

2025 Engineering Services INDUSTRY PROFILE

Colorado Urban Front Range



To navigate directly to a specific section, click on the title in the list below. This will link directly to the corresponding page.

To return back to the Table of Contents, click on any section title. This will link back to the Table of Contents to allow easy navigation to other sections.

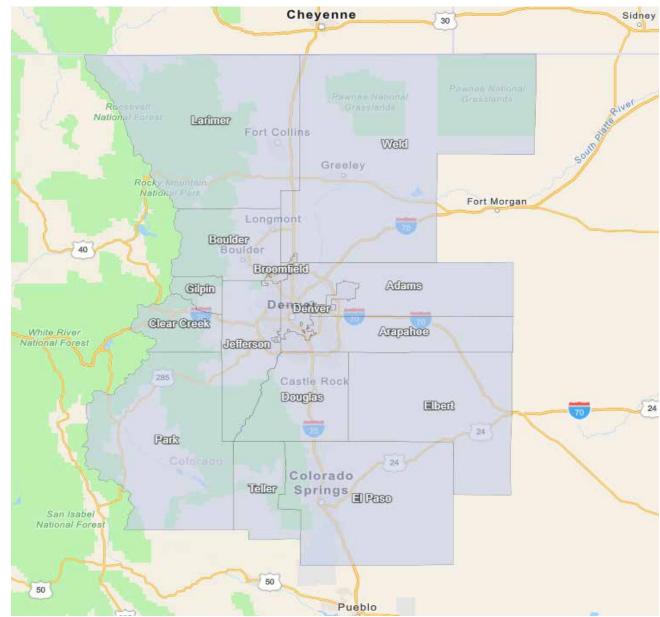
Table of Contents

03	Geograp	phical	Area
	Cogia	Jineur	Alcu

- **Industries Making Up The Sector** 04
- 08 **Historical Trends**
- **Employment Concentration** 10
- 14 Where Core Workforce Lives
- Demographics 17
- **Telework and Automation Strategies** 20
- 22 Wages
- 26 **Top Occupations**
- 31 Let's Talk!

Geographical Area

counties that make up Colorado's Urban Front Range.



The geographic region includes the following metropolitan areas:

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

total employment. GRP.

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





The geographical area for this industry profile includes the 15

In 2024, this 15 county region employed nearly 2.74 million people across all industries, and made up 83.3% of Colorado's

In 2024, the Gross Regional Product (GRP) for the Urban Front Range was \$471.6 billion, which made up 1.7% of the national

Engineering Services

3.3% From prior year

2.2% Total Jobs in CO **Urban Front Range**

The engineering services sector employs 56,045 people in 5,313 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 \$15.5 billion in sales, and contributed \$10.2 billion to the region's GRP. The engineering services industry has been thriving, with a diverse range of companies spanning fields like aerospace, technology, heavy civil construction, and renewable energy. The region's emphasis on sustainability and renewable energy initiatives aligns with the industry's focus on creating solutions for a more environmentally conscious future.



Top Specialized Skills

- Project Management
- Construction
- AutoCAD

- AutoCAD

Industries Making up the Sector

Top Software Skills

 Microsoft Office Autodesk Revit

Top Credentials

- Valid Driver's License
- Top Secret-Sensitive Compartmented Information (TS/SCI Clearance)
- Professional Engineer (PE) License

Engineering Services Sector

Employment concentration is also known as location quotient. Location quotient measures industry employment concentration in a given geography relative to the national average. For example, employment in geophysical surveying and mapping services is 2.23 times more concentrated than the national average for this industry. The North American Industry Classification System (NAICS) is used to categorize businesses and organizations based on their primary economic activities. It is used throughout the United States, Mexico, and Canada.



Numbers to Know

- 4,971 jobs
- 794 establishments
- 1.51 employment concentration
- \$1.2 billion in sales
- 8.3% change to 2028
- \$98,511 average wage
- \$13,685 average employer paid benefits

Landscape Architectural Services NAICS 541320

Numbers to Know

- 1,367 jobs
- 242 establishments
- 2.45 employment concentration
- \$301.9 million in sales
- 12.1% change to 2028
- \$83,275 average wage
- \$11,566 average employer paid benefits



Engineering Services

NAICS 541330

Numbers to Know

- 44,278 jobs
- 3,453 establishments
- 2.36 employment concentration
- \$12.7 billion in sales
- 8.4% change to 2028
- \$130,228 average wage
- \$18,100 average employer paid benefits

Building Inspection Services

NAICS 541350

Numbers to Know

- 639 jobs
- 216 establishments
- 1.47 employment concentration
- \$138.9 million in sales
- 7.1% change to 2028
- \$73,329 average wage
- \$10,173 average employer paid benefits

Surveying and Mapping (except Geophysical) Services

NAICS 541370

Numbers to Know

- 1,154 jobs
- 179 establishments
- 1.29 employment concentration
- \$253.2 million in sales
- (0.5%) change to 2028
- \$93,077 average wage
- \$12,917 average employer paid benefits

Drafting Services

NAICS 541340

Numbers to Know

- 351 jobs
- 98 establishments
- 2.25 employment concentration
- \$111.5 million in sales
- 9.3% change to 2028
- \$98,916 average wage
- \$13,754 average employer paid benefits

Geophysical Surveying & Mapping Services NAICS 541360

Numbers to Know

- 1,251 jobs
- 97 establishments
- 5.51 employment concentration
- \$473.1 million in sales
- 0.5% change to 2028
- \$166,145 average wage
- \$23,078 average employer paid benefits

Testing Laboratories

NAICS 541380

Numbers to Know

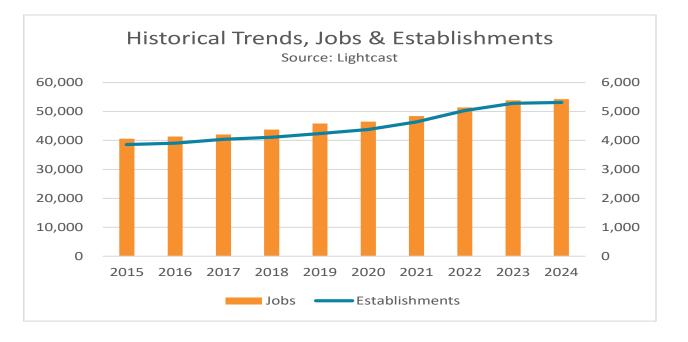
- 2,034 jobs
- 234 establishments
- 0.72 employment concentration
- \$394.7 million in sales
- 1.6% change to 2028
- \$87,624 average wage
- \$11,810 average employer paid benefits



Historical Trends

Colorado Urban Front Range

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



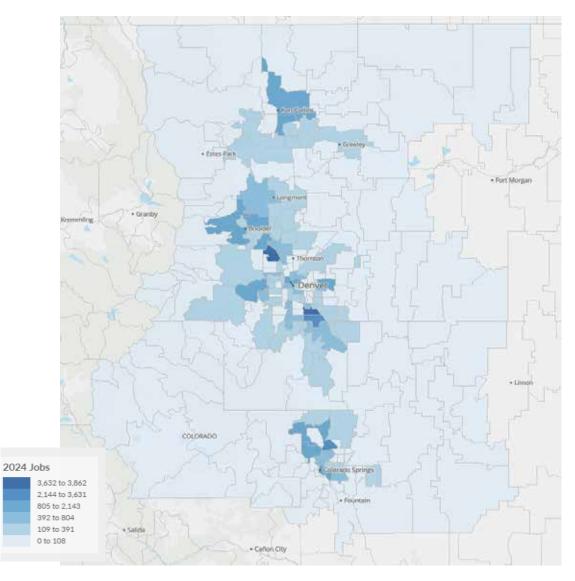


Source: Lightcast

9

Employment Concentration

Employment Concentration Map



Colorado Urban Front Range

The overall employment concentration in this sector is 2.31 times the national average. There are some areas that are national hubs for different types of engineering services. For example, Arapahoe and Jefferson counties are hubs for aerospace engineering.

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 businesses operating within various industries in the sector. For example, the highest average wage per worker is in geophysical surveying and mapping services while the lowest is in building inspection services. Thus, a county that has a greater concentration of building inspection services will have a lower average wage per worker.

ADAMS

- Jobs 2.211
- Employment Concentration - 0.83
- Current Wages, Salaries, & Proprietor Earnings -\$131.847
- Benefits \$18,286
- Top Businesses Preferred Pump & Equipment, Ames Construction, US Engineering

BROOMFIELD

- Jobs 879
- Employment Concentration - 1.95
- Current Wages, Salaries, & Proprietor Earnings -\$182,412
- Benefits \$25,328
- Top Businesses -Stoller Newport, MWH Constructors, Renewable **Energy Systems**

ARAPAHOE

- Jobs 10.760
- Employment Concentration - 2.95
- Current Wages, Salaries, & Proprietor Earnings -\$128.900
- Benefits \$17.909 • Top Businesses - Merrick & Co, Seakr Engineering, Mikron Corp

CLEAR CREEK

- Jobs <10
- Employment Concentration - 0.18
- Proprietor Earnings Insf. Data
- Benefits Insf. Data
- Top Businesses SGS Transportation, CDOT Engineers, Architectural Innovators

BOULDER

- Jobs 4.936
- Employment Concentration - 2.34
- Current Wages, Salaries, & Proprietor Earnings - \$115,941
- Benefits \$16.088
- Top Businesses Uplight Energy, Earth System Research Laboratory, Vaisala

DOUGLAS

- Jobs 3.139
- Employment Concentration - 2.01
- Current Wages, Salaries, & Proprietor Earnings -\$125.236
- Benefits \$17.396
- Top Businesses -Mollenhauer Group, First Pass Engineering, Burns & McDonnell

- Jobs 9.239
- 2.41

- & Proprietor Earnings -\$122.987
- Benefits \$17.087
- Engineering, Lockheed Martin. Kratos

- 2.91

GILPIN

- Jobs <10
- Employment Concentration - 0.05
- Current Wages, Salaries, & Proprietor Earnings - Insf. Data
- Benefits Insf. Data
- Top Businesses Caribou Engineering

PARK

- Jobs 14
- Employment Concentration - 0.41
- Current Wages, Salaries, & Proprietor Earnings -\$60,664
- Benefits \$8,435
- Top Businesses Littlehorn Engineering, Green Mountain Landscaping, Xa Mars Electronics
- \$63,208 • Benefits - **\$8,789** Engineering Solutions, Sparrow Engineering, Engineering

• Jobs - 81

- 0.88

- Current Wages, Salaries, &

- Jobs 11.831
- Employment Concentration - 1.95
- Current Wages, Salaries, & Proprietor Earnings -\$117,939
- Benefits \$16,378
- Top Businesses Zachry Engineering, Antero Resource Midstream, Carter & Burgess

DENVER

EL PASO

Employment Concentration

• Current Wages, Salaries,

• Top Businesses - Apogee

JEFFERSON

• Jobs - 7.694 Employment Concentration

- Current Wages, Salaries, & Proprietor Earnings - \$115,221 • Benefits - \$15,994
- Top Businesses Lockheed
- Martin, M E Engineers, NEI
- **Electric Power Engineering**

TELLER

• Employment Concentration

• Current Wages, Salaries, & Proprietor Earnings -

• Top Businesses - Enginuity Davidson Lonnie Hidaero

ELBERT

- Jobs 64
- Employment Concentration - 1.22
- Current Wages, Salaries, & Proprietor Earnings - \$92,167
- Benefits \$12.816
- Top Businesses Lent Construction, Lumin General Contractors. Robert's Small Engine

LARIMER

- Jobs 2.790
- Employment Concentration - 1.47
- Current Wages, Salaries, & Proprietor Earnings -\$154.298
- Benefits \$21,429
- Top Businesses Woodward Inc., Tanco Engineering, Miner & Miner Consulting Engineers

WELD

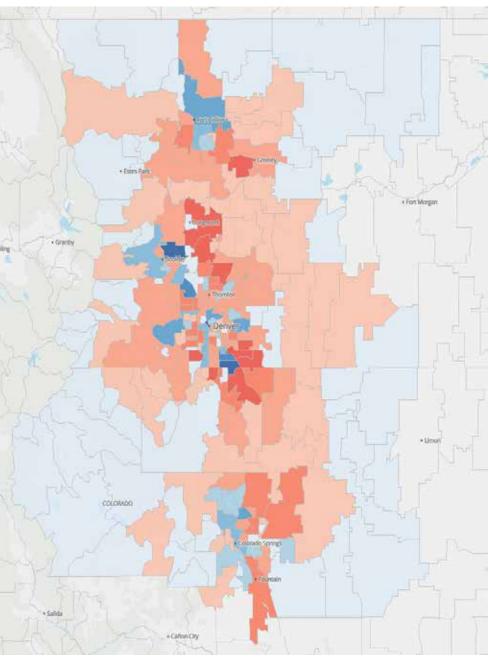
- Jobs 622
- Employment Concentration - 0.49
- Current Wages, Salaries, & Proprietor Earnings - \$91,552
- Benefits \$12,608
- Top Business Cermak Peterka Peterson, Woodward, Sodar Leasing

Business names are sourced from Database USA



Commute Map

2024 Net Commuters 2,653 to 3,105 2.040 to 2.652 497 to 2,039 243 to 496 87 to 242 0 to 86 0 to -86 -87 to -242 -243 to -496 -497 to -2,039



Where Core Workforce Lives

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 engineering services, this core set of occupations is made up engineers, technicians, and drafters. Examples of these occupations include aerospace and civil engineers, and engineering technicians. This map shows where persons employed in these occupations live (orange areas) and where they work (blue areas).

Source: Lightcast



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, 9,778 engineering workers live in Jefferson County. There are 9,481 engineering jobs in the county. This means there are 296 fewer engineering services jobs in Jefferson County than there are residents in those occupations. Note: the latest commuter data available is from 2024.

County	Net Commuters	Resident Workers	Jobs
Denver	3,681	9,637	13,317
Boulder	2,589	6,292	8,881
Arapahoe	2,284	7,795	10,079
Clear Creek	28	51	78
Larimer	14	4,869	4,884
Gilpin	(33)	49	16
Park	(89)	126	36
Teller	(122)	219	97
Elbert	(199)	284	84
El Paso	(222)	8,904	8,682
Broomfield	(248)	1,639	1,391
Jefferson	(296)	9,778	9,481
Adams	(2,122)	6,152	4,030
Douglas	(2,666)	5,861	3,195
Weld	(2,968)	4,958	1,989

Source: Lightcast



Demographics

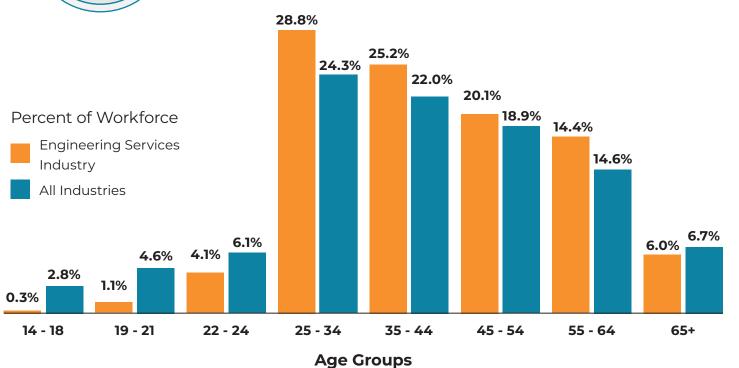
Comparative Retirement Risk

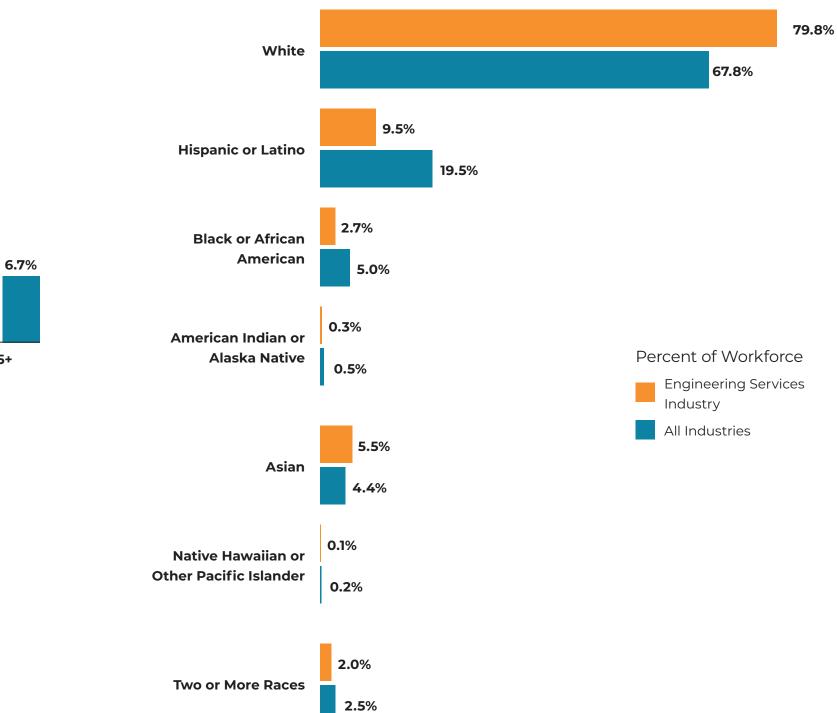
6%

The comparative retirement risk for the engineering industry in the 15 county region is slightly lower than across all industries, with 6.0% of the workforce in the industry aged 65 or older, while 6.7% of the workforce across all industries are 65 years or older.

Demographics

These bar charts illustrate the racial and ethnic industry.





Comparative Gender

Percent of Workforce Engineering Services Industry All Industries Men 57.7% 57.7% 51.9% Women 42.3% 48.1%

These bar charts illustrate the racial and ethnic composition of the workforce in the engineering



Telework and Automation Strategies

Remote Work Potential



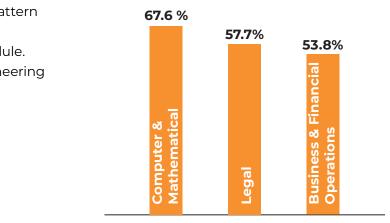
In a scarce labor market, a valid strategy for employers might be to review their staffing pattern and determine which positions, if any, can be employed remotely or on a hybrid work schedule. Approximately 43.1% of the workforce in engineering has at least partial teleworking capacity.

Automation Index

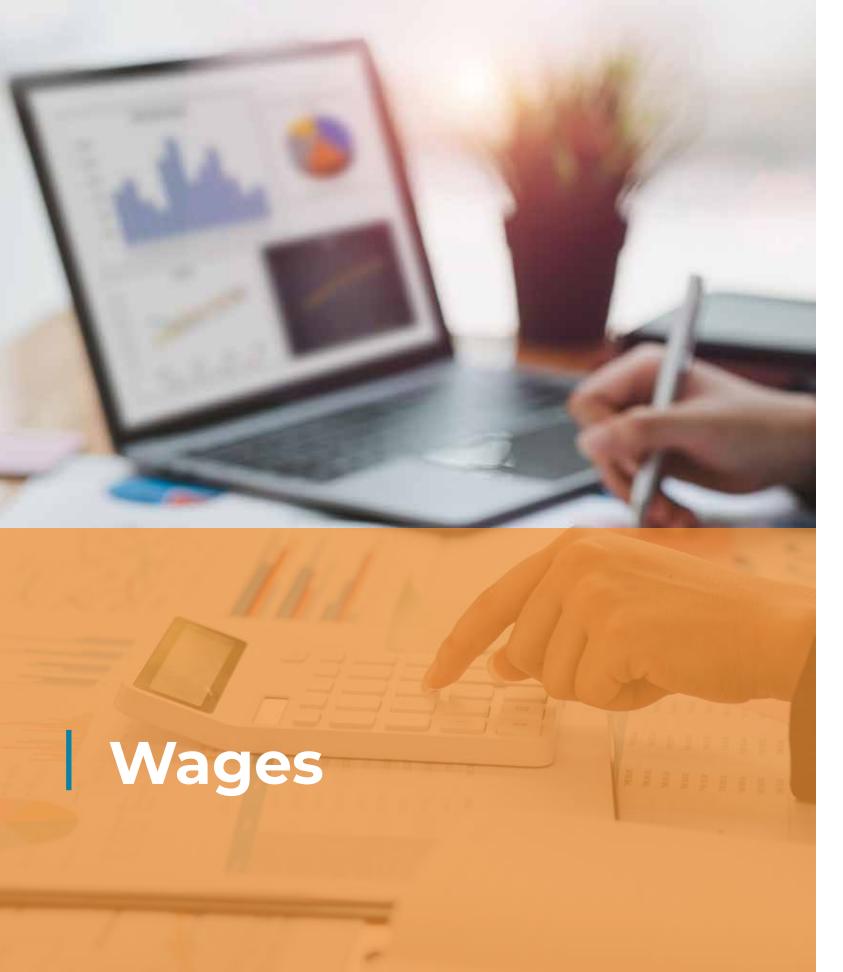
85.3

Another valid strategy employers can use in tod scarce labor market is automation. The automat numbers presented in this profile are based on automation index which was developed in 2013. this is the best available data, it is likely that add automation strategies are now available. Autom leverages the productive capacity of fewer work allow for higher output.

Remote Work Capability for Sector

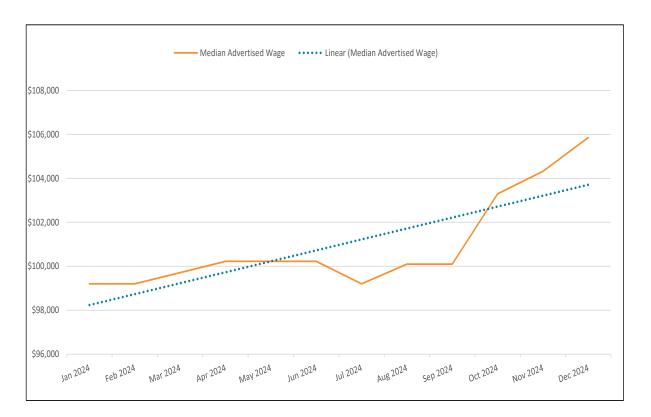


day's tion	125.4	123.3	122.5
an			e e
. While			ano
ditional	o S		en ds
nation	<u>o</u> p	.*	n <u>t</u>
kers to	Preparation ng Related	S N S	Grounds Maintenance
	e pa	Construction Extraction	8 8 8
	r Br	Constructi Extraction	Building Cleaning
	Food Pr Serving	tra	ear
	Se Se	ŬЩ	ы



Advertised Wage Trends

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



Competitive Wage Analysis

This table shows the top 20 occupations by percentage of total employment in the sector, as well as total employment across industries. For example, the engineering services sector employs 1,485 software developers, but there are 45,468 employed across all industry sectors. This is important because the engineering sector must compete with other sectors for critical talent, such as general and operations managers, project management specialists, and mechanical engineers. Average annual openings for each occupation are 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 & Operations Managers	959	1.7%	41,260	4,200	\$58.71	\$44.42	\$62.52	\$92.12	None	Bachelor's degree
11-9041	Architectural & Engineering Managers	1,626	2.9%	4,024	331	\$65.85	\$73.42	\$84.85	\$103.82	None	Bachelor's degree
13-1082	Project Management Specialists	3,728	6.7%	28,647	2,485	\$58.95	\$37.90	\$48.77	\$63.40	None	Bachelor's degree
13-1161	Market Research Analysts & Marketing Specialists	665	1.2%	25,285	2,887	\$40.25	\$28.25	\$37.40	\$50.67	None	Bachelor's degree
13-1199	Business Operations Specialists, All Other	1,076	1.9%	43,849	4,283	\$47.63	\$30.72	\$40.54	\$56.46	None	Bachelor's degree
13-2011	Accountants & Auditors	748	1.3%	31,998	2,972	\$36.55	\$32.52	\$41.52	\$54.85	None	Bachelor's degree
15-1252	Software Developers	1,485	2.6%	45,468	4,124	\$60.18	\$51.20	\$65.21	\$81.29	None	Bachelor's degree
17-1011	Architects, Except Landscape & Naval	2,769	4.9%	3,076	255	\$48.12	\$36.11	\$45.49	\$56.36	Internship/residency	Bachelor's degree
17-1022	Surveyors	1,050	1.9%	1,271	109	\$33.11	\$27.21	\$34.67	\$44.15	Internship/residency	Bachelor's degree
17-2011	Aerospace Engineers	931	1.7%	3,835	253	\$63.88	\$50.73	\$63.68	\$83.10	None	Bachelor's degree
17-2051	Civil Engineers	8,004	14.3%	12,060	939	\$49.35	\$36.99	\$46.41	\$61.08	None	Bachelor's degree
17-2071	Electrical Engineers	1,292	2.3%	3,756	273	\$54.03	\$43.37	\$53.15	\$65.51	None	Bachelor's degree
17-2072	Electronics Engineers, Except Computer	747	1.3%	5,826	364	\$56.86	\$46.63	\$60.16	\$78.71	None	Bachelor's degree
17-2112	Industrial Engineers	698	1.2%	5,125	399	\$50.58	\$39.67	\$48.72	\$61.34	None	Bachelor's degree
17-2141	Mechanical Engineers	2,380	4.2%	6,820	509	\$52.80	\$40.08	\$49.46	\$63.73	None	Bachelor's degree
17-3011	Architectural & Civil Drafters	2,347	4.2%	2,860	317	\$37.54	\$28.44	\$34.73	\$40.94	None	Associate's degree
17-3022	Civil Engineering Technologists & Technicians	814	1.4%	1,395	158	\$33.11	\$24.26	\$31.78	\$37.38	None	Associate's degree
17-3031	Surveying & Mapping Technicians	1,712	3.1%	2,428	327	\$30.40	\$22.12	\$24.42	\$30.07	Moderate-term OJT	High school diploma or GED
43-6014	Secretaries & Administrative Assistants, Except Legal, Medical, & Executive	818	1.5%	29,783	3,468	\$24.98	\$18.65	\$21.93	\$25.94	Short-term OJT	High school diploma or GED
47-4011	Construction & Building Inspectors	1,203	2.2%	3,047	398	\$37.29	\$27.70	\$33.64	\$40.63	Moderate-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.



Civil Engineers

∙% Employment	14.3%		
 Unique Postings 	1,758		
 Posted Salary 	\$49.35		
• Hires	5,602		
 Separations 	5,251		
•Turnover Rate	44.8%		
Top Skills: Civil Engineering,			
Project Manageme	ent, AutoCAD		



Architects, Except Landscape & Naval

•% Employment	4.9%			
•Unique Postings	111			
 Posted Salary 	\$48.12			
• Hires	999			
 Separations 	931			
•Turnover Rate	31.3%			
Top Skills: Autodesk Revit,				
Project Management,				
Building Codes				



Project Management Specialists

•% Employment	6.7%		
•Unique Postings	1,035		
 Posted Salary 	\$58.95		
• Hires	15,130		
 Separations 	15,059		
•Turnover Rate	54.0%		
Top Skills: Project Management,			
Business Development,			
Construction			



Mechanical Engineers

 % Employment 	4.2%			
•Unique Postings	512			
 Posted Salary 	\$52.80			
• Hires	2,680			
 Separations 	2,444			
•Turnover Rate	36.9%			
Top Skills: Mechanical				
Engineering, Project				
Management, Auto	desk Revit			



Architectural & Civil Drafters

 % Employment 	4.2%
•Unique Postings	283
 Posted Salary 	\$37.54
• Hires	1,227
 Separations 	1,173
•Turnover Rate	42.1%
Top Skills: Compute	er-Aided
Design, AutoCAD, A	AutoCAD
Civil 3D	



Surveying & Mapping Technicians

•% Employment	3.1%		
 Unique Postings 	126		
 Posted Salary 	\$30.40		
• Hires	988		
 Separations 	951		
•Turnover Rate	40.2%		
Top Skills: Surveying, AutoCAD Civil 3D, Legal Land Description			
Civil 5D, Legal Land			

Business Operations Specialists, All Other

•% Employment	1.9%			
•Unique Postings	41			
 Posted Salary 	\$47.63			
• Hires	27,812			
 Separations 	27,338			
•Turnover Rate	63.5%			
Top Skills: Sustainability				
Reporting, Business				
Development, Power Bl				



Architectural & **Engineering Managers**

•% Employment	2.9%		
•Unique Postings	311		
 Posted Salary 	\$65.85		
• Hires	1,120		
 Separations 	1,059		
•Turnover Rate	27.1%		
Top Skills: Project Management,			
Business Development, Civil			
Engineering			



Software Developers

•% Employment	2.6%
 Unique Postings 	664
 Posted Salary 	\$60.18
• Hires	20,717
 Separations 	21,541
•Turnover Rate	49.7%
Top Skills: Software	
Development, Software	
Engineering, Agile Methodology	



Electrical Engineers

•% Employment	2.3%
 Unique Postings 	808
 Posted Salary 	\$54.03
• Hires	1,341
 Separations 	1,328
•Turnover Rate	36.4%
Top Skills: Electrical	
Engineering, Project	
Management, AutoCAD	



Construction & Building Inspectors

•% Employment	2.2%
• Unique Postings	134
 Posted Salary 	\$37.29
• Hires	1,625
 Separations 	1,547
•Turnover Rate	52.1%
Top Skills: Construction, Project	
Management, Construction	
Inspection	



General & Operations Managers

$\cdot\%$ Employment	1.7%	
 Unique Postings 	140	
 Posted Salary 	\$58.71	
• Hires	19,915	
 Separations 	19,555	
•Turnover Rate	48.8%	
Top Skills: Project Management,		
Business Development,		
Operations Management		



Secretaries & Administrative Assistants, Except Legal, Medical, & Executive

•% Employment	1.5%
 Unique Postings 	161
 Posted Salary 	\$24.98
• Hires	16,016
 Separations 	15,733
•Turnover Rate	53.4%
Top Skills: Administ	rative
Support, Project Management,	
Invoicing	



Surveyors

- % Employment 1.9%
- •Unique Postings 201
- Posted Salary \$33.11
- Hires 455
- 427 Separations
- •Turnover Rate 34.7%

Top Skills: Surveying, Topographic Surveying, Topography



Aerospace Engineers

•% Employment	1.7%
•Unique Postings	59
 Posted Salary 	\$63.88
• Hires	1,341
 Separations 	1,328
•Turnover Rate	35.5%
Top Skills: Spacecra	aft, Systems
Engineering Aerospace Physic	

าร Engineering, Aerospace Physics



Civil Engineering Technologists & Technicians

•% Employment 1.4% •Unique Postings 21 • Posted Salary \$33.11 578 • Hires 538 Separations •Turnover Rate 39.9% Top Skills: Civil Engineering, Project Management, AutoCAD



Electronics Engineers, Except Computer

•% Employment	1.3%
•Unique Postings	45
 Posted Salary 	\$56.86
• Hires	2,062
 Separations 	2,091
•Turnover Rate	36.3%
Top Skills: Radio Frequency,	
Electrical Engineering,	
Electronics	



Accountants & Auditors

•% Employment	1.3%
•Unique Postings	112
 Posted Salary 	\$36.55
• Hires	16,753
 Separations 	16,721
•Turnover Rate	53.5%
Top Skills: Accounting, Invoicing,	
Project Accounting	

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/ADWBusinessServices.



Source: Lightcast

Industrial Engineers

•% Employment	1.2%
•Unique Postings	208
 Posted Salary 	\$50.58
• Hires	2,168
 Separations 	2,039
•Turnover Rate	41.0%
Top Skills: Project Management,	
AutoCAD, Electrica	l Engineering



Market Research Analysts & Marketing Specialists

•% Employment	1.2%
 Unique Postings 	88
 Posted Salary 	\$40.25
• Hires	17,877
 Separations 	17,971
•Turnover Rate	73.4%
Top Skills: Marketing, Business	
Development, Project	
Management	

Outsourcing



APPRENTICESHIP нив

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











www.adworks.org







Arapahoe/Douglas Works! is an equal opportunity employer/program. Auxiliary aids and services are available upon request to individuals with disabilities. Arapahoe/Douglas Works! programs are federally funded with \$18,730,452.65 (~78 percent) through the U.S. Department of Labor. Additionally, ~22 percent (\$5,326,786.07) is financed by non-federal sources.