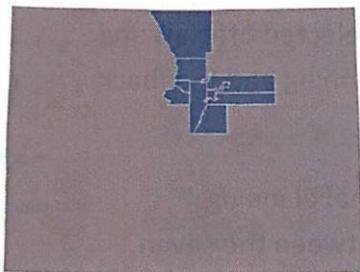


# **Colorado Central Planning Region's Regional Plan for Execution of Workforce Development Activities**

**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

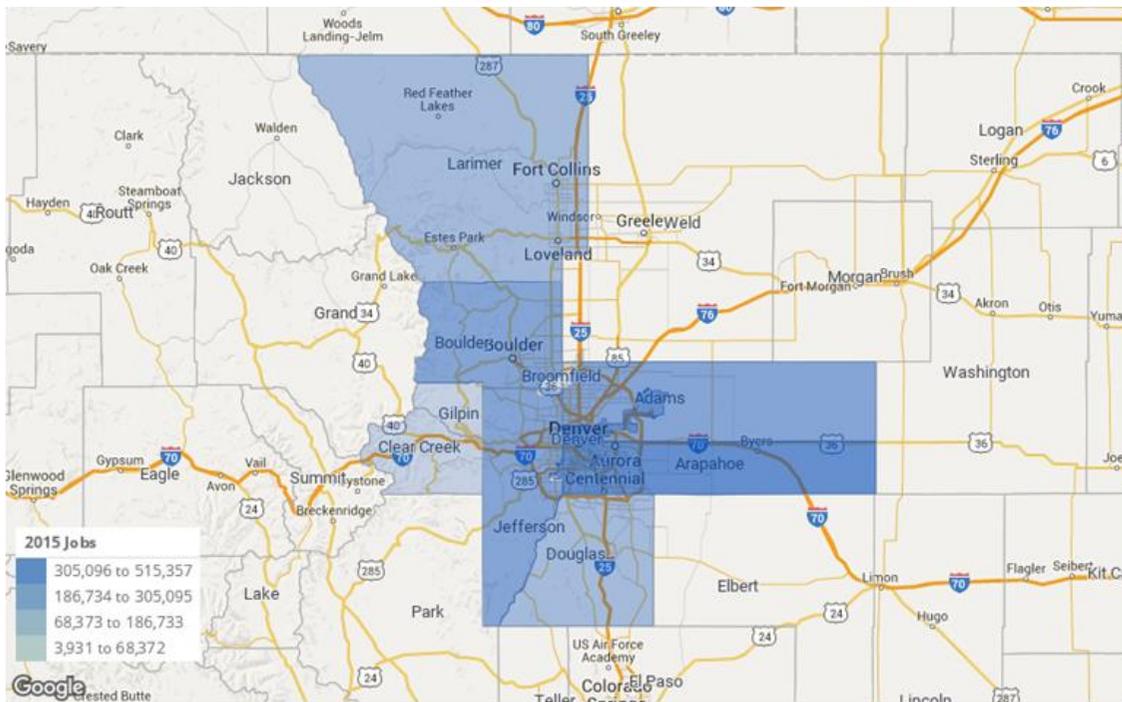
To ensure all relevant stakeholders were involved in the development of this plan, the Colorado Central Planning Region invited local workforce development boards, local elected officials and key partners from the Central Planning Region to participate in multiple planning and feedback sessions.

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 EMPLOYMENT**



**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

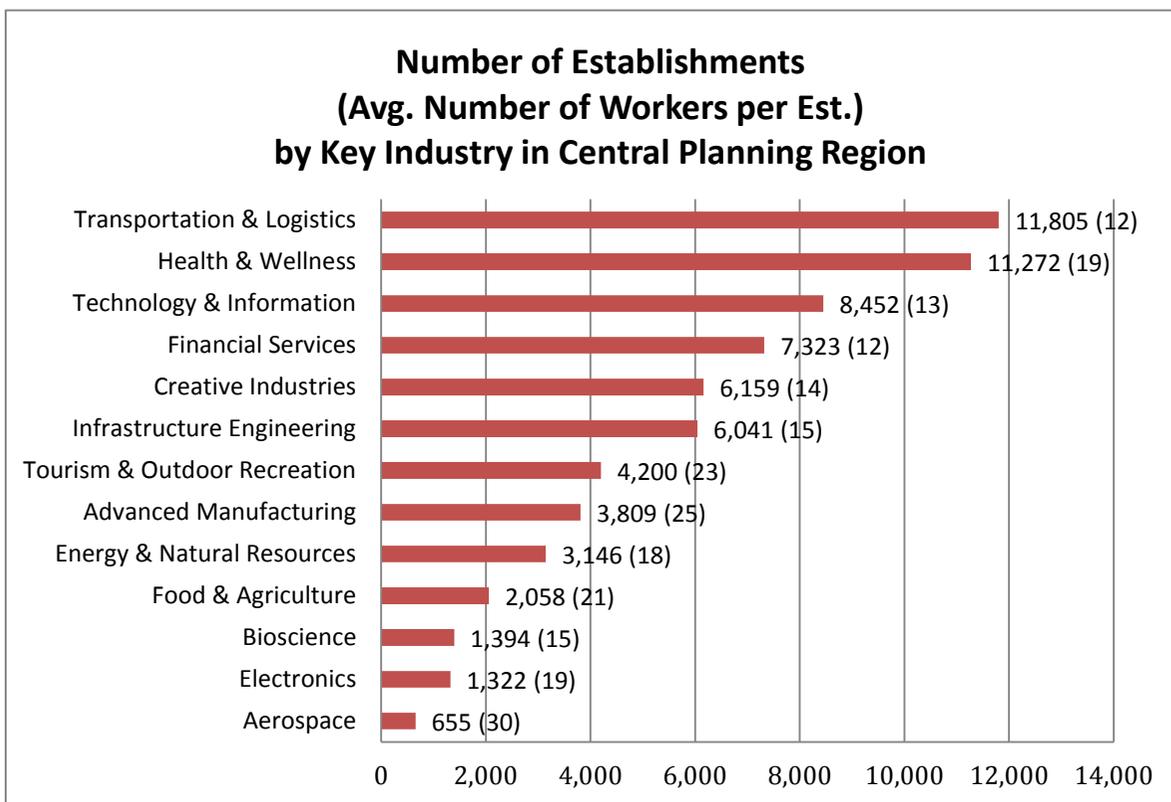
An examination of this data reveals the following observations about the Central Planning Region's existing in-demand industry sectors and occupations:

- 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**

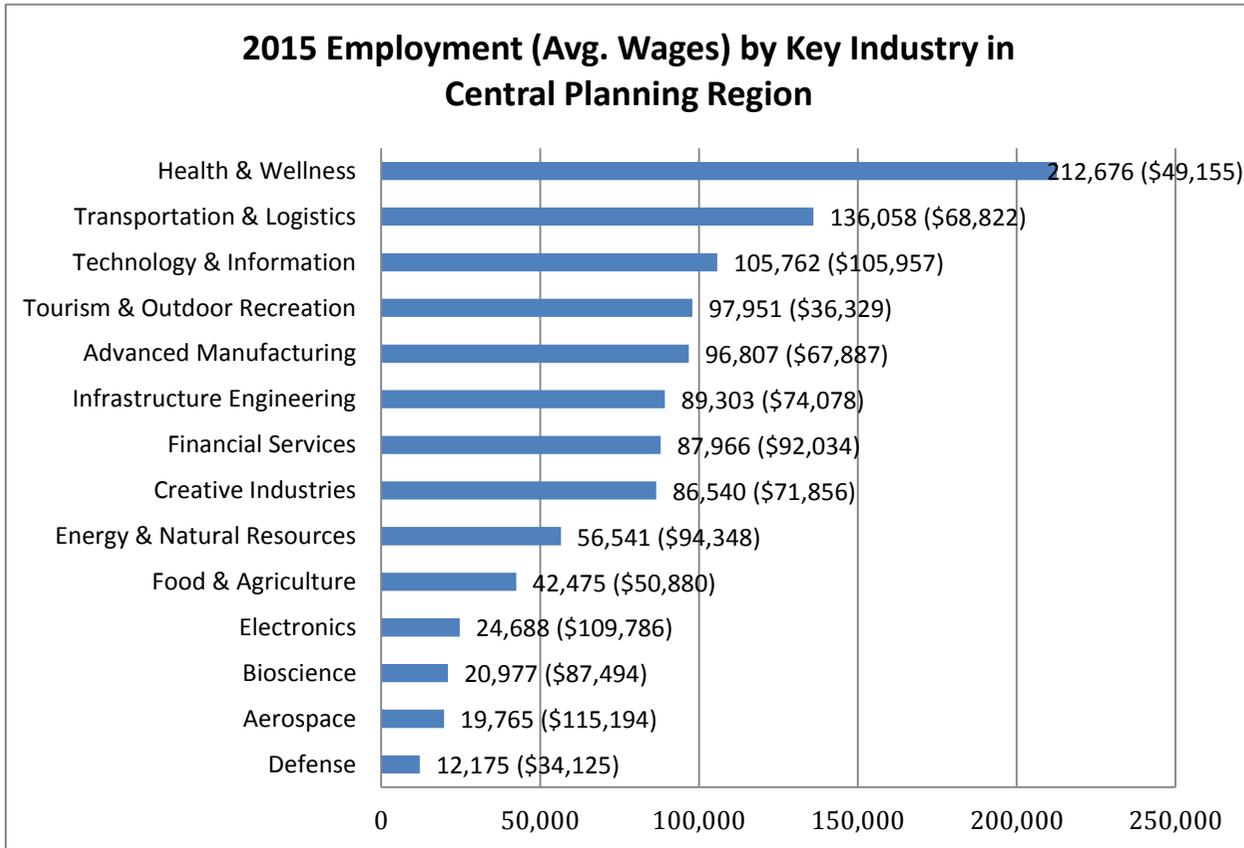


Table 2, on the following page, depicts the top **20 key industry sectors** in the Central Planning Region. These key sectors are diverse, but they tend to be somewhat concentrated in high technology sectors. The Central Planning Region will pay close attention to the projection for telecommunications 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
	<b>Totals</b>	<b>620,630</b>	<b>631,489</b>	<b>641,940</b>	<b>652,094</b>	<b>661,446</b>	<b>40,817</b>	<b>1.3%</b>		<b>47,411</b>

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 OCCUPATIONS.**

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

**Table 5: Top Jobs Currently Listed**

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

Source: Wanted Analytics

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

**Table 6: Top Skills & Certifications in Demand**

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

Source: Wanted Analytics

**Difficult to Hire Occupations**

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

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

**Table 7: Training Pipeline Completions to Hires Ratio**

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

Sources: EMSI 2015.3 QCEW, Non-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.<sup>1</sup> 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.<sup>2</sup> 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.<sup>3</sup>

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<sup>1</sup> 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>.

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

<sup>3</sup> 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<sup>4</sup> 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

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

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

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

**Table 12: Unemployment Rates/Estimated Counts**

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

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

Sources: LAUS, National Unemployment Data

**Labor Market Trends**

**Commute Patterns**

**Table 13: Inflow/Outflow Commute Patterns**

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**

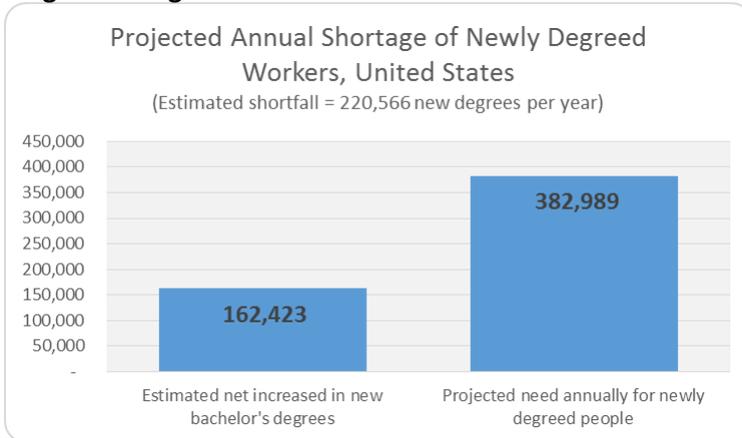


Figure 4, left, is an analysis of U.S. Census data regarding the number of degree holders in Colorado's Central Planning Region.

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.<sup>5</sup> 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.<sup>6</sup> 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.<sup>7</sup>

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.

<sup>5</sup> 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).

<sup>6</sup> FY 2014–2015 Colorado Skills for Job Report.

<sup>7</sup> 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 assigned to each occupation is derived using a "crosswalk." Occupations are classified using the Standard Occupational Classification System (SOC) or ONET. Occupational training programs are ordered using the federal Classification of Instructional Programs (CIP) coding system. When these two classification systems are put side by side, the occupations a training program can prepare one for can be 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.<sup>8</sup> 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.

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<sup>8</sup> 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	Unemployment Rate	Labor Force	Unemployed
All Veterans over 18 years	3.0%	124,819	3,748
Gulf War II Era Veterans	3.6%	35,326	1,261
Disabled Veterans*	17.2%	21,469	1,321
Black or African American	3.6%	366,580	13,263
Hispanic or Latino	4.0%	304,641	12,264
All Teenagers (16-19)	9.8%	65,110	6,380
Black or African American (16-19)	14.7%	7,969	1,174
Hispanic or Latino (16-19)	10.5%	12,720	1,334

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

### ***Justice System Involved***

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

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

### ***Poverty***

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

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

### ***Individuals with Disabilities***

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

### ***Homeless***

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

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

**Age Bands**

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

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

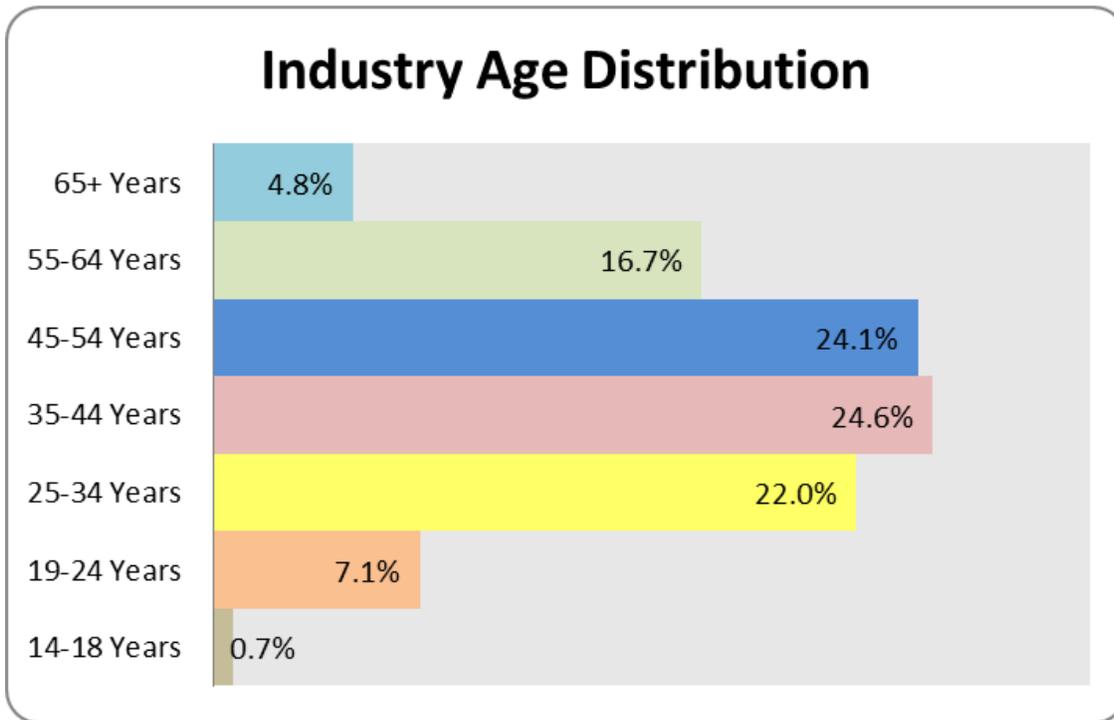
**Table 16: Labor Force Age Gap**

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

Source: EMSI 2015.2 Data

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

Figure 5: Industry Age Distribution



**WIOA Priority Populations**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The following schedule of activities outlines the steps taken to develop the regional plan:

- Full-day planning session held with local area workforce directors and staff from the region: January 19, 2016
- Full-day planning and feedback session held with local area workforce directors, staff, board members and county commissioners/local elected officials: February 18, 2016
- First draft of plan developed and reviewed by the region's workforce directors, staff, board members, county commissioners/local elected officials and partners: February 29-March 14, 2016
- Feedback incorporated into plan: March 14-March 27, 2016
- Revised plan posted for public comment on CWDC website: March 28, 2016
- Public meeting for public comment held at Larimer County Workforce Center, 200 West Oak, 1<sup>st</sup> 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.

# **Occupation Table**

All Occupations in Colorado Central Planning Region

EMSI Q3 2015 Data Set

January 2016

**Arapahoe/Douglas Works!**

6964 S. Lima Street  
Centennial, Colorado 80112  
303.636.1160

# Parameters

## Regions

Code	Description
8001	Adams County, CO
8005	Arapahoe County, CO
8013	Boulder County, CO
8014	Broomfield County, CO
8019	Clear Creek County, CO
8031	Denver County, CO
8035	Douglas County, CO
8047	Gilpin County, CO
8059	Jefferson County, CO
8069	Larimer County, CO

## Timeframe

2016 - 2020

## Datarun

2015.3 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Training Pipeline: Colorado Central Planning Region - Managers

SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
11-3061	Purchasing Managers	712	34	0	0.0	Bachelor's degree	\$59.36
11-9141	Property, Real Estate, and Community Association Managers	2,761	95	56	0.6	High school diploma or equivalent	\$28.64
11-2031	Public Relations and Fundraising Managers	675	34	46	1.4	Bachelor's degree	\$61.30
11-3031	Financial Managers	5,113	238	426	1.8	Bachelor's degree	\$64.46
11-2021	Marketing Managers	2,607	136	326	2.4	Bachelor's degree	\$60.33
11-9032	Education Administrators, Elementary and Secondary School	2,835	122	497	4.1	Master's degree	\$42.48
11-9051	Food Service Managers	2,302	82	365	4.5	High school diploma or equivalent	\$23.79
11-1021	General and Operations Managers	29,382	1,102	5,598	5.1	Bachelor's degree	\$52.84
11-9161	Emergency Management Directors	73	3	13	5.2	Bachelor's degree	\$38.50
11-3121	Human Resources Managers	1,381	82	429	5.2	Bachelor's degree	\$58.53
11-9013	Farmers, Ranchers, and Other Agricultural Managers	1,846	47	282	6.1	High school diploma or equivalent	\$13.86
11-9033	Education Administrators, Postsecondary	1,870	85	537	6.4	Master's degree	\$36.41
11-3021	Computer and Information Systems Managers	5,412	202	1,313	6.5	Bachelor's degree	\$67.43
11-9111	Medical and Health Services Managers	2,973	169	1,659	9.8	Bachelor's degree	\$50.73
11-2011	Advertising and Promotions Managers	437	20	238	11.9	Bachelor's degree	\$56.56
11-9031	Education Administrators, Preschool and Childcare Center/Program	811	37	497	13.5	Bachelor's degree	\$17.70
11-9081	Lodging Managers	390	14	215	15.4	High school diploma or equivalent	\$22.71
11-9199	Managers, All Other	9,738	328	6,010	18.3	High school diploma or equivalent	\$40.90
11-3131	Training and Development Managers	319	19	429	22.9	Bachelor's degree	\$51.99
11-9039	Education Administrators, All Other	297	15	346	23.1	Bachelor's degree	\$26.65
11-9041	Architectural and Engineering Managers	2,993	144	3,386	23.6	Bachelor's degree	\$71.08
11-2022	Sales Managers	4,062	169	5,562	32.9	Bachelor's degree	\$56.22
11-9021	Construction Managers	5,840	160	5,458	34.2	Bachelor's degree	\$34.76
11-3111	Compensation and Benefits Managers	176	9	429	47.7	Bachelor's degree	\$61.90
11-1031	Legislators	204	9	470	53.7	Bachelor's degree	\$28.60
11-3011	Administrative Services Managers	1,994	97	5,499	56.5	Bachelor's degree	\$47.88
11-9121	Natural Sciences Managers	1,176	47	2,741	58.3	Bachelor's degree	\$59.62
11-1011	Chief Executives	1,729	87	5,621	64.6	Bachelor's degree	\$72.89
11-9151	Social and Community Service Managers	1,087	59	5,768	97.8	Bachelor's degree	\$31.37
11-3071	Transportation, Storage, and Distribution Managers	1,078	43	5,510	127.4	High school diploma or equivalent	\$46.42
11-3051	Industrial Production Managers	1,006	38	5,313	139.8	Bachelor's degree	\$48.43

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

Training Pipeline: Colorado Central Planning Region - Business & Finance							
SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
13-1011	Agents and Business Managers of Artists, Performers, and Athletes	184	5	0	0.0	Bachelor's degree	\$18.67
13-1021	Buyers and Purchasing Agents, Farm Products	78	4	0	0.0	High school diploma or equivalent	\$28.88
13-1023	Purchasing Agents, Except Wholesale, Retail, and Farm Products	4,704	139	0	0.0	High school diploma or equivalent	\$31.27
13-1031	Claims Adjusters, Examiners, and Investigators	3,144	100	0	0.0	High school diploma or equivalent	\$31.52
13-1081	Logisticians	2,242	95	0	0.0	Bachelor's degree	\$34.74
13-1121	Meeting, Convention, and Event Planners	1,867	85	0	0.0	Bachelor's degree	\$20.44
13-1131	Fundraisers	1,216	56	0	0.0	Bachelor's degree	\$27.24
13-2053	Insurance Underwriters	972	31	0	0.0	Bachelor's degree	\$34.04
13-1199	Business Operations Specialists, All Other	33,011	800	42	0.1	High school diploma or equivalent	\$34.78
13-2071	Credit Counselors	245	17	1	0.1	Bachelor's degree	\$27.92
13-1041	Compliance Officers	3,713	131	37	0.3	Bachelor's degree	\$32.47
13-2011	Accountants and Auditors	28,141	1,364	707	0.5	Bachelor's degree	\$33.76
13-1161	Market Research Analysts and Marketing Specialists	10,865	504	272	0.5	Bachelor's degree	\$32.84
13-1022	Wholesale and Retail Buyers, Except Farm Products	1,318	63	105	1.7	High school diploma or equivalent	\$23.38
13-2052	Personal Financial Advisors	3,673	203	356	1.8	Bachelor's degree	\$35.96
13-2051	Financial Analysts	3,553	221	392	1.8	Bachelor's degree	\$36.01
13-1071	Human Resources Specialists	7,717	278	536	1.9	Bachelor's degree	\$30.14
13-2021	Appraisers and Assessors of Real Estate	1,616	26	56	2.2	Bachelor's degree	\$29.07
13-2072	Loan Officers	3,945	147	356	2.4	Bachelor's degree	\$34.04
13-1151	Training and Development Specialists	3,946	168	429	2.5	Bachelor's degree	\$30.25
13-2099	Financial Specialists, All Other	2,867	71	356	5.0	Bachelor's degree	\$32.21
13-2082	Tax Preparers	1,635	59	394	6.7	High school diploma or equivalent	\$20.74
13-1141	Compensation, Benefits, and Job Analysis Specialists	881	38	429	11.3	Bachelor's degree	\$33.41
13-1111	Management Analysts	9,783	412	5,412	13.1	Bachelor's degree	\$35.51
13-2041	Credit Analysts	1,226	52	947	18.1	Bachelor's degree	\$31.20
13-2031	Budget Analysts	740	44	947	21.5	Bachelor's degree	\$35.98
13-2081	Tax Examiners and Collectors, and Revenue Agents	692	28	671	24.4	Bachelor's degree	\$27.34

13-2061	Financial Examiners	510	22	671	30.2	Bachelor's degree	\$34.97
13-1051	Cost Estimators	3,881	191	5,983	31.3	Bachelor's degree	\$30.49
13-1075	Labor Relations Specialists	464	12	536	46.6	Bachelor's degree	\$31.38

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

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

Training Pipeline: Colorado Central Planning Region - Architecture & Engineering							
SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
17-1022	Surveyors	814	39	0	0.0	Bachelor's degree	\$25.00
17-2121	Marine Engineers and Naval Architects	49	5	0	0.0	Bachelor's degree	\$44.31
17-3012	Electrical and Electronics Drafters	643	21	0	0.0	Associate's degree	\$29.09
17-3013	Mechanical Drafters	831	24	0	0.0	Associate's degree	\$26.18
17-2112	Industrial Engineers	2,352	126	1	0.0	Bachelor's degree	\$43.12
17-2061	Computer Hardware Engineers	2,914	82	46	0.6	Bachelor's degree	\$50.15
17-2081	Environmental Engineers	1,814	86	93	1.1	Bachelor's degree	\$40.48

17-2151	Mining and Geological Engineers, Including Mining Safety Engineers	477	25	31	1.2	Bachelor's degree	\$53.71
17-2051	Civil Engineers	5,687	325	412	1.3	Bachelor's degree	\$37.98
17-2171	Petroleum Engineers	1,662	134	170	1.3	Bachelor's degree	\$74.03
17-3021	Aerospace Engineering and Operations Technicians	297	9	13	1.4	Associate's degree	\$36.33
17-2161	Nuclear Engineers	218	9	12	1.4	Bachelor's degree	\$48.22
17-3027	Mechanical Engineering Technicians	363	22	38	1.7	Associate's degree	\$30.41
17-3025	Environmental Engineering Technicians	468	22	40	1.8	Associate's degree	\$26.29
17-1011	Architects, Except Landscape and Naval	2,667	141	254	1.8	Bachelor's degree	\$33.53
17-2141	Mechanical Engineers	5,578	299	541	1.8	Bachelor's degree	\$40.38
17-3031	Surveying and Mapping Technicians	1,094	53	97	1.8	High school diploma or equivalent	\$23.52
17-2011	Aerospace Engineers	2,196	91	177	2.0	Bachelor's degree	\$57.82
17-3024	Electro-Mechanical Technicians	111	7	13	2.0	Associate's degree	\$26.42
17-2031	Biomedical Engineers	473	28	61	2.2	Bachelor's degree	\$45.10
17-2071	Electrical Engineers	3,097	126	346	2.7	Bachelor's degree	\$43.43
17-2131	Materials Engineers	551	26	78	3.1	Bachelor's degree	\$55.26
17-1021	Cartographers and Photogrammetrists	571	27	84	3.1	Bachelor's degree	\$34.02
17-2072	Electronics Engineers, Except Computer	4,124	122	398	3.3	Bachelor's degree	\$46.68
17-3026	Industrial Engineering Technicians	341	14	51	3.6	Associate's degree	\$26.86
17-3023	Electrical and Electronics Engineering Technicians	1,623	57	206	3.6	Associate's degree	\$29.07
17-3011	Architectural and Civil Drafters	1,549	49	194	3.9	Associate's degree	\$25.55
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	336	18	93	5.2	Bachelor's degree	\$47.84
17-3022	Civil Engineering Technicians	782	35	230	6.5	Associate's degree	\$24.20
17-3029	Engineering Technicians, Except Drafters, All Other	1,260	47	341	7.2	Associate's degree	\$34.49
17-1012	Landscape Architects	497	24	211	8.9	Bachelor's degree	\$33.65
17-2041	Chemical Engineers	561	27	261	9.6	Bachelor's degree	\$43.23
17-2199	Engineers, All Other	1,527	60	824	13.7	Bachelor's degree	\$46.66
17-3019	Drafters, All Other	247	9	135	14.6	Associate's degree	\$27.07

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

Training Pipeline: Colorado Central Planning Region - Life, Physical & Social Science							
SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
19-4021	Biological Technicians	2,350	112	0	0.0	Bachelor's degree	\$21.22

19-4031	Chemical Technicians	661	34	0	0.0	Associate's degree	\$19.51
19-4041	Geological and Petroleum Technicians	530	42	0	0.0	Associate's degree	\$32.22
19-4051	Nuclear Technicians	60	3	0	0.0	Associate's degree	\$40.82
19-2032	Materials Scientists	91	5	1	0.2	Bachelor's degree	\$46.07
19-4092	Forensic Science Technicians	235	13	3	0.2	Bachelor's degree	\$30.41
19-4099	Life, Physical, and Social Science Technicians, All Other	669	48	16	0.3	Associate's degree	\$20.80
19-2021	Atmospheric and Space Scientists	1,574	61	48	0.8	Bachelor's degree	\$44.17
19-2042	Geoscientists, Except Hydrologists and Geographers	2,336	134	149	1.1	Bachelor's degree	\$50.46
19-2099	Physical Scientists, All Other	490	17	21	1.3	Bachelor's degree	\$48.41
19-1041	Epidemiologists	228	8	10	1.3	Master's degree	\$35.36
19-3051	Urban and Regional Planners	560	37	72	1.9	Master's degree	\$34.79
19-2041	Environmental Scientists and Specialists, Including Health	2,625	138	288	2.1	Bachelor's degree	\$36.42
19-1012	Food Scientists and Technologists	195	13	38	2.9	Bachelor's degree	\$33.71
19-2031	Chemists	1,622	69	244	3.6	Bachelor's degree	\$35.64
19-1021	Biochemists and Biophysicists	498	32	153	4.8	Doctoral or professional degree	\$30.53
19-1022	Microbiologists	447	21	101	4.9	Bachelor's degree	\$29.13
19-4061	Social Science Research Assistants	286	21	114	5.6	Associate's degree	\$20.03
19-1013	Soil and Plant Scientists	373	20	134	6.7	Bachelor's degree	\$22.85
19-4091	Environmental Science and Protection Technicians, Including Health	642	45	304	6.8	Associate's degree	\$20.05
19-4011	Agricultural and Food Science Technicians	148	10	85	8.3	Associate's degree	\$17.78
19-2043	Hydrologists	349	16	131	8.3	Master's degree	\$46.25
19-2012	Physicists	568	24	208	8.6	Doctoral or professional degree	\$42.40
19-1042	Medical Scientists, Except Epidemiologists	1,360	71	687	9.6	Doctoral or professional degree	\$28.67
19-1031	Conservation Scientists	827	31	396	12.8	Bachelor's degree	\$29.86
19-3031	Clinical, Counseling, and School Psychologists	2,804	127	2,057	16.2	Doctoral or professional degree	\$29.53
19-4093	Forest and Conservation Technicians	273	13	208	16.3	Associate's degree	\$16.94
19-1023	Zoologists and Wildlife Biologists	300	15	319	21.6	Bachelor's degree	\$27.62
19-3099	Social Scientists and Related Workers, All Other	560	13	289	22.2	Bachelor's degree	\$35.08
19-1032	Foresters	179	9	237	27.9	Bachelor's degree	\$25.82
19-3011	Economists	291	16	780	48.0	Master's degree	\$43.17
19-3091	Anthropologists and Archeologists	157	6	330	60.0	Master's degree	\$26.38
19-3022	Survey Researchers	104	10	711	74.8	Master's degree	\$25.52
19-1029	Biological Scientists, All Other	389	18	1,616	92.3	Bachelor's degree	\$37.50
19-3039	Psychologists, All Other	255	12	2,065	172.1	Master's degree	\$38.26
19-1099	Life Scientists, All Other	65	4	1,044	278.4	Bachelor's degree	\$26.77

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

Training Pipeline: Colorado Central Planning Region - Community & Social Service

SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
21-2099	Religious Workers, All Other	642	28	8	0.3	Bachelor's degree	\$17.65
21-1093	Social and Human Service Assistants	1,811	130	98	0.8	High school diploma or equivalent	\$14.95
21-2021	Directors, Religious Activities and Education	1,268	72	79	1.1	Bachelor's degree	\$24.94
21-1022	Healthcare Social Workers	1,635	87	98	1.1	Master's degree	\$26.37
21-1014	Mental Health Counselors	3,047	120	147	1.2	Master's degree	\$19.52
21-1023	Mental Health and Substance Abuse Social Workers	1,364	65	98	1.5	Bachelor's degree	\$19.84
21-1012	Educational, Guidance, School, and Vocational Counselors	2,981	111	188	1.7	Master's degree	\$22.29
21-1011	Substance Abuse and Behavioral Disorder Counselors	1,139	57	98	1.7	High school diploma or equivalent	\$19.40
21-2011	Clergy	2,443	103	184	1.8	Bachelor's degree	\$23.82
21-1015	Rehabilitation Counselors	1,014	40	98	2.4	Master's degree	\$16.97
21-1091	Health Educators	477	28	98	3.5	Bachelor's degree	\$26.86
21-1021	Child, Family, and School Social Workers	3,444	143	662	4.6	Bachelor's degree	\$21.51
21-1099	Community and Social Service Specialists, All Other	1,703	77	475	6.1	Master's degree	\$19.86
21-1092	Probation Officers and Correctional Treatment Specialists	1,307	43	662	15.6	Bachelor's degree	\$25.10
21-1094	Community Health Workers	340	25	475	19.2	High school diploma or equivalent	\$20.72
21-1029	Social Workers, All Other	836	28	684	24.4	Bachelor's degree	\$21.30
21-1013	Marriage and Family Therapists	400	19	730	39.5	Master's degree	\$20.32
21-1019	Counselors, All Other	289	13	668	52.4	Master's degree	\$30.20

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

Training Pipeline: Colorado Central Planning Region - Legal

SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
23-2011	Paralegals and Legal Assistants	4,869	228	212	0.9	Associate's degree	\$25.12
23-1011	Lawyers	12,558	459	589	1.3	Doctoral or professional degree	\$51.95
23-2091	Court Reporters	385	11	21	1.9	Postsecondary non-degree award	\$34.51
23-2093	Title Examiners, Abstractors, and Searchers	1,434	45	212	4.7	High school diploma or equivalent	\$23.82

23-2099	Legal Support Workers, All Other	1,001	28	197	7.1	High school diploma or equivalent	\$25.48
23-1023	Judges, Magistrate Judges, and Magistrates	310	8	507	61.5	Doctoral or professional degree	\$64.20
23-1012	Judicial Law Clerks	171	5	478	100.6	Doctoral or professional degree	\$22.33
23-1022	Arbitrators, Mediators, and Conciliators	113	5	529	117.6	Bachelor's degree	\$39.60
23-1021	Administrative Law Judges, Adjudicators, and Hearing Officers	185	4	507	119.3	Doctoral or professional degree	\$50.39

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

Training Pipeline: Colorado Central Planning Region - Education, Training & Library							
SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
25-2023	Career/Technical Education Teachers, Middle School	131	5	0	0.0	Bachelor's degree	\$27.06
25-2032	Career/Technical Education Teachers, Secondary School	517	26	0	0.0	Bachelor's degree	\$28.89
25-3021	Self-Enrichment Education Teachers	5,096	205	0	0.0	High school diploma or equivalent	\$17.20
25-4031	Library Technicians	1,749	125	0	0.0	Postsecondary non-degree award	\$17.22
25-9041	Teacher Assistants	14,053	574	5	0.0	Some college, no degree	\$13.03
25-9099	Education, Training, and Library Workers, All Other	1,415	34	13	0.4	Bachelor's degree	\$15.29
25-3098	Substitute Teachers	1,381	99	89	0.9	Bachelor's degree	\$13.62
25-2052	Special Education Teachers, Kindergarten and Elementary School	3,237	98	91	0.9	Bachelor's degree	\$25.54
25-2021	Elementary School Teachers, Except Special Education	16,318	732	695	0.9	Bachelor's degree	\$24.59
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	10,916	480	708	1.5	Bachelor's degree	\$26.55
25-4021	Librarians	1,547	58	89	1.5	Master's degree	\$30.20
25-3099	Teachers and Instructors, All Other	3,569	141	237	1.7	Bachelor's degree	\$16.99
25-2022	Middle School Teachers, Except Special and Career/Technical Education	8,772	383	688	1.8	Bachelor's degree	\$24.68
25-2054	Special Education Teachers, Secondary School	1,454	47	90	1.9	Bachelor's degree	\$27.57
25-2053	Special Education Teachers, Middle School	1,026	34	90	2.7	Bachelor's degree	\$25.64
25-2011	Preschool Teachers, Except Special Education	5,597	268	851	3.2	Associate's degree	\$13.71
25-3011	Adult Basic and Secondary Education and Literacy Teachers and Instructors	789	27	89	3.3	Bachelor's degree	\$20.20
25-1099	Postsecondary Teachers	21,905	793	4,089	5.2	Doctoral or professional degree	\$30.92
25-2051	Special Education Teachers, Preschool	517	17	91	5.4	Bachelor's degree	\$26.39

25-2012	Kindergarten Teachers, Except Special Education	2,713	130	799	6.2	Bachelor's degree	\$21.95
25-9031	Instructional Coordinators	2,531	65	432	6.6	Master's degree	\$32.45
25-4012	Curators	224	10	82	8.6	Master's degree	\$22.20
25-4013	Museum Technicians and Conservators	218	9	82	9.4	Bachelor's degree	\$17.54
25-2059	Special Education Teachers, All Other	104	7	209	28.8	Bachelor's degree	\$26.15
25-4011	Archivists	66	3	89	29.7	Master's degree	\$24.65
25-9021	Farm and Home Management Advisors	144	4	297	84.9	Master's degree	\$23.41

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

Training Pipeline: Colorado Central Planning Region - Arts, Design, Entertainment, Sports & Media							
SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
27-1026	Merchandise Displayers and Window Trimmers	1,229	55	1	0.0	High school diploma or equivalent	\$13.55
27-4099	Media and Communication Equipment Workers, All Other	645	11	1	0.1	High school diploma or equivalent	\$21.38
27-1023	Floral Designers	675	21	3	0.1	High school diploma or equivalent	\$11.95
27-4014	Sound Engineering Technicians	279	7	2	0.3	Postsecondary non-degree award	\$27.19
27-4011	Audio and Video Equipment Technicians	1,225	42	18	0.4	Postsecondary non-degree award	\$21.51
27-4021	Photographers	2,767	165	97	0.6	High school diploma or equivalent	\$12.22
27-2023	Umpires, Referees, and Other Sports Officials	743	29	22	0.8	High school diploma or equivalent	\$11.30
27-2022	Coaches and Scouts	3,939	213	207	1.0	Bachelor's degree	\$13.07
27-3099	Media and Communication Workers, All Other	449	12	13	1.1	High school diploma or equivalent	\$26.79
27-3042	Technical Writers	1,187	56	61	1.1	Bachelor's degree	\$32.32
27-1025	Interior Designers	1,885	94	105	1.1	Bachelor's degree	\$21.21
27-1021	Commercial and Industrial Designers	625	31	41	1.3	Bachelor's degree	\$26.15
27-1024	Graphic Designers	4,842	207	303	1.5	Bachelor's degree	\$21.02
27-4012	Broadcast Technicians	482	11	18	1.6	Associate's degree	\$21.55
27-2031	Dancers	498	18	29	1.6	High school diploma or equivalent	\$11.94
27-1012	Craft Artists	419	12	20	1.7	High school diploma or equivalent	\$7.73
27-2032	Choreographers	121	9	29	3.4	High school diploma or equivalent	\$20.14
27-1022	Fashion Designers	259	14	47	3.4	Bachelor's degree	\$25.39
27-2042	Musicians and Singers	2,377	104	417	4.0	High school diploma or equivalent	\$19.86
27-2041	Music Directors and Composers	674	31	130	4.2	Bachelor's degree	\$21.95
27-1011	Art Directors	909	31	142	4.6	Bachelor's degree	\$28.83
27-3091	Interpreters and Translators	1,628	114	526	4.6	Bachelor's degree	\$20.29
27-1029	Designers, All Other	339	14	66	4.8	Bachelor's degree	\$20.71
27-2011	Actors	416	19	127	6.6	Some college, no degree	\$13.45

27-3031	Public Relations Specialists	3,836	121	1,017	8.4	Bachelor's degree	\$24.40
27-2099	Entertainers and Performers, Sports and Related Workers, All Other	582	14	127	8.9	High school diploma or equivalent	\$17.17
27-1027	Set and Exhibit Designers	112	5	43	9.6	Bachelor's degree	\$18.56
27-2012	Producers and Directors	1,127	44	423	9.6	Bachelor's degree	\$25.73
27-4031	Camera Operators, Television, Video, and Motion Picture	267	4	42	10.5	Bachelor's degree	\$26.04
27-1014	Multimedia Artists and Animators	690	24	332	13.8	Bachelor's degree	\$21.76
27-3041	Editors	1,487	39	577	14.9	Bachelor's degree	\$27.46
27-3011	Radio and Television Announcers	259	9	139	15.0	Bachelor's degree	\$21.29
27-2021	Athletes and Sports Competitors	322	12	205	16.7	High school diploma or equivalent	\$26.28
27-1013	Fine Artists, Including Painters, Sculptors, and Illustrators	750	24	466	19.6	High school diploma or equivalent	\$9.65
27-3022	Reporters and Correspondents	532	17	447	25.9	Bachelor's degree	\$18.76
27-3043	Writers and Authors	1,894	56	1,561	28.0	Bachelor's degree	\$20.20
27-4032	Film and Video Editors	226	3	156	56.7	Bachelor's degree	\$24.48
27-3012	Public Address System and Other Announcers	263	10	946	94.6	High school diploma or equivalent	\$14.76
27-1019	Artists and Related Workers, All Other	169	6	615	102.5	High school diploma or equivalent	\$17.08

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

Training Pipeline: Colorado Central Planning Region - Healthcare Practitioner							
SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
29-1066	Psychiatrists	317	15	0	0.0	Doctoral or professional degree	\$100.24
29-1011	Chiropractors	838	31	3	0.1	Doctoral or professional degree	\$24.50
29-1041	Optometrists	599	31	3	0.1	Doctoral or professional degree	\$56.27
29-1081	Podiatrists	250	22	3	0.1	Doctoral or professional degree	\$26.31
29-1125	Recreational Therapists	155	8	3	0.4	Bachelor's degree	\$22.91
29-1122	Occupational Therapists	2,159	88	47	0.5	Master's degree	\$38.80
29-1123	Physical Therapists	3,450	198	179	0.9	Doctoral or professional degree	\$35.60
29-1071	Physician Assistants	1,652	80	82	1.0	Master's degree	\$45.61
29-1141	Registered Nurses	32,618	1,455	1,812	1.2	Associate's degree	\$33.93
29-1127	Speech-Language Pathologists	2,312	91	116	1.3	Master's degree	\$39.40
29-1171	Nurse Practitioners	1,588	85	112	1.3	Master's degree	\$49.61
29-1124	Radiation Therapists	205	11	14	1.3	Associate's degree	\$43.60
29-1021	Dentists, General	1,857	80	118	1.5	Doctoral or professional degree	\$72.66
29-1126	Respiratory Therapists	1,277	61	102	1.7	Associate's degree	\$28.30
29-1051	Pharmacists	3,806	167	284	1.7	Doctoral or professional degree	\$58.46

29-1131	Veterinarians	1,409	74	160	2.2	Doctoral or professional degree	\$37.82
29-1069	Physicians and Surgeons, All Other	2,312	120	309	2.6	Doctoral or professional degree	\$102.88
29-1151	Nurse Anesthetists	106	11	40	3.6	Master's degree	\$76.18
29-1199	Health Diagnosing and Treating Practitioners, All Other	1,066	57	270	4.8	Master's degree	\$20.39
29-1062	Family and General Practitioners	1,945	72	352	4.9	Doctoral or professional degree	\$87.34
29-1067	Surgeons	746	31	185	6.0	Doctoral or professional degree	\$97.61
29-1023	Orthodontists	85	4	25	6.7	Doctoral or professional degree	\$92.07
29-1031	Dietitians and Nutritionists	840	38	273	7.1	Bachelor's degree	\$26.93
29-1022	Oral and Maxillofacial Surgeons	78	4	25	7.1	Doctoral or professional degree	\$106.87
29-1063	Internists, General	506	21	148	7.2	Doctoral or professional degree	\$104.93
29-1161	Nurse Midwives	112	6	40	7.3	Master's degree	\$47.29
29-1181	Audiologists	252	13	119	9.2	Doctoral or professional degree	\$38.95
29-1064	Obstetricians and Gynecologists	311	12	148	12.9	Doctoral or professional degree	\$90.82
29-1061	Anesthesiologists	196	11	156	14.9	Doctoral or professional degree	\$96.50
29-1065	Pediatricians, General	265	12	202	17.6	Doctoral or professional degree	\$83.00
29-1129	Therapists, All Other	299	9	306	36.0	Bachelor's degree	\$23.19
29-1128	Exercise Physiologists	229	5	303	63.8	Bachelor's degree	\$18.74

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

Training Pipeline: Colorado Central Planning Region - Healthcare Technical							
SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
29-2011	Medical and Clinical Laboratory Technologists	2,022	95	3	0.0	Bachelor's degree	\$29.59
29-2031	Cardiovascular Technologists and Technicians	472	24	3	0.1	Associate's degree	\$31.77
29-2053	Psychiatric Technicians	540	18	3	0.2	Postsecondary non-degree award	\$17.51
29-2012	Medical and Clinical Laboratory Technicians	1,531	101	17	0.2	Associate's degree	\$19.57
29-2081	Opticians, Dispensing	978	53	11	0.2	High school diploma or equivalent	\$18.02
29-2033	Nuclear Medicine Technologists	231	8	3	0.4	Associate's degree	\$39.03
29-2021	Dental Hygienists	3,273	176	70	0.4	Associate's degree	\$40.18
29-2061	Licensed Practical and Licensed Vocational Nurses	4,098	272	129	0.5	Postsecondary non-degree award	\$23.02
29-2091	Orthotists and Prosthetists	83	6	3	0.5	Master's degree	\$29.01
29-2055	Surgical Technologists	1,208	50	40	0.8	Postsecondary non-degree award	\$25.47
29-2071	Medical Records and Health Information Technicians	1,730	99	88	0.9	Postsecondary non-degree award	\$22.25
29-2032	Diagnostic Medical Sonographers	670	38	40	1.1	Associate's degree	\$37.53
29-9011	Occupational Health and Safety Specialists	1,045	50	69	1.4	Bachelor's degree	\$36.88

29-2057	Ophthalmic Medical Technicians	541	17	27	1.6	Postsecondary non-degree award	\$20.70
29-2052	Pharmacy Technicians	3,115	112	190	1.7	High school diploma or equivalent	\$16.25
29-2034	Radiologic Technologists	2,174	84	160	1.9	Associate's degree	\$29.16
29-9091	Athletic Trainers	251	15	40	2.7	Bachelor's degree	\$18.20
29-2099	Health Technologists and Technicians, All Other	1,816	68	229	3.4	High school diploma or equivalent	\$18.03
29-2056	Veterinary Technologists and Technicians	2,412	96	416	4.3	Associate's degree	\$14.59
29-9012	Occupational Health and Safety Technicians	152	9	69	7.9	High school diploma or equivalent	\$27.39
29-2041	Emergency Medical Technicians and Paramedics	2,032	87	749	8.6	Postsecondary non-degree award	\$17.98
29-9099	Healthcare Practitioners and Technical Workers, All Other	406	24	216	8.9	Bachelor's degree	\$26.91
29-2051	Dietetic Technicians	317	12	104	9.0	Associate's degree	\$15.93
29-2035	Magnetic Resonance Imaging Technologists	376	15	157	10.5	Associate's degree	\$35.64

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

Training Pipeline: Colorado Central Planning Region - Healthcare Support							
SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
31-9099	Healthcare Support Workers, All Other	1,334	54	3	0.1	High school diploma or equivalent	\$14.58
31-1011	Home Health Aides	15,467	830	135	0.2	Less than high school	\$12.33
31-1013	Psychiatric Aides	184	16	3	0.2	High school diploma or equivalent	\$13.68
31-9094	Medical Transcriptionists	1,052	47	12	0.3	Postsecondary non-degree award	\$17.35
31-2011	Occupational Therapy Assistants	473	32	27	0.8	Associate's degree	\$26.81
31-9097	Phlebotomists	1,507	74	93	1.3	Postsecondary non-degree award	\$16.81
31-2021	Physical Therapist Assistants	734	53	75	1.4	Associate's degree	\$25.73
31-1014	Nursing Assistants	12,593	624	1,348	2.2	Postsecondary non-degree award	\$13.99
31-9091	Dental Assistants	4,781	205	455	2.2	Postsecondary non-degree award	\$18.70
31-2022	Physical Therapist Aides	251	26	75	2.9	High school diploma or equivalent	\$14.21
31-9011	Massage Therapists	4,684	221	740	3.4	Postsecondary non-degree award	\$16.47
31-9092	Medical Assistants	7,084	355	1,298	3.7	Postsecondary non-degree award	\$16.37
31-2012	Occupational Therapy Aides	39	5	27	5.4	High school diploma or equivalent	\$14.06
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	628	35	416	12.0	High school diploma or equivalent	\$11.87
31-9093	Medical Equipment Preparers	655	30	937	31.8	High school diploma or equivalent	\$17.62
31-9095	Pharmacy Aides	83	6	190	33.0	High school diploma or equivalent	\$15.42
31-1015	Orderlies	376	19	1,348	70.9	High school diploma or equivalent	\$12.99

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

Training Pipeline: Colorado Central Planning Region - Protective Services							
SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
33-1011	First-Line Supervisors of Correctional Officers	241	13	0	0.0	High school diploma or equivalent	\$36.93
33-3041	Parking Enforcement Workers	101	5	0	0.0	High school diploma or equivalent	\$17.71
33-9011	Animal Control Workers	154	6	0	0.0	High school diploma or equivalent	\$22.07
33-9091	Crossing Guards	603	16	0	0.0	High school diploma or equivalent	\$12.45
33-9092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	2,869	243	0	0.0	High school diploma or equivalent	\$9.46
33-9093	Transportation Security Screeners	842	31	0	0.0	High school diploma or equivalent	\$18.38
33-9032	Security Guards	10,888	491	33	0.1	High school diploma or equivalent	\$13.44
33-9099	Protective Service Workers, All Other	2,220	188	33	0.2	High school diploma or equivalent	\$14.72
33-3012	Correctional Officers and Jailers	2,559	112	41	0.4	High school diploma or equivalent	\$24.46
33-2011	Firefighters	2,707	108	57	0.5	Postsecondary non-degree award	\$28.27
33-1021	First-Line Supervisors of Fire Fighting and Prevention Workers	546	30	17	0.6	Postsecondary non-degree award	\$40.60
33-3051	Police and Sheriff's Patrol Officers	6,447	288	183	0.6	High school diploma or equivalent	\$34.14
33-1099	First-Line Supervisors of Protective Service Workers, All Other	804	39	33	0.8	High school diploma or equivalent	\$25.68
33-3021	Detectives and Criminal Investigators	1,260	39	183	4.7	High school diploma or equivalent	\$40.98
33-9021	Private Detectives and Investigators	521	27	161	5.9	High school diploma or equivalent	\$22.39
33-1012	First-Line Supervisors of Police and Detectives	871	37	553	15.2	High school diploma or equivalent	\$49.11
33-3011	Bailiffs	50	3	161	64.4	High school diploma or equivalent	\$19.82

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

Training Pipeline: Colorado Central Planning Region - Food Preparation & Serving							
SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
35-2011	Cooks, Fast Food	3,192	162	0	0.0	Less than high school	\$9.77
35-2015	Cooks, Short Order	1,262	53	0	0.0	Less than high school	\$10.71
35-2021	Food Preparation Workers	8,659	408	0	0.0	Less than high school	\$10.22
35-3011	Bartenders	7,362	429	0	0.0	Less than high school	\$9.16
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	48,839	3,183	0	0.0	Less than high school	\$9.09
35-3022	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	3,147	270	0	0.0	Less than high school	\$9.45

35-3031	Waiters and Waitresses	36,423	2,424	0	0.0	Less than high school	\$9.07
35-3041	Food Servers, Nonrestaurant	5,054	242	0	0.0	Less than high school	\$10.44
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	4,982	320	0	0.0	Less than high school	\$9.08
35-9021	Dishwashers	5,430	357	0	0.0	Less than high school	\$9.50
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	7,362	684	0	0.0	Less than high school	\$9.42
35-9099	Food Preparation and Serving Related Workers, All Other	807	57	0	0.0	Less than high school	\$9.79
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	10,410	583	175	0.3	High school diploma or equivalent	\$16.28
35-2012	Cooks, Institution and Cafeteria	3,746	164	84	0.5	Less than high school	\$12.99
35-2014	Cooks, Restaurant	17,628	795	572	0.7	Less than high school	\$11.14
35-1011	Chefs and Head Cooks	1,451	46	572	12.4	High school diploma or equivalent	\$19.64
35-2019	Cooks, All Other	176	7	572	84.7	Less than high school	\$10.76

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

Training Pipeline: Colorado Central Planning Region - Building & Grounds Cleaning & Maintenance							
SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	1,734	40	0	0.0	High school diploma or equivalent	\$19.90
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	30,171	1,271	0	0.0	Less than high school	\$11.16
37-2012	Maids and Housekeeping Cleaners	18,030	733	0	0.0	Less than high school	\$8.97
37-2019	Building Cleaning Workers, All Other	205	10	0	0.0	Less than high school	\$12.40
37-2021	Pest Control Workers	389	26	0	0.0	High school diploma or equivalent	\$14.08
37-3011	Landscaping and Groundskeeping Workers	16,105	623	0	0.0	Less than high school	\$11.80
37-3012	Pesticide Handlers, Sprayers, and Applicators, Vegetation	190	9	0	0.0	High school diploma or equivalent	\$14.00
37-3013	Tree Trimmers and Pruners	275	14	0	0.0	High school diploma or equivalent	\$12.44
37-3019	Grounds Maintenance Workers, All Other	286	13	85	6.4	Less than high school	\$12.80
37-1011	First-Line Supervisors of Housekeeping and Janitorial Workers	2,147	96	4,134	43.2	High school diploma or equivalent	\$16.30

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

Training Pipeline: Colorado Central Planning Region - Personal Care & Service

SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
39-2021	Nonfarm Animal Caretakers	3,445	108	0	0.0	Less than high school	\$9.63
39-3011	Gaming Dealers	769	31	0	0.0	High school diploma or equivalent	\$8.75
39-3019	Gaming Service Workers, All Other	78	4	0	0.0	High school diploma or equivalent	\$14.25
39-3031	Ushers, Lobby Attendants, and Ticket Takers	3,709	229	0	0.0	Less than high school	\$9.72
39-3091	Amusement and Recreation Attendants	3,562	245	0	0.0	Less than high school	\$9.37
39-3093	Locker Room, Coatroom, and Dressing Room Attendants	209	15	0	0.0	High school diploma or equivalent	\$10.62
39-3099	Entertainment Attendants and Related Workers, All Other	163	13	0	0.0	High school diploma or equivalent	\$12.83
39-6011	Baggage Porters and Bellhops	507	19	0	0.0	High school diploma or equivalent	\$9.22
39-6012	Concierges	260	16	0	0.0	High school diploma or equivalent	\$13.61
39-7011	Tour Guides and Escorts	538	37	0	0.0	High school diploma or equivalent	\$12.70
39-7012	Travel Guides	75	5	0	0.0	High school diploma or equivalent	\$16.75
39-9099	Personal Care and Service Workers, All Other	1,217	49	0	0.0	High school diploma or equivalent	\$10.35
39-9021	Personal Care Aides	17,502	859	154	0.2	Less than high school	\$10.16
39-9011	Childcare Workers	14,521	659	216	0.3	High school diploma or equivalent	\$9.19
39-9041	Residential Advisors	481	44	16	0.4	High school diploma or equivalent	\$13.52
39-9031	Fitness Trainers and Aerobics Instructors	6,278	241	207	0.9	High school diploma or equivalent	\$18.86
39-9032	Recreation Workers	4,941	143	193	1.4	Bachelor's degree	\$11.77
39-5012	Hairdressers, Hairstylists, and Cosmetologists	9,275	500	962	1.9	Postsecondary non-degree award	\$11.39
39-5011	Barbers	707	37	120	3.3	Postsecondary non-degree award	\$13.98
39-2011	Animal Trainers	231	13	79	6.3	High school diploma or equivalent	\$11.13
39-4031	Morticians, Undertakers, and Funeral Directors	161	6	40	6.7	Associate's degree	\$19.80
39-4021	Funeral Attendants	110	4	40	11.4	High school diploma or equivalent	\$13.61
39-5093	Shampooers	197	5	57	12.0	Less than high school	\$7.73
39-1012	Slot Supervisors	140	4	90	24.0	High school diploma or equivalent	\$14.89
39-5092	Manicurists and Pedicurists	1,255	38	1,013	27.0	Postsecondary non-degree award	\$10.80
39-5094	Skincare Specialists	998	45	1,265	28.3	Postsecondary non-degree award	\$12.60
39-1021	First-Line Supervisors of Personal Service Workers	2,695	97	4,078	42.1	High school diploma or equivalent	\$17.11
39-1011	Gaming Supervisors	270	12	4,078	332.9	High school diploma or equivalent	\$17.80

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

Training Pipeline: Colorado Central Planning Region - Sales & Related

SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
41-2021	Counter and Rental Clerks	8,408	279	0	0.0	Less than high school	\$11.56
41-2022	Parts Salespersons	2,419	95	0	0.0	Less than high school	\$14.70
41-3021	Insurance Sales Agents	9,841	422	0	0.0	High school diploma or equivalent	\$21.62
41-3031	Securities, Commodities, and Financial Services Sales Agents	7,575	297	0	0.0	Bachelor's degree	\$22.68
41-3041	Travel Agents	881	14	0	0.0	High school diploma or equivalent	\$18.24
41-9012	Models	112	6	0	0.0	Less than high school	\$15.72
41-9031	Sales Engineers	1,770	50	0	0.0	Bachelor's degree	\$48.47
41-9041	Telemarketers	4,813	263	0	0.0	Less than high school	\$13.44
41-9091	Door-to-Door Sales Workers, News and Street Vendors, and Related Workers	1,071	10	0	0.0	High school diploma or equivalent	\$7.42
41-2011	Cashiers	33,238	1,876	3	0.0	Less than high school	\$9.59
41-2031	Retail Salespersons	56,064	2,701	6	0.0	Less than high school	\$11.03
41-3011	Advertising Sales Agents	2,310	85	1	0.0	High school diploma or equivalent	\$24.52
41-3099	Sales Representatives, Services, All Other	17,970	767	45	0.1	High school diploma or equivalent	\$26.12
41-9011	Demonstrators and Product Promoters	672	42	3	0.1	High school diploma or equivalent	\$14.15
41-1011	First-Line Supervisors of Retail Sales Workers	13,884	501	48	0.1	High school diploma or equivalent	\$17.58
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	23,743	723	70	0.1	High school diploma or equivalent	\$28.08
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	5,646	193	42	0.2	Bachelor's degree	\$40.22
41-1012	First-Line Supervisors of Non-Retail Sales Workers	4,481	103	42	0.4	High school diploma or equivalent	\$32.17
41-9099	Sales and Related Workers, All Other	2,879	102	45	0.4	High school diploma or equivalent	\$18.19
41-9022	Real Estate Sales Agents	5,713	111	56	0.5	High school diploma or equivalent	\$21.82
41-2012	Gaming Change Persons and Booth Cashiers	67	3	3	1.1	High school diploma or equivalent	\$12.75
41-9021	Real Estate Brokers	1,896	40	56	1.4	High school diploma or equivalent	\$28.58

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

Training Pipeline: Colorado Central Planning Region - Office & Administrative Support							
SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings

43-2011	Switchboard Operators, Including Answering Service	1,284	37	0	0.0	High school diploma or equivalent	\$12.87
43-2021	Telephone Operators	195	9	0	0.0	High school diploma or equivalent	\$18.33
43-3061	Procurement Clerks	788	42	0	0.0	High school diploma or equivalent	\$22.22
43-3099	Financial Clerks, All Other	1,076	46	0	0.0	High school diploma or equivalent	\$19.97
43-4021	Correspondence Clerks	69	4	0	0.0	High school diploma or equivalent	\$20.47
43-4031	Court, Municipal, and License Clerks	2,551	75	0	0.0	High school diploma or equivalent	\$19.26
43-4051	Customer Service Representatives	33,188	1,798	0	0.0	High school diploma or equivalent	\$15.88
43-4071	File Clerks	1,707	55	0	0.0	High school diploma or equivalent	\$14.86
43-4081	Hotel, Motel, and Resort Desk Clerks	2,793	164	0	0.0	High school diploma or equivalent	\$10.62
43-4111	Interviewers, Except Eligibility and Loan	2,880	123	0	0.0	High school diploma or equivalent	\$15.86
43-4121	Library Assistants, Clerical	1,343	91	0	0.0	High school diploma or equivalent	\$11.77
43-4151	Order Clerks	1,955	71	0	0.0	High school diploma or equivalent	\$15.78
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	2,005	75	0	0.0	High school diploma or equivalent	\$20.04
43-4171	Receptionists and Information Clerks	15,548	694	0	0.0	High school diploma or equivalent	\$14.34
43-4181	Reservation and Transportation Ticket Agents and Travel Clerks	2,046	57	0	0.0	High school diploma or equivalent	\$13.82
43-4199	Information and Record Clerks, All Other	5,850	139	0	0.0	High school diploma or equivalent	\$19.40
43-5011	Cargo and Freight Agents	558	35	0	0.0	High school diploma or equivalent	\$19.87
43-5021	Couriers and Messengers	937	15	0	0.0	High school diploma or equivalent	\$13.74
43-5031	Police, Fire, and Ambulance Dispatchers	1,247	51	0	0.0	High school diploma or equivalent	\$22.88
43-5032	Dispatchers, Except Police, Fire, and Ambulance	2,206	104	0	0.0	High school diploma or equivalent	\$19.47
43-5041	Meter Readers, Utilities	275	7	0	0.0	High school diploma or equivalent	\$24.22
43-5051	Postal Service Clerks	600	9	0	0.0	High school diploma or equivalent	\$26.81
43-5052	Postal Service Mail Carriers	3,004	102	0	0.0	High school diploma or equivalent	\$27.58
43-5053	Postal Service Mail Sorters, Processors, and Processing Machine Operators	1,858	13	0	0.0	High school diploma or equivalent	\$26.30
43-5061	Production, Planning, and Expediting Clerks	2,345	112	0	0.0	High school diploma or equivalent	\$23.07
43-5071	Shipping, Receiving, and Traffic Clerks	7,599	271	0	0.0	High school diploma or equivalent	\$14.59
43-5111	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	339	16	0	0.0	High school diploma or equivalent	\$16.76
43-6012	Legal Secretaries	2,301	72	0	0.0	High school diploma or equivalent	\$23.42
43-9011	Computer Operators	445	8	0	0.0	High school diploma or equivalent	\$23.57
43-9022	Word Processors and Typists	575	4	0	0.0	High school diploma or equivalent	\$18.01
43-9031	Desktop Publishers	254	5	0	0.0	Associate's degree	\$19.74
43-9041	Insurance Claims and Policy Processing Clerks	1,521	82	0	0.0	High school diploma or equivalent	\$20.70
43-9051	Mail Clerks and Mail Machine Operators, Except Postal Service	956	28	0	0.0	High school diploma or equivalent	\$15.42
43-9061	Office Clerks, General	27,530	1,169	0	0.0	High school diploma or equivalent	\$16.56

43-9071	Office Machine Operators, Except Computer	742	21	0	0.0	High school diploma or equivalent	\$15.18
43-9081	Proofreaders and Copy Markers	110	3	0	0.0	Bachelor's degree	\$18.29
43-9199	Office and Administrative Support Workers, All Other	3,071	151	0	0.0	High school diploma or equivalent	\$16.76
43-5081	Stock Clerks and Order Fillers	22,984	881	3	0.0	Less than high school	\$12.43
43-3071	Tellers	4,722	291	1	0.0	High school diploma or equivalent	\$13.09
43-3011	Bill and Account Collectors	3,299	183	1	0.0	High school diploma or equivalent	\$17.19
43-4131	Loan Interviewers and Clerks	2,830	77	1	0.0	High school diploma or equivalent	\$21.50
43-4061	Eligibility Interviewers, Government Programs	1,917	69	1	0.0	High school diploma or equivalent	\$20.99
43-9021	Data Entry Keyers	2,281	29	1	0.0	High school diploma or equivalent	\$17.12
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	46,068	1,367	70	0.1	High school diploma or equivalent	\$17.78
43-4141	New Accounts Clerks	441	16	1	0.1	High school diploma or equivalent	\$17.43
43-4041	Credit Authorizers, Checkers, and Clerks	354	10	1	0.1	High school diploma or equivalent	\$18.48
43-1011	First-Line Supervisors of Office and Administrative Support Workers	15,606	727	95	0.1	High school diploma or equivalent	\$26.92
43-3031	Bookkeeping, Accounting, and Auditing Clerks	22,078	624	314	0.5	High school diploma or equivalent	\$18.54
43-6011	Executive Secretaries and Executive Administrative Assistants	9,344	214	169	0.8	High school diploma or equivalent	\$25.45
43-6013	Medical Secretaries	6,364	313	250	0.8	High school diploma or equivalent	\$16.79
43-3021	Billing and Posting Clerks	4,802	222	314	1.4	High school diploma or equivalent	\$19.23
43-3051	Payroll and Timekeeping Clerks	1,885	90	314	3.5	High school diploma or equivalent	\$21.07
43-4011	Brokerage Clerks	823	37	314	8.6	High school diploma or equivalent	\$23.59
43-9111	Statistical Assistants	202	9	314	33.9	Bachelor's degree	\$23.63
43-3041	Gaming Cage Workers	125	3	314	125.6	High school diploma or equivalent	\$13.18

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

Training Pipeline: Colorado Central Planning Region - Farming, Fishing & Forestry							
SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers	195	7	0	0.0	High school diploma or equivalent	\$22.02
45-2011	Agricultural Inspectors	60	3	0	0.0	Bachelor's degree	\$22.51
45-2041	Graders and Sorters, Agricultural Products	132	6	0	0.0	Less than high school	\$10.38
45-2091	Agricultural Equipment Operators	195	10	0	0.0	Less than high school	\$14.59
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	3,200	123	0	0.0	Less than high school	\$12.95

45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals	435	21	0	0.0	Less than high school	\$10.71
45-2099	Agricultural Workers, All Other	67	3	0	0.0	Less than high school	\$15.62

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

Training Pipeline: Colorado Central Planning Region - Construction & Extraction							
SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
47-4011	Construction and Building Inspectors	1,271	63	0	0.0	High school diploma or equivalent	\$30.22
47-4021	Elevator Installers and Repairers	216	7	0	0.0	High school diploma or equivalent	\$39.07
47-5011	Derrick Operators, Oil and Gas	229	33	0	0.0	Less than high school	\$23.42
47-5012	Rotary Drill Operators, Oil and Gas	376	48	0	0.0	Less than high school	\$28.89
47-5013	Service Unit Operators, Oil, Gas, and Mining	725	100	0	0.0	Less than high school	\$24.43
47-5031	Explosives Workers, Ordnance Handling Experts, and Blasters	84	5	0	0.0	High school diploma or equivalent	\$23.51
47-5071	Roustabouts, Oil and Gas	741	88	0	0.0	Less than high school	\$18.14
47-5081	Helpers--Extraction Workers	250	24	0	0.0	High school diploma or equivalent	\$17.81
47-2181	Roofers	2,117	75	4	0.1	Less than high school	\$18.31
47-2061	Construction Laborers	17,367	606	33	0.1	Less than high school	\$14.93
47-2073	Operating Engineers and Other Construction Equipment Operators	4,586	171	10	0.1	High school diploma or equivalent	\$20.63
47-2051	Cement Masons and Concrete Finishers	3,063	60	4	0.1	Less than high school	\$17.03
47-2081	Drywall and Ceiling Tile Installers	2,019	32	4	0.1	Less than high school	\$19.49
47-2031	Carpenters	13,287	288	41	0.1	High school diploma or equivalent	\$18.73
47-4051	Highway Maintenance Workers	1,169	35	6	0.2	High school diploma or equivalent	\$21.41
47-2141	Painters, Construction and Maintenance	4,392	95	18	0.2	Less than high school	\$16.05
47-2021	Brickmasons and Blockmasons	1,258	59	12	0.2	High school diploma or equivalent	\$20.88
47-2071	Paving, Surfacing, and Tamping Equipment Operators	1,049	34	10	0.3	High school diploma or equivalent	\$19.39
47-5021	Earth Drillers, Except Oil and Gas	292	16	6	0.4	High school diploma or equivalent	\$20.73
47-2121	Glaziers	691	31	18	0.6	High school diploma or equivalent	\$20.04
47-2011	Boilermakers	109	7	4	0.6	High school diploma or equivalent	\$28.74
47-3016	Helpers--Roofers	136	6	4	0.7	Less than high school	\$13.27
47-2044	Tile and Marble Setters	644	14	12	0.9	Less than high school	\$18.40
47-3011	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	195	14	12	0.9	Less than high school	\$16.31
47-2221	Structural Iron and Steel Workers	579	36	37	1.0	High school diploma or equivalent	\$20.28
47-5099	Extraction Workers, All Other	58	5	6	1.3	High school diploma or equivalent	\$20.72

47-4061	Rail-Track Laying and Maintenance Equipment Operators	103	5	6	1.3	High school diploma or equivalent	\$25.01
47-5041	Continuous Mining Machine Operators	136	4	6	1.5	High school diploma or equivalent	\$27.04
47-2132	Insulation Workers, Mechanical	745	24	37	1.5	High school diploma or equivalent	\$17.30
47-2211	Sheet Metal Workers	2,196	69	108	1.6	High school diploma or equivalent	\$20.77
47-2111	Electricians	11,696	445	863	1.9	High school diploma or equivalent	\$21.99
47-2131	Insulation Workers, Floor, Ceiling, and Wall	677	18	37	2.0	Less than high school	\$16.69
47-2152	Plumbers, Pipefitters, and Steamfitters	6,477	181	393	2.2	High school diploma or equivalent	\$22.52
47-2022	Stonemasons	131	6	12	2.2	High school diploma or equivalent	\$16.10
47-2082	Tapers	759	13	37	2.8	Less than high school	\$18.65
47-4031	Fence Erectors	263	11	33	3.1	High school diploma or equivalent	\$15.39
47-4041	Hazardous Materials Removal Workers	797	36	123	3.4	High school diploma or equivalent	\$17.59
47-2041	Carpet Installers	526	10	37	3.6	Less than high school	\$18.63
47-2171	Reinforcing Iron and Rebar Workers	211	9	37	4.4	High school diploma or equivalent	\$19.10
47-3019	Helpers, Construction Trades, All Other	70	4	18	4.8	Less than high school	\$14.29
47-4099	Construction and Related Workers, All Other	674	18	88	5.0	High school diploma or equivalent	\$17.30
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	9,427	249	1,336	5.4	High school diploma or equivalent	\$28.30
47-3012	Helpers--Carpenters	192	7	41	5.7	Less than high school	\$13.47
47-3014	Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	148	3	18	6.0	Less than high school	\$11.38
47-2042	Floor Layers, Except Carpet, Wood, and Hard Tiles	210	5	37	8.2	High school diploma or equivalent	\$17.79
47-2161	Plasterers and Stucco Masons	382	4	37	8.7	Less than high school	\$17.45
47-4071	Septic Tank Servicers and Sewer Pipe Cleaners	399	19	211	11.1	Less than high school	\$17.14
47-3015	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	403	17	215	12.5	High school diploma or equivalent	\$13.49
47-2151	Pipelayers	669	16	215	13.4	Less than high school	\$18.13
47-2043	Floor Sanders and Finishers	132	3	37	13.5	High school diploma or equivalent	\$17.19
47-2231	Solar Photovoltaic Installers	96	3	49	15.1	High school diploma or equivalent	\$19.71
47-3013	Helpers--Electricians	563	34	863	25.2	High school diploma or equivalent	\$15.50

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

Training Pipeline: Colorado Central Planning Region - Installation, Maintenance & Repair							
SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
49-2092	Electric Motor, Power Tool, and Related Repairers	324	6	0	0.0	Postsecondary non-degree award	\$20.75

49-3041	Farm Equipment Mechanics and Service Technicians	55	4	0	0.0	High school diploma or equivalent	\$17.05
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	1,805	75	0	0.0	High school diploma or equivalent	\$23.15
49-3043	Rail Car Repairers	179	8	0	0.0	High school diploma or equivalent	\$24.11
49-3051	Motorboat Mechanics and Service Technicians	125	4	0	0.0	High school diploma or equivalent	\$15.12
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	337	9	0	0.0	High school diploma or equivalent	\$16.82
49-3091	Bicycle Repairers	496	31	0	0.0	High school diploma or equivalent	\$13.81
49-9011	Mechanical Door Repairers	436	19	0	0.0	High school diploma or equivalent	\$18.86
49-9012	Control and Valve Installers and Repairers, Except Mechanical Door	882	35	0	0.0	High school diploma or equivalent	\$32.99
49-9031	Home Appliance Repairers	441	16	0	0.0	High school diploma or equivalent	\$18.43
49-9041	Industrial Machinery Mechanics	3,920	220	0	0.0	High school diploma or equivalent	\$26.08
49-9043	Maintenance Workers, Machinery	503	21	0	0.0	High school diploma or equivalent	\$21.73
49-9044	Millwrights	244	10	0	0.0	High school diploma or equivalent	\$25.11
49-9051	Electrical Power-Line Installers and Repairers	1,656	73	0	0.0	High school diploma or equivalent	\$36.68
49-9062	Medical Equipment Repairers	816	50	0	0.0	Associate's degree	\$24.30
49-9063	Musical Instrument Repairers and Tuners	143	5	0	0.0	High school diploma or equivalent	\$13.71
49-9091	Coin, Vending, and Amusement Machine Servicers and Repairers	268	4	0	0.0	High school diploma or equivalent	\$17.11
49-9092	Commercial Divers	63	4	0	0.0	Postsecondary non-degree award	\$23.65
49-9094	Locksmiths and Safe Repairers	246	13	0	0.0	High school diploma or equivalent	\$19.20
49-9098	Helpers--Installation, Maintenance, and Repair Workers	654	39	0	0.0	High school diploma or equivalent	\$14.69
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	3,389	99	6	0.1	Postsecondary non-degree award	\$32.57
49-9071	Maintenance and Repair Workers, General	13,957	514	56	0.1	High school diploma or equivalent	\$17.91
49-9052	Telecommunications Line Installers and Repairers	1,130	51	6	0.1	High school diploma or equivalent	\$22.68
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	4,658	192	23	0.1	High school diploma or equivalent	\$32.79
49-2097	Electronic Home Entertainment Equipment Installers and Repairers	310	14	6	0.4	Postsecondary non-degree award	\$20.75
49-9069	Precision Instrument and Equipment Repairers, All Other	75	4	2	0.5	High school diploma or equivalent	\$32.68
49-9096	Riggers	77	8	6	0.8	High school diploma or equivalent	\$26.36
49-2011	Computer, Automated Teller, and Office Machine Repairers	2,085	83	68	0.8	Some college, no degree	\$19.25

49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	4,164	175	213	1.2	Postsecondary non-degree award	\$22.84
49-2021	Radio, Cellular, and Tower Equipment Installers and Repairs	273	4	6	1.4	Associate's degree	\$22.09
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	1,160	35	68	1.9	Postsecondary non-degree award	\$28.44
49-9099	Installation, Maintenance, and Repair Workers, All Other	2,179	63	123	1.9	High school diploma or equivalent	\$17.97
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	3,309	113	227	2.0	High school diploma or equivalent	\$22.26
49-3023	Automotive Service Technicians and Mechanics	9,059	347	710	2.0	High school diploma or equivalent	\$17.72
49-3021	Automotive Body and Related Repairers	1,784	54	118	2.2	High school diploma or equivalent	\$21.16
49-3093	Tire Repairers and Changers	973	51	127	2.5	High school diploma or equivalent	\$12.13
49-3092	Recreational Vehicle Service Technicians	244	11	37	3.3	High school diploma or equivalent	\$23.21
49-3011	Aircraft Mechanics and Service Technicians	1,271	51	198	3.9	Postsecondary non-degree award	\$34.45
49-3022	Automotive Glass Installers and Repairers	370	13	118	8.9	High school diploma or equivalent	\$14.80
49-3052	Motorcycle Mechanics	173	6	65	10.8	High school diploma or equivalent	\$21.14
49-2098	Security and Fire Alarm Systems Installers	1,090	49	859	17.4	High school diploma or equivalent	\$18.56
49-2091	Avionics Technicians	131	4	264	62.1	Associate's degree	\$30.81
49-2093	Electrical and Electronics Installers and Repairers, Transportation Equipment	147	5	678	150.7	Postsecondary non-degree award	\$29.15
49-2095	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	156	5	859	190.9	Postsecondary non-degree award	\$37.33
49-9097	Signal and Track Switch Repairers	60	3	859	343.6	High school diploma or equivalent	\$28.29

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

Training Pipeline: Colorado Central Planning Region - Production							
SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
51-1011	First-Line Supervisors of Production and Operating Workers	4,210	105	0	0.0	Postsecondary non-degree award	\$28.60
51-2031	Engine and Other Machine Assemblers	359	18	0	0.0	High school diploma or equivalent	\$16.81
51-2091	Fiberglass Laminators and Fabricators	71	3	0	0.0	High school diploma or equivalent	\$13.58
51-2092	Team Assemblers	5,204	216	0	0.0	High school diploma or equivalent	\$13.31
51-2099	Assemblers and Fabricators, All Other	2,326	87	0	0.0	High school diploma or equivalent	\$13.78
51-3021	Butchers and Meat Cutters	1,425	54	0	0.0	Less than high school	\$15.14
51-3022	Meat, Poultry, and Fish Cutters and Trimmers	130	8	0	0.0	Less than high school	\$12.22
51-3023	Slaughterers and Meat Packers	270	7	0	0.0	Less than high school	\$14.27

51-3091	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	168	7	0	0.0	Less than high school	\$22.76
51-3093	Food Cooking Machine Operators and Tenders	122	8	0	0.0	High school diploma or equivalent	\$17.61
51-3099	Food Processing Workers, All Other	436	20	0	0.0	Less than high school	\$11.93
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	330	10	0	0.0	High school diploma or equivalent	\$15.19
51-4022	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	111	3	0	0.0	High school diploma or equivalent	\$18.66
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	120	3	0	0.0	High school diploma or equivalent	\$14.89
51-4034	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	116	5	0	0.0	High school diploma or equivalent	\$16.74
51-4035	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	88	3	0	0.0	High school diploma or equivalent	\$16.79
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	876	19	0	0.0	High school diploma or equivalent	\$12.48
51-4111	Tool and Die Makers	190	6	0	0.0	High school diploma or equivalent	\$27.36
51-5111	Prepress Technicians and Workers	335	8	0	0.0	Postsecondary non-degree award	\$17.27
51-5112	Printing Press Operators	1,727	33	0	0.0	High school diploma or equivalent	\$17.39
51-5113	Print Binding and Finishing Workers	752	14	0	0.0	High school diploma or equivalent	\$14.67
51-6011	Laundry and Dry-Cleaning Workers	2,229	87	0	0.0	Less than high school	\$10.79
51-6021	Pressers, Textile, Garment, and Related Materials	525	8	0	0.0	Less than high school	\$11.94
51-6093	Upholsterers	313	9	0	0.0	High school diploma or equivalent	\$15.76
51-7011	Cabinetmakers and Bench Carpenters	1,300	12	0	0.0	High school diploma or equivalent	\$15.40
51-7021	Furniture Finishers	285	5	0	0.0	High school diploma or equivalent	\$16.43
51-7041	Sawing Machine Setters, Operators, and Tenders, Wood	140	7	0	0.0	High school diploma or equivalent	\$14.65
51-8011	Nuclear Power Reactor Operators	71	3	0	0.0	High school diploma or equivalent	\$41.27
51-8012	Power Distributors and Dispatchers	73	3	0	0.0	High school diploma or equivalent	\$43.19
51-8013	Power Plant Operators	415	13	0	0.0	High school diploma or equivalent	\$34.20
51-8091	Chemical Plant and System Operators	106	6	0	0.0	High school diploma or equivalent	\$23.35
51-8092	Gas Plant Operators	137	12	0	0.0	High school diploma or equivalent	\$39.67
51-8093	Petroleum Pump System Operators, Refinery Operators, and Gaugers	241	27	0	0.0	High school diploma or equivalent	\$35.97
51-8099	Plant and System Operators, All Other	188	9	0	0.0	High school diploma or equivalent	\$25.81
51-9011	Chemical Equipment Operators and Tenders	372	18	0	0.0	High school diploma or equivalent	\$18.76

51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	897	41	0	0.0	High school diploma or equivalent	\$23.53
51-9021	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	356	12	0	0.0	High school diploma or equivalent	\$19.64
51-9022	Grinding and Polishing Workers, Hand	248	9	0	0.0	Less than high school	\$13.51
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	711	34	0	0.0	High school diploma or equivalent	\$12.56
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	228	5	0	0.0	High school diploma or equivalent	\$17.34
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	444	16	0	0.0	High school diploma or equivalent	\$14.17
51-9051	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	265	7	0	0.0	High school diploma or equivalent	\$13.81
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	3,494	153	0	0.0	High school diploma or equivalent	\$19.08
51-9071	Jewelers and Precious Stone and Metal Workers	284	7	0	0.0	High school diploma or equivalent	\$16.02
51-9081	Dental Laboratory Technicians	608	31	0	0.0	High school diploma or equivalent	\$17.23
51-9082	Medical Appliance Technicians	147	9	0	0.0	High school diploma or equivalent	\$18.80
51-9083	Ophthalmic Laboratory Technicians	326	19	0	0.0	High school diploma or equivalent	\$14.84
51-9111	Packaging and Filling Machine Operators and Tenders	3,480	135	0	0.0	High school diploma or equivalent	\$13.03
51-9121	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	1,056	24	0	0.0	High school diploma or equivalent	\$16.69
51-9141	Semiconductor Processors	158	4	0	0.0	Associate's degree	\$17.52
51-9151	Photographic Process Workers and Processing Machine Operators	183	9	0	0.0	High school diploma or equivalent	\$12.70
51-9192	Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	115	4	0	0.0	Less than high school	\$12.27
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	386	18	0	0.0	High school diploma or equivalent	\$16.16
51-9196	Paper Goods Machine Setters, Operators, and Tenders	575	6	0	0.0	High school diploma or equivalent	\$19.22
51-9198	Helpers--Production Workers	3,120	118	0	0.0	Less than high school	\$12.06
51-9199	Production Workers, All Other	1,766	93	0	0.0	High school diploma or equivalent	\$14.60
51-2023	Electromechanical Equipment Assemblers	1,749	38	2	0.1	High school diploma or equivalent	\$16.24
51-2022	Electrical and Electronic Equipment Assemblers	2,526	63	6	0.1	High school diploma or equivalent	\$15.65
51-4041	Machinists	2,997	149	92	0.6	High school diploma or equivalent	\$22.01
51-3092	Food Batchmakers	1,388	63	84	1.3	High school diploma or equivalent	\$12.55

51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	910	51	92	1.8	High school diploma or equivalent	\$17.66
51-3011	Bakers	2,685	116	246	2.1	Less than high school	\$11.42
51-8031	Water and Wastewater Treatment Plant and System Operators	1,100	52	113	2.2	High school diploma or equivalent	\$25.26
51-2041	Structural Metal Fabricators and Fitters	731	41	92	2.3	High school diploma or equivalent	\$20.17
51-6031	Sewing Machine Operators	1,231	13	33	2.6	Less than high school	\$11.09
51-4012	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	108	8	31	3.8	High school diploma or equivalent	\$26.91
51-4121	Welders, Cutters, Solderers, and Brazers	2,986	125	496	4.0	High school diploma or equivalent	\$18.91
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	877	18	104	5.9	High school diploma or equivalent	\$16.42
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	572	15	92	6.1	High school diploma or equivalent	\$15.96
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	536	14	92	6.5	High school diploma or equivalent	\$13.74
51-6052	Tailors, Dressmakers, and Custom Sewers	314	5	33	6.9	Less than high school	\$11.28
51-9122	Painters, Transportation Equipment	484	13	118	9.3	High school diploma or equivalent	\$21.92
51-4193	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	301	8	92	12.3	High school diploma or equivalent	\$15.12
51-4199	Metal Workers and Plastic Workers, All Other	213	8	92	12.3	High school diploma or equivalent	\$16.00
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	671	6	96	15.4	High school diploma or equivalent	\$13.24
51-7099	Woodworkers, All Other	133	6	96	17.5	High school diploma or equivalent	\$13.99
51-8021	Stationary Engineers and Boiler Operators	415	18	541	30.9	High school diploma or equivalent	\$25.13
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	240	13	496	38.2	High school diploma or equivalent	\$15.69
51-9123	Painting, Coating, and Decorating Workers	126	4	142	40.6	Less than high school	\$13.22

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

Training Pipeline: Colorado Central Planning Region - Transportaton & Material Moving							
SOC	Description	2016 Jobs	Projected Annual Openings	Regional Completions (2014)	Completers per Opening	Typical Entry Level Education	Median Hourly Earnings
53-1011	Aircraft Cargo Handling Supervisors	127	6	0	0.0	High school diploma or equivalent	\$14.64
53-1021	First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	1,112	50	0	0.0	High school diploma or equivalent	\$21.66
53-2021	Air Traffic Controllers	308	16	0	0.0	Associate's degree	\$63.88

53-2022	Airfield Operations Specialists	61	4	0	0.0	High school diploma or equivalent	\$26.78
53-2031	Flight Attendants	3,063	127	0	0.0	High school diploma or equivalent	\$20.10
53-3021	Bus Drivers, Transit and Intercity	2,354	72	0	0.0	High school diploma or equivalent	\$16.36
53-3022	Bus Drivers, School or Special Client	3,440	124	0	0.0	High school diploma or equivalent	\$16.07
53-3032	Heavy and Tractor-Trailer Truck Drivers	17,754	563	0	0.0	Postsecondary non-degree award	\$20.74
53-3033	Light Truck or Delivery Services Drivers	10,715	249	0	0.0	High school diploma or equivalent	\$14.78
53-3041	Taxi Drivers and Chauffeurs	2,496	111	0	0.0	Less than high school	\$12.31
53-3099	Motor Vehicle Operators, All Other	1,644	69	0	0.0	High school diploma or equivalent	\$10.31
53-4011	Locomotive Engineers	288	15	0	0.0	High school diploma or equivalent	\$23.18
53-4021	Railroad Brake, Signal, and Switch Operators	167	9	0	0.0	High school diploma or equivalent	\$25.97
53-4031	Railroad Conductors and Yardmasters	318	16	0	0.0	High school diploma or equivalent	\$22.47
53-4041	Subway and Streetcar Operators	79	4	0	0.0	High school diploma or equivalent	\$32.14
53-5011	Sailors and Marine Oilers	104	6	0	0.0	Less than high school	\$21.45
53-5021	Captains, Mates, and Pilots of Water Vessels	81	6	0	0.0	Bachelor's degree	\$38.87
53-6021	Parking Lot Attendants	1,592	111	0	0.0	Less than high school	\$9.49
53-6031	Automotive and Watercraft Service Attendants	774	39	0	0.0	Less than high school	\$10.86
53-6041	Traffic Technicians	91	6	0	0.0	High school diploma or equivalent	\$23.43
53-6061	Transportation Attendants, Except Flight Attendants	118	4	0	0.0	High school diploma or equivalent	\$12.21
53-7011	Conveyor Operators and Tenders	472	16	0	0.0	Less than high school	\$22.42
53-7051	Industrial Truck and Tractor Operators	4,613	132	0	0.0	Less than high school	\$16.11
53-7061	Cleaners of Vehicles and Equipment	3,646	141	0	0.0	Less than high school	\$9.87
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	22,949	1,169	0	0.0	Less than high school	\$12.13
53-7063	Machine Feeders and Offbearers	513	13	0	0.0	Less than high school	\$13.27
53-7064	Packers and Packagers, Hand	3,926	202	0	0.0	Less than high school	\$9.36
53-7071	Gas Compressor and Gas Pumping Station Operators	81	7	0	0.0	Less than high school	\$26.95
53-7072	Pump Operators, Except Wellhead Pumpers	196	17	0	0.0	Less than high school	\$23.34
53-7073	Wellhead Pumpers	641	54	0	0.0	Less than high school	\$27.18
53-7081	Refuse and Recyclable Material Collectors	1,107	49	0	0.0	Less than high school	\$15.85
53-7199	Material Moving Workers, All Other	268	14	0	0.0	Less than high school	\$18.15
53-3031	Driver/Sales Workers	5,184	176	3	0.0	High school diploma or equivalent	\$10.49
53-1031	First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	2,274	95	14	0.1	High school diploma or equivalent	\$28.69
53-6099	Transportation Workers, All Other	1,108	61	14	0.2	High school diploma or equivalent	\$18.31
53-7021	Crane and Tower Operators	346	23	6	0.3	High school diploma or equivalent	\$19.32
53-2011	Airline Pilots, Copilots, and Flight Engineers	3,233	163	50	0.3	Bachelor's degree	\$58.92

53-7032	Excavating and Loading Machine and Dragline Operators	404	9	6	0.7	High school diploma or equivalent	\$17.50
53-6051	Transportation Inspectors	308	16	14	0.9	High school diploma or equivalent	\$34.46
53-2012	Commercial Pilots	462	22	50	2.3	High school diploma or equivalent	\$38.81
53-3011	Ambulance Drivers and Attendants, Except Emergency Medical Technicians	128	6	746	129.7	High school diploma or equivalent	\$10.58

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Management Occupations

SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
11-2021	Marketing Managers	2,607	11,590	1,283	0.1	Difficult
11-9071	Gaming Managers	<10	29	3	0.1	Difficult
11-3111	Compensation and Benefits Managers	176	810	95	0.1	Difficult
11-9161	Emergency Management Directors	73	309	38	0.1	Difficult
11-9111	Medical and Health Services Managers	2,973	8,125	1,506	0.2	Difficult
11-2022	Sales Managers	4,062	10,578	2,339	0.2	Difficult
11-3121	Human Resources Managers	1,381	3,205	764	0.2	Difficult
11-3131	Training and Development Managers	319	782	187	0.2	Difficult
11-3061	Purchasing Managers	712	1,338	354	0.3	Difficult
11-9121	Natural Sciences Managers	1,176	1,376	453	0.3	Difficult
11-3031	Financial Managers	5,113	7,676	2,578	0.3	Difficult
11-9199	Managers, All Other	9,738	9,376	3,218	0.3	Difficult
11-9051	Food Service Managers	2,302	4,982	1,853	0.4	Difficult
11-2031	Public Relations and Fundraising Managers	675	1,137	447	0.4	Difficult
11-3051	Industrial Production Managers	1,006	1,107	461	0.4	Difficult
11-3071	Transportation, Storage, and Distribution Managers	1,078	1,376	620	0.5	Difficult
11-3021	Computer and Information Systems Managers	5,412	5,368	2,568	0.5	Difficult
11-9141	Property, Real Estate, and Community Association Managers	2,761	2,129	1,076	0.5	Difficult
11-9041	Architectural and Engineering Managers	2,993	2,229	1,236	0.6	Difficult
11-9151	Social and Community Service Managers	1,087	882	683	0.8	Difficult
11-9081	Lodging Managers	390	280	266	0.9	Difficult
11-2011	Advertising and Promotions Managers	437	333	341	1.0	Medium
11-9033	Education Administrators, Postsecondary	1,870	990	1,050	1.1	Medium
11-3011	Administrative Services Managers	1,994	925	1,177	1.3	Medium
11-1011	Chief Executives	1,729	504	653	1.3	Medium
11-9021	Construction Managers	5,840	2,915	3,806	1.3	Medium
11-9031	Education Administrators, Preschool and Childcare Center/Program	811	385	545	1.4	Medium
11-1021	General and Operations Managers	29,382	8,508	21,073	2.5	Medium
11-9061	Funeral Service Managers	62	13	40	3.0	Easy
11-9032	Education Administrators, Elementary and Secondary School	2,835	353	1,313	3.7	Easy
11-9131	Postmasters and Mail Superintendents	78	8	32	3.8	Easy
11-9039	Education Administrators, All Other	297	28	156	5.6	Easy
11-9013	Farmers, Ranchers, and Other Agricultural Managers	1,846	24	394	16.4	Easy

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

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Business & Finance Occupations

SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
13-1032	Insurance Appraisers, Auto Damage	68	93	26	0.3	Difficult
13-1111	Management Analysts	9,783	9,337	3,841	0.4	Difficult
13-2061	Financial Examiners	510	518	218	0.4	Difficult
13-2051	Financial Analysts	3,553	3,330	1,531	0.5	Difficult
13-1141	Compensation, Benefits, and Job Analysis Specialists	881	960	521	0.5	Difficult
13-2072	Loan Officers	3,945	3,442	1,961	0.6	Difficult
13-2052	Personal Financial Advisors	3,673	1,428	1,084	0.8	Difficult
13-1151	Training and Development Specialists	3,946	2,999	2,379	0.8	Difficult
13-2053	Insurance Underwriters	972	480	405	0.8	Difficult
13-1081	Logisticians	2,242	1,242	1,056	0.9	Difficult
13-1031	Claims Adjusters, Examiners, and Investigators	3,144	1,445	1,315	0.9	Difficult
13-1023	Purchasing Agents, Except Wholesale, Retail, and Farm Products	4,704	2,261	2,533	1.1	Medium
13-2041	Credit Analysts	1,226	542	613	1.1	Medium
13-1021	Buyers and Purchasing Agents, Farm Products	78	45	54	1.2	Medium
13-1161	Market Research Analysts and Marketing Specialists	10,865	4,812	6,250	1.3	Medium
13-2011	Accountants and Auditors	28,141	12,284	16,913	1.4	Medium
13-2071	Credit Counselors	245	101	152	1.5	Medium
13-1071	Human Resources Specialists	7,717	4,414	6,947	1.6	Medium
13-1041	Compliance Officers	3,713	1,012	1,853	1.8	Medium
13-2031	Budget Analysts	740	185	345	1.9	Medium
13-2082	Tax Preparers	1,635	437	957	2.2	Medium
13-1011	Agents and Business Managers of Artists, Performers, and Athletes	184	19	51	2.7	Medium
13-1022	Wholesale and Retail Buyers, Except Farm Products	1,318	243	749	3.1	Easy
13-1199	Business Operations Specialists, All Other	33,011	5,683	18,459	3.2	Easy
13-1121	Meeting, Convention, and Event Planners	1,867	388	1,531	3.9	Easy
13-2081	Tax Examiners and Collectors, and Revenue Agents	692	65	285	4.4	Easy
13-2021	Appraisers and Assessors of Real Estate	1,616	150	699	4.7	Easy
13-1051	Cost Estimators	3,881	648	3,219	5.0	Easy
13-1131	Fundraisers	1,216	114	833	7.3	Easy
13-2099	Financial Specialists, All Other	2,867	154	1,423	9.3	Easy
13-1075	Labor Relations Specialists	464	27	410	15.3	Easy

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

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Computer & Mathematical Occupations						
SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
15-1111	Computer and Information Research Scientists	116	490	45	0.1	Difficult
15-1122	Information Security Analysts	1,235	3,858	594	0.2	Difficult
15-1199	Computer Occupations, All Other	6,624	20,476	3,493	0.2	Difficult
15-1134	Web Developers	3,176	8,567	1,467	0.2	Difficult
15-2031	Operations Research Analysts	713	1,624	307	0.2	Difficult
15-1142	Network and Computer Systems Administrators	8,392	14,712	4,781	0.3	Difficult
15-1141	Database Administrators	2,058	3,285	1,068	0.3	Difficult
15-1121	Computer Systems Analysts	8,717	11,636	4,222	0.4	Difficult
15-1132	Software Developers, Applications	20,114	19,011	9,649	0.5	Difficult
15-1131	Computer Programmers	3,923	3,472	1,929	0.6	Difficult
15-1151	Computer User Support Specialists	11,317	11,202	6,481	0.6	Difficult
15-2011	Actuaries	481	268	211	0.8	Difficult
15-2041	Statisticians	470	240	215	0.9	Difficult
15-1133	Software Developers, Systems Software	10,176	4,240	4,562	1.1	Medium
15-1143	Computer Network Architects	3,502	1,536	1,674	1.1	Medium
15-2021	Mathematicians	37	4	14	3.3	Easy
15-1152	Computer Network Support Specialists	3,188	349	1,548	4.4	Easy

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Architecture & Engineering Occupations						
SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
17-3026	Industrial Engineering Technicians	341	932	139	0.1	Difficult
17-2112	Industrial Engineers	2,352	5,439	1,028	0.2	Difficult
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	336	693	210	0.3	Difficult
17-2071	Electrical Engineers	3,097	3,864	1,476	0.4	Difficult
17-2171	Petroleum Engineers	1,662	1,377	639	0.5	Difficult
17-3023	Electrical and Electronics Engineering Technicians	1,623	1,257	687	0.5	Difficult

17-2051	Civil Engineers	5,687	3,758	2,464	0.7	Difficult
17-3022	Civil Engineering Technicians	782	439	325	0.7	Difficult
17-2041	Chemical Engineers	561	297	225	0.8	Difficult
17-2081	Environmental Engineers	1,814	1,147	870	0.8	Difficult
17-2141	Mechanical Engineers	5,578	3,190	2,489	0.8	Difficult
17-3027	Mechanical Engineering Technicians	363	212	167	0.8	Difficult
17-2021	Agricultural Engineers	28	15	12	0.8	Difficult
17-3024	Electro-Mechanical Technicians	111	51	45	0.9	Difficult
17-2151	Mining and Geological Engineers, Including Mining Safety Engineers	477	207	188	0.9	Difficult
17-2072	Electronics Engineers, Except Computer	4,124	1,660	1,560	0.9	Difficult
17-2011	Aerospace Engineers	2,196	707	665	0.9	Difficult
17-2131	Materials Engineers	551	186	203	1.1	Medium
17-3011	Architectural and Civil Drafters	1,549	610	679	1.1	Medium
17-2061	Computer Hardware Engineers	2,914	950	1,135	1.2	Medium
17-2199	Engineers, All Other	1,527	629	769	1.2	Medium
17-2121	Marine Engineers and Naval Architects	49	16	21	1.3	Medium
17-1022	Surveyors	814	257	341	1.3	Medium
17-3031	Surveying and Mapping Technicians	1,094	312	477	1.5	Medium
17-2031	Biomedical Engineers	473	75	142	1.9	Medium
17-3013	Mechanical Drafters	831	202	448	2.2	Medium
17-3012	Electrical and Electronics Drafters	643	137	319	2.3	Medium
17-3025	Environmental Engineering Technicians	468	83	245	2.9	Medium
17-2161	Nuclear Engineers	218	57	188	3.3	Easy
17-1011	Architects, Except Landscape and Naval	2,667	257	936	3.6	Easy
17-3021	Aerospace Engineering and Operations Technicians	297	21	78	3.8	Easy
17-1021	Cartographers and Photogrammetrists	571	55	264	4.8	Easy
17-1012	Landscape Architects	497	50	274	5.4	Easy
17-3029	Engineering Technicians, Except Drafters, All Other	1,260	141	776	5.5	Easy
17-3019	Drafters, All Other	247	1	160	173.5	Easy

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

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Life, Physical & Social Science Occupations						
SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
19-4093	Forest and Conservation Technicians	273	807	117	0.1	Difficult
19-4061	Social Science Research Assistants	286	564	160	0.3	Difficult

19-1042	Medical Scientists, Except Epidemiologists	1,360	1,616	602	0.4	Difficult
19-2032	Materials Scientists	91	75	32	0.4	Difficult
19-3032	Industrial-Organizational Psychologists	21	17	8	0.5	Difficult
19-4091	Environmental Science and Protection Technicians, Including Health	642	793	380	0.5	Difficult
19-1012	Food Scientists and Technologists	195	116	121	1.0	Medium
19-1032	Foresters	179	74	85	1.2	Medium
19-1023	Zoologists and Wildlife Biologists	300	121	140	1.2	Medium
19-4021	Biological Technicians	2,350	918	1,134	1.2	Medium
19-4041	Geological and Petroleum Technicians	530	194	242	1.2	Medium
19-4099	Life, Physical, and Social Science Technicians, All Other	669	367	477	1.3	Medium
19-1029	Biological Scientists, All Other	389	112	158	1.4	Medium
19-1011	Animal Scientists	26	7	10	1.4	Medium
19-3051	Urban and Regional Planners	560	162	240	1.5	Medium
19-3031	Clinical, Counseling, and School Psychologists	2,804	670	1,001	1.5	Medium
19-4031	Chemical Technicians	661	223	350	1.6	Medium
19-2041	Environmental Scientists and Specialists, Including Health	2,625	739	1,336	1.8	Medium
19-2031	Chemists	1,622	383	784	2.0	Medium
19-2042	Geoscientists, Except Hydrologists and Geographers	2,336	469	991	2.1	Medium
19-1013	Soil and Plant Scientists	373	80	169	2.1	Medium
19-4051	Nuclear Technicians	60	31	68	2.2	Medium
19-4092	Forensic Science Technicians	235	46	103	2.2	Medium
19-1031	Conservation Scientists	827	168	437	2.6	Medium
19-1041	Epidemiologists	228	37	107	2.9	Medium
19-4011	Agricultural and Food Science Technicians	148	29	86	3.0	Medium
19-2021	Atmospheric and Space Scientists	1,574	244	749	3.1	Easy
19-2043	Hydrologists	349	49	163	3.3	Easy
19-1022	Microbiologists	447	63	211	3.3	Easy
19-3022	Survey Researchers	104	19	65	3.4	Easy
19-1021	Biochemists and Biophysicists	498	47	163	3.5	Easy
19-2012	Physicists	568	61	219	3.6	Easy
19-2099	Physical Scientists, All Other	490	52	197	3.8	Easy
19-3011	Economists	291	38	156	4.1	Easy
19-3091	Anthropologists and Archeologists	157	17	80	4.8	Easy
19-3092	Geographers	61	4	25	6.7	Easy
19-3093	Historians	79	5	37	7.2	Easy
19-2011	Astronomers	26	1	10	10.4	Easy
19-3099	Social Scientists and Related Workers, All Other	560	22	279	12.9	Easy
19-3094	Political Scientists	31	1	14	15.7	Easy
19-3039	Psychologists, All Other	255	2	77	41.5	Easy

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Community & Social Service Occupations						
SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
21-2099	Religious Workers, All Other	642	0	297	644.2	Easy
21-1029	Social Workers, All Other	836	2	423	183.4	Easy
21-2021	Directors, Religious Activities and Education	1,268	15	525	34.5	Easy
21-1094	Community Health Workers	340	16	194	12.0	Easy
21-1015	Rehabilitation Counselors	1,014	54	567	10.5	Easy
21-1092	Probation Officers and Correctional Treatment Specialists	1,307	70	548	7.9	Easy
21-2011	Clergy	2,443	169	1,041	6.2	Easy
21-1099	Community and Social Service Specialists, All Other	1,703	213	1,069	5.0	Easy
21-1021	Child, Family, and School Social Workers	3,444	513	1,961	3.8	Easy
21-1014	Mental Health Counselors	3,047	527	1,683	3.2	Easy
21-1013	Marriage and Family Therapists	400	70	202	2.9	Medium
21-1011	Substance Abuse and Behavioral Disorder Counselors	1,139	286	578	2.0	Medium
21-1091	Health Educators	477	158	258	1.6	Medium
21-1022	Healthcare Social Workers	1,635	834	953	1.1	Medium
21-1012	Educational, Guidance, School, and Vocational Counselors	2,981	1,429	1,487	1.0	Medium
21-1019	Counselors, All Other	289	148	147	1.0	Difficult
21-1023	Mental Health and Substance Abuse Social Workers	1,364	1,595	755	0.5	Difficult
21-1093	Social and Human Service Assistants	1,811	3,222	1,123	0.3	Difficult

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Legal Occupations						
SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
23-2011	Paralegals and Legal Assistants	4,869	1,644	2,138	1.3	Medium
23-1012	Judicial Law Clerks	171	32	72	2.2	Medium
23-1011	Lawyers	12,558	2,168	5,021	2.3	Medium
23-1021	Administrative Law Judges, Adjudicators, and Hearing Officers	185	25	76	3.0	Easy
23-2093	Title Examiners, Abstractors, and Searchers	1,434	101	591	5.8	Easy
23-1023	Judges, Magistrate Judges, and Magistrates	310	4	130	35.3	Easy
23-1022	Arbitrators, Mediators, and Conciliators	113	1	57	40.8	Easy

23-2099	Legal Support Workers, All Other	1,001	4	459	124.3	Easy
23-2091	Court Reporters	385	0	146	316.0	Easy

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Education, Training & Library Occupations						
SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
25-1099	Postsecondary Teachers	21,905	6,329	11,615	1.8	Medium
25-9031	Instructional Coordinators	2,531	733	1,361	1.9	Medium
25-2011	Preschool Teachers, Except Special Education	5,597	2,183	4,084	1.9	Medium
25-9011	Audio-Visual and Multimedia Collections Specialists	34	7	17	2.4	Medium
25-3099	Teachers and Instructors, All Other	3,569	814	1,973	2.4	Medium
25-9021	Farm and Home Management Advisors	144	23	57	2.5	Medium
25-2054	Special Education Teachers, Secondary School	1,454	229	653	2.8	Medium
25-2023	Career/Technical Education Teachers, Middle School	131	18	59	3.2	Easy
25-2032	Career/Technical Education Teachers, Secondary School	517	54	225	4.1	Easy
25-4021	Librarians	1,547	172	726	4.2	Easy
25-2052	Special Education Teachers, Kindergarten and Elementary School	3,237	303	1,446	4.8	Easy
25-2053	Special Education Teachers, Middle School	1,026	81	451	5.6	Easy
25-4011	Archivists	66	6	35	5.9	Easy
25-4013	Museum Technicians and Conservators	218	20	127	6.4	Easy
25-9041	Teacher Assistants	14,053	940	7,005	7.5	Easy
25-3021	Self-Enrichment Education Teachers	5,096	382	2,999	7.9	Easy
25-4012	Curators	224	16	134	8.5	Easy
25-3011	Adult Basic and Secondary Education and Literacy Teachers and Instructors	789	36	400	11.1	Easy
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	10,916	426	5,090	12.0	Easy
25-4031	Library Technicians	1,749	70	846	12.1	Easy
25-2022	Middle School Teachers, Except Special and Career/Technical Education	8,772	304	3,953	13.0	Easy
25-2021	Elementary School Teachers, Except Special Education	16,318	484	7,329	15.2	Easy
25-2012	Kindergarten Teachers, Except Special Education	2,713	71	1,259	17.7	Easy
25-2051	Special Education Teachers, Preschool	517	15	288	19.5	Easy
25-2059	Special Education Teachers, All Other	104	3	55	19.7	Easy

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Arts, Design, Entertainment, Sports & Media Occupations

SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
27-1026	Merchandise Displayers and Window Trimmers	1,229	3,936	970	0.2	Difficult
27-3021	Broadcast News Analysts	54	102	26	0.3	Difficult
27-4013	Radio Operators	11	13	5	0.4	Difficult
27-3042	Technical Writers	1,187	1,049	678	0.6	Difficult
27-4012	Broadcast Technicians	482	303	303	1.0	Medium
27-3031	Public Relations Specialists	3,836	2,545	2,881	1.1	Medium
27-3022	Reporters and Correspondents	532	209	245	1.2	Medium
27-1024	Graphic Designers	4,842	1,581	2,233	1.4	Medium
27-1025	Interior Designers	1,885	386	563	1.5	Medium
27-3043	Writers and Authors	1,894	224	413	1.8	Medium
27-3011	Radio and Television Announcers	259	69	130	1.9	Medium
27-1019	Artists and Related Workers, All Other	169	43	84	1.9	Medium
27-2012	Producers and Directors	1,127	462	926	2.0	Medium
27-1011	Art Directors	909	219	441	2.0	Medium
27-3041	Editors	1,487	315	670	2.1	Medium
27-3091	Interpreters and Translators	1,628	265	638	2.4	Medium
27-4032	Film and Video Editors	226	68	168	2.5	Medium
27-4021	Photographers	2,767	180	477	2.6	Medium
27-4014	Sound Engineering Technicians	279	83	256	3.1	Easy
27-4011	Audio and Video Equipment Technicians	1,225	301	1,021	3.4	Easy
27-2022	Coaches and Scouts	3,939	704	2,990	4.2	Easy
27-1021	Commercial and Industrial Designers	625	50	218	4.3	Easy
27-1014	Multimedia Artists and Animators	690	56	269	4.8	Easy
27-2023	Umpires, Referees, and Other Sports Officials	743	100	635	6.3	Easy
27-1023	Floral Designers	675	90	597	6.7	Easy
27-1013	Fine Artists, Including Painters, Sculptors, and Illustrators	750	10	84	8.3	Easy
27-1012	Craft Artists	419	5	61	12.0	Easy
27-4031	Camera Operators, Television, Video, and Motion Picture	267	18	222	12.3	Easy
27-1022	Fashion Designers	259	8	123	14.7	Easy
27-2042	Musicians and Singers	2,377	41	837	20.4	Easy
27-1027	Set and Exhibit Designers	112	3	78	24.0	Easy
27-3012	Public Address System and Other Announcers	263	4	123	33.4	Easy
27-2021	Athletes and Sports Competitors	322	6	360	64.9	Easy
27-3099	Media and Communication Workers, All Other	449	5	432	85.1	Easy
27-2041	Music Directors and Composers	674	2	223	96.7	Easy

27-2099	Entertainers and Performers, Sports and Related Workers, All Other	582	3	365	131.7	Easy
27-2011	Actors	416	0	250	542.0	Easy

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

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Healthcare Practitioners Occupations						
SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
29-1066	Psychiatrists	317	420	135	0.3	Difficult
29-1063	Internists, General	506	596	205	0.3	Difficult
29-1125	Recreational Therapists	155	272	95	0.3	Difficult
29-1024	Prosthodontists	<10	4	2	0.4	Difficult
29-1022	Oral and Maxillofacial Surgeons	78	72	34	0.5	Difficult
29-1141	Registered Nurses	32,618	36,214	18,656	0.5	Difficult
29-1122	Occupational Therapists	2,159	2,967	1,623	0.5	Difficult
29-1127	Speech-Language Pathologists	2,312	2,365	1,332	0.6	Difficult
29-1062	Family and General Practitioners	1,945	1,547	878	0.6	Difficult
29-1071	Physician Assistants	1,652	1,390	854	0.6	Difficult
29-1124	Radiation Therapists	205	162	109	0.7	Difficult
29-1067	Surgeons	746	422	326	0.8	Difficult
29-1031	Dietitians and Nutritionists	840	582	463	0.8	Difficult
29-1171	Nurse Practitioners	1,588	1,002	815	0.8	Difficult
29-1069	Physicians and Surgeons, All Other	2,312	1,135	941	0.8	Difficult
29-1181	Audiologists	252	179	154	0.9	Difficult
29-1023	Orthodontists	85	40	34	0.9	Difficult
29-1123	Physical Therapists	3,450	2,700	2,592	1.0	Difficult
29-1064	Obstetricians and Gynecologists	311	128	130	1.0	Medium
29-1065	Pediatricians, General	265	107	109	1.0	Medium
29-1029	Dentists, All Other Specialists	65	25	28	1.1	Medium
29-1126	Respiratory Therapists	1,277	772	875	1.1	Medium
29-1051	Pharmacists	3,806	1,768	2,492	1.4	Medium
29-1081	Podiatrists	250	109	154	1.4	Medium
29-1161	Nurse Midwives	112	38	59	1.5	Medium
29-1061	Anesthesiologists	196	42	74	1.8	Medium
29-1021	Dentists, General	1,857	491	876	1.8	Medium
29-1131	Veterinarians	1,409	516	1,078	2.1	Medium
29-1128	Exercise Physiologists	229	41	90	2.2	Medium

29-1151	Nurse Anesthetists	106	5	42	8.3	Easy
29-1041	Optometrists	599	42	392	9.2	Easy
29-1199	Health Diagnosing and Treating Practitioners, All Other	1,066	44	492	11.1	Easy
29-1129	Therapists, All Other	299	2	53	22.8	Easy
29-1011	Chiropractors	838	17	580	33.9	Easy

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Healthcare Technical Occupations						
SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
29-2055	Surgical Technologists	1,208	2,494	604	0.2	Difficult
29-2031	Cardiovascular Technologists and Technicians	472	950	238	0.3	Difficult
29-2054	Respiratory Therapy Technicians	44	84	24	0.3	Difficult
29-2092	Hearing Aid Specialists	42	69	20	0.3	Difficult
29-2071	Medical Records and Health Information Technicians	1,730	2,921	975	0.3	Difficult
29-9092	Genetic Counselors	34	50	19	0.4	Difficult
29-2032	Diagnostic Medical Sonographers	670	628	305	0.5	Difficult
29-2033	Nuclear Medicine Technologists	231	163	110	0.7	Difficult
29-2034	Radiologic Technologists	2,174	1,520	1,076	0.7	Difficult
29-2011	Medical and Clinical Laboratory Technologists	2,022	1,290	1,048	0.8	Difficult
29-2035	Magnetic Resonance Imaging Technologists	376	228	191	0.8	Difficult
29-9011	Occupational Health and Safety Specialists	1,045	713	606	0.8	Difficult
29-2099	Health Technologists and Technicians, All Other	1,816	901	817	0.9	Difficult
29-2053	Psychiatric Technicians	540	278	258	0.9	Difficult
29-2061	Licensed Practical and Licensed Vocational Nurses	4,098	2,755	2,705	1.0	Difficult
29-2012	Medical and Clinical Laboratory Technicians	1,531	746	809	1.1	Medium
29-2052	Pharmacy Technicians	3,115	1,643	2,059	1.3	Medium
29-2051	Dietetic Technicians	317	146	214	1.5	Medium
29-2041	Emergency Medical Technicians and Paramedics	2,032	704	1,114	1.6	Medium
29-9012	Occupational Health and Safety Technicians	152	41	92	2.3	Medium
29-9091	Athletic Trainers	251	72	176	2.4	Medium
29-2091	Orthotists and Prosthetists	83	11	38	3.4	Easy
29-2056	Veterinary Technologists and Technicians	2,412	497	1,867	3.8	Easy
29-2081	Opticians, Dispensing	978	169	667	3.9	Easy
29-2057	Ophthalmic Medical Technicians	541	68	305	4.5	Easy
29-2021	Dental Hygienists	3,273	346	1,948	5.6	Easy

29-9099	Healthcare Practitioners and Technical Workers, All Other	406	22	231	10.6	Easy
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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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Healthcare Support Occupations						
SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
31-2011	Occupational Therapy Assistants	473	904	359	0.4	Difficult
31-9093	Medical Equipment Preparers	655	780	347	0.4	Difficult
31-9099	Healthcare Support Workers, All Other	1,334	1,200	737	0.6	Difficult
31-2021	Physical Therapist Assistants	734	643	551	0.9	Difficult
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	628	499	468	0.9	Difficult
31-9092	Medical Assistants	7,084	3,995	3,795	0.9	Difficult
31-9095	Pharmacy Aides	83	51	54	1.1	Medium
31-9097	Phlebotomists	1,507	462	823	1.8	Medium
31-2022	Physical Therapist Aides	251	92	173	1.9	Medium
31-1014	Nursing Assistants	12,593	4,535	8,696	1.9	Medium
31-2012	Occupational Therapy Aides	39	10	28	2.9	Medium
31-9091	Dental Assistants	4,781	879	2,894	3.3	Easy
31-9011	Massage Therapists	4,684	611	3,312	5.4	Easy
31-9094	Medical Transcriptionists	1,052	85	613	7.2	Easy
31-1011	Home Health Aides	15,467	1,424	11,792	8.3	Easy
31-1015	Orderlies	376	12	181	15.7	Easy
31-1013	Psychiatric Aides	184	2	90	48.7	Easy

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Protective Service Occupations						
SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
33-2022	Forest Fire Inspectors and Prevention Specialists	<10	18	2	0.1	Difficult
33-2021	Fire Inspectors and Investigators	49	54	23	0.4	Difficult
33-1099	First-Line Supervisors of Protective Service Workers, All Other	804	645	581	0.9	Difficult
33-9021	Private Detectives and Investigators	521	256	273	1.1	Medium
33-3031	Fish and Game Wardens	17	6	7	1.1	Medium

33-3041	Parking Enforcement Workers	101	40	47	1.2	Medium
33-3021	Detectives and Criminal Investigators	1,260	371	524	1.4	Medium
33-1021	First-Line Supervisors of Fire Fighting and Prevention Workers	546	121	245	2.0	Medium
33-9031	Gaming Surveillance Officers and Gaming Investigators	95	32	66	2.0	Medium
33-9032	Security Guards	10,888	3,953	8,342	2.1	Medium
33-9099	Protective Service Workers, All Other	2,220	497	1,209	2.4	Medium
33-9093	Transportation Security Screeners	842	102	339	3.3	Easy
33-9092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	2,869	520	2,636	5.1	Easy
33-1012	First-Line Supervisors of Police and Detectives	871	66	369	5.6	Easy
33-3011	Bailiffs	50	3	22	8.1	Easy
33-9011	Animal Control Workers	154	9	76	8.3	Easy
33-3051	Police and Sheriff's Patrol Officers	6,447	317	2,817	8.9	Easy
33-3052	Transit and Railroad Police	19	1	10	10.3	Easy
33-2011	Firefighters	2,707	103	1,353	13.1	Easy
33-3012	Correctional Officers and Jailers	2,559	79	1,066	13.5	Easy
33-9091	Crossing Guards	603	25	417	16.7	Easy
33-1011	First-Line Supervisors of Correctional Officers	241	3	103	37.1	Easy

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Food Preparation & Serving Related Occupations						
SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	10,410	8,863	11,871	1.3	Medium
35-2012	Cooks, Institution and Cafeteria	3,746	1,326	2,781	2.1	Medium
35-1011	Chefs and Head Cooks	1,451	689	1,619	2.4	Medium
35-3022	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	3,147	1,071	3,580	3.3	Easy
35-9021	Dishwashers	5,430	1,471	6,785	4.6	Easy
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	4,982	1,170	6,031	5.2	Easy
35-2021	Food Preparation Workers	8,659	1,803	9,426	5.2	Easy
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	48,839	7,491	56,350	7.5	Easy
35-2014	Cooks, Restaurant	17,628	2,757	21,807	7.9	Easy
35-3041	Food Servers, Nonrestaurant	5,054	522	4,830	9.3	Easy
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	7,362	1,002	9,480	9.5	Easy
35-3011	Bartenders	7,362	967	9,378	9.7	Easy
35-2015	Cooks, Short Order	1,262	84	1,533	18.4	Easy

35-3031	Waiters and Waitresses	36,423	2,489	46,560	18.7	Easy
35-2011	Cooks, Fast Food	3,192	126	3,682	29.2	Easy
35-2019	Cooks, All Other	176	1	180	130.3	Easy
35-9099	Food Preparation and Serving Related Workers, All Other	807	2	913	395.8	Easy

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Building & Grounds Cleaning & Maintenance Occupations						
SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
37-1011	First-Line Supervisors of Housekeeping and Janitorial Workers	2,147	949	1,745	1.8	Medium
37-2021	Pest Control Workers	389	199	396	2.0	Medium
37-2012	Maids and Housekeeping Cleaners	18,030	3,906	10,896	2.8	Medium
37-3013	Tree Trimmers and Pruners	275	13	110	8.5	Easy
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	30,171	2,015	27,755	13.8	Easy
37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	1,734	122	1,690	13.9	Easy
37-3011	Landscaping and Groundskeeping Workers	16,105	1,115	15,761	14.1	Easy
37-3012	Pesticide Handlers, Sprayers, and Applicators, Vegetation	190	9	155	17.7	Easy
37-3019	Grounds Maintenance Workers, All Other	286	8	303	36.5	Easy

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Personal Care & Service Occupations						
SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
39-2011	Animal Trainers	231	129	93	0.7	Difficult
39-1011	Gaming Supervisors	270	116	102	0.9	Difficult
39-3092	Costume Attendants	38	36	42	1.2	Medium
39-6012	Concierges	260	157	213	1.4	Medium
39-6011	Baggage Porters and Bellhops	507	248	447	1.8	Medium
39-5091	Makeup Artists, Theatrical and Performance	32	10	21	2.1	Medium
39-1021	First-Line Supervisors of Personal Service Workers	2,695	885	2,162	2.4	Medium
39-9031	Fitness Trainers and Aerobics Instructors	6,278	1,614	6,350	3.9	Easy
39-5012	Hairdressers, Hairstylists, and Cosmetologists	9,275	1,135	4,974	4.4	Easy

39-2021	Nonfarm Animal Caretakers	3,445	597	2,721	4.6	Easy
39-4011	Embalmers	<10	1	6	4.6	Easy
39-5094	Skincare Specialists	998	138	648	4.7	Easy
39-4021	Funeral Attendants	110	12	78	6.2	Easy
39-3093	Locker Room, Coatroom, and Dressing Room Attendants	209	34	217	6.4	Easy
39-5092	Manicurists and Pedicurists	1,255	99	667	6.7	Easy
39-3012	Gaming and Sports Book Writers and Runners	57	8	53	6.7	Easy
39-3011	Gaming Dealers	769	53	402	7.6	Easy
39-9032	Recreation Workers	4,941	452	3,481	7.7	Easy
39-7011	Tour Guides and Escorts	538	38	353	9.2	Easy
39-9021	Personal Care Aides	17,502	1,108	12,458	11.2	Easy
39-9011	Childcare Workers	14,521	470	6,264	13.3	Easy
39-7012	Travel Guides	75	4	51	13.8	Easy
39-3091	Amusement and Recreation Attendants	3,562	298	4,292	14.4	Easy
39-1012	Slot Supervisors	140	3	65	23.6	Easy
39-3019	Gaming Service Workers, All Other	78	3	80	24.7	Easy
39-4031	Morticians, Undertakers, and Funeral Directors	161	4	106	28.6	Easy
39-9041	Residential Advisors	481	7	291	39.4	Easy
39-5011	Barbers	707	7	294	39.9	Easy
39-9099	Personal Care and Service Workers, All Other	1,217	9	664	72.0	Easy
39-3031	Ushers, Lobby Attendants, and Ticket Takers	3,709	29	5,384	185.2	Easy

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Sales & Related Occupations						
SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
41-9011	Demonstrators and Product Promoters	672	3,164	620	0.2	Difficult
41-9031	Sales Engineers	1,770	2,202	764	0.3	Difficult
41-3031	Securities, Commodities, and Financial Services Sales Agents	7,575	8,208	2,877	0.4	Difficult
41-1012	First-Line Supervisors of Non-Retail Sales Workers	4,481	5,417	1,936	0.4	Difficult
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	5,646	5,536	2,361	0.4	Difficult
41-1011	First-Line Supervisors of Retail Sales Workers	13,884	22,170	10,577	0.5	Difficult
41-9091	Door-to-Door Sales Workers, News and Street Vendors, and Related Workers	1,071	61	57	0.9	Difficult
41-3021	Insurance Sales Agents	9,841	3,641	3,993	1.1	Medium

41-3099	Sales Representatives, Services, All Other	17,970	10,471	13,212	1.3	Medium
41-3011	Advertising Sales Agents	2,310	1,453	2,042	1.4	Medium
41-9022	Real Estate Sales Agents	5,713	1,249	1,994	1.6	Medium
41-3041	Travel Agents	881	205	410	2.0	Medium
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	23,743	6,098	12,327	2.0	Medium
41-2031	Retail Salespersons	56,064	24,179	51,234	2.1	Medium
41-9041	Telemarketers	4,813	1,148	4,373	3.8	Easy
41-2011	Cashiers	33,238	6,299	31,564	5.0	Easy
41-2022	Parts Salespersons	2,419	271	1,781	6.6	Easy
41-9099	Sales and Related Workers, All Other	2,879	220	1,966	8.9	Easy
41-2021	Counter and Rental Clerks	8,408	675	6,303	9.3	Easy
41-9021	Real Estate Brokers	1,896	55	795	14.4	Easy
41-2012	Gaming Change Persons and Booth Cashiers	67	3	62	22.3	Easy
41-9012	Models	112	2	66	35.9	Easy

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Office & Administrative Support Occupations						
SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
43-4141	New Accounts Clerks	441	691	175	0.3	Difficult
43-3071	Tellers	4,722	3,684	1,895	0.5	Difficult
43-1011	First-Line Supervisors of Office and Administrative Support Workers	15,606	15,253	9,629	0.6	Difficult
43-6013	Medical Secretaries	6,364	3,667	3,486	1.0	Difficult
43-4051	Customer Service Representatives	33,188	19,540	23,259	1.2	Medium
43-9011	Computer Operators	445	214	268	1.3	Medium
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	2,005	1,110	1,447	1.3	Medium
43-4081	Hotel, Motel, and Resort Desk Clerks	2,793	1,980	2,597	1.3	Medium
43-4131	Loan Interviewers and Clerks	2,830	1,199	1,631	1.4	Medium
43-5061	Production, Planning, and Expediting Clerks	2,345	979	1,419	1.4	Medium
43-9081	Proofreaders and Copy Markers	110	30	46	1.5	Medium
43-6011	Executive Secretaries and Executive Administrative Assistants	9,344	3,810	5,775	1.5	Medium
43-6012	Legal Secretaries	2,301	683	1,040	1.5	Medium
43-5011	Cargo and Freight Agents	558	222	347	1.6	Medium
43-3011	Bill and Account Collectors	3,299	1,508	2,454	1.6	Medium
43-5081	Stock Clerks and Order Fillers	22,984	9,260	19,089	2.1	Medium

43-9041	Insurance Claims and Policy Processing Clerks	1,521	334	694	2.1	Medium
43-3051	Payroll and Timekeeping Clerks	1,885	678	1,452	2.1	Medium
43-4151	Order Clerks	1,955	544	1,183	2.2	Medium
43-4111	Interviewers, Except Eligibility and Loan	2,880	839	1,919	2.3	Medium
43-3031	Bookkeeping, Accounting, and Auditing Clerks	22,078	6,300	15,097	2.4	Medium
43-2099	Communications Equipment Operators, All Other	23	5	13	2.6	Medium
43-3021	Billing and Posting Clerks	4,802	1,081	2,876	2.7	Medium
43-9199	Office and Administrative Support Workers, All Other	3,071	620	1,674	2.7	Medium
43-9022	Word Processors and Typists	575	65	200	3.1	Easy
43-5031	Police, Fire, and Ambulance Dispatchers	1,247	186	581	3.1	Easy
43-9021	Data Entry Keyers	2,281	650	2,031	3.1	Easy
43-5071	Shipping, Receiving, and Traffic Clerks	7,599	1,302	5,394	4.1	Easy
43-5032	Dispatchers, Except Police, Fire, and Ambulance	2,206	372	1,624	4.4	Easy
43-3041	Gaming Cage Workers	125	24	105	4.4	Easy
43-4171	Receptionists and Information Clerks	15,548	2,482	11,387	4.6	Easy
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	46,068	6,390	31,616	4.9	Easy
43-9051	Mail Clerks and Mail Machine Operators, Except Postal Service	956	170	854	5.0	Easy
43-4121	Library Assistants, Clerical	1,343	127	647	5.1	Easy
43-4071	File Clerks	1,707	223	1,227	5.5	Easy
43-4181	Reservation and Transportation Ticket Agents and Travel Clerks	2,046	160	894	5.6	Easy
43-2011	Switchboard Operators, Including Answering Service	1,284	180	1,030	5.7	Easy
43-9031	Desktop Publishers	254	24	144	5.9	Easy
43-5021	Couriers and Messengers	937	69	457	6.6	Easy
43-5052	Postal Service Mail Carriers	3,004	157	1,179	7.5	Easy
43-5053	Postal Service Mail Sorters, Processors, and Processing Machine Operators	1,858	88	731	8.3	Easy
43-4031	Court, Municipal, and License Clerks	2,551	132	1,136	8.6	Easy
43-9061	Office Clerks, General	27,530	2,216	20,366	9.2	Easy
43-5111	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	339	24	306	12.5	Easy
43-3061	Procurement Clerks	788	28	464	16.8	Easy
43-4061	Eligibility Interviewers, Government Programs	1,917	47	807	17.1	Easy
43-5051	Postal Service Clerks	600	13	240	18.5	Easy
43-9111	Statistical Assistants	202	5	91	19.7	Easy
43-5041	Meter Readers, Utilities	275	12	267	21.4	Easy
43-9071	Office Machine Operators, Except Computer	742	26	651	24.8	Easy
43-4011	Brokerage Clerks	823	15	398	26.2	Easy
43-2021	Telephone Operators	195	2	120	52.1	Easy
43-4041	Credit Authorizers, Checkers, and Clerks	354	3	209	75.4	Easy
43-3099	Financial Clerks, All Other	1,076	4	523	125.9	Easy

43-4199	Information and Record Clerks, All Other	5,850	13	3,282	253.9	Easy
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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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Farming, Fishing & Forestry Occupations						
SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
45-2011	Agricultural Inspectors	60	28	40	1.4	Medium
45-4011	Forest and Conservation Workers	43	14	45	3.2	Easy
45-4021	Fallers	<10	2	7	3.7	Easy
45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers	195	60	260	4.3	Easy
45-3011	Fishers and Related Fishing Workers	19	1	4	4.7	Easy
45-2091	Agricultural Equipment Operators	195	10	305	30.0	Easy
45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals	435	14	537	37.6	Easy
45-2041	Graders and Sorters, Agricultural Products	132	4	204	55.3	Easy
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	3,200	30	5,661	188.7	Easy

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Construction & Extraction Occupations						
SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
47-2231	Solar Photovoltaic Installers	96	156	68	0.4	Difficult
47-5042	Mine Cutting and Channeling Machine Operators	34	29	17	0.6	Difficult
47-5061	Roof Bolters, Mining	<10	2	2	0.9	Difficult
47-4011	Construction and Building Inspectors	1,271	436	536	1.2	Medium
47-5013	Service Unit Operators, Oil, Gas, and Mining	725	225	410	1.8	Medium
47-5081	Helpers--Extraction Workers	250	67	157	2.3	Medium
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	9,427	1,595	7,250	4.5	Easy
47-5012	Rotary Drill Operators, Oil and Gas	376	42	204	4.9	Easy
47-5031	Explosives Workers, Ordnance Handling Experts, and Blasters	84	7	41	6.0	Easy
47-4061	Rail-Track Laying and Maintenance Equipment Operators	103	14	84	6.1	Easy
47-2111	Electricians	11,696	1,305	8,430	6.5	Easy
47-2152	Plumbers, Pipefitters, and Steamfitters	6,477	546	4,484	8.2	Easy
47-2211	Sheet Metal Workers	2,196	193	1,739	9.0	Easy

47-5099	Extraction Workers, All Other	58	4	34	9.2	Easy
47-4051	Highway Maintenance Workers	1,169	57	542	9.5	Easy
47-5071	Roustabouts, Oil and Gas	741	39	496	12.6	Easy
47-2073	Operating Engineers and Other Construction Equipment Operators	4,586	305	4,083	13.4	Easy
47-5021	Earth Drillers, Except Oil and Gas	292	14	232	16.8	Easy
47-2221	Structural Iron and Steel Workers	579	32	571	17.7	Easy
47-2071	Paving, Surfacing, and Tamping Equipment Operators	1,049	49	918	18.8	Easy
47-2031	Carpenters	13,287	417	9,300	22.3	Easy
47-2131	Insulation Workers, Floor, Ceiling, and Wall	677	33	736	22.5	Easy
47-3014	Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	148	7	175	25.3	Easy
47-5011	Derrick Operators, Oil and Gas	229	5	129	25.4	Easy
47-2151	Pipelayers	669	22	565	26.0	Easy
47-3013	Helpers--Electricians	563	14	386	27.0	Easy
47-2061	Construction Laborers	17,367	525	14,289	27.2	Easy
47-2171	Reinforcing Iron and Rebar Workers	211	5	149	29.3	Easy
47-4099	Construction and Related Workers, All Other	674	19	569	29.4	Easy
47-2181	Roofers	2,117	63	1,909	30.4	Easy
47-3012	Helpers--Carpenters	192	5	182	35.9	Easy
47-3011	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	195	6	218	36.4	Easy
47-3015	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	403	8	295	37.6	Easy
47-2141	Painters, Construction and Maintenance	4,392	61	2,519	41.3	Easy
47-2121	Glaziers	691	16	696	43.1	Easy
47-3019	Helpers, Construction Trades, All Other	70	1	60	43.3	Easy
47-2043	Floor Sanders and Finishers	132	2	107	46.5	Easy
47-2051	Cement Masons and Concrete Finishers	3,063	58	3,217	55.8	Easy
47-4041	Hazardous Materials Removal Workers	797	14	904	63.2	Easy
47-2044	Tile and Marble Setters	644	6	381	63.6	Easy
47-2021	Brickmasons and Blockmasons	1,258	18	1,146	65.3	Easy
47-2022	Stonemasons	131	1	104	75.3	Easy
47-4031	Fence Erectors	263	2	193	83.4	Easy
47-2011	Boilermakers	109	1	88	94.9	Easy
47-2081	Drywall and Ceiling Tile Installers	2,019	19	2,009	103.6	Easy
47-3016	Helpers--Roofers	136	1	146	105.2	Easy
47-4021	Elevator Installers and Repairers	216	1	156	112.6	Easy
47-2142	Paperhangers	70	0	54	116.5	Easy
47-2041	Carpet Installers	526	2	375	202.9	Easy
47-2132	Insulation Workers, Mechanical	745	2	626	271.3	Easy
47-2042	Floor Layers, Except Carpet, Wood, and Hard Tiles	210	0	141	304.6	Easy
47-4071	Septic Tank Servicers and Sewer Pipe Cleaners	399	1	364	394.7	Easy

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

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Installation, Maintenance & Repair Occupations						
SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
49-2097	Electronic Home Entertainment Equipment Installers and Repairers	310	426	158	0.4	Difficult
49-2091	Avionics Technicians	131	115	72	0.6	Difficult
49-9062	Medical Equipment Repairers	816	516	336	0.7	Difficult
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	4,658	3,254	3,128	1.0	Difficult
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	3,389	1,202	1,196	1.0	Difficult
49-3041	Farm Equipment Mechanics and Service Technicians	55	36	36	1.0	Medium
49-9081	Wind Turbine Service Technicians	63	48	49	1.0	Medium
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	3,309	1,865	2,224	1.2	Medium
49-9071	Maintenance and Repair Workers, General	13,957	7,750	9,600	1.2	Medium
49-3023	Automotive Service Technicians and Mechanics	9,059	4,323	6,665	1.5	Medium
49-9031	Home Appliance Repairers	441	166	292	1.8	Medium
49-2096	Electronic Equipment Installers and Repairers, Motor Vehicles	197	84	154	1.8	Medium
49-2098	Security and Fire Alarm Systems Installers	1,090	323	823	2.5	Medium
49-9041	Industrial Machinery Mechanics	3,920	803	2,051	2.6	Medium
49-3011	Aircraft Mechanics and Service Technicians	1,271	257	666	2.6	Medium
49-3021	Automotive Body and Related Repairers	1,784	553	1,448	2.6	Medium
49-2095	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	156	65	175	2.7	Medium
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	4,164	848	2,746	3.2	Easy
49-3093	Tire Repairers and Changers	973	241	795	3.3	Easy
49-9098	Helpers--Installation, Maintenance, and Repair Workers	654	142	504	3.5	Easy
49-2021	Radio, Cellular, and Tower Equipment Installers and Repairs	273	35	142	4.1	Easy
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	1,805	255	1,124	4.4	Easy
49-3092	Recreational Vehicle Service Technicians	244	36	187	5.2	Easy
49-9091	Coin, Vending, and Amusement Machine Servicers and Repairers	268	37	201	5.4	Easy
49-9052	Telecommunications Line Installers and Repairers	1,130	91	506	5.5	Easy
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	1,160	89	584	6.6	Easy
49-3091	Bicycle Repairers	496	71	471	6.7	Easy
49-3043	Rail Car Repairers	179	17	123	7.4	Easy

49-9011	Mechanical Door Repairers	436	50	410	8.1	Easy
49-9094	Locksmiths and Safe Repairers	246	13	112	8.3	Easy
49-3022	Automotive Glass Installers and Repairers	370	38	321	8.4	Easy
49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	337	36	306	8.6	Easy
49-9099	Installation, Maintenance, and Repair Workers, All Other	2,179	156	1,685	10.8	Easy
49-9069	Precision Instrument and Equipment Repairers, All Other	75	3	30	11.0	Easy
49-2011	Computer, Automated Teller, and Office Machine Repairers	2,085	93	1,105	11.9	Easy
49-2092	Electric Motor, Power Tool, and Related Repairers	324	15	190	12.9	Easy
49-9061	Camera and Photographic Equipment Repairers	58	3	36	13.1	Easy
49-9096	Riggers	77	5	72	14.2	Easy
49-9097	Signal and Track Switch Repairers	60	2	41	17.9	Easy
49-9092	Commercial Divers	63	4	75	18.1	Easy
49-9044	Millwrights	244	9	195	22.2	Easy
49-9051	Electrical Power-Line Installers and Repairers	1,656	74	1,909	25.7	Easy
49-2093	Electrical and Electronics Installers and Repairers, Transportation Equipment	147	3	90	28.0	Easy
49-9095	Manufactured Building and Mobile Home Installers	62	2	54	29.0	Easy
49-9012	Control and Valve Installers and Repairers, Except Mechanical Door	882	15	690	46.7	Easy
49-9043	Maintenance Workers, Machinery	503	3	299	108.1	Easy
49-3052	Motorcycle Mechanics	173	0	128	278.1	Easy

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Production Occupations						
SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
51-6052	Tailors, Dressmakers, and Custom Sewers	314	161	87	0.5	Difficult
51-1011	First-Line Supervisors of Production and Operating Workers	4,210	3,880	2,383	0.6	Difficult
51-8091	Chemical Plant and System Operators	106	63	55	0.9	Difficult
51-4062	Patternmakers, Metal and Plastic	<10	8	7	0.9	Difficult
51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	97	21	23	1.1	Medium
51-4012	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	108	46	53	1.1	Medium
51-6061	Textile Bleaching and Dyeing Machine Operators and Tenders	<10	4	6	1.4	Medium
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	910	288	412	1.4	Medium
51-4023	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	43	17	24	1.4	Medium
51-6042	Shoe Machine Operators and Tenders	<10	1	2	1.4	Medium

51-9123	Painting, Coating, and Decorating Workers	126	48	76	1.6	Medium
51-9082	Medical Appliance Technicians	147	29	47	1.6	Medium
51-9081	Dental Laboratory Technicians	608	95	174	1.8	Medium
51-3022	Meat, Poultry, and Fish Cutters and Trimmers	130	51	95	1.9	Medium
51-8021	Stationary Engineers and Boiler Operators	415	112	232	2.1	Medium
51-4051	Metal-Refining Furnace Operators and Tenders	21	5	11	2.3	Medium
51-8012	Power Distributors and Dispatchers	73	34	79	2.4	Medium
51-8092	Gas Plant Operators	137	23	54	2.4	Medium
51-2022	Electrical and Electronic Equipment Assemblers	2,526	564	1,601	2.8	Medium
51-9071	Jewelers and Precious Stone and Metal Workers	284	43	130	3.0	Medium
51-4061	Model Makers, Metal and Plastic	55	7	22	3.0	Easy
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	3,494	727	2,289	3.1	Easy
51-8031	Water and Wastewater Treatment Plant and System Operators	1,100	162	510	3.2	Easy
51-4034	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	116	18	58	3.2	Easy
51-9151	Photographic Process Workers and Processing Machine Operators	183	53	174	3.3	Easy
51-4111	Tool and Die Makers	190	27	89	3.3	Easy
51-9198	Helpers--Production Workers	3,120	1,260	4,281	3.4	Easy
51-4041	Machinists	2,997	520	1,816	3.5	Easy
51-9141	Semiconductor Processors	158	20	77	3.8	Easy
51-4192	Layout Workers, Metal and Plastic	42	6	24	4.1	Easy
51-4121	Welders, Cutters, Solderers, and Brazers	2,986	494	2,068	4.2	Easy
51-2099	Assemblers and Fabricators, All Other	2,326	736	3,126	4.2	Easy
51-9199	Production Workers, All Other	1,766	539	2,395	4.4	Easy
51-9191	Adhesive Bonding Machine Operators and Tenders	45	5	22	4.7	Easy
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	876	115	577	5.0	Easy
51-5113	Print Binding and Finishing Workers	752	80	456	5.7	Easy
51-4194	Tool Grinders, Filers, and Sharpeners	58	5	27	5.8	Easy
51-8093	Petroleum Pump System Operators, Refinery Operators, and Gaugers	241	15	86	5.8	Easy
51-4035	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	88	7	43	6.3	Easy
51-5112	Printing Press Operators	1,727	162	1,032	6.4	Easy
51-8013	Power Plant Operators	415	78	518	6.6	Easy
51-6092	Fabric and Apparel Patternmakers	61	9	59	6.7	Easy
51-9011	Chemical Equipment Operators and Tenders	372	27	181	6.8	Easy
51-6011	Laundry and Dry-Cleaning Workers	2,229	248	1,744	7.0	Easy
51-3091	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	168	18	131	7.1	Easy

51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	877	108	811	7.5	Easy
51-2023	Electromechanical Equipment Assemblers	1,749	107	801	7.5	Easy
51-4193	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	301	26	198	7.5	Easy
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	897	61	483	7.9	Easy
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	228	18	146	7.9	Easy
51-8099	Plant and System Operators, All Other	188	12	110	9.1	Easy
51-2092	Team Assemblers	5,204	502	4,934	9.8	Easy
51-9111	Packaging and Filling Machine Operators and Tenders	3,480	359	3,567	9.9	Easy
51-9121	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	1,056	57	619	10.9	Easy
51-7041	Sawing Machine Setters, Operators, and Tenders, Wood	140	12	132	11.0	Easy
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	240	12	133	11.5	Easy
51-9196	Paper Goods Machine Setters, Operators, and Tenders	575	27	320	11.8	Easy
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	711	37	444	11.9	Easy
51-6093	Upholsterers	313	12	161	12.9	Easy
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	120	5	67	13.2	Easy
51-3093	Food Cooking Machine Operators and Tenders	122	7	98	14.2	Easy
51-9197	Tire Builders	61	1	20	14.5	Easy
51-5111	Prepress Technicians and Workers	335	13	195	14.6	Easy
51-9083	Ophthalmic Laboratory Technicians	326	10	147	15.2	Easy
51-9051	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	265	10	151	15.6	Easy
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	444	15	240	15.8	Easy
51-9122	Painters, Transportation Equipment	484	23	363	16.0	Easy
51-9022	Grinding and Polishing Workers, Hand	248	9	142	16.2	Easy
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	386	12	203	17.6	Easy
51-9021	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	356	12	234	18.8	Easy
51-6021	Pressers, Textile, Garment, and Related Materials	525	24	503	20.6	Easy
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	572	12	282	22.7	Easy
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	330	9	199	22.7	Easy
51-6062	Textile Cutting Machine Setters, Operators, and Tenders	62	2	48	25.9	Easy
51-6031	Sewing Machine Operators	1,231	33	855	26.1	Easy

51-9193	Cooling and Freezing Equipment Operators and Tenders	50	1	39	28.4	Easy
51-4191	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	76	1	40	28.7	Easy
51-3011	Bakers	2,685	74	2,287	31.0	Easy
51-9194	Etchers and Engravers	72	1	52	37.5	Easy
51-3021	Butchers and Meat Cutters	1,425	31	1,261	40.8	Easy
51-3023	Slaughterers and Meat Packers	270	6	269	44.8	Easy
51-2091	Fiberglass Laminators and Fabricators	71	1	42	45.9	Easy
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	536	6	318	49.2	Easy
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	671	10	508	50.1	Easy
51-4052	Pourers and Casters, Metal	67	1	47	51.2	Easy
51-4022	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	111	1	76	54.7	Easy
51-9031	Cutters and Trimmers, Hand	42	0	27	57.7	Easy
51-7021	Furniture Finishers	285	3	182	65.6	Easy
51-7011	Cabinetmakers and Bench Carpenters	1,300	14	955	66.7	Easy
51-6064	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	26	0	31	67.3	Easy
51-2041	Structural Metal Fabricators and Fitters	731	6	479	86.6	Easy
51-3092	Food Batchmakers	1,388	14	1,223	88.3	Easy
51-6099	Textile, Apparel, and Furnishings Workers, All Other	46	0	44	96.4	Easy
51-2031	Engine and Other Machine Assemblers	359	1	386	418.5	Easy

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

Training Pipeline: Completions to Hires Ratio, Colorado Central Planning Region - Transportation & Material Moving Occupations						
SOC	Description	2016 Jobs	Avg. Annual Job Postings	Avg. Number Annual Hires*	Hires per Posting	Hiring Difficulty
53-5031	Ship Engineers	25	95	13	0.1	Difficult
53-3032	Heavy and Tractor-Trailer Truck Drivers	17,754	38,715	13,500	0.3	Difficult
53-1031	First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	2,274	3,135	1,570	0.5	Difficult
53-1011	Aircraft Cargo Handling Supervisors	127	54	60	1.1	Medium
53-6041	Traffic Technicians	91	37	44	1.2	Medium
53-5021	Captains, Mates, and Pilots of Water Vessels	81	37	52	1.4	Medium
53-3041	Taxi Drivers and Chauffeurs	2,496	876	1,235	1.4	Medium
53-5022	Motorboat Operators	21	8	12	1.6	Medium

53-3031	Driver/Sales Workers	5,184	2,632	4,590	1.7	Medium
53-3033	Light Truck or Delivery Services Drivers	10,715	3,647	7,765	2.1	Medium
53-6051	Transportation Inspectors	308	87	191	2.2	Medium
53-7199	Material Moving Workers, All Other	268	139	320	2.3	Medium
53-6031	Automotive and Watercraft Service Attendants	774	257	716	2.8	Medium
53-2022	Airfield Operations Specialists	61	11	33	3.1	Easy
53-3022	Bus Drivers, School or Special Client	3,440	446	1,812	4.1	Easy
53-2021	Air Traffic Controllers	308	32	139	4.4	Easy
53-7051	Industrial Truck and Tractor Operators	4,613	1,026	4,488	4.4	Easy
53-4013	Rail Yard Engineers, Dinkey Operators, and Hostlers	27	4	19	4.6	Easy
53-6021	Parking Lot Attendants	1,592	301	1,426	4.7	Easy
53-1021	First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	1,112	163	807	4.9	Easy
53-7033	Loading Machine Operators, Underground Mining	53	5	25	5.0	Easy
53-4031	Railroad Conductors and Yardmasters	318	41	234	5.8	Easy
53-7061	Cleaners of Vehicles and Equipment	3,646	523	3,062	5.9	Easy
53-3021	Bus Drivers, Transit and Intercity	2,354	197	1,208	6.1	Easy
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	22,949	3,437	24,726	7.2	Easy
53-2012	Commercial Pilots	462	49	361	7.4	Easy
53-7081	Refuse and Recyclable Material Collectors	1,107	78	642	8.3	Easy
53-6061	Transportation Attendants, Except Flight Attendants	118	7	74	10.0	Easy
53-7021	Crane and Tower Operators	346	27	302	11.1	Easy
53-7071	Gas Compressor and Gas Pumping Station Operators	81	2	28	12.0	Easy
53-4011	Locomotive Engineers	288	12	216	18.7	Easy
53-7064	Packers and Packagers, Hand	3,926	239	4,484	18.8	Easy
53-7063	Machine Feeders and Offbearers	513	19	380	20.1	Easy
53-4021	Railroad Brake, Signal, and Switch Operators	167	6	121	21.9	Easy
53-2031	Flight Attendants	3,063	48	1,112	23.4	Easy
53-3099	Motor Vehicle Operators, All Other	1,644	47	1,235	26.2	Easy
53-7032	Excavating and Loading Machine and Dragline Operators	404	11	305	27.6	Easy
53-4041	Subway and Streetcar Operators	79	1	33	36.1	Easy
53-7121	Tank Car, Truck, and Ship Loaders	49	1	37	40.5	Easy
53-2011	Airline Pilots, Copilots, and Flight Engineers	3,233	15	1,158	76.0	Easy
53-5011	Sailors and Marine Oilers	104	0	61	131.6	Easy
53-7073	Wellhead Pumpers	641	0	226	489.9	Easy

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

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

49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	4,658	3,254	3,128	1.0	Difficult
41-1012	First-Line Supervisors of Non-Retail Sales Workers	4,481	5,417	1,936	0.4	Difficult
51-1011	First-Line Supervisors of Production and Operating Workers	4,210	3,880	2,383	0.6	Difficult
17-2072	Electronics Engineers, Except Computer	4,124	1,660	1,560	0.9	Difficult
29-2061	Licensed Practical and Licensed Vocational Nurses	4,098	2,755	2,705	1.0	Difficult
11-2022	Sales Managers	4,062	10,578	2,339	0.2	Difficult
13-1151	Training and Development Specialists	3,946	2,999	2,379	0.8	Difficult
13-2072	Loan Officers	3,945	3,442	1,961	0.6	Difficult
15-1131	Computer Programmers	3,923	3,472	1,929	0.6	Difficult
13-2052	Personal Financial Advisors	3,673	1,428	1,084	0.8	Difficult

13-2051	Financial Analysts	3,553	3,330	1,531	0.5	Difficult
29-1123	Physical Therapists	3,450	2,700	2,592	1.0	Difficult
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	3,389	1,202	1,196	1.0	Difficult
15-1134	Web Developers	3,176	8,567	1,467	0.2	Difficult
13-1031	Claims Adjusters, Examiners, and Investigators	3,144	1,445	1,315	0.9	Difficult
17-2071	Electrical Engineers	3,097	3,864	1,476	0.4	Difficult
11-9041	Architectural and Engineering Managers	2,993	2,229	1,236	0.6	Difficult
11-9111	Medical and Health Services Managers	2,973	8,125	1,506	0.2	Difficult
11-9141	Property, Real Estate, and Community Association Managers	2,761	2,129	1,076	0.5	Difficult
11-2021	Marketing Managers	2,607	11,590	1,283	0.1	Difficult
17-2112	Industrial Engineers	2,352	5,439	1,028	0.2	Difficult
29-1069	Physicians and Surgeons, All Other	2,312	1,135	941	0.8	Difficult
29-1127	Speech-Language Pathologists	2,312	2,365	1,332	0.6	Difficult
11-9051	Food Service Managers	2,302	4,982	1,853	0.4	Difficult
53-1031	First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	2,274	3,135	1,570	0.5	Difficult
13-1081	Logisticians	2,242	1,242	1,056	0.9	Difficult
17-2011	Aerospace Engineers	2,196	707	665	0.9	Difficult
29-2034	Radiologic Technologists	2,174	1,520	1,076	0.7	Difficult
29-1122	Occupational Therapists	2,159	2,967	1,623	0.5	Difficult
15-1141	Database Administrators	2,058	3,285	1,068	0.3	Difficult
29-2011	Medical and Clinical Laboratory Technologists	2,022	1,290	1,048	0.8	Difficult
29-1062	Family and General Practitioners	1,945	1,547	878	0.6	Difficult
29-2099	Health Technologists and Technicians, All Other	1,816	901	817	0.9	Difficult
17-2081	Environmental Engineers	1,814	1,147	870	0.8	Difficult
21-1093	Social and Human Service Assistants	1,811	3,222	1,123	0.3	Difficult
41-9031	Sales Engineers	1,770	2,202	764	0.3	Difficult
29-2071	Medical Records and Health Information Technicians	1,730	2,921	975	0.3	Difficult
17-2171	Petroleum Engineers	1,662	1,377	639	0.5	Difficult
29-1071	Physician Assistants	1,652	1,390	854	0.6	Difficult
17-3023	Electrical and Electronics Engineering Technicians	1,623	1,257	687	0.5	Difficult
29-1171	Nurse Practitioners	1,588	1,002	815	0.8	Difficult
11-3121	Human Resources Managers	1,381	3,205	764	0.2	Difficult
21-1023	Mental Health and Substance Abuse Social Workers	1,364	1,595	755	0.5	Difficult
19-1042	Medical Scientists, Except Epidemiologists	1,360	1,616	602	0.4	Difficult
31-9099	Healthcare Support Workers, All Other	1,334	1,200	737	0.6	Difficult
15-1122	Information Security Analysts	1,235	3,858	594	0.2	Difficult
27-1026	Merchandise Displayers and Window Trimmers	1,229	3,936	970	0.2	Difficult
29-2055	Surgical Technologists	1,208	2,494	604	0.2	Difficult

27-3042	Technical Writers	1,187	1,049	678	0.6	Difficult
11-9121	Natural Sciences Managers	1,176	1,376	453	0.3	Difficult
11-9151	Social and Community Service Managers	1,087	882	683	0.8	Difficult
11-3071	Transportation, Storage, and Distribution Managers	1,078	1,376	620	0.5	Difficult
41-9091	Door-to-Door Sales Workers, News and Street Vendors, and Related Workers	1,071	61	57	0.9	Difficult
29-9011	Occupational Health and Safety Specialists	1,045	713	606	0.8	Difficult
11-3051	Industrial Production Managers	1,006	1,107	461	0.4	Difficult
13-2053	Insurance Underwriters	972	480	405	0.8	Difficult
13-1141	Compensation, Benefits, and Job Analysis Specialists	881	960	521	0.5	Difficult
29-1031	Dietitians and Nutritionists	840	582	463	0.8	Difficult
49-9062	Medical Equipment Repairers	816	516	336	0.7	Difficult
33-1099	First-Line Supervisors of Protective Service Workers, All Other	804	645	581	0.9	Difficult
17-3022	Civil Engineering Technicians	782	439	325	0.7	Difficult
29-1067	Surgeons	746	422	326	0.8	Difficult
31-2021	Physical Therapist Assistants	734	643	551	0.9	Difficult
15-2031	Operations Research Analysts	713	1,624	307	0.2	Difficult
11-3061	Purchasing Managers	712	1,338	354	0.3	Difficult
11-2031	Public Relations and Fundraising Managers	675	1,137	447	0.4	Difficult
41-9011	Demonstrators and Product Promoters	672	3,164	620	0.2	Difficult
29-2032	Diagnostic Medical Sonographers	670	628	305	0.5	Difficult
31-9093	Medical Equipment Preparers	655	780	347	0.4	Difficult
19-4091	Environmental Science and Protection Technicians, Including Health	642	793	380	0.5	Difficult
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	628	499	468	0.9	Difficult
17-2041	Chemical Engineers	561	297	225	0.8	Difficult
29-2053	Psychiatric Technicians	540	278	258	0.9	Difficult
13-2061	Financial Examiners	510	518	218	0.4	Difficult
29-1063	Internists, General	506	596	205	0.3	Difficult
15-2011	Actuaries	481	268	211	0.8	Difficult
17-2151	Mining and Geological Engineers, Including Mining Safety Engineers	477	207	188	0.9	Difficult
31-2011	Occupational Therapy Assistants	473	904	359	0.4	Difficult
29-2031	Cardiovascular Technologists and Technicians	472	950	238	0.3	Difficult
15-2041	Statisticians	470	240	215	0.9	Difficult
43-4141	New Accounts Clerks	441	691	175	0.3	Difficult
11-9081	Lodging Managers	390	280	266	0.9	Difficult
29-2035	Magnetic Resonance Imaging Technologists	376	228	191	0.8	Difficult
17-3027	Mechanical Engineering Technicians	363	212	167	0.8	Difficult
17-3026	Industrial Engineering Technicians	341	932	139	0.1	Difficult
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	336	693	210	0.3	Difficult

11-3131	Training and Development Managers	319	782	187	0.2	Difficult
29-1066	Psychiatrists	317	420	135	0.3	Difficult
51-6052	Tailors, Dressmakers, and Custom Sewers	314	161	87	0.5	Difficult
49-2097	Electronic Home Entertainment Equipment Installers and Repairers	310	426	158	0.4	Difficult
21-1019	Counselors, All Other	289	148	147	1.0	Difficult
19-4061	Social Science Research Assistants	286	564	160	0.3	Difficult
19-4093	Forest and Conservation Technicians	273	807	117	0.1	Difficult
39-1011	Gaming Supervisors	270	116	102	0.9	Difficult
29-1181	Audiologists	252	179	154	0.9	Difficult
29-2033	Nuclear Medicine Technologists	231	163	110	0.7	Difficult
39-2011	Animal Trainers	231	129	93	0.7	Difficult
29-1124	Radiation Therapists	205	162	109	0.7	Difficult
11-3111	Compensation and Benefits Managers	176	810	95	0.1	Difficult
29-1125	Recreational Therapists	155	272	95	0.3	Difficult
49-2091	Avionics Technicians	131	115	72	0.6	Difficult
15-1111	Computer and Information Research Scientists	116	490	45	0.1	Difficult
17-3024	Electro-Mechanical Technicians	111	51	45	0.9	Difficult
51-8091	Chemical Plant and System Operators	106	63	55	0.9	Difficult
47-2231	Solar Photovoltaic Installers	96	156	68	0.4	Difficult
19-2032	Materials Scientists	91	75	32	0.4	Difficult
29-1023	Orthodontists	85	40	34	0.9	Difficult
29-1022	Oral and Maxillofacial Surgeons	78	72	34	0.5	Difficult
11-9161	Emergency Management Directors	73	309	38	0.1	Difficult
13-1032	Insurance Appraisers, Auto Damage	68	93	26	0.3	Difficult
27-3021	Broadcast News Analysts	54	102	26	0.3	Difficult
33-2021	Fire Inspectors and Investigators	49	54	23	0.4	Difficult
29-2054	Respiratory Therapy Technicians	44	84	24	0.3	Difficult
29-2092	Hearing Aid Specialists	42	69	20	0.3	Difficult
47-5042	Mine Cutting and Channeling Machine Operators	34	29	17	0.6	Difficult
29-9092	Genetic Counselors	34	50	19	0.4	Difficult
17-2021	Agricultural Engineers	28	15	12	0.8	Difficult
53-5031	Ship Engineers	25	95	13	0.1	Difficult
19-3032	Industrial-Organizational Psychologists	21	17	8	0.5	Difficult
27-4013	Radio Operators	11	13	5	0.4	Difficult

# Appendix A - Data Sources and Calculations

## Completers Data

The completers data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

## Institution Data

The institution data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

## Occupation Data

EMSI occupation employment data are based on final EMSI industry data and final EMSI staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level EMSI earnings by industry.