

2022

Bioscience Industry profile

for Arapahoe & Douglas Counties Colorado WIOA Central Planning Region



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GEOGRAPHICAL AREA

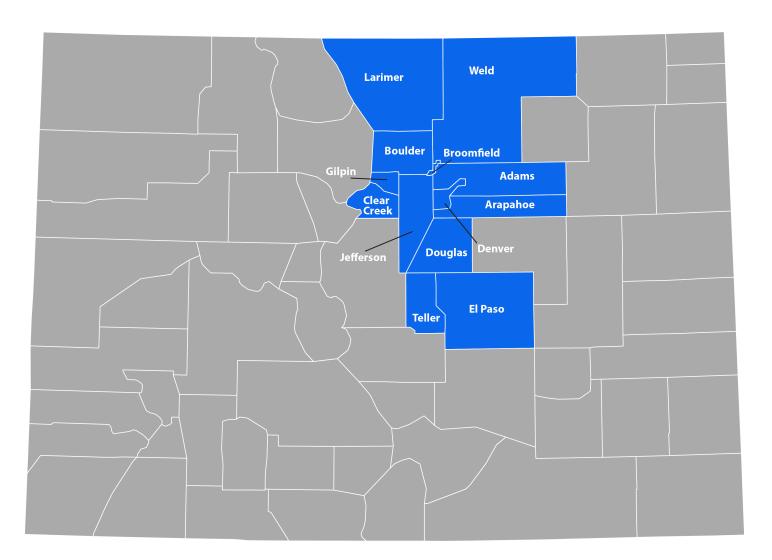
The geographic area for this industry profile includes the 13 counties that make up Colorado's Urban Front Range.

The geographic region includes the following metropolitan areas:

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

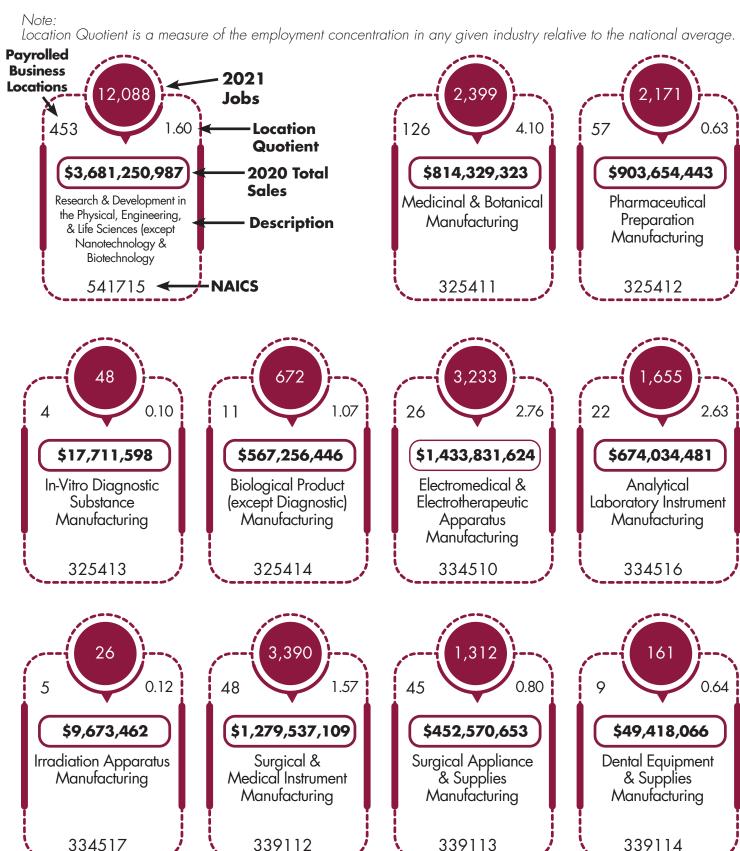
In 2021, this thirteen-county region employed nearly 2.6 million people across all industries, and made up over 85% of Colorado's total employment.

In 2020, the gross regional product (GRP) for Colorado's Urban Front Range was \$312.76 billion, which made up around 1.7% of the national GRP. GRP is the total market value of all goods and services produced in the region.

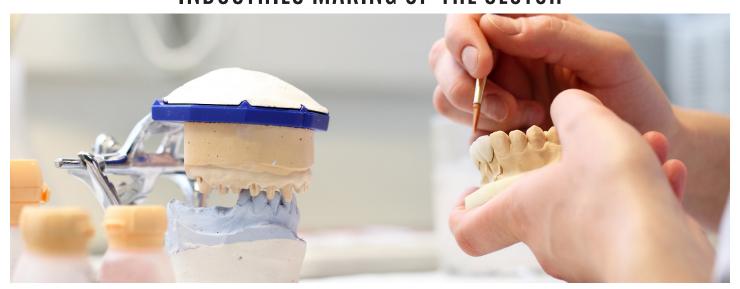


INDUSTRIES MAKING UP THE SECTOR

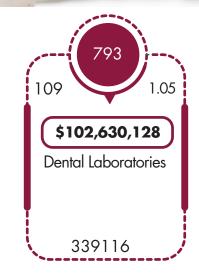
The Bioscience Sector employs 135,245 people in 4,706 payrolled business locations along Colorado's Urban Front Range. In 2020, the sector had \$54.1 billion in sales, and contributed \$23.8 billion to the region's Gross Regional Product. The region's geographic location and extensive infrastructure ensures a strong global supply chain, and a diversified business climate. In addition, ready access to highly skilled workers and world-class research institutions offers employers in the Sector many advantages in a global economy.



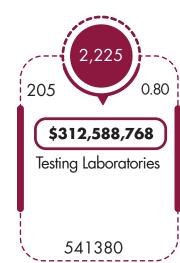
INDUSTRIES MAKING UP THE SECTOR

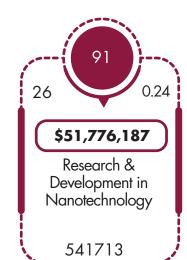


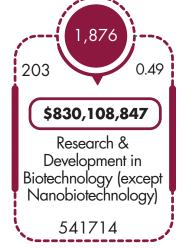










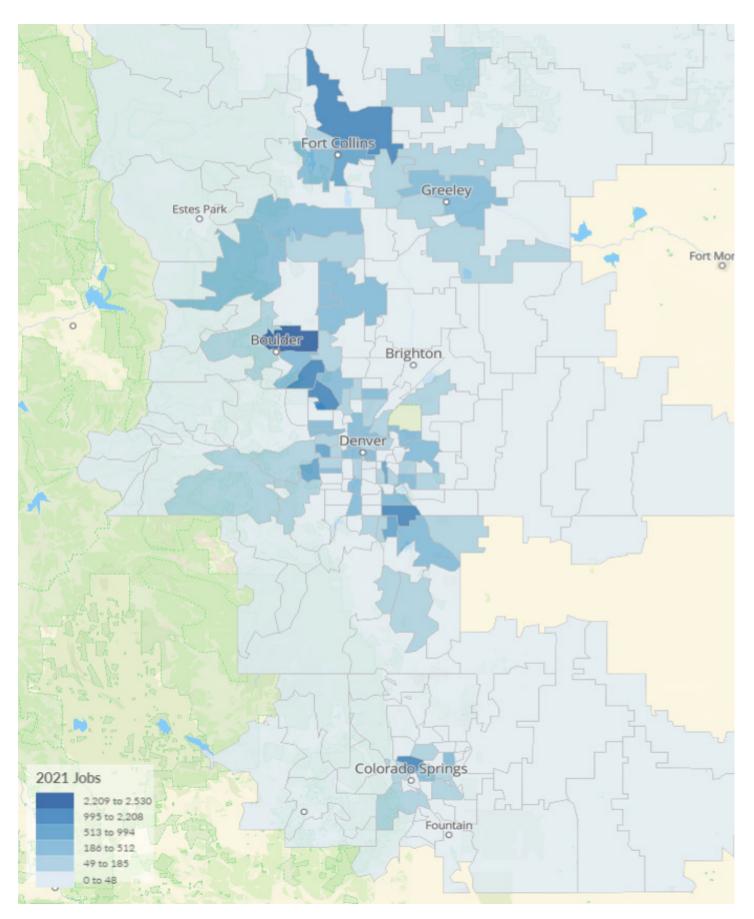


Source: EMSI Burning Glass

TOTALS

2021 Jobs - 26,075
Payrolled Business Locations - 1,780
Location Quotient - 1.67
Total Sales - \$9,978,117,565

EMPLOYMENT CONCENTRATION MAP



Source: EMSI Burning Glass

EMPLOYMENT CONCENTRATION

The Front Range region is a national hub in bioscience, with overall employment in the sector concentrated at 167% of the national average. The highest employment concentrations are in medicinal and botanical manufacturing (4.10 times the national average), and in electromedical and electrotherapeutic apparatus and analytical laboratory equipment manufacturing (2.76 and 2.63 times more concentrated than the national average, respectively).

Note: A supplement is any kind of employer paid benefit beyond wage or salary.

Jobs and Average Earnings by County

County	2021 Jobs	Average Wage & Salaries	Average Cost of Supplements
Boulder	<u> 7,060</u>	\$131,692	\$26,626
Jefferson	4,583	\$99,014	\$26,258
Denver	3,048	\$104,063	\$20,867
Arapahoe	2,769	\$97,002	\$16,947
El Paso	2,478	\$78,538	\$19,580
Larimer	2,273	\$102,652	\$26,011
Douglas	1,385	\$123,023	\$22,441
Adams	1,229	\$68,018	\$12,338
Weld	949	\$77,722	\$14,553
Broomfield	278	\$132,706	\$32,935
Clear Creek	<10	Insf. Data	Insf. Data
Gilpin	<10	Insf. Data	Insf. Data
Teller	<10	Insf. Data	Insf. Data
TOTALS	26,053	\$101,443	\$21,856

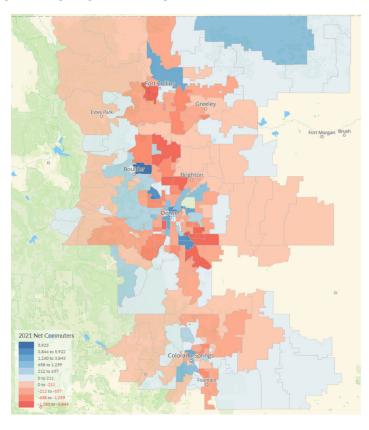
WHERE CORE WORKFORCE LIVES

Every industry sector has a group of occupations that it needs to produce its good or render its service. This is called a staffing pattern, and these staffing patterns include management, business and financial occupations, administrative and support occupations, and core occupations.

Core occupations in the Sector include some installation, maintenance and repair occupations, and production occupations. This map shows where the core workers in the industry live (orange) and where they work (blue).

For this industry, the core occupations are defined as follows:

- Management
- Business & Financial Operations
- Computer & Mathematical
- Architecture & Engineering
- Life, Physical, & Social Science



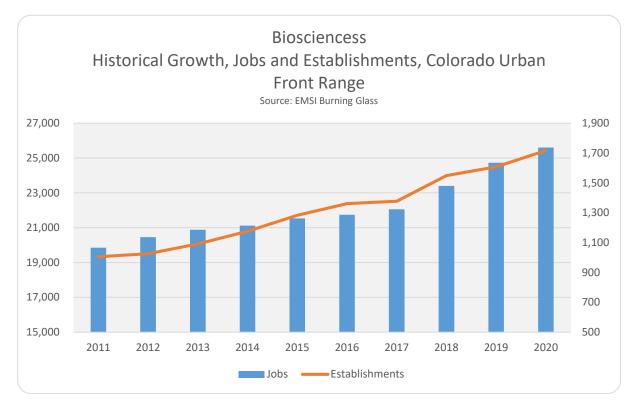
County	Net Commuters	Resident Workers	Jobs
Denver	12,291	24,251	36,542
Boulder	6,552	19,168	25,720
Arapahoe	955	21,129	22,084
Clear Creek	55	177	232
Gilpin	(93)	155	62
Teller	(360)	756	396
Larimer	(774)	18,421	17,647
Broomfield	(1,283)	4,922	3,639
El Paso	(1,709)	21,475	19,767
Jefferson	(3,023)	27,738	24,714
Adams	(3,224)	20,469	17,245
Douglas	(5,361)	12,360	6,998
Weld	(5,943)	18,979	13,036

Source: EMSI Burning Glass

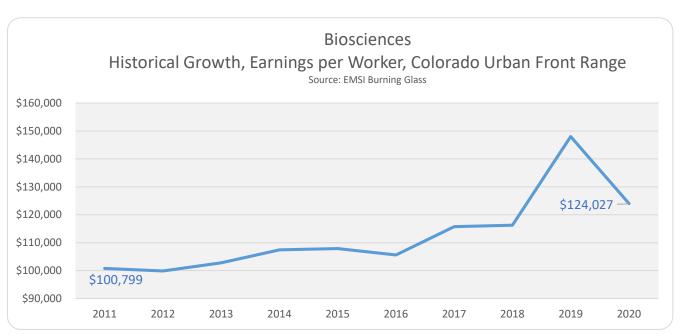
HISTORICAL TRENDS & GROWTH

- Over the last decade, employment in the Bioscience Sector grew by 5,750 jobs, an annual growth rate of 2.87%.
- The number of establishments grew annually by 6.1% over the same time period, moving from 1,005 in 2011 to 1,718 in 2020.
- Average worker earnings in the sector, which includes wages, salaries, and compensation, grew from \$100,799 in 2011 to \$124,027 in 2020, an annual growth rate of 2.3%.

Historical Trends



Historical Growth



PROJECTED GROWTH

The Biosciences Sector is expected to grow at an annual rate of 1.67%, with the number of jobs increasing to 29,060 by 2025. The Urban Front Range continues to be a national hub in several sector industries with employment concentration in the sector as a whole at 1.67 times the national average.

Note:

Location Quotient is a measure of the employment concentration in any given industry relative to the national average.

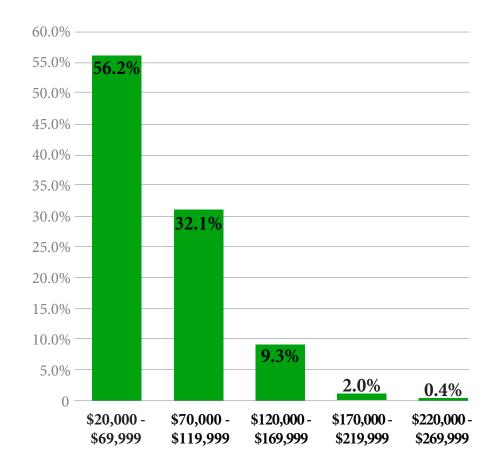
Source: EMSI Burning Glass

NAICS	Description	2021 Jobs	2025 Jobs	2021- 2025 Change	Location Quotient	2020 Payrolled Business Locations
423450	Medical, Dental, & Hospital Equipment & Supplies Merchant Wholesalers	5,923	7,114	1,191	1.38	877
325411	Medicinal & Botanical Manufacturing	2,399	2,985	585	4.10	126
325412	Pharmaceutical Preparation Manufacturing	2,171	2,452	280	0.63	57
325414	Biological Product (except Diagnostic) Manufacturing	672	931	259	1.07	11
541714	Research & Development in Biotechnology (except Nanobiotechnology)	1,876	2,085	209	0.49	203
334516	Analytical Laboratory Instrument Manufacturing	1,655	1,833	178	2.63	22
541380	Testing Laboratories	2,225	2,398	173	0.80	205
334510	Electromedical & Electrotherapeutic Apparatus Manufacturing	3,233	3,396	163	2.76	26
339112	Surgical & Medical Instrument Manufacturing	3,390	3,416	25	1.57	48
339113	Surgical Appliance & Supplies Manufacturing	1,312	1,324	12	0.80	45
325413	In-Vitro Diagnostic Substance Manufacturing	48	59	12	0.10	4
339115	Ophthalmic Goods Manufacturing	99	100	0	0.27	8
334517	Irradiation Apparatus Manufacturing	26	26	0	0.12	5
541713	Research & Development in Nanotechnology	91	87	(5)	0.24	26
339114	Dental Equipment & Supplies Manufacturing	161	121	(40)	0.64	9
339116	Dental Laboratories	793	734	(58)	1.05	109
	Totals	26,075	29,060	2,985	1.67	1,780

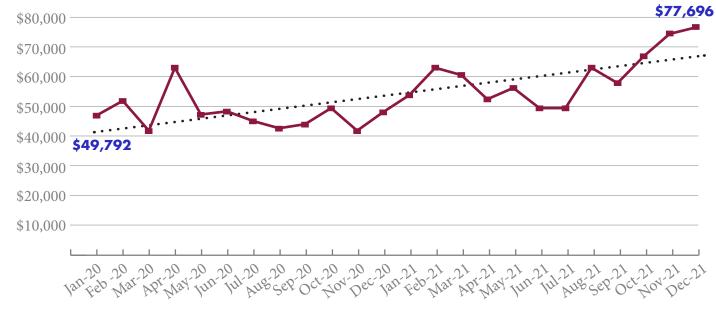
WAGE TRENDS

The bar graph and the line graph below are from EMSI Burning Glass, and reflect wage trends in job postings for the industry. The bar graph shows the posting wage curve for 2021 to date, with the median posted annual wage \$63,616. The line graph below shows the median wage from job postings by month over a three-year period.

Salary Range of Unique Job Postings



Advertised Wage Trends



COMPETITIVE WAGE ANALYSIS

This table shows employment within the Colorado Urban Front Range in the top 20 occupations in the sector. Regional wage ranges and the median wage are shown.

COMPETITIVE WAGE ANALYSIS

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

SOC Code	Description	# Jobs in Industry	% of Total Employment in Industry	# Jobs across Industries	Average Annual Openings	Average Wage	10th Percentile Wage	25th Percentile Wage	Median Wage	75th Percentile Wage	90th Percentile Wage
11-1021	General & Operations Managers	468	1.8%	32,731	3,590	\$71.32	\$26.57	\$39.11	\$60.37	\$93.63	\$132.71
13-1161	Market Research Analysts & Marketing Specialists	381	1.5%	20,905	2,766	\$38.24	\$19.01	\$24.81	\$34.11	\$47.97	\$64.47
13-1198	Project Management Specialists & Business Operations Specialists, All Other	883	3.4%	51,871	4,714	\$43.94	\$22.65	\$29.41	\$40.16	\$54.02	\$69.13
13-2011	Accountants & Auditors	350	1.3%	35,865	3,885	\$41.50	\$22.67	\$28.06	\$37.08	\$50.48	\$65.31
15-1256	Software Developers & Software Quality Assurance Analysts & Testers	1,217	4.7%	50,056	5,808	\$54.39	\$32.71	\$40.77	\$53.14	\$66.32	\$79.67
17-2031	Bioengineers & Biomedical Engineers	346	1.3%	881	68	\$46.82	\$32.07	\$36.30	\$44.54	\$56.14	\$66.55
17-2112	Industrial Engineers	566	2.2%	4,216	398	\$48.37	\$31.36	\$36.99	\$46.27	\$58.11	\$70.09
17-2141	Mechanical Engineers	349	1.3%	5,434	435	\$50.03	\$29.12	\$35.15	\$45.24	\$58.06	\$78.02
19-2031	Chemists	564	2.2%	1,612	186	\$39.18	\$20.44	\$26.64	\$36.43	\$49.67	\$63.65
19-4021	Biological Technicians	361	1.4%	2,996	433	\$21.82	\$12.48	\$16.48	\$19.86	\$26.57	\$33.93
41-4011	Sales Representatives, Wholesale & Manufacturing, Technical & Scientific Products	908	3.5%	6,274	741	\$53.28	\$23.62	\$32.67	\$45.55	\$67.10	\$89.25
41-4012	Sales Representatives, Wholesale & Manufacturing, Except Technical & Scientific Products	843	3.2%	26,222	2,897	\$39.95	\$15.98	\$22.83	\$33.77	\$49.66	\$71.04
43-4051	Customer Service Representatives	572	2.2%	44,606	6,184	\$19.07	\$12.44	\$14.14	\$17.56	\$22.30	\$27.88
51-1011	First-Line Supervisors of Production & Operating Workers	436	1.7%	6,154	726	\$34.27	\$19.44	\$24.16	\$32.16	\$42.38	\$53.03
51-2028	Electrical, Electronic, & Electromechanical Assemblers, Except Coil Winders, Tapers, & Finishers	897	3.4%	5,538	666	\$18.50	\$12.90	\$14.80	\$17.48	\$20.99	\$25.75
51-2098	Miscellaneous Assemblers & Fabricators	585	2.2%	8,010	894	\$17.54	\$12.49	\$13.90	\$16.47	\$19.64	\$23.99
51-9061	Inspectors, Testers, Sorters, Samplers, & Weighers	622	2.4%	5,283	675	\$24.92	\$14.61	\$17.33	\$22.01	\$29.74	\$38.53
51-9081	Dental Laboratory Technicians	397	1.5%	467	68	\$25.30	\$14.17	\$17.05	\$24.43	\$29.37	\$33.21
51-9082	Medical Appliance Technicians	505	1.9%	746	104	\$19.82	\$14.28	\$16.13	\$18.71	\$22.50	\$26.45
51-9111	Packaging & Filling Machine Operators & Tenders	458	1.8%	4,325	595	\$17.02	\$12.41	\$13. <i>7</i> 3	\$16.06	\$19.34	\$23.36

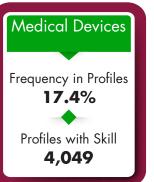
TOP ONLINE PROFILES & REGIONAL BENCH STRENGTH

EMSI Burning Glass has access to over 102 million online resumes throughout the United States, and offers analytical data on those profiles. This table shows online profiles of people working in the Sector that have been updated at some time in calendar 2021. While not all of these people may be presently looking for work, the fact they have recently updated their online resumes suggests they may be open to new opportunities.

Occupation	Profiles	Percent
Sales Managers	1,418	6.1%
Personal Service Managers, All Other; Entertainment & Recreation Managers, Except Gambling; & Managers, All Other	962	4.1%
Marketing Managers	908	3.9%
Industrial Engineers	744	3.2%
Software Developers & Software Quality Assurance Analysts & Testers	693	3.0%
Sales Representatives, Wholesale & Manufacturing, Technical & Scientific Products	599	2.6%
Computer User Support Specialists	585	2.5%
General & Operations Managers	577	2.5%
Sales Representatives, Wholesale & Manufacturing, Except Technical & Scientific Products	557	2.4%
Mechanical Engineers	477	2.1%
Chief Executives	457	2.0%
Computer Occupations, All Other	445	1.9%
First-Line Supervisors of Office & Administrative Support Workers	437	1.9%
Natural Sciences Managers	425	1.8%
Customer Service Representatives	409	1.8%
Registered Nurses	406	1.7%
Architectural & Engineering Managers	371	1.6%
Engineers, All Other	367	1.6%
Medical Scientists, Except Epidemiologists	358	1.5%
Medical & Health Services Managers	342	1.5%

TOP HARD SKILLS IN ONLINE PROFILES

The figures on this page show the top hard skills listed in online profiles of people working in the Sector that have been updated at some time in calendar 2021.



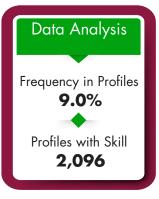


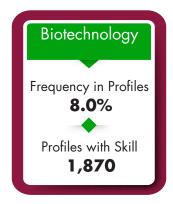


























TOP QUALIFICATIONS IN ONLINE PROFILES

The figures on this page show the top qualifications listed in online profiles of people working in the Sector that have been updated at some time in calendar 2021.





















Source: EMSI Burning Glass

STRATEGIES FOR MAINTAINING PRODUCTIVITY & OUTPUT

This section explores various options and resources that can be used to leverage scarce labor. The table immediately below shows hires, separations and turnover rate for the top 20 occupations in the sector (2020).

- There are generally five strategies an employer can use to attract workers:

 1. Offer more money and/or signing bonus (this gets new hires in, but does not necessarily keep them

 - Hire remote workers for those functions that can be filled using virtual technology.
 Invest capital in automation to leverage current labor productivity.
 Work with local K-12 and postsecondary educators to expose students to career pathways in the
 - 5. Work with the local workforce system and its partners to seek out and train hidden talent through internships and apprenticeships.

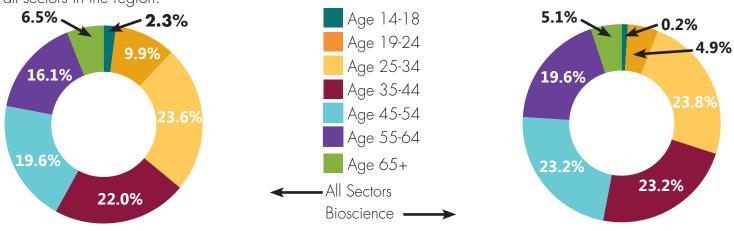
SOC Code	Description	Hires	Separations	Turnover Rate
51-2098	Miscellaneous Assemblers & Fabricators	7,131	7,710	96.3%
51-9111	Packaging & Filling Machine Operators & Tenders	3,952	3,816	88.2%
43-4051	Customer Service Representatives	36,067	37,253	83.5%
51-9061	Inspectors, Testers, Sorters, Samplers, & Weighers	3,928	4,326	81.9%
51-9082	Medical Appliance Technicians	405	475	63.7%
19-4021	Biological Technicians	1,807	1,904	63.5%
13-2011	Accountants & Auditors	18,909	19,505	54.4%
13-1161	Market Research Analysts & Marketing Specialists	12,387	11,297	54.0%
11-1021	General & Operations Managers	18,471	17,435	53.3%
51-1011	First-Line Supervisors of Production & Operating Workers	3,223	3,139	51.0%
19-2031	Chemists	810	820	50.9%
41-4012	Sales Representatives, Wholesale & Manufacturing, Except Technical & Scientific Products	13,211	12,770	48.7%
51-9081	Dental Laboratory Technicians	194	217	46.5%
51-2028	Electrical, Electronic, & Electromechanical Assemblers, Except Coil Winders, Tapers, & Finishers	2,512	2,451	44.3%
13-1198	Project Management Specialists & Business Operations Specialists, All Other	21,235	22,836	44.0%
41-4011	Sales Representatives, Wholesale & Manufacturing, Technical & Scientific Products	2,904	2,741	43.7%
15-1256	Software Developers & Software Quality Assurance Analysts & Testers	21,359	17,224	34.4%
17-2031	Bioengineers & Biomedical Engineers	246	275	31.2%
17-2112	Industrial Engineers	1,408	1,212	28.7%
17-2141	Mechanical Engineers	1,580	1,461	26.9%

DEMOGRAPHICS

Comparative Retirement Risk

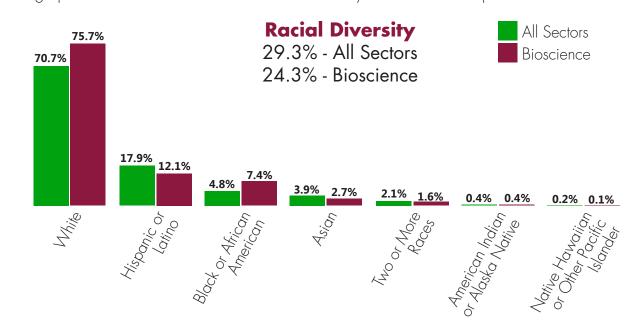
Source: EMSI Burning Glass

The Sector has lower retirement risk, with 5.1% of its labor force aged 65 or older, compared with 6.5% for all sectors in the region.



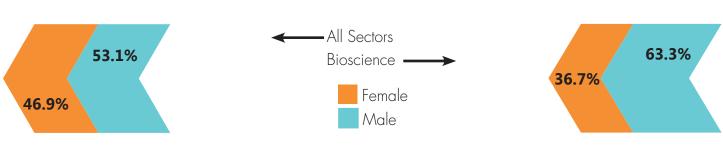
Comparative Racial & Ethnic Diversity

The bar graph below shows the racial and ethnic diversity in the Sector compared to all sectors in the region.



Comparative Gender

The figures below show the gender diversity in the Sector compared to all sectors in the region.



REMOTE WORK POTENTIAL

This table is customized to the sector using its entire staffing pattern along Colorado's Urban Front Range. It uses data from EMSI Burning Glass to determine the percent of unique job postings during 2021 that specified the new hire could work remotely, at least part of the time.

Data on remote working capabilities can be combined with capital investment in virtual technologies to create hybrid work models that can leverage scarce local labor while at the same time ensuring sector demand can be met. Hybrid models are generally popular with job seekers, and have the virtue of allowing employers to recruit further afield, and even internationally for selected business functions.

SOC Code	Description	Employed in Industry	Estimated Remote Capability	Occupation Family Posted Remotely
15	Computer & Mathematical	2,464	529	21.5%
13	Business & Financial Operations	2,883	540	18.7%
23	Legal	72	12	16.4%
27	Arts, Design, Entertainment, Sports, & Media	206	26	12.4%
19	Life, Physical, & Social Science	2,558	293	11.5%
21	Community & Social Service	<10	N/A	11.4%
11	Management	2,134	242	11.3%
41	Sales & Related	2,336	259	11.1%
43	Office & Administrative Support	2,436	261	10.7%
17	Architecture & Engineering	3,122	285	9.1%
49	Installation, Maintenance, & Repair	960	39	4.0%
31	Healthcare Support	33	1	3.9%
47	Construction & Extraction	100	4	3.8%
33	Protective Service	11	0	3.6%
29	Healthcare Practitioners & Technical	206	7	3.5%
51	Production	5,622	185	3.3%
37	Building & Grounds Cleaning & Maintenance	53	2	2.9%
39	Personal Care & Service	<10	N/A	2.8%
53	Transportation & Material Moving	858	16	1.9%
35	Food Preparation & Serving Related	<10	N/A	1.2%

Remote Work Capability for Sector Employed in Industry - 26,054 Estimated Remote Capability - 2,700 Percent of Occupation Family Posted Remote - 10.4%

AUTOMATION INDEX

The automation index measures the potential to automate in order to leverage the productivity of scarce labor. It is presented on an index with a base of 100 – occupations with a score above 100 have a greater-than-average potential for automation, and occupations with a score below 100 have a lower-than-average potential to automate. Occupations where the automation index number is above 100 may present opportunity to think about capital investments that can partly solve labor shortage problems.

Automation seldom replaces workers 1:1. Generally, automation has the potential to leverage productivity, allowing a business to produce the same or more output with fewer people.

Employed Automation Description SOC in Sector Index 35 Food Preparation & Serving Related 125.9 <10 47 Construction & Extraction 100 123.1 122.5 37 53 Building & Grounds Cleaning & Maintenance 113.8 5,622 51 Production 53 858 Transportation & Material Moving 110.9 49 Installation, Maintenance, & Repair 960 108.9 33 Protective Service 11 98.7 43 2,436 98.1 Office & Administrative Support <10 96.1 39 Personal Care & Services Sales & Related 95.0 2,336 41 Healthcare Support 33 95.0 31 Arts, Design, Entertainment, Sports, & Media 27 206 89.7 89.5 13 **Business & Financial Operations** 2,883 Healthcare Practitioners & Technical 88.3 29 206 Architecture & Engineering 3,122 17 87.0

APPRENTICEABLE OCCUPATIONS

Many occupations are apprenticeable, and businesses can work with the local workforce centers to create apprenticeship pathways that help to ensure a steady supply of workers with the skills the industry actually needs.

An apprenticeship is an industry-driven, high-quality career pathway where employers can develop and prepare their future workforce, and individuals can obtain paid work experience, classroom instruction, and a portable, nationally-recognized credential. Find information and resources on the <u>A/D Works! website</u>.

SOC Code	Description	Employed in Industry	Percent of Total Jobs in Sector	Median Hourly Earnings	Currently Apprenticeable*
11-1021	General & Operations Managers	468	13.7%	\$60.37	Yes
13-1161	Market Research Analysts & Marketing Specialists	381	15.3%	\$34.11	Yes
13-1198	Project Management Specialists & Business Operations Specialists, All Other	883	10.4%	\$40.16	No
13-2011	Accountants & Auditors	350	10.8%	\$37.08	Yes
15-1256	Software Developers & Software Quality Assurance Analysts & Testers	1,217	16.3%	\$53.14	Yes
17-2031	Bioengineers & Biomedical Engineers	346	5.8%	\$44.54	No
17-2112	Industrial Engineers	566	12.2%	\$46.27	Yes
17-2141	Mechanical Engineers	349	7.1%	\$45.24	Yes
19-2031	Chemists	564	16.9%	\$36.43	No
19-4021	Biological Technicians	361	10.2%	\$19.86	Yes
41-4011	Sales Representatives, Wholesale & Manufacturing, Technical & Scientific Products	908	16.9%	\$45.55	Yes
41-4012	Sales Representatives, Wholesale & Manufacturing, Except Technical & Scientific Products	843	15.8%	\$33.77	No
43-4051	Customer Service Representatives	572	9.7%	\$17.56	Yes
51-1011	First-Line Supervisors of Production & Operating Workers	436	10.9%	\$32.16	No
51-2028	Electrical, Electronic, & Electromechanical Assemblers, Except Coil Winders, Tapers, & Finishers	897	4.4%	\$1 <i>7</i> .48	Yes
51-2098	Miscellaneous Assemblers & Fabricators	585	-2.8%	\$16.47	Yes
51-9061	Inspectors, Testers, Sorters, Samplers, & Weighers	622	5.6%	\$22.01	Yes
51-9081	Dental Laboratory Technicians	397	2.9%	\$24.43	Yes
51-9082	Medical Appliance Technicians	505	1.0%	\$18.71	Yes
51-9111	Packaging & Filling Machine Operators & Tenders	458	22.0%	\$16.06	No

Source: EMSI Burning Glass

11

19

23

15

21

Management

Legal

Life, Physical, & Social Science

Computer & Mathematical

Community & Social Service

2,134

2,558

72

2,464

<10

85.1

84.5

84.0

83.4

82.3

TRAINING PIPELINE

TRAINING PIPELINE

A good way to assess the ongoing strength of the training pipeline in the region is to compare number of people who completed a training program in the occupation (regional completions) with the average number of annual openings in that occupation.

If there are more openings than there are completions, then there is a shortfall. Employers may wish to work with regional workforce development centers such as Arapahoe/Douglas Works! and area educators to address shortfalls in critical occupations using a variety of strategies.

SOC Code	Description	2021 Jobs	Average Annual Openings	Regional Completions	Surplus/ (Shortfall)	Typical On-the-Job Training	Typical Entry Level Education
15-1256	Software Developers & Software Quality Assurance Analysts & Testers	50,056	5,808	3,626	(2,182)	None	Bachelor's Degree
51-2098	Miscellaneous Assemblers & Fabricators	8,010	894	0	(894)	Moderate-term	HS Diploma or Equivalent
41-4011	Sales Representatives, Wholesale & Manufacturing, Technical & Scientific Products	6,274	741	34	(707)	Moderate-term	Bachelor's Degree
51-9061	Inspectors, Testers, Sorters, Samplers, & Weighers	5,283	675	60	(615)	Moderate-term	HS Diploma or Equivalent
51-9111	Packaging & Filling Machine Operators & Tenders	4,325	595	0	(595)	Moderate-term	HS Diploma or Equivalent
51-1011	First-Line Supervisors of Production & Operating Workers	6,154	726	145	(581)	None	HS Diploma or Equivalent
51-2028	Electrical, Electronic, & Electromechanical Assemblers, Except Coil Winders, Tapers, & Finishers	5,538	666	99	(567)	Moderate-term	HS Diploma or Equivalent
17-2112	Industrial Engineers	4,216	398	214	(184)	None	Bachelor's Degree
51-9082	Medical Appliance Technicians	746	104	0	(104)	Moderate-term	HS Diploma or Equivalent
51-9081	Dental Laboratory Technicians	467	68	0	(68)	Moderate-term	HS Diploma or Equivalent
19-2031	Chemists	1,612	186	625	439	None	Bachelor's Degree
17-2031	Bioengineers & Biomedical Engineers	881	68	595	527	None	Bachelor's Degree
19-4021	Biological Technicians	2,996	433	1,358	925	None	Bachelor's Degree
17-2141	Mechanical Engineers	5,434	435	1,954	1,519	None	Bachelor's Degree
13-2011	Accountants & Auditors	35,865	3,885	12,063	8,178	None	Bachelor's Degree
43-4051	Customer Service Representatives	44,606	6,184	15,221	9,037	Short-term	HS Diploma or Equivalent
13-1161	Market Research Analysts & Marketing Specialists	20,905	2,766	12,746	9,980	None	Bachelor's Degree
41-4012	Sales Representatives, Wholesale & Manufacturing, Except Technical & Scientific Products	26,222	2,897	15,326	12,429	Moderate-term	HS Diploma or Equivalent
11-1021	General and Operations Managers	32,731	3,590	18,053	14,463	None	Bachelor's Degree
13-1198	Project Management Specialists and Business Operations Specialists, All Other	51,871	4,714	19,354	14,640	None	Bachelor's Degree

TOP JOBS

Top 10 Occupations Currently Listed in the Colorado Central Planning Region

Click on the icon to learn more about the occupation





Darker Color

628 2.429

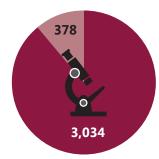
Sales Representatives, Wholesale & Manufacturing, **Except Technical & Scientific Products**



Personal Service Managers, All Other; Entertainment & **Recreation Managers, Except Gambling; &** Managers, All Other



Sales Managers



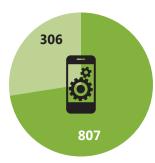
Clinical Laboratory Technologists & Technicians



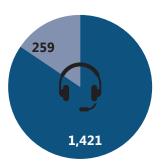
Computer **Occupations, All Other**



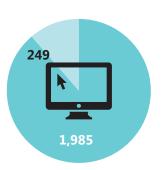
Marketing Managers



Software Developers & Software Quality **Assurance Analysts & Testers**



Customer Service Representatives



Medical Dosimetrists, **Medical Records** Specialists, & Health **Technologists & Technicians, All Other**



Medical & Health Services Managers

Source: EMSI Burning Glass BIOSCIENCE

Source: EMSI Burning Glass

JOB POSTING ANALYTICS

The top companies and certifications required by employers in this Sector are shown below. The job listings section shows the top websites where businesses in this sector list their open jobs. Job Families are groups of occupations based upon work performed, skills, education, training, and credentials. The top 5 job families, measured by percent of total employment in the Sector are shown at the bottom right.

Click on the company to go to their career page and see what openings they currently have.

Click on the certification name to learn more about it.

- 1 Medtronic
- Pfizer
- Terumo BCT
- Thermo Fisher Scientific
- Kbi Biopharma

Click on the job listing to go to the job search website and see what openings they currently have.

JOB LISTINGS

- Dejobs.org
- Indeed.com
- 3 Simplyhired.com
- Recruiternetworks.com
- Disabledperson.com

Certifications

- 1 Master of Business Administration (MBA)
- Commercial Driver's License (CDL)
- **Licensed Practical Nurse**
- **Bachelor Of Science in Business**
- **Project Management Professional** Certification

Click on the job family to see the groups of occupations and learn more about those occupations using O*Net OnLine.

JOB FAMILY

- Management
- **Business and Financial Operations**
- Computer and Mathematical
- Architecture and Engineering
- Life, Physical, and Social Science

TOP HARD SKILLS IN SECTOR

The table below lists the top 20 hard skills from EMSI Burning Glass demanded by employers in the Sector during the last calendar year. This is matched against the number of online profiles that have been updated sometime in the last year that also list those hard skills. This can give employers and job seekers thinking of entering the sector an idea of where the greatest opportunities exist in upskilling, next skilling and reskilling.

	Skills	Postings	% of Total Postings	Online Profiles	% of Total Online Postings
U	Medical Devices	1,829	16.2%	4,049	17.4%
2	Pharmaceuticals	1,342	11.9%	2,997	12.9%
3	Good Manufacturing Practices	1,236	11.0%	1,686	7.2%
4	New Product Development	1,224	10.9%	2,953	12.7%
5	Auditing	1,174	10.4%	1,197	5.1%
6	Standard Operating Procedure	1,169	10.4%	615	2.6%
7	Selling Techniques	1,000	8.9%	1,172	5.0%
8	Biology	870	7.7%	546	2.3%
9	Corrective And Preventive Action	804	7.1%	1,326	5.7%
10	Microsoft Mail	800	7.1%	563	2.4%
1	Process Improvement	755	6.7%	2,204	9.5%
12	Biotechnology	696	6.2%	1,870	8.0%
13	OSHA	691	6.1%	81	0.3%
14	Quality Management Systems	685	6.1%	1,275	5.5%
15	Finance	675	6.0%	735	3.2%
16	Project Management	663	5.9%	1,827	7.9%
17	Strategic Planning	659	5.8%	2,553	11.0%
18	Warehousing	654	5.8%	528	2.3%
19	Life Sciences	650	5.8%	775	3.3%
20	Automation	630	5.6%	846	3.6%

BIOSCIENCE





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