



IT-SOFTWARE

With a growing remote workforce and top quality of life, IT-Software in Metro Denver is surging.



- full report -

2020



Metro**Denver**EDC

Often called a “center of influence,” the Metro Denver EDC was the nation’s first regional economic development organization. From Castle Rock to Fort Collins and Golden to Greeley, we represent the nine counties and 66 communities that contribute to our resilient economy and incredible culture. All told, the EDC’s service territory makes up two-thirds of the Colorado GDP and approximately three-quarters of the state’s population.

Thanks to the leadership and generosity of 250 of Colorado’s most influential companies, the EDC works to monitor and advance the Metro Denver economy through corporate attraction and retention; workforce development; domestic and global marketing; investments in infrastructure; and public policy that fosters a pro-business climate.

The data we produce is foundational to the work we do. Publications like our annual Industry Cluster Studies offer the companies we court (as well as the regional partners we support) a deeper understanding of what’s happening across Metro Denver, and for certain industries, the state more broadly. We track this data closely – leveraging the intel and insights to not only drive corporate recruitment and investment, but foster competition, build a culture of impact and innovation, strengthen the business community and work to ensure that life and work in Metro Denver are thriving.

- IT-Software Report -

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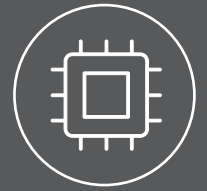
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IT-SOFTWARE

INDUSTRY
snapshot
(U.S. DATA IN PARENTHESES)

Companies	Average Wage	*Emp. Ranking
6,960	\$127,210	5
		<small>*Employment Concentration Ranking</small>

Direct Employment:
79,420

Direct Employment Concentration (2020):
3.6% (2.3%)

5-Year Employment Growth (2015-2020):
56.8% (21.8%)

1-Year Employment Growth (2020):
8.9% (3.4%)

Industry Overview

The Metro Denver region is the definitive tech hub between the coasts and continues to be a magnet for information technology start-ups and legacy businesses. From data analytics leaders like Palantir Technologies Inc. to cloud technology innovators like Salesforce, Metro Denver consistently makes the short list for businesses within the tech industry considering relocation or investment. The region is a leader in cybersecurity, cloud-based technologies and various software solutions. 2020 continued to see robust employment growth for the region's Information Technology (IT)-Software Cluster, driven by access to talent and office space.

The IT-Software Cluster supports business activities in all other sectors of the economy with a variety of products and services, ranging from virus protection and other security programs for computers to specialized, custom software and computer integrated systems design. IT-Software includes companies involved in off-the-shelf software products to custom computer programming, computer facilities management, computer systems design, and data processing services. IT-Software companies also provide network solutions, web-based applications and operating systems.

Nearly 6,960 IT-Software companies are located in the region including major operations for IBM Corp., IHS Markit, Oracle, Zillow and Google, among others. The region is a hotbed of innovation activity, with the ninth-highest concentration of technology jobs relative to the overall employment base. With close to 9% increase in employment in 2020, IT-Software Cluster growth was more than double the national average, contributing \$32.1 billion, or 15.1%, to the region's economy. Ongoing demand for IT-software services during the pandemic has positively influenced employment in this cluster in Metro Denver, particularly for cloud infrastructure services, security software from a growing remote workforce and specialized software solutions.

Cluster Definition

The Metro Denver and Northern Colorado region is comprised of Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, Jefferson, Larimer and Weld counties. In this report, the IT-Software Cluster is defined by seven, six-digit North American Industry Classification System (NAICS) codes including software reproduction, software publishers, custom computer programming, data processing and hosting, computer facilities management services and computer systems design services. This definition allows for a comparative analysis of the Metro Denver and Northern Colorado region's IT-Software Cluster relative to other metropolitan regions through the United States. This definition also avoids double-counting workers in other technology clusters such as telecommunications and aerospace.

Cluster Job Growth

- IT-Software employment grew 8.9% between 2019 and 2020, more than double the U.S. growth rate of 3.4%.
- 79,420 employees worked at close to 6,960 companies in the region.
- 2020 was the tenth-consecutive year for IT-Software growth, adding over 38,080 jobs since 2010.
- IT-Software employment in the region grew 56.8% over the past five years, compared with the U.S. growth rate of 21.8%.
- The IT-Software Cluster employed 3.6% of the region's total employment base in 2020.

Major Industry Investments, Expansions & Milestones

Consistently ranked among the top 10 cities for tech workers and among the “Best Places to Live” according to *U.S. News and World Report*, the region's entrepreneurial ecosystem and vibrant startup community has long been a desirable location for tech company growth and investment. The following expansion plans were noted in 2020:

- **Palantir Technologies Inc.** relocated its headquarters from Palo Alto, Calif. to Denver and closed 2020 with nearly \$150 million in new government contracts. The company sells data analysis and tracking software to governments and employs about 2,500 people worldwide.
- **Marqeta**, a card issuing platform, will open its second headquarters in Denver and plans to go public in 2021. The company expects to hire 100 employees in 2021 and expand its workforce to over 500 in the next eight years.
- Portland-based **DAT Solutions LLC**, a global logistics-technology company, will open a second headquarters in the Denver Tech Center. The company expects to hire more than 100 people in Denver.
- New York-based **Todyl** relocated its headquarters to a coworking space in Denver and expects to add another 10 to 15 employees by the end of 2021.
- **SurveyGizmo** moved its headquarters from Boulder to Louisville to accommodate company growth. The company employs close to 120 people and expects to continue to grow its workforce in Louisville.
- **Amazon Inc.** plans to add 3,500 new tech and corporate jobs in six U.S. cities including Denver. The company expects to add 100 jobs and 20,000 square feet of additional office space in its downtown Denver Tech Hub, where about 700 of Amazon's existing 10,500 Colorado employees work.

- **Pax8**, a cloud distribution technology company, will expand its business in Colorado and create 1,800 new jobs over the next eight years. The company, based in Greenwood Village, currently employs 375 in Colorado.
- **Snapdocs** will expand its Denver headcount by more than 600 people over the next eight years after securing \$60 million in Series C funding.
- **Contentful**, a content management systems company, opened a new office in Denver and plans to hire between 50 and 100 sales employees in 2021.
- **Google** is expanding its operations in Boulder, opening additional offices and increasing its workforce. The company added 75,000 square feet of space in Boulder that could potentially hold more than 1,000 workers.
- Travel tech startup **Hotel Engine** plans to double its staff and move to a new Denver headquarters in mid-2021. The company added 40 employees to its workforce, growing to 130 total employees, and plans to add another 125 people to its engineering, sales and product development departments.
- **Secure64** moved into a new headquarters in Fort Collins to support company growth.
- **Wix.com**, a global website creation company, opened a new office in Denver that includes over 200 full-time customer care employees.
- **Sophia Genetics**, an international health-tech company, will open a new research and development hub in Aurora, bringing 100 employees to the area by 2022. The company makes software for analyzing health data and has headquarters in Boston and Switzerland.
- **OTA Insight**, a London-based company that makes business intelligence software for hotels, opened its first Denver office and plans to add workers.
- **Facebook** signed a lease to expand its footprint in Denver. The additional 23,000 square feet can accommodate up to 100 more employees.

Real Estate & Tech Footprint

The region's rising presence on national and international real estate stages has made it a magnet for tech companies looking for either a new headquarters location or a satellite office. Technology companies expanded real estate occupancy along the Front Range by 23% from 2018 to 2020, increasing the total footprint of the industry from 17.4 million square feet to 21.4 million square feet. Software companies have the second-largest footprint in the state, occupying 6.4 million square feet, up from 5.2 million square feet in 2018. The Boulder-Broomfield area has the highest concentration of tech occupancy relative to overall office occupancy at 43%. In Metro Denver, 13% of occupied office space houses tech companies.

Innovation & Entrepreneurship

The region is propelled by entrepreneurship and innovation, resulting in one of the highest concentrations of startup activity in the nation. According to Inc.'s Surge Cities Index, Denver's rate of entrepreneurship is the second highest among all 50 cities on the list and ranked No. 4 in high-growth company density. Fort Collins-Loveland and Boulder have ranked consistently in the top 10 for high-tech startup density. Brookings Institution also named the Denver-Aurora-Lakewood MSA among the 20 "superstar metro areas" with the largest absolute numbers of jobs in innovation industries.

- The Denver-Boulder region ranked among the top 25 global startup ecosystems. (Startup Genome)
- Denver ranked among the "Best American Cities to Launch a Startup in 2020." (Rentberry)
- Denver ranked 10th in CBRE's "2020 Tech-30" report with high tech job growth of 13.5% and high-tech office market rent growth of 4.1%.
- Denver ranked No. 6 for top tech cities, with the highest rankings for tech industry presence (6th) and young workforce population (8th). (Site Selection Group)
- Denver and Boulder ranked in the "Top 20 Tech Towns" in the U.S. (CompTIA)
- Denver and Boulder ranked among the "15 Best Cities in the U.S. for Startups and Entrepreneurs" in 2020. (Crowdspring)

Venture Capital & Investments

Companies in the region's IT-Software Cluster attracted significant capital and investments in 2020. Among the 18 startup cities analyzed in the 2020 Boulder Innovation Venture 2.0, Boulder and Denver ranked among the top 10 venture capital investment cities on a per capita basis. According to Pitchbook, companies in the IT-Software industry in 2020 attracted \$756 million in venture capital in 150 deals, representing almost half of the total amount invested across all industries in the region. Since 2010, venture capital in the IT-Software industry has more than doubled from \$215.1 million to \$756 million. The majority of venture capital deals since 2010 were concentrated in SaaS and TMT (technology, media, and telecommunications).



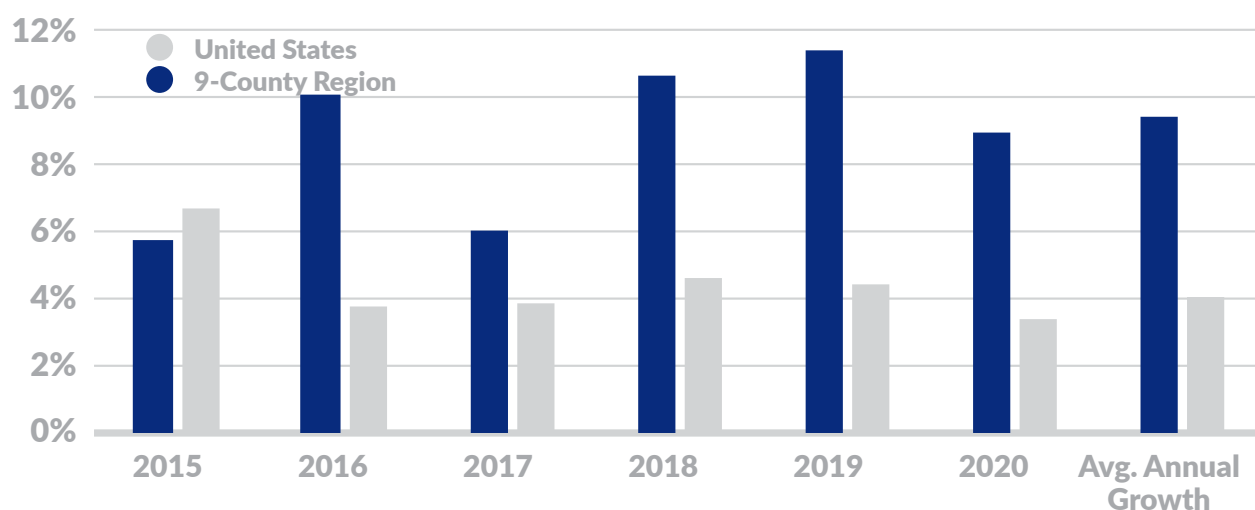
Multiple venture capital deals and investment opportunities valued over \$10 million occurred in 2020:

- Denver-based **Palantir Technologies** filed an IPO with a market valuation above \$10 billion.
- **Handshake** raised \$80 million in Series D funding and launched a virtual career fair platform. The company employs 30 people in its Denver office and plans to recruit for additional software engineering positions.
- Denver-based **JumpCloud** raised \$75 million Series E funding and is positioned for rapid growth as it serves accelerating demand for a modern, cloud-based directory. The company has now raised over \$165 million and plans to hire an additional 500 people over the next several years.
- Golden-based **Outrider** closed on a Series B round of funding worth \$65 million following a Series A round of funding worth \$53 million. The funding will help expand its distribution networks and grow its 110-person team.
- Cybersecurity services company **Deepwatch** raised \$53 million and plans to accelerate research and development of its cloud systems platform and expand its workforce.
- Denver-based **Stedi Inc.**, a builder of business-to-business transaction recording software, raised \$50.1 million in its fifth funding round.
- Online learning and teaching marketplace company **Udemy** raised \$50 million in Series F funding and will continue expanding its Denver workforce by 200 employees through 2021.
- Quantum atomics company **ColdQuanta**, based in Boulder, raised \$32 million in Series A funding.
- Boulder-based **Automox**, a cybersecurity startup specializing in automated cybersecurity systems, raised \$30 million in Series B funding and plans to expand its sales and marketing teams to support its growing customer base.
- Denver-based tech-focused venture capital firm **Range Ventures** launched in March 2020 and announced a new \$23 million fund to provide early-stage capital to local founders.
- Boulder-based in-app messaging startup **Stream** closed on a \$15 million Series A round of funding. The company has offices in Boulder and Amsterdam and splits their 100-person team between the two offices.
- **Josh.ai**, a privacy-focused home technology company, closed on an \$11 million Series A funding round. The company will use the funds to build out the next generation of technology and invest in research and development.

Economic Profile

+ IT-Software Employment & Company Profile 2020 ¹		
	9-County Region	U.S.A.
Direct employment, 2020	79,420	3,795,050
Number of direct companies, 2020	6,960	258,380
One-year direct employment growth, 2019-2020	8.9%	3.4%
Five-year direct employment growth, 2015-2020	56.8%	21.8%
Avg. annual direct employment growth, 2015-2020	9.4%	4.0%
Direct employment concentration	3.6%	2.3%
% of companies with <10 employees	85.2%	85.5%

IT-Software Number of Employees Growth Rate²



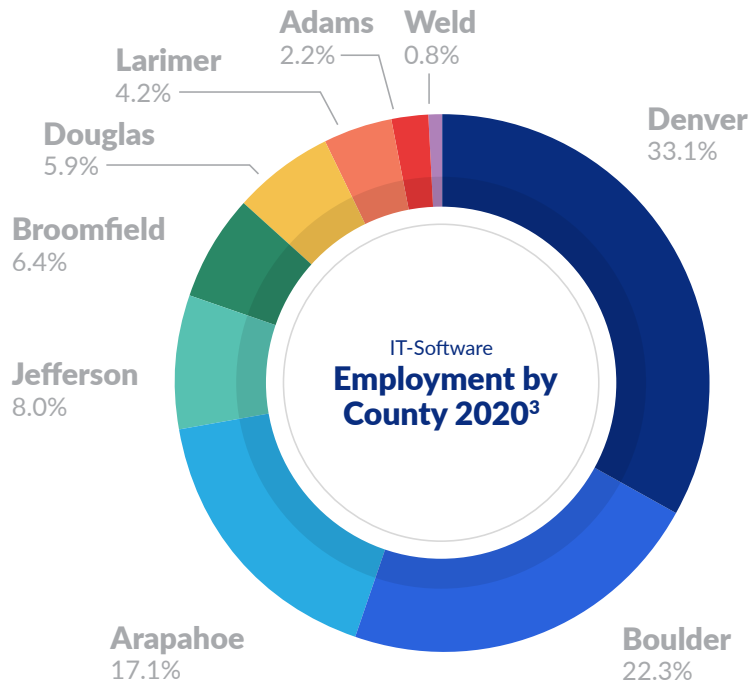
¹ Dun & Bradstreet, Inc., Hoover's Online Database; Market Analysis Profile, 2015-2020; Development Research Partners.

² Dun & Bradstreet, Inc., Hoover's Online Database; Market Analysis Profile, 2015-2020.

³ Market Analysis Profile, 2020; Development Research Partners.

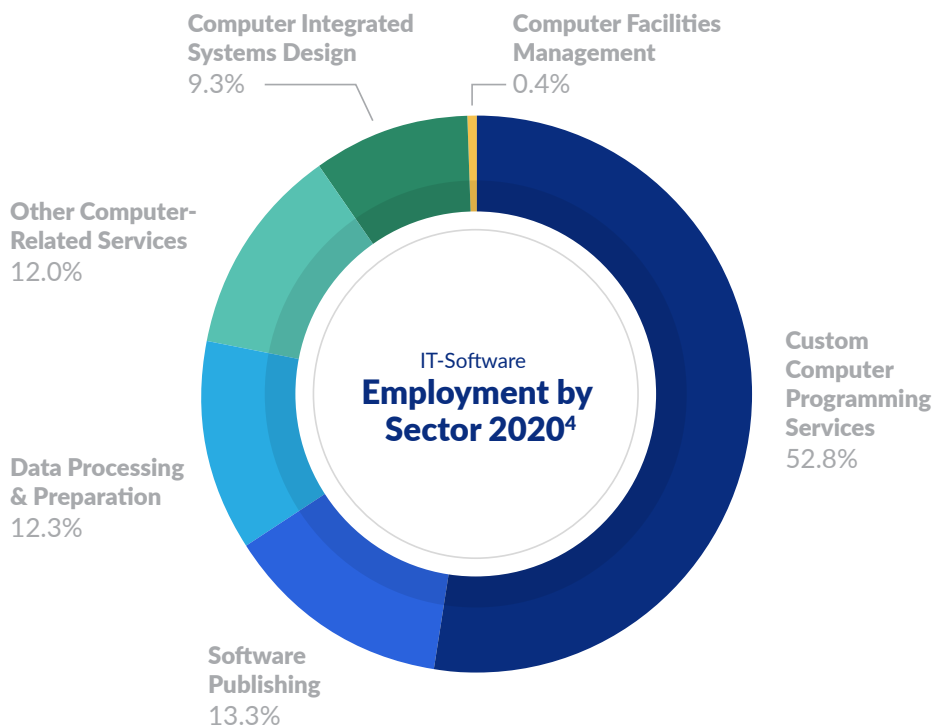


9-County⁵ RANKINGS



5th

Software direct
employment
concentration



10th

Software direct
employment

⁴ Market Analysis Profile, 2020; Development Research Partners.

⁵ Direct employment rank based on the number of employees in the industry cluster in a state. Employment concentration rank based on the direct cluster employment in a state expressed as a percent of total employment in all industries in the same state. Rankings are for the 50 states. No multiplier effects are included. 1st = highest for both rankings.

Industry Infrastructure Support





Workforce Profile

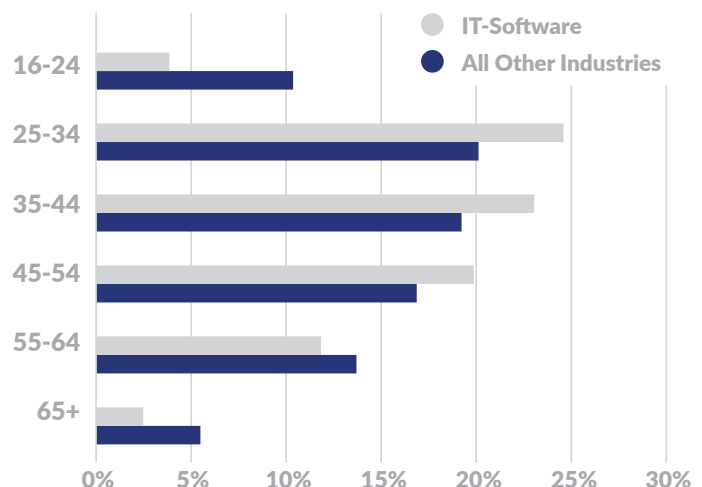
Metro Denver and Northern Colorado's tech workforce is routinely cited by area tech businesses as one of the most important criteria in their decisions to expand locally or move to the region.

- Denver ranks No. 7 in North America for technology talent, according to the "2020 Scoring Tech Talent" report. (CBRE)
- The Boulder Metropolitan Statistical Area (MSA) has a concentration of computer and mathematical operations jobs 2.6 times the national average, and fourth highest among the nation's metro areas. (U.S. Bureau of Labor Statistics)
- Denver ranked third on RCLCO's 2020 STEM Job Growth Index, up two positions from No. 5 in 2019.
- IT-Software companies can choose from a large regional talent pool. College graduates make up 46.5% of the adult population, and 92.3% of adults have graduated from high school.
- The region is home to at least 10 tech programs, boot camps and coding schools that quickly train software developers and designers.
- In 2020, Fullstack Academy partnered with Colorado State University's Extended Campus to offer in-person, hybrid or online cybersecurity and coding bootcamps.
- CU Boulder ranked among the top 15 best public computer engineering graduate programs in the nation in 2020. (U.S. News & World Report)

Age Distribution

- The age distribution of workers in the region's IT-Software Cluster is concentrated in the younger age brackets, especially the 25-34 and 35-44 age groups.
- About 55.6% of the region's employees are between the ages of 25 and 44 years old, compared with the age distribution across all other industries in the region (45.9%).

Metro Denver & Northern Colorado's Distribution of Employment by Age⁶



⁶Provided by Arapahoe/Douglas Works!; QCEW Employees, Non-QCEW Employees, & Self Employed - EMSI 2020.3 Class of Worker.

⁷Provided by Arapahoe/Douglas Works!; QCEW Employees, Non-QCEW Employees, & Self Employed - EMSI 2020.3 Class of Worker.

Wages

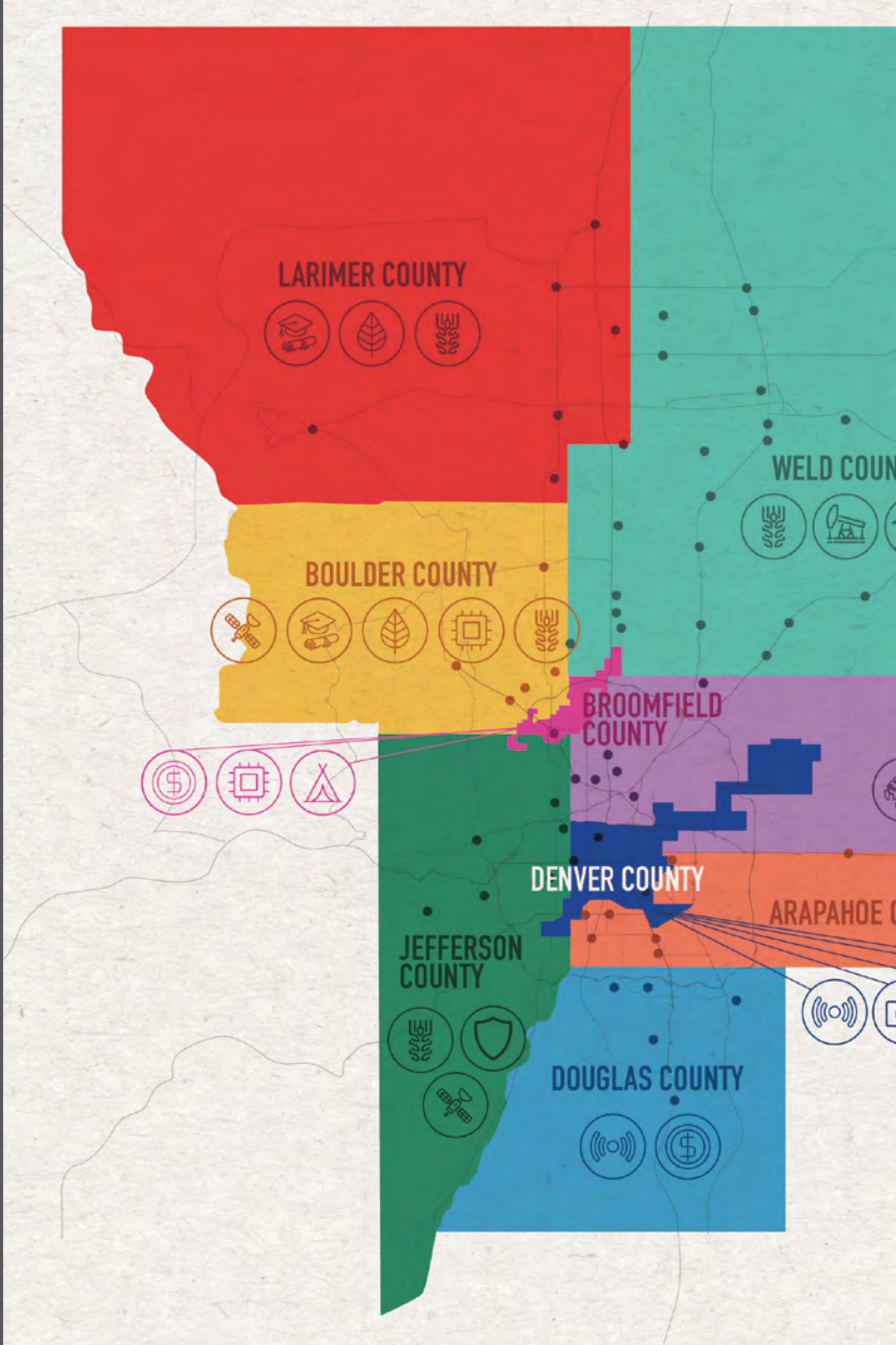
- The 2019 average annual salary for workers in the IT-Software Cluster was \$127,210 in the region, compared with the national average of \$132,200.
- The average starting salary for workers in the IT-Software Cluster (\$72,520) was the highest among any of the clusters in the region, and nearly double the average across all industries (\$39,070).
- Total payroll reached nearly \$9.3 billion in 2019.

Metro Denver & Northern Colorado IT-Software Occupation & Salary Profile, 2020⁷

10 Largest IT-Software Occupations in Metro Denver & Northern Colorado	Total Working Across All Industries (2020)	Number of Available Applicants (2020)	Number of Graduates (2019)	Median Salary	10th Percentile Salary	25th Percentile Salary	75th Percentile Salary	90th Percentile Salary
1. Software developers & software quality assurance analysts & testers	39,511	2,860	1,671	\$108,957	\$66,127	\$84,400	\$135,987	\$163,147
2. Computer user support specialists	13,521	979	1,116	\$57,499	\$38,440	\$45,698	\$74,090	\$93,937
3. Computer occupations, all other	12,295	890	1,657	\$102,401	\$58,260	\$76,043	\$129,659	\$161,716
4. Sales representatives of services, except advertising, insurance, financial services, & travel	27,993	2,026	3	\$62,892	\$27,972	\$41,912	\$96,367	\$150,140
5. Project management specialists & business operations specialists, all other	42,873	3,103	50	\$80,642	\$45,847	\$58,960	\$108,751	\$142,539
6. Computer systems analysts	8,017	580	1,366	\$97,560	\$62,758	\$76,861	\$121,584	\$146,198
7. Network & computer systems administrators	10,084	730	663	\$87,781	\$55,711	\$69,348	\$110,445	\$131,148
8. Computer & information systems managers	7,048	510	2,527	\$160,698	\$105,540	\$130,999	\$205,145	\$327,426
9. Market research analysts & marketing specialists	17,615	1,275	452	\$69,999	\$41,039	\$52,730	\$97,886	\$130,689
10. Computer network architects	5,881	426	2,362	\$120,022	\$74,734	\$93,416	\$148,703	\$171,571

Notes: The number of available applicants is a point-in-time measurement of the number of people who have registered in Colorado's workforce development system's statewide database, Connecting Colorado, as being able and available to work in a particular occupation. Results should be interpreted with caution since registration in Connecting Colorado is self-reported. In addition, the skills rubric may assign up to four occupation codes for each registrant. Therefore, the number of available applicants could be inflated.

Metro Denver Industry Map



Notable Rankings

#1

Colorado made an impressive showing in the 2020 *U.S. News & World Report's* "Best Places to Live" list with Front Range cities ranking #1, #2, #4 and #5.

#1

Colorado was recently named the top state for Women-Led Startups by small business reviewer, Merchant Maverick.

#1

USA Today recently named DEN the Best Large Airport in the U.S.

#2

U.S. News & World Report ranked Colorado as the second-best state economy in the country, after four years maintaining the top spot.

#2

Colorado is the second-best state in the U.S. to retire in, according to a study by WalletHub.

#2

Milken Institute named Colorado #2 for "Best State for Technology and Science," with a strong entrepreneurial infrastructure and STEM workforce.

#3

Colorado saw the third largest increase of millennials in the past five years, according to Haven Life.

#3

Denver ranked third for STEM job growth, according to the 2020 STEMdex.

#4

A new study by Spanning says Colorado has the fourth-most tech jobs per capita – citing 123,040 tech workers at a median annual wage of \$94,880.

#4

Denver took in the #4 spot for U.S. cities that people moved to in 2020, according to Updater.com.

#6

LinkedIn gave Denver the 6th place ranking for cities with the most opportunity for job seekers.

#6

Denver ranked sixth among the "Best U.S. Cities for Remote Workers" in 2020, according to BusinessInsider.com.

Data research provided by Development Research Partners, Inc.
Founded in 1994, DRP specializes in economic research for local and state government
and private sector businesses, including industry cluster research, industry trends analysis
and strategic competitive analysis.
www.developmentresearch.net



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