

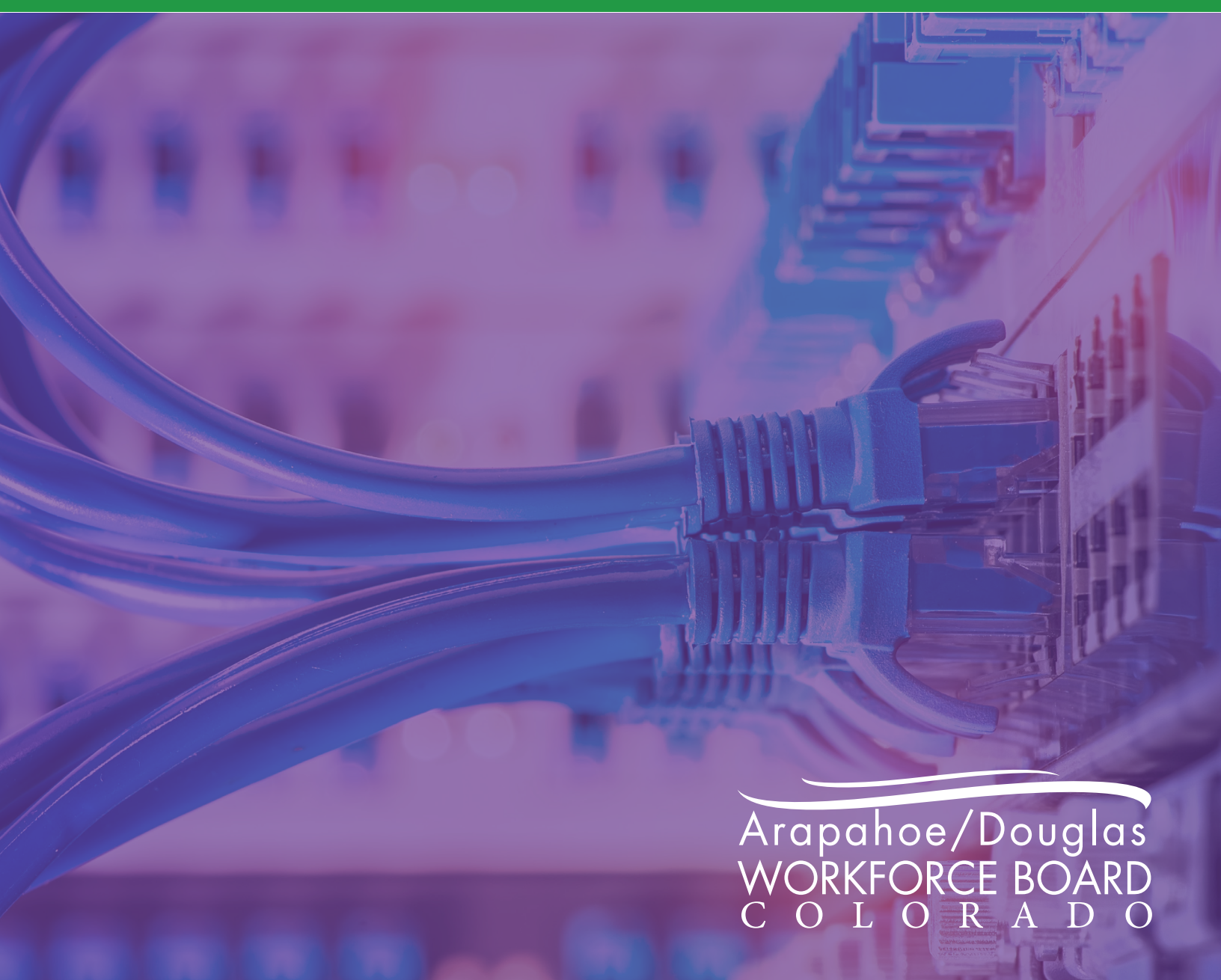


2025

Information Technology

INDUSTRY PROFILE

Colorado Urban Front Range



Arapahoe/Douglas
WORKFORCE BOARD
C O L O R A D O

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A map of Colorado showing its county boundaries and names. Major cities and towns are marked with dots and labeled. The map includes the Rocky Mountain National Park, several National Forests (Roosevelt, White River, San Isabel), and the Pawnee National Grasslands. Major highways (Interstates 70, 25, 76, 40, 50, 24, 285 and State Routes 30, 40, 50, 24, 285) are shown as orange lines. The South Platte River is shown as a blue line. The map is oriented with North at the top.

- Boulder
- Colorado Springs
- Denver-Aurora-Lakewood
- Fort Collins
- Greeley

Lightcast defines GRP as the final market value of all goods and services in the region.



Information Technology

▲ **4.7%** From prior year

4.7%

**Total Jobs in CO
Urban Front Range**

The information technology (IT) sector employs 127,356 people in 19,198 establishments. An 'establishment' is one facility in which people work. For example, a business in the sector may have several locations, and each one of those locations counts as an 'establishment.'

In 2024, the sector had \$55.7 billion in sales, and contributed \$36.7 billion to the region's GRP. The information technology sector in the region is vibrant and rapidly growing. It is home to numerous tech companies and startups. The region's thriving IT ecosystem is supported by a skilled workforce and a collaborative tech community, making it an attractive hub for tech professionals and businesses alike.



127,356

Total Jobs



19,198

Establishments



55.7 B

Total Sales

Industries Making up the Sector

Top Specialized Skills

- Project Management
- Computer Science
- Automation

Top Software Skills

- Python (Programming Language)
- Amazon Web Services
- SQL (Programming Language)

Top Credentials

- Top Secret-Sensitive Compartmented Information (TS/SCI Clearance)
- Security Clearance
- Secret Clearance

Source: Lightcast

Information Technology Sector

Employment concentration measures the concentration of employment in an industry in the local region against the average employment concentration in that industry nationwide. For example, employment in custom computer programming services is 2.41 times more concentrated than the national average for this industry.”The North American Industry Classification System (NAICS) is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy.

Software Publishers

NAICS 513210

- Numbers to Know
- 19,334 jobs
 - 1,704 establishments
 - 1.80 employment concentration
 - \$14.5 billion in sales
 - 6.9% change to 2029
 - \$199,730 average wage
 - \$27,578 average employer paid benefits

Data Processing, Hosting, & Related Services

NAICS 518210

- Numbers to Know
- 15,414 jobs
 - 1,490 establishments
 - 1.92 employment concentration
 - \$10.9 billion in sales
 - 6.9% change to 2029
 - \$174,132 average wage
 - \$36,033 average employer paid benefits

Media Streaming Distribution Services, Social Networks, & Other Media Networks & Content Providers

NAICS 516210

- Numbers to Know
- 4,208 jobs
 - 432 establishments
 - 1.18 employment concentration
 - \$4.2 billion in sales
 - (9.8%) change to 2029
 - \$160,417 average wage
 - \$31,104 average employer paid benefits

Web Search Portals & All Other Information Services

NAICS 519290

- Numbers to Know
- 863 jobs
 - 118 establishments
 - 0.33 employment concentration
 - \$459.8 million in sales
 - 15.5% change to 2029
 - \$165,494 average wage
 - \$15,056 average employer paid benefits

Custom Computer Programming Services

NAICS 541511

- Numbers to Know
- 43,866 jobs
 - 9,465 establishments
 - 2.41 employment concentration
 - \$11 billion in sales
 - 18.0% change to 2029
 - \$170,242 average wage
 - \$23,252 average employer paid benefits

Computer Systems Design Services

NAICS 541512

- Numbers to Know
- 40,861 jobs
 - 5,570 establishments
 - 2.16 employment concentration
 - \$13.8 billion in sales
 - 13.3% change to 2029
 - \$165,295 average wage
 - \$22,575 average employer paid benefits

Computer Facilities Management Services

NAICS 541513

- Numbers to Know
- 705 jobs
 - 104 establishments
 - 0.53 employment concentration
 - \$203 million in sales
 - 2.9% change to 2029
 - \$117,120 average wage
 - \$15,920 average employer paid benefits

Other Computer Related Services

NAICS 541519

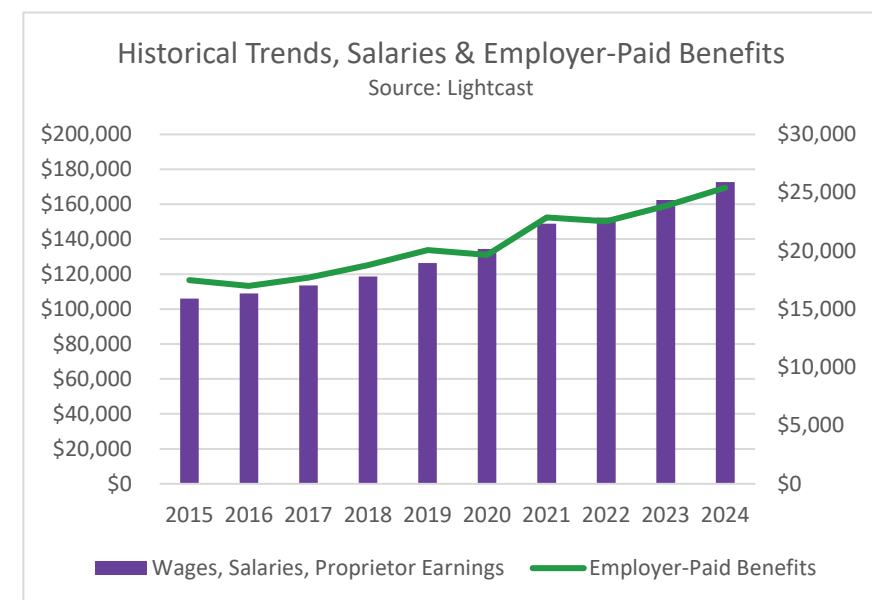
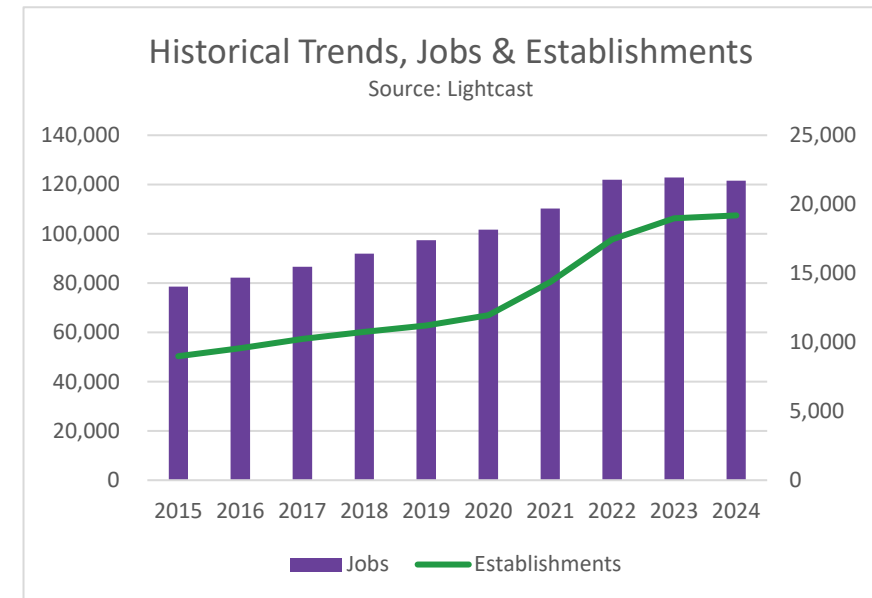
- Numbers to Know
- 2,104 jobs
 - 317 establishments
 - 0.96 employment concentration
 - \$698.8 million in sales
 - 0.1% change to 2029
 - \$154,110 average wage
 - \$21,005 average employer paid benefits



Historical Trends

Colorado Urban Front Range

The first graph shows the growth in jobs (purple bars) and the growth in the number of establishments (green line) in the sector between 2015 and 2024. The second graph shows the growth in wages, salaries and proprietor earnings (purple bars), and in employer-paid benefits, including the employer portions of both Social Security and Medicare payroll deductions (green line) for the same period.

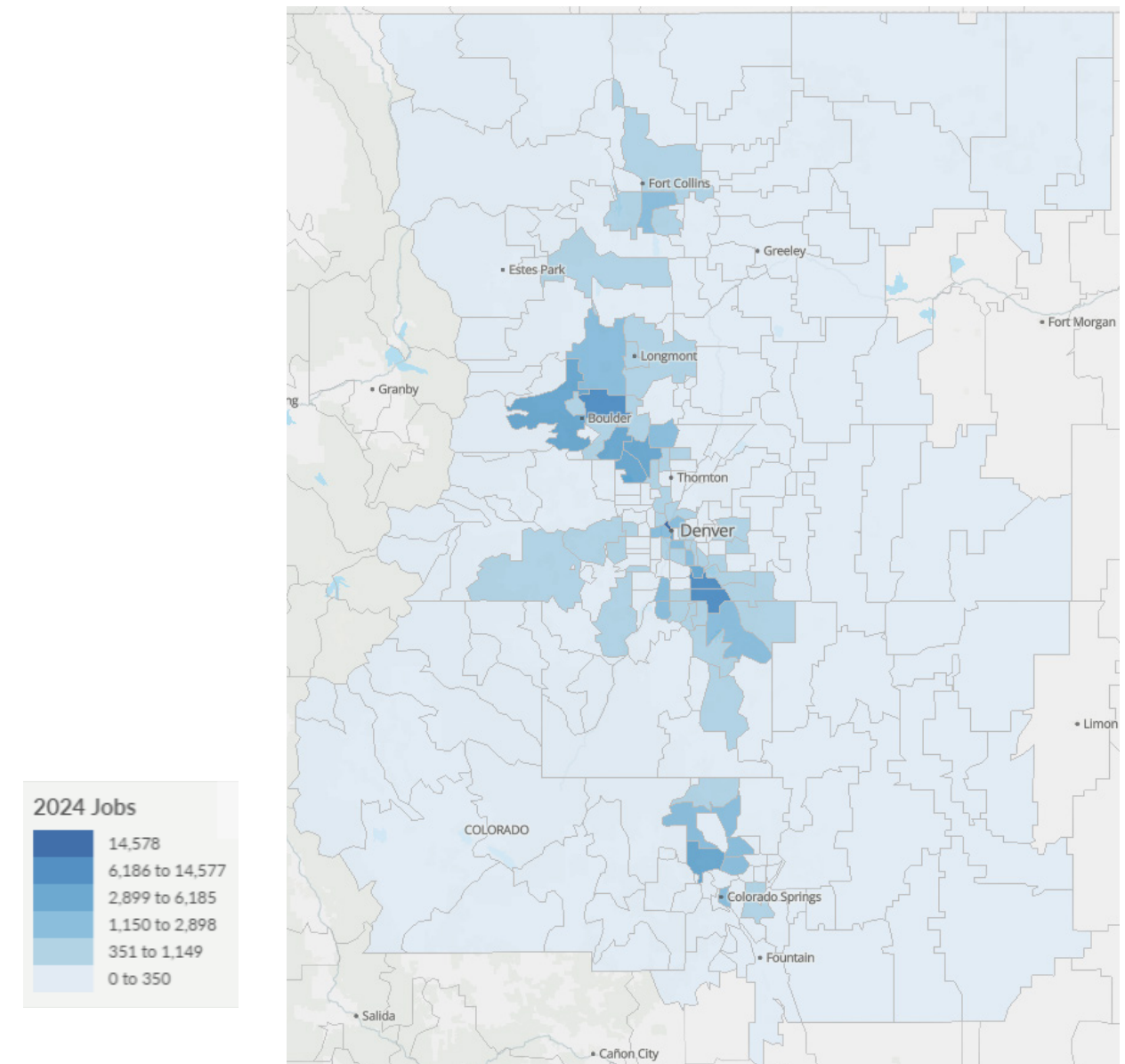


Source: Lightcast



Employment Concentration

Employment Concentration Map



Colorado Urban Front Range

The overall employment concentration in this sector is 2.46 times the national average, which suggests the region is a national hub for this sector. Concentration also varies by county, with the heaviest sector employment concentrations in Broomfield and Boulder counties.

Source: Lightcast

Sector Employment Concentration



Employment concentration in the sector is shown here within each of the 15 counties making up the region. Note that the current wages, salaries, and proprietor earnings, as well as the current employer-paid benefits are different within each county. This is because each county has a different mix of sector industries. For example, the average wage in software publishing is \$199,730 as opposed to the average wage of \$165,295 in computer systems design. As a result, depending on the sector industry mix in each county, wages and employer-paid benefits will be different.

- ADAMS**
- Jobs - 2,602
 - Employment Concentration - 0.41
 - Current Wages, Salaries, & Proprietor Earnings - \$167,783
 - Benefits - \$23,767
 - Top Businesses - Avaya, Google, Leidos

- BROOMFIELD**
- Jobs - 4,950
 - Employment Concentration - 4.62
 - Current Wages, Salaries, & Proprietor Earnings - \$205,963
 - Benefits - \$31,289
 - Top Businesses - VMware, Conga, Webroot Software

- ARAPAHOE**
- Jobs - 20,696
 - Employment Concentration - 2.40
 - Current Wages, Salaries, & Proprietor Earnings - \$152,119
 - Benefits - \$23,440
 - Top Businesses - Proofpoint, IHS Markit, Pax8

- CLEAR CREEK**
- Jobs - 34
 - Employment Concentration - 0.39
 - Current Wages, Salaries, & Proprietor Earnings - \$145,008
 - Benefits - \$19,613
 - Top Businesses - SEO Service, Workplace IT

- BOULDER**
- Jobs - 19,746
 - Employment Concentration - 3.95
 - Current Wages, Salaries, & Proprietor Earnings - \$219,500
 - Benefits - \$31,292
 - Top Businesses - Zayo, Seagate Technology, Google

- DENVER**
- Jobs - 35,190
 - Employment Concentration - 2.44
 - Current Wages, Salaries, & Proprietor Earnings - \$184,014
 - Benefits - \$27,647
 - Top Businesses - Service Source International, Gusto, The Outdoor Channel

- DOUGLAS**
- Jobs - 8,692
 - Employment Concentration - 2.35
 - Current Wages, Salaries, & Proprietor Earnings - \$165,554
 - Benefits - \$23,966
 - Top Businesses - Quickpen International, Solution ii, Douglas County Technology Service

- GILPIN**
- Jobs - 20
 - Employment Concentration - 0.18
 - Current Wages, Salaries, & Proprietor Earnings - \$141,512
 - Benefits- \$19,370
 - Top Businesses - James Associates

- PARK**
- Jobs - 67
 - Employment Concentration - 0.84
 - Current Wages, Salaries, & Proprietor Earnings - \$121,859
 - Benefits - \$16,763
 - Top Businesses - SC Inc, Positively Lead, Vcheck Solutions

- EL PASO**
- Jobs - 14,146
 - Employment Concentration - 1.56
 - Current Wages, Salaries, & Proprietor Earnings - \$140,571
 - Benefits - \$19,585
 - Top Businesses - PTI, Quantum Metrics, Intelligent Software Solutions Inc

- JEFFERSON**
- Jobs - 9,517
 - Employment Concentration - 1.52
 - Current Wages, Salaries, & Proprietor Earnings - \$135,936
 - Benefits - \$20,011
 - Top Businesses - Itransition, Aleryx, Iflexion

- TELLER**
- Jobs - 91
 - Employment Concentration - 0.42
 - Current Wages, Salaries, & Proprietor Earnings - \$111,311
 - Benefits- \$15,133
 - Top Businesses - Satellite Service Rays, Ridge Automation & Software, Higher Altitude Properties

- ELBERT**
- Jobs - 121
 - Employment Concentration - 0.98
 - Current Wages, Salaries, & Proprietor Earnings - \$149,916
 - Benefits - \$21,351
 - Top Businesses - Information Partners Inc, Jones Consulting, Crestone Seismic Software

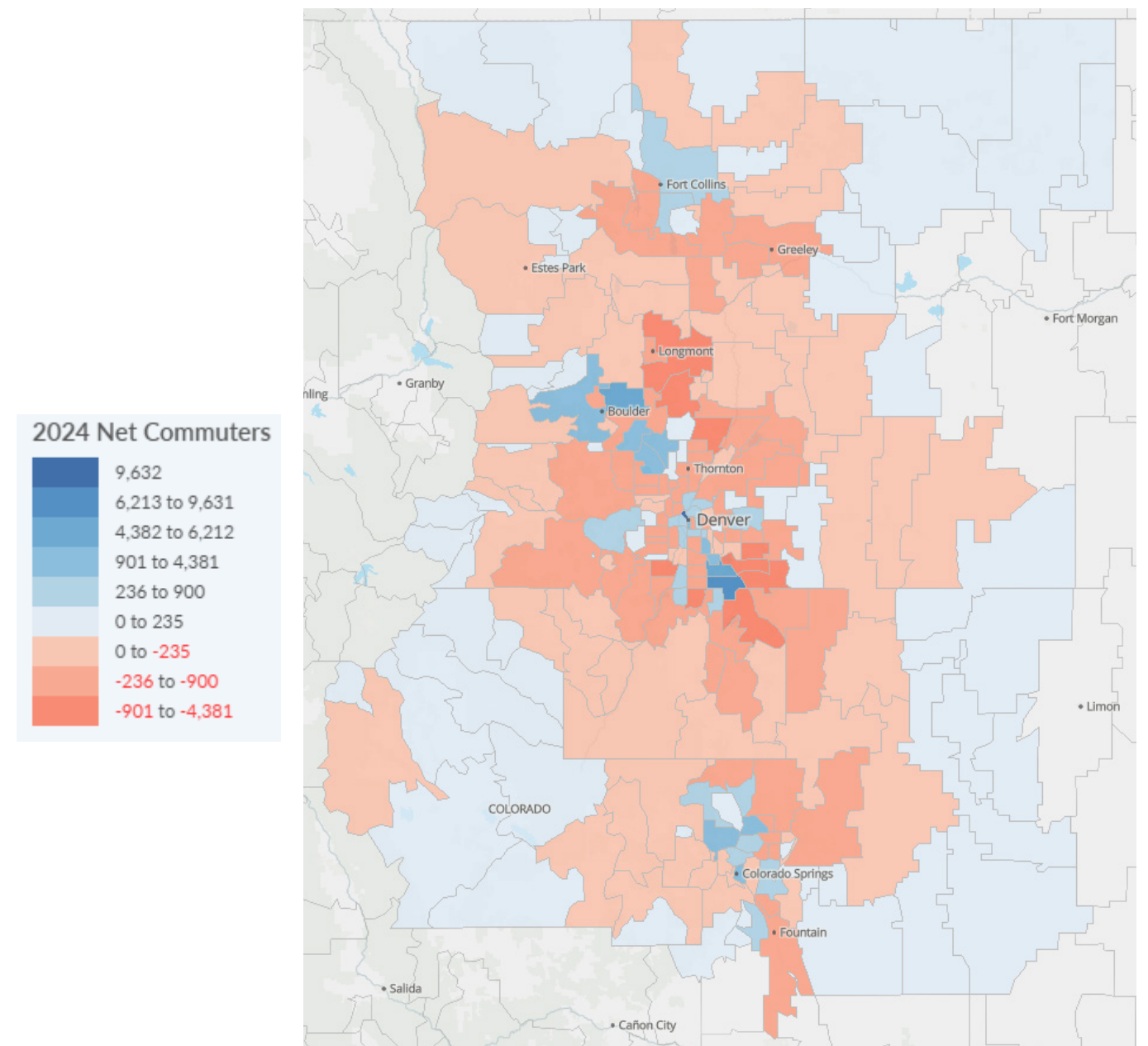
- LARIMER**
- Jobs - 4,566
 - Employment Concentration - 1.02
 - Current Wages, Salaries, & Proprietor Earnings - \$135,628
 - Benefits - \$19,250
 - Top Businesses - US Career Institute, Encompass Technologies Wolf Robotics LLC

- WELD**
- Jobs - 1,165
 - Employment Concentration - 0.38
 - Current Wages, Salaries, & Proprietor Earnings - \$175,503
 - Benefits- \$24,827
 - Top Businesses - Computer Information Concepts, Thin Air Networks, Ttec



Where Core Workforce Lives

Commute Map



Every sector has a group of occupations it needs to fulfil its mission. This is called a staffing pattern, and generally includes managers, business and finance people, sales and administrative support, computer and mathematical occupations. There is also a core set of occupations that are primarily responsible for producing the goods or services that industry provides. In information technology, this core set of occupations is made up of computer occupations. Examples of these occupations include software developers, user support specialists, and information security analysts. This map shows where persons employed in these occupations live (orange areas) and where they work (blue areas).

Where Core Workforce Lives

Commute Patterns

This table shows the number of ‘net commuters’ in each of the 15 counties making up the region. For example, 13,786 workers in these core occupations live in Douglas County. There are 9,067 jobs in the county. This means an additional 4,720 core workers commute out of Douglas County to work in these core information technology occupations. Note: the latest commuter data available is from 2024.

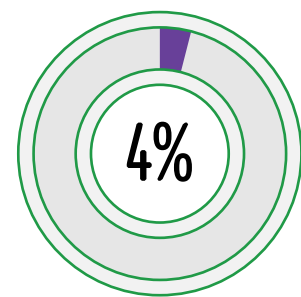
County	Net Commuters	Resident Workers	Jobs
Denver	12,778	21,498	34,275
Boulder	4,641	12,276	16,917
Arapahoe	3,533	17,531	21,064
Broomfield	1,397	3,133	4,530
El Paso	660	17,154	17,814
Gilpin	(19)	104	85
Clear Creek	(20)	88	68
Park	(163)	252	90
Teller	(217)	449	233
Elbert	(428)	574	146
Larimer	(1,041)	6,508	5,466
Adams	(4,036)	10,837	6,802
Weld	(4,639)	6,694	2,054
Douglas	(4,720)	13,786	9,067
Jefferson	(6,002)	17,871	11,869

Source: Lightcast

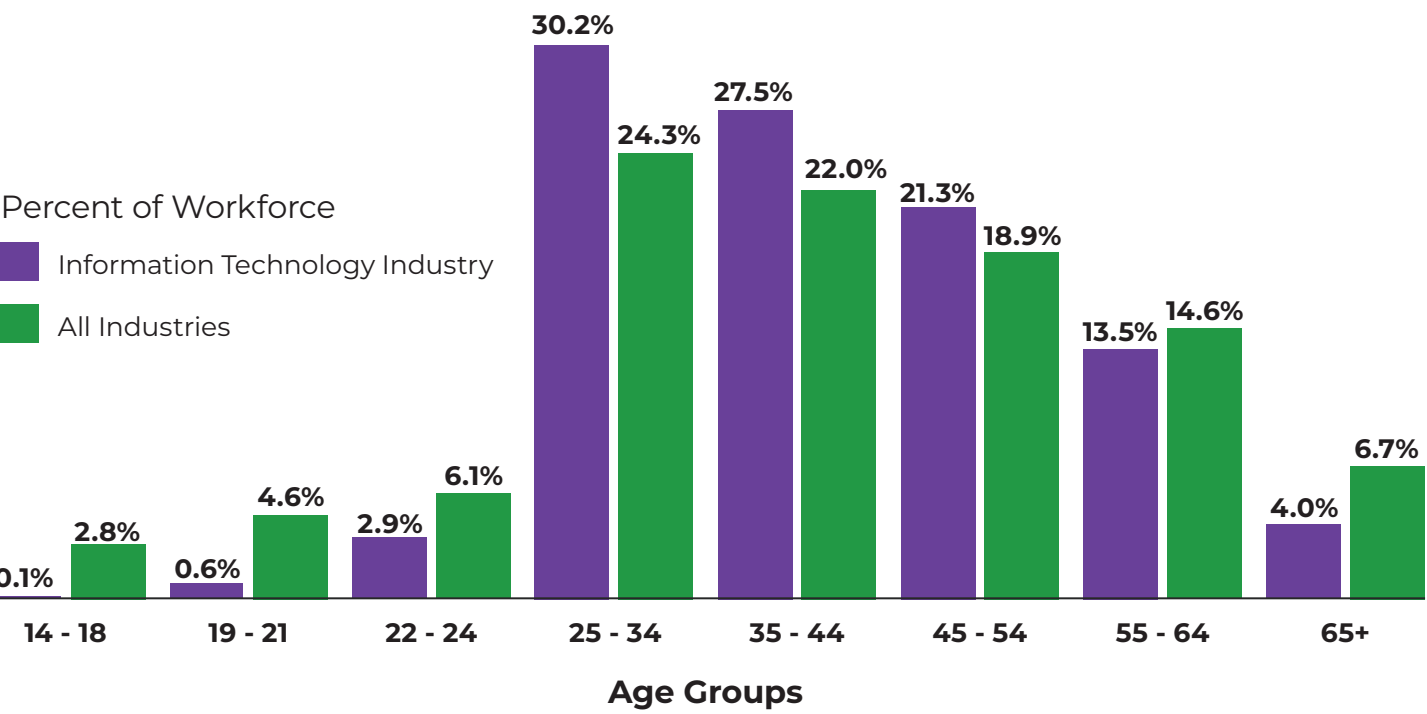


Demographics

Comparative Retirement Risk



Retirement risk in information technology is much lower than that across all industries in the region. This reflects a younger labor force with significantly higher numbers in the 25 to 54 age bands than the regional average across all industries.



Comparative Gender

Percent of Workforce

- Information Technology Industry
- All Industries



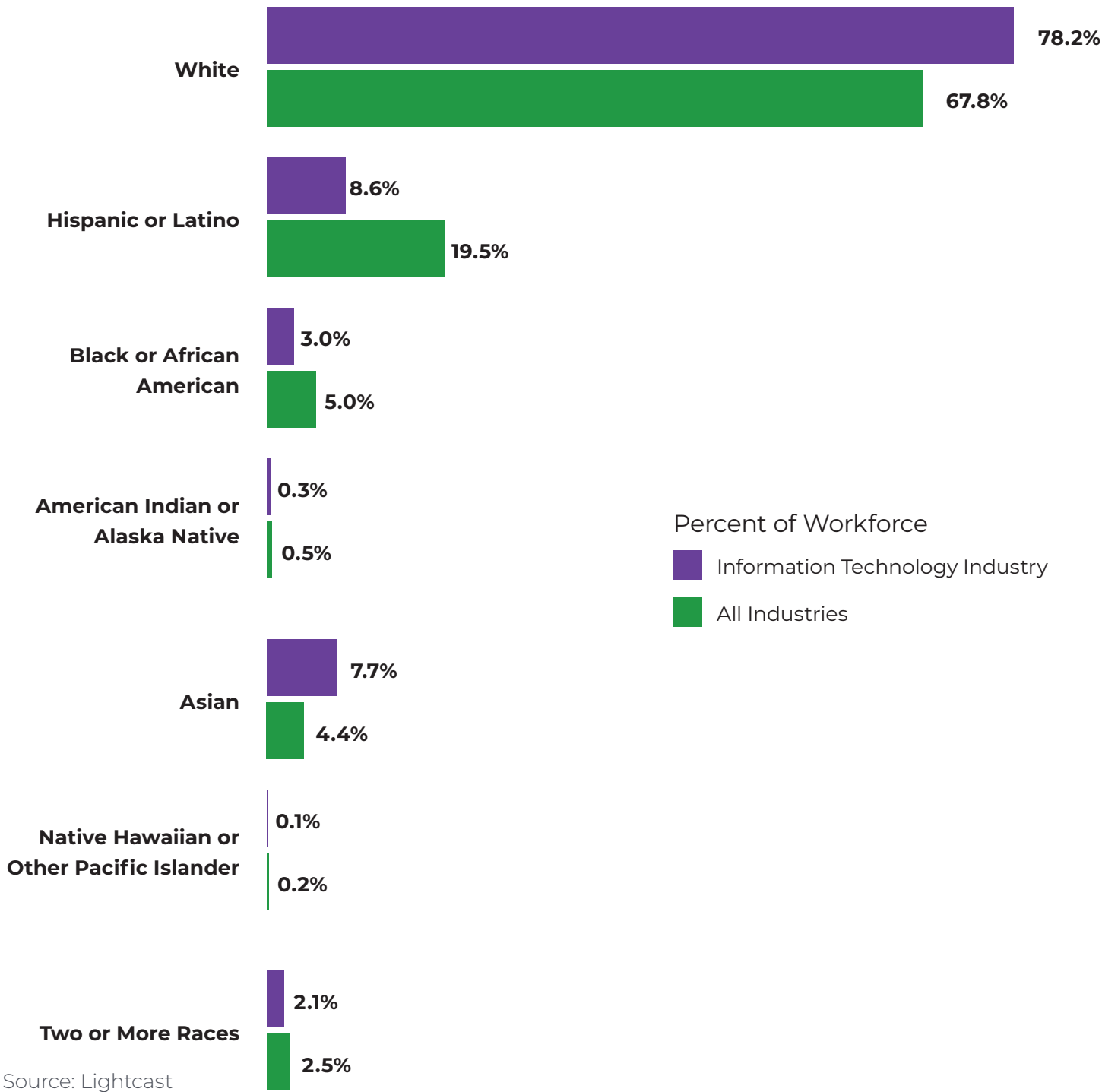
Men
65.0%
51.9%



Women
35.0%
48.1%

Demographics

These bar charts illustrate the racial and ethnic composition of the workforce in the information technology industry.



Source: Lightcast

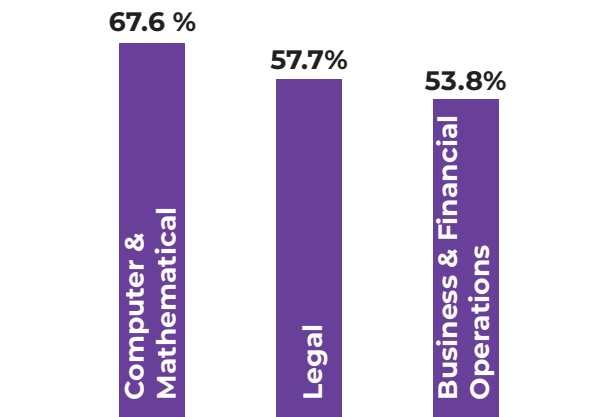


Telework and Automation Strategies

Remote Work Potential

52.0% Remote Work Capability for Sector

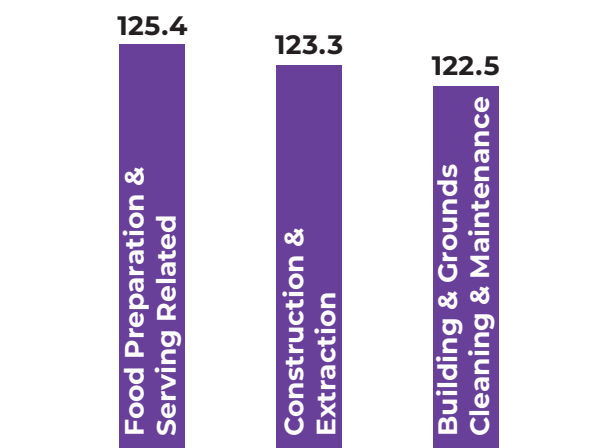
In a scarce labor market, a valid strategy for employers might be to review their staffing pattern and determine which positions, if any, can be employed remotely or on a hybrid work schedule. Approximately 52.0% of the workforce in information technology has at least partial teleworking capacity.



Automation Index

86.9

Another valid strategy employers can use in today's scarce labor market is automation. Automation seldom replaces workers 1:1. Rather, automation leverages the productive capacity of fewer workers to allow for higher output. Examples of automation in information technology include cloud software, and the ability of user and network support people to 'remote in' to fix issues for an end user.



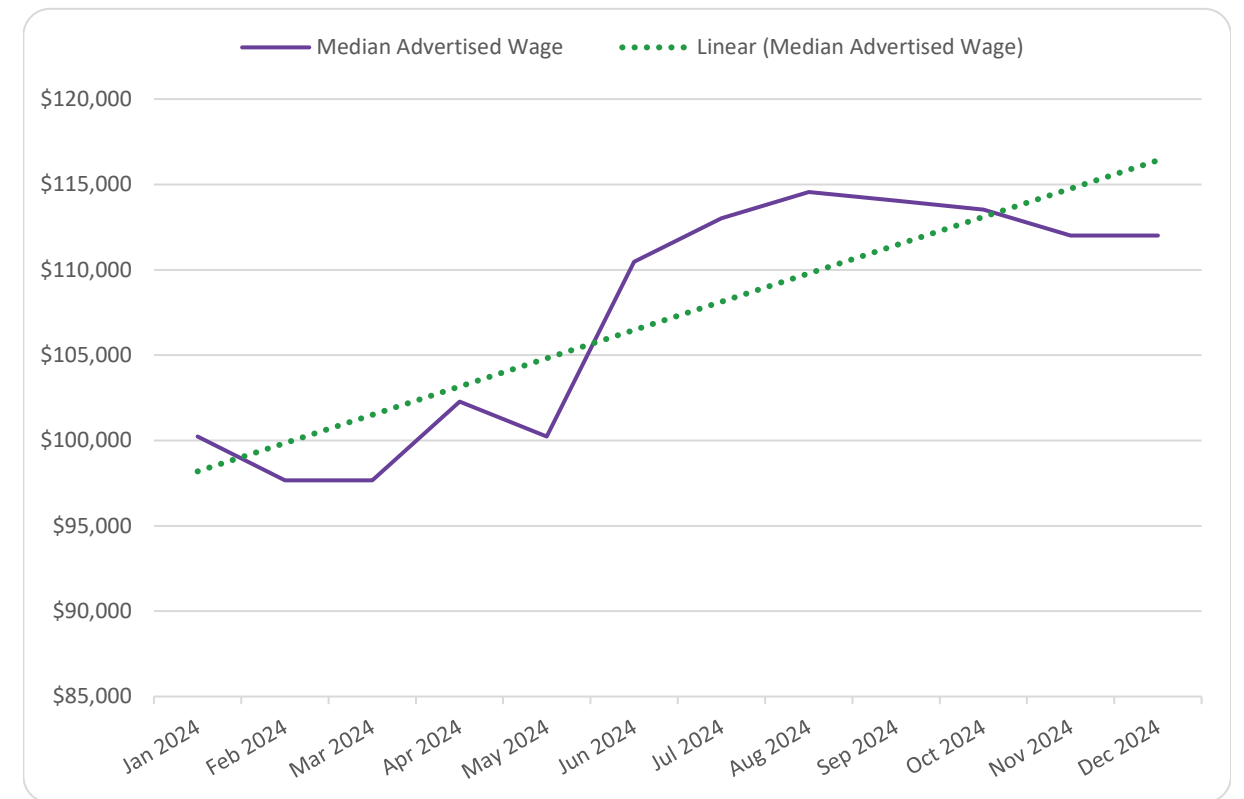
Source: Lightcast



Wages

Advertised Wage Trends

This line graph shows movement in advertised wages in jobs posted in the sector over the last year.



Competitive Wage Analysis

The following table shows the top 20 occupations by percentage of total employment in the sector, as well as total employment across industries. For example, the information technology sector employs 27,726 software developers, but there are 45,468 employed across all industry sectors. This is important because the information technology sector must compete with other sectors for critical talent, such as sales representatives, computer and information systems managers, and computer user support specialists. Average annual openings for each occupation is estimated according to known attrition (people leaving the occupation or retiring) as well as expected national and local growth in the occupation.

Median posted wage levels can be compared to estimated entry and experienced level wages, and the typical entry level education, as well as the typical on-the-job training (OJT) are shown to illustrate the potential for apprenticeships and OJT to supplement shortfalls in the traditional training pipeline.

The Standard Occupational Classification (SOC) system is used by Federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data.

Competitive Wage Analysis

SOC	Description	Jobs in Sector	% of Total Employment in Sector	Jobs Across all Industries	Average Annual Openings		Median Posted Wage	Entry Level Wage	Median Wage	Highly Experienced Level Wage	Typical On-the-Job Training	Typical Entry Level Education
11-1021	General and Operations Managers	2,748	2.1%	41,260	4,200		\$64.86	\$44.42	\$62.52	\$92.12	None	Bachelor's degree
11-2022	Sales Managers	1,554	1.2%	9,244	830		\$74.71	\$66.22	\$85.04	\$107.30	None	Bachelor's degree
11-3021	Computer and Information Systems Managers	5,178	4.0%	12,096	1,156		\$84.43	\$67.79	\$83.72	\$103.86	None	Bachelor's degree
13-1071	Human Resources Specialists	1,914	1.5%	19,287	1,932		\$37.05	\$28.25	\$37.16	\$49.35	None	Bachelor's degree
13-1082	Project Management Specialists	4,227	3.3%	28,647	2,485		\$52.06	\$37.90	\$48.77	\$63.40	None	Bachelor's degree
13-1111	Management Analysts	1,771	1.4%	13,197	1,502		\$52.80	\$35.00	\$45.76	\$60.49	None	Bachelor's degree
13-1161	Market Research Analysts and Marketing Specialists	4,270	3.4%	25,285	2,887		\$42.46	\$28.25	\$37.40	\$50.67	None	Bachelor's degree
13-1199	Business Operations Specialists, All Other	3,528	2.8%	43,849	4,283		\$55.26	\$30.72	\$40.54	\$56.46	None	Bachelor's degree
13-2011	Accountants and Auditors	1,846	1.5%	31,998	2,972		\$36.80	\$32.52	\$41.52	\$54.85	None	Bachelor's degree
15-1211	Computer Systems Analysts	3,751	2.9%	9,187	800		\$53.78	\$46.39	\$52.73	\$65.20	None	Bachelor's degree
15-1212	Information Security Analysts	2,221	1.7%	5,928	581		\$57.72	\$47.12	\$58.96	\$73.48	None	Bachelor's degree
15-1232	Computer User Support Specialists	6,719	5.3%	16,183	1,420		\$30.34	\$26.56	\$32.59	\$40.81	None	Some college, no degree
15-1241	Computer Network Architects	4,130	3.3%	10,149	603		\$60.43	\$50.04	\$64.19	\$79.97	None	Bachelor's degree
15-1244	Network and Computer Systems Administrators	3,165	2.5%	10,288	706		\$52.80	\$40.02	\$49.46	\$59.11	None	Bachelor's degree
15-1252	Software Developers	27,726	21.5%	45,468	4,124		\$64.37	\$51.20	\$65.21	\$81.29	None	Bachelor's degree
15-1253	Software Quality Assurance Analysts and Testers	3,625	2.8%	6,200	569		\$51.08	\$44.07	\$55.43	\$63.64	None	Bachelor's degree
15-1299	Computer Occupations, All Other	2,656	2.1%	8,445	736		\$63.88	\$42.63	\$55.63	\$71.42	None	Bachelor's degree
15-2051	Data Scientists	1,753	1.4%	5,915	587		\$61.17	\$40.42	\$53.77	\$67.31	None	Bachelor's degree
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	8,580	6.8%	37,747	3,988		\$40.25	\$28.11	\$39.24	\$69.32	Moderate-term OJT	High school diploma or GED
43-4051	Customer Service Representatives	2,762	2.2%	42,324	5,958		\$21.85	\$17.91	\$21.02	\$24.88	Short-term OJT	High school diploma or GED



Top Occupations

Top 20 Occupations Currently Listed
in the Colorado Urban Front Range

Top Occupations

These figures use information from unique job postings across the sector to show the number of jobs posted in the 15 county region during the last year and median posted salary. It is also important when planning staffing strategy to look at hires, separations and turnover rate for each of the occupations, what the percent of employment in the sector is, and the top skills demanded over the prior 12-month period.

Discover more about each occupation by simply clicking on the respective icon.



Software Developers

- % Employment 21.5%
- Unique Postings 2,995
- Posted Salary \$64.37
- Hires 20,717
- Separations 21,541
- Turnover Rate 49.7%

Top Skills: Computer Science, Agile Methodology, Python



Sales Representatives of Services, Except Advertising, Insurance, Financial Services, & Travel

- % Employment 6.8%
- Unique Postings 263
- Posted Salary \$40.25
- Hires 25,068
- Separations 25,609
- Turnover Rate 69.1%

Top Skills: Sales Prospecting, Selling Techniques, Marketing



Computer User Support Specialists

- % Employment 5.3%
- Unique Postings 816
- Posted Salary \$30.34
- Hires 8,187
- Separations 8,294
- Turnover Rate 52.8%

Top Skills: Technical Support, Help Desk Support, Operating Systems



Computer & Information Systems Managers

- % Employment 4.0%
- Unique Postings 40
- Posted Salary \$84.43
- Hires 4,358
- Separations 4,427
- Turnover Rate 38.1%

Top Skills: Computer Science, Project Management, Automation



Market Research Analysts & Marketing Specialists

• % Employment	3.4%
• Unique Postings	366
• Posted Salary	\$42.46
• Hires	17,877
• Separations	17,971
• Turnover Rate	73.4%
Top Skills: Marketing, Project Management, Digital Marketing	



Project Management Specialists

• % Employment	3.3%
• Unique Postings	587
• Posted Salary	\$52.06
• Hires	15,130
• Separations	15,059
• Turnover Rate	54.0%
Top Skills: Project Management, Agile Methodology, Milestones	



Network & Computer Systems Administrators

• % Employment	2.5%
• Unique Postings	421
• Posted Salary	\$52.80
• Hires	4,540
• Separations	4,642
• Turnover Rate	46.1%
Top Skills: Operating Systems, Linux, System Administration	



Customer Service Representatives

• % Employment	2.2%
• Unique Postings	602
• Posted Salary	\$21.85
• Hires	34,574
• Separations	37,361
• Turnover Rate	89.1%
Top Skills: Call Center Experience, Inbound Calls, Data Entry	



Computer Network Architects

• % Employment	3.3%
• Unique Postings	734
• Posted Salary	\$60.43
• Hires	4,069
• Separations	4,351
• Turnover Rate	43.5%
Top Skills: Network Engineering, Network Routing, Automation	



Computer Systems Analysts

• % Employment	2.9%
• Unique Postings	224
• Posted Salary	\$53.78
• Hires	4,176
• Separations	4,268
• Turnover Rate	48.2%
Top Skills: Computer Science, Project Management, Automation	



General & Operations Managers

• % Employment	2.1%
• Unique Postings	310
• Posted Salary	\$64.86
• Hires	19,915
• Separations	19,555
• Turnover Rate	48.8%
Top Skills: Project Management, Marketing, Finance	



Computer Occupations, All Other

• % Employment	2.1%
• Unique Postings	2,784
• Posted Salary	\$63.88
• Hires	3,953
• Separations	3,888
• Turnover Rate	47.6%
Top Skills: Computer Science, Project Management, Automation	



Software Quality Assurance Analysts & Testers

• % Employment	2.8%
• Unique Postings	235
• Posted Salary	\$51.08
• Hires	2,878
• Separations	3,041
• Turnover Rate	51.1%
Top Skills: Automation, Test Automation, Test Planning	



Business Operations Specialists, All Other

• % Employment	2.8%
• Unique Postings	75
• Posted Salary	\$55.26
• Hires	27,812
• Separations	27,338
• Turnover Rate	63.5%
Top Skills: Project Management, Security Controls, Quality Management	



Information Security Analysts

• % Employment	1.7%
• Unique Postings	222
• Posted Salary	\$57.72
• Hires	3,221
• Separations	3,294
• Turnover Rate	58.3%
Top Skills: Cyber Security, Vulnerability, Incident Response	



Human Resources Specialists

• % Employment	1.5%
• Unique Postings	219
• Posted Salary	\$37.05
• Hires	16,075
• Separations	16,170
• Turnover Rate	85.9%
Top Skills: Human Resources Information System (HRIS), Talent Management, Workday	



Accountants & Auditors

- % Employment 1.5%
 - Unique Postings 378
 - Posted Salary \$36.80
 - Hires 16,753
 - Separations 16,721
 - Turnover Rate 53.5%
- Top Skills: Accounting, Finance, Auditing



Management Analysts

- % Employment 1.4%
 - Unique Postings 479
 - Posted Salary \$52.80
 - Hires 7,056
 - Separations 6,800
 - Turnover Rate 53.9%
- Top Skills: Project Management, Data Analysis, Business Process



Data Scientists

- % Employment 1.4%
 - Unique Postings 807
 - Posted Salary \$61.17
 - Hires 3,270
 - Separations 3,294
 - Turnover Rate 58.5%
- Top Skills: Data Analysis, SQL, Python



Sales Managers

- % Employment 1.2%
 - Unique Postings 510
 - Posted Salary \$74.71
 - Hires 4,134
 - Separations 4,275
 - Turnover Rate 47.4%
- Top Skills: Marketing, Selling Techniques, Sales Prospecting

Source: Lightcast

Let's Talk!

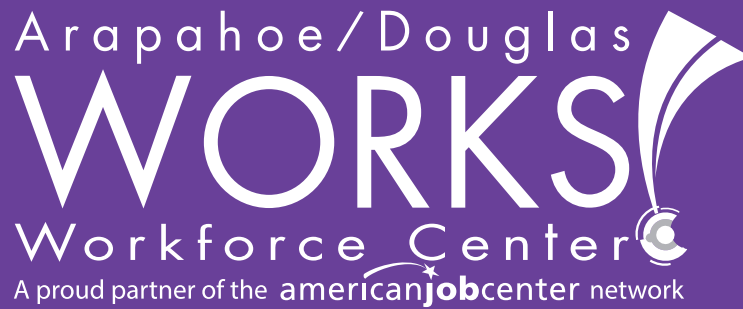
There are a number of strategies you can employ to enhance employee recruitment and retention. The Arapahoe/Douglas Works! Business Services Team can help you strategize and implement these tactics. Get started by calling (303) 636-1359 or visiting <https://bit.ly/ADWBBusinessServices>.



The Colorado Apprenticeship Hub serves as a resource for companies seeking to engage in registered apprenticeship programs in Colorado. The Hub provides apprenticeship-related services at no cost to employers.

If you want to connect to a consultant, please email the team at apprenticeship@arapahoegov.com





ARAPAHOE COUNTY



DOUGLAS COUNTY
COLORADO

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