Average monthly hires estimated using Longitudinal Employer-Household Dynamics Quarterly Workforce Indicators, date range January 2013 to February 2015

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

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

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

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

[1] The Chronicle of Higher Education. (2012). The Role of Higher Education in Career Development: Employer Perceptions. December 2012. Available at http://chronicle.com/items/biz/pdf/Employers%20Survey.pdf.
[2] Colorado Workforce Development Council. (2015). *Colorado Talent Pipeline Report*. Retrieved at https://www.colorado.gov/pacific/cwdc/colorado-talent-pipeline-report.
[3] The Colorado Talent Pipeline Report, data sourced from LinkedIn, 2015.

The Colorado Talent Pipeline Report also noted core skills that are necessary for success in work or education beyond high school. Those skills are listed below[4] and will be a focus of the workforce and education programs driven by sector partnerships and career pathways within the Central Planning Region.

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

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

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

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

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

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

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

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

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

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

Speaking: talking with others to convey information effectively

[4] Ibid.

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

Table 8: Age Demographics

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

Source: U.S. Census Bureau compiled by EMSI

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

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

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

Table 9: Employment Age Groupings

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

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

Source: EMSI 2015.2 Data

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

Current Labor Force Employment and Unemployment Data

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

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

Table 10: Employment Concentrations by County

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

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

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

Table 11: Unemployment Rate

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

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

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

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

Table 12: Unemployment Rates/Estimated Counts

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

Sources: LAUS, National Unemployment Data

Labor Market Trends

Commute Patterns

Table 13: Inflow/Outflow Commute Patterns

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

Source: U.S. Census Bureau

The U.S. Census Bureau has detailed data on commute patterns. Table 13, left, shows the commuter inflow/outflow patterns for each of the counties in the Central Planning Region. The "Percent Commuting into County" column shows the percent of the total jobs in each county that are filled by people who commute in from other counties. These are people who do not live in the county where they work. The "Percent Commuting out of County" column represents residents of the county who commute to other counties to work. These are people who live in the county but commute to some other county to work. Counties that have a relatively small percentage of people commuting in and out have labor markets that are more self-contained than counties with larger percentages. One trend to watch is the percent of people in a county's labor force who work from home. In the United States, 4.5% of working people work from home. In Colorado's Central Planning Region, the county with the highest percentage of its workers working from home is Douglas County (11%).

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

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

Table 14: Commute Patterns

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

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

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

Educational and Skill Levels of the Region's Workforce

Educational Attainment and Field of Degree

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

Figure 4: Degree Holders

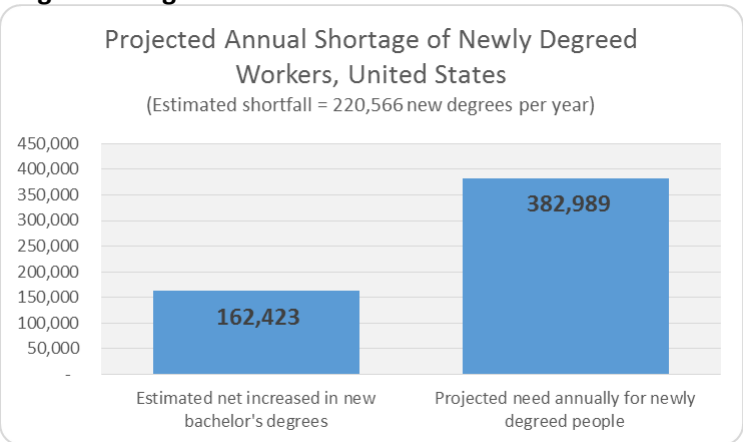


Figure 4, left, is an analysis of U.S. Census data regarding the number of degree holders in Colorado's Central Planning Region. This bar graph illustrates a national problem; there are not enough new bachelor's degree holders to replace older degree holders leaving the labor force and fill positions created by new growth.

In Colorado, 74% of all jobs statewide will require some level of postsecondary education or training by the year 2020.[5] Relative to the rest of the nation, Colorado has a highly educated adult population. It is estimated that 68% of adults have some college experience or a postsecondary credential, while 46% have an associate's degree or higher.[6] When the "top jobs" were extracted from that total, the percent of jobs requiring postsecondary education or training is even larger—88% of Colorado's "top jobs" require some level of formal postsecondary education or training for entry, whether it is an employer-sponsored formal training program, apprenticeship, certificate or degree.[7]

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

[5] Colorado Workforce Development Council. (2016). Driving Colorado Forward Together: Colorado's Combined Plan for Execution of Work force Development Activities. (Draft released for public comment January 11, 2016).
[6] FY 2014–2015 Colorado Skills for Job Report.
[7] Colorado Workforce Development Council. (2015). Colorado Talent Pipeline Report. Retrieved at https://www.colorado.gov/pacific/cwdc/colorado-talent-pipeline-report.

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

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

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

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

Table 15:Training Pipeline

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

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

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

Special Populations in the Labor Force

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

Table 16: Unemployment Rate, Special

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

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

Justice System Involved

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

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

Poverty

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

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

Individuals with Disabilities

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

Homeless

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

- There were a total of 5,812 homeless people in the six-county area.
- Of these, 47% (2,726) were households without children, and 53% (3,086) were households with children.
- An estimated 4,644 of the homeless people were working age.
- This group included 399 veterans.

Age Bands

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

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

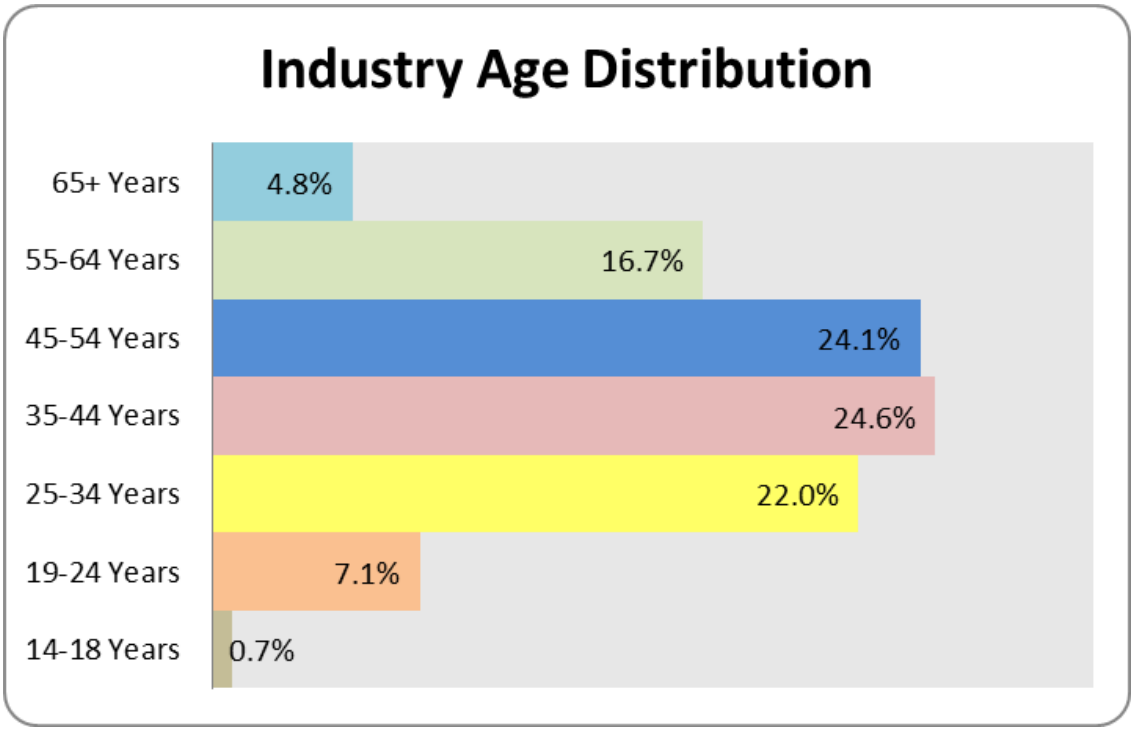
Table 16: Labor Force Age Gap

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

Source: EMSI 2015.2 Data

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

Figure 5: Industry Age Distribution



WIOA Priority Populations

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

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

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

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

Discussion

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

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

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

- Region 3,which includes Adams, Arapahoe/Douglas, Boulder and Denver counties and the Tri-County (Jefferson, Clear Creek and Gilpin) area, has five sector partnerships: 1) health and wellness (active), 2) advanced manufacturing (active), 3) landscape architecture (emerging), 4) technology and information (emerging) and 5) construction and development (exploring).

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

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

The Central Planning Region will continue to use sector partnerships in furtherance of the state's key goal to **engage business and industry as a fulcrum to inform and align all elements of the demand-driven system**, which is described in the Colorado Combined Plan for Execution of Workforce Development Activities. The state is committed to expanding regionally focused sector partnerships that are championed by business and industry to drive career pathways. In addition to working to expand and sustain the existing sector partnerships, the Central Planning Region will expand some of these partnerships where the data indicates there is a concentration of in-demand industries. The region may also choose to create sub-sector partnerships as well based on what the data suggests is needed. For example, the Central Planning Region will coordinate efforts that are happening in a particular locale and broaden that focus across the entire region when the issue(s) impact the entire region, thereby reducing fragmentation of effort. A key role of the Central Planning Region's leadership will also be to continuously evaluate the needs of the region to identify new industry partners that could contribute

toward the resolution of critical issues, *e.g.,* establishing the priorities for the region, aligning training providers' educational curricula with employers' true needs and developing apprenticeship programs.

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

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

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

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

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

- Promote consistency among local area workforce development boards and key partners in the communication and application of career pathways across the region

Discussion

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

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

This strategy will aim to support the alignment of curricula and credentials to workforce needs and communicate the crosswalk of core competencies, credentialing and education requirements. This would include presenting opportunities for advancement and/or lateral moves within the industry. Each career pathway should include education, training, employment, retention and advancement requirements, so jobseekers have a clear understanding of upward mobility within the sector.

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

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

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

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

Discussion

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

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

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

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

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

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

regional level where they are feasible and necessary, as these are currently coordinated and managed at the local area level.

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

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

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

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

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

The Central Planning Region will support the local area plans, which will coordinate the provision of vocational rehabilitation services under Title IV. Local area plans include memoranda of understanding with service providers for these activities. When appropriate, local areas will address these services using a regional-level service model. The Central Planning Region will share best practices from different

workforce areas in providing universal access to programs and services when serving individuals with disabilities.

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

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

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

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

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

The Central Planning Region is committed to providing services to individuals with disabilities and other untapped talent. It will explore opportunities for cooperative agreements among local boards and other

local entities. Examples of these cooperative agreements may include, but are not limited to: 1) sharing labor market information with WIOA partners, including adult basic education providers and the Division of Vocational Rehabilitation; 2) engaging key stakeholders from businesses and industries cooperatively; and 3) enhancing the coordination of the continuum of talent development strategies for shared customer bases across systems to build and maximize staff capacity, resources and communication.

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

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

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

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

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

Within the Central Planning Region, local area workforce boards will operate autonomously, and the region will work to collectively negotiate with the governor the accountability measures for these local areas. In addition, when it is strategically and financially in the best interest of the region and local areas, the Central Planning Region will report outcomes at the regional rather than local level. Performance accountability measures will be more fully defined when regulations are released by the federal government on June 16, 2016.

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

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

In addition, the Central Planning Region is committed to implementing regional process improvement strategies to create shared access to data across local areas. This should reduce duplicate efforts and data entry and streamline customer interactions. This will be significant, since Colorado career centers are fully integrated and operate in close partnership with other workforce agencies, making co-enrollment in multiple programs commonplace. Co-enrollment provides the customer with the ideal service plan while allowing the system to utilize its resources in an efficient manner. By working alongside the state and local areas to simplify collection of customer intake data and share this data across multiple programs, the region will work to significantly improve the customer experience and

contribute to a more efficient process overall. The region will also work to evaluate and identify opportunities to implement additional streamlined systems, when applicable. For example, local area workforce development boards within the region may be able to use the same on-the-job training contracts with employers to further reduce redundancies and inefficiencies.

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

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

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

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

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

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

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