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# Shifting Winds

## Examining Employment Trends in Rural Northwest Regions

February 2023



## Foreword

In the Pacific Northwest and Mountain West, the rural community is the backbone of our economy. It is one that we hope is realizing the benefits of a shifting workforce landscape. Yet most headlines focus on urban areas and national trends. To better understand what is really happening in our local communities, we teamed up with WGU Labs, the innovation arm of Western Governors University.

Our research into rural workforce conditions paints a clear picture about the rural regions of the Pacific Northwest and Mountain West: the pandemic unlocked access to new, tech sector jobs. However, many of these opportunities will require our collective investment in localized skills, training, and education to ensure individuals will thrive in this rapidly changing work environment.

**Tonya Drake, Ph.D.**

*Chancellor and Regional Vice President  
Western Governors University*



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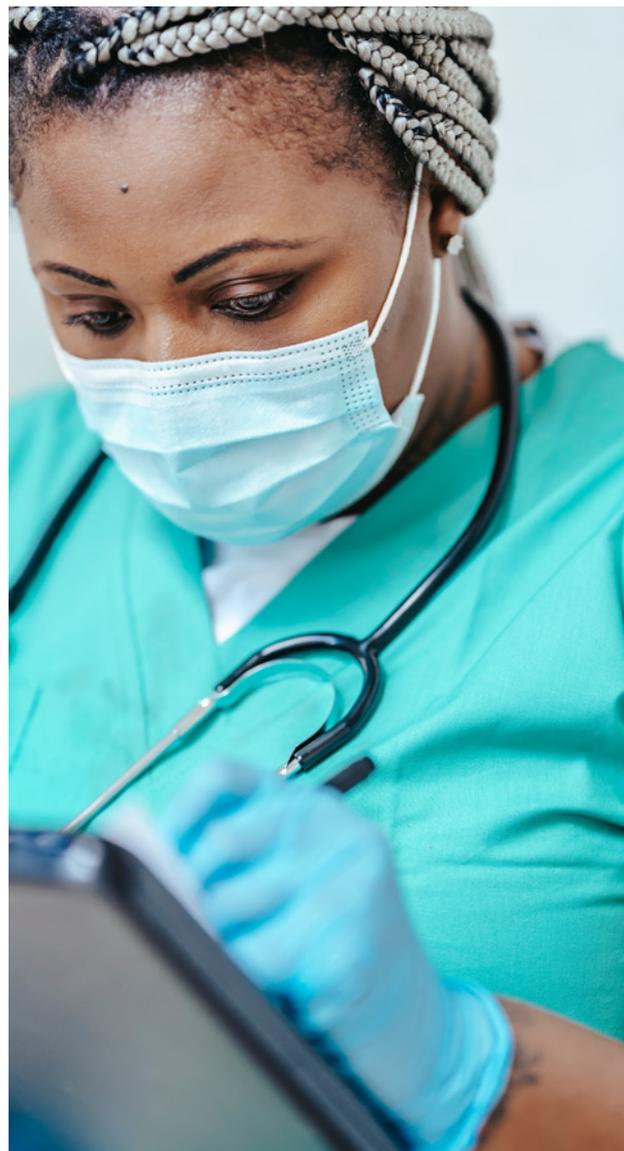
# Rural Pacific Northwest and Mountain West Regions Workforce Trends Research Brief February 2023

## Executive Summary

In the years following in-person workplace closures in 2020, the U.S. employment landscape has undergone tremendous change. Popular narratives tout a transformed workplace environment with increasing **flexibility and remote work**, distributed **workforces shifting outside** of urban areas, and **expanded talent pipelines**. The pandemic also spurred **widespread digitization**, increasing opportunities for technology-based work. **According to U.S. Bureau of Labor Statistics (BLS) data**, a national increase in remote work, e-commerce, and telehealth will likely lead to a rise in computer occupations, which are projected to grow by 13.4% over the 2020-30 decade, 5.7 percentage points faster than the 7.7% average for all occupations.

However, there is an open question about whether the rural communities will realize the benefits of these shifts.

WGU Labs, in partnership with Western Governors University's Northwest Regional team, examined **Lightcast's** job listing data from 2017 to 2022 to understand how the employment landscape in rural regions of the Pacific Northwest and Mountain West states shifted as the nation experienced and then emerged from the pandemic.



## We learned that:



**Health care jobs** still dominate in the rural Pacific Northwest and Mountain West, making up between 15% and 51% of all rural job postings in these states over the last five years. Moreover, the sector added over 20,000 job postings in rural counties in the five states we profiled.

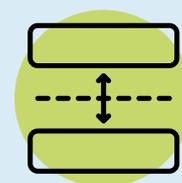
### STEM sector jobs are rising.



Rural posting increases outpaced urban areas, with science, technology, engineering, and math (STEM) postings increasing 183% in rural areas versus a 61% increase in urban areas across the five states. Between 83% and 90% of these positions are listed as in-person, requiring locally based talent. Job postings for positions in the professional, scientific, and technical service fields joined health care and construction as the top three growth sectors in these regions.

### Gaps in key position requirements and local skills are emerging.

The top 10 specialized skills in rural job postings in Pacific Northwest and Mountain West states are significantly underrepresented in local job seeker profiles. Auditing, marketing, computer science, business development, project management, accounting, Agile methodology, finance, workflow management, and data analysis are the most sought-after skills. Only marketing is overrepresented in local job seeker profiles, while technology skills are significantly underrepresented. For example, almost 9% of positions in these rural regions seek a candidate with computer science skills but less than 1% of profiles from rural talent list this as a skill. In addition, post-COVID, the bachelor's degree overtook the high school diploma as a job requirement.



For career seekers, **technology, finance, and insurance jobs offer a balance between growth and robust pay** for rural talent. Not all growing sectors are large enough to offer abundant opportunities, and not all offer robust pay. Across all five states, technology jobs appear among the highest-growing and highest-paying positions listed in rural regions, with finance and insurance positions also striking this balance in all of these states except Oregon.



The Lightcast data suggest that rural talent in the Pacific Northwest and Mountain West have access to new and exciting opportunities if they have the background and skills to seize them. Rising expectations for bachelor's degrees and for skills associated with the technology sector will mean rural talent needs to explore educational opportunities. Undoubtedly, rural leaders want local

talent who are born, reared, and invested in rural communities to enjoy the benefits these new positions bring. This is an opportunity for local workforce agencies and states to work together with local community leaders to expand access to the career exploration, skills certification, degree programs, and experiences that make these jobs attainable.

## Key Findings Brief

### Health care jobs still dominate in the rural West...

- Jobs in health care made up a large percentage of postings in rural counties from 2017 to 2022.
- In the last five years, the health care sector added more than 20,000 job postings in rural counties in the five states we profiled.
- Between 2017 and 2022, more than half of the total postings in rural Washington and Oregon, and about a third of postings in Colorado and Idaho, were health care positions. Only Utah breaks with this trend with just 15% of total rural postings in health care.

### ...but local tech sector jobs are rising.

- The professional, scientific, and technical service fields joined health care and construction as the top three growth sectors in these regions.
- Rural companies in Washington, Oregon, Idaho, and Utah all saw an increase in demand for STEM jobs after the initial COVID shock.
- Rural posting increases outpaced urban areas, with STEM postings increasing 183% in rural areas versus a 61% increase in urban areas across the five states.
- Of STEM rural postings, 80-90% of positions are listed as in-person, requiring local talent to fill employer needs.
  - That companies seem to want in-person talent may suggest that they still prefer a workforce that meets together, that only local talent can understand their local needs, or both.



### However, gaps in key position requirements and local skills are emerging.

- The top 10 specialized skills in rural job postings in Pacific Northwest and Mountain West states are significantly underrepresented in local job seeker profiles.
- The top skills are auditing, marketing, computer science, business development, project management, accounting, Agile methodology, finance, workflow management, and data analysis.
  - Of these, only marketing is overrepresented in local job seeker profiles.
  - For example, almost 9% of positions in these rural regions seek a candidate with computer science skills, but less than 1% of profiles from rural talent list this as a skill.
- Post-COVID, a bachelor's degree became a more prominent requirement compared to high school diplomas, with 33% of jobs requiring a bachelor's degree versus 20% requiring a high school diploma or GED.
- However, in the five Pacific Northwest and Mountain West states we explored, only between 21% (Oregon) and 33% (Colorado) of rural residents in these states hold a bachelor's degree.

### Job seekers must balance high-growth industries against high wages.

- Jobs classified as professional, scientific, and technical offer this combination of high growth and high salaries.
- Growth in rural tech positions across all five states ranged from 10% to 45% with salaries between \$62,000 and \$106,000.
- Though less consistent across the states, jobs in finance and insurance as well as information industries (e.g., print and digital media, telecom, information processing, data processing, information services, etc.), also show strong growth and salaries.



# New Futures in the Rural West: Shifting Employment Trends in the Rural Pacific Northwest and Mountain West

The employment landscape is shifting in ways we've yet to fully understand. Speculation about [which jobs and industries will rise and fade](#) in the post-pandemic era; the long-term impact of our present labor shortages; and the consequences of remote work on productivity, including the distribution and residential choices of talent, remain open questions.

What is certain is that change is clearly afoot and this change will play out differently across the diverse geography and economics of the U.S. Monitoring how this change is unfolding in different parts of the country will be crucial to understanding how talent and industry across our country can thrive in an economy that is now shaped by COVID-induced shifts in workforce dynamics, increasing intersections between health and workplace; redistribution of people, places, and work; and increased digitization of workplace activities.

In partnership with WGU's Northwest Region, we examined the employment landscape in rural areas of five Pacific Northwest and Mountain West states — Oregon, Washington, Idaho, Utah, and Colorado. Our goal with this effort was to explore, via data, the local landscape in the context of what we know is happening at the national level. Has the rise in remote and virtual job opportunities translated to the rural regions? Are rural regions seeing the same growth in STEM and technology jobs seen in [national data](#)?

We know that the rural community is an important engine of the economy with its own unique circumstances and needs. Dedicated analyses like this report are essential to support policy and economic development that meets the needs and opportunities of rural communities.



The Pacific Northwest and Mountain West states are an important subset of states to bring a focus to rural economics and labor markets. These states are home to sizable shares of rural residents (between 10% in Utah and 30% in Idaho), though they remain among the **least densely populated states**<sup>1</sup>. At the same time, these states are among the **fastest-growing rural populations**<sup>2</sup> and fastest-growing rural economies in the country in the years preceding the **pandemic**<sup>3</sup>.

Using data from Lightcast (a comprehensive database of BLS statistics, job postings, and professional profiles aggregated from sources across the U.S.), we examined recent job postings in rural locales in these states to understand:

- What jobs are being posted, and to what extent do they reflect a shift in labor market opportunities for local talent?
- What are the salaries offered by these jobs?
- What are the education requirements that employers are listing for these positions?

To add context to the employment data, the Northwest team at WGU reached out to regional economic and education leaders for their impressions of the trends emerging from these data.

This analysis revealed that health care jobs remain a priority in rural labor markets. However, recent increases in STEM job postings by rurally located firms suggests that rural regions in these states joined the national COVID-fueled rise of technology sector jobs.

<sup>1</sup> Of the five states, only Washington's population, 120 residents per square mile, is more dense than the national average of 93 residents per square mile. The rest fall below 60 residents per mile.

<sup>2</sup> As of 2020, between 10% (Utah) and 30% (Idaho) of state residents are residing in rural areas in these states.  
<https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural.html>

<sup>3</sup> U.S. Bureau of Economic Analysis, "SAGDP1 State annual gross domestic product (GDP) summary" (accessed Wednesday, January 4, 2023).

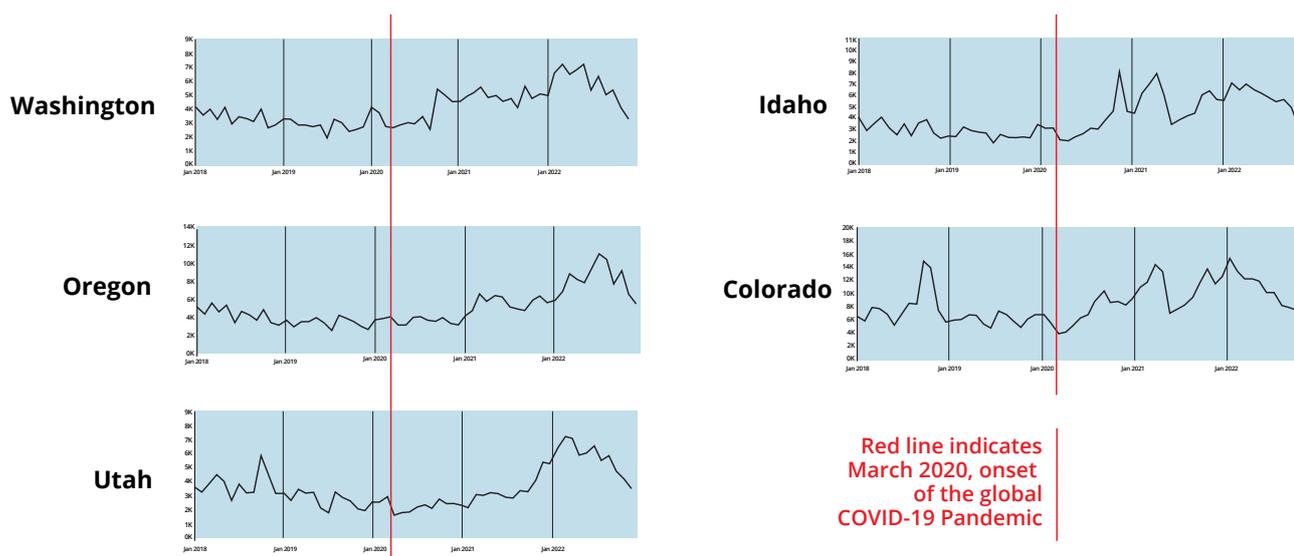
## Demand for Talent Shifted Throughout the Pandemic, but Health Care Jobs Still Dominate in the Rural West

Pacific Northwest and Mountain West states saw large fluctuations in the demand for talent through the pandemic, but jobs in health care continue to dominate the job postings.

March 2020, followed by a sustained rise beginning in late 2020. Recent trends, however, show demand resuming to pre-pandemic levels. (See Figure 1.)

The demand for new hires in rural areas of these states had been relatively steady until the pandemic disruptions, which brought a sudden drop in

### Unique Job Postings in Rural Counties Nov. 2017-Nov. 2022



Red line indicates March 2020, onset of the global COVID-19 Pandemic

Figure 1: The demand for new hires shifted through the pandemic

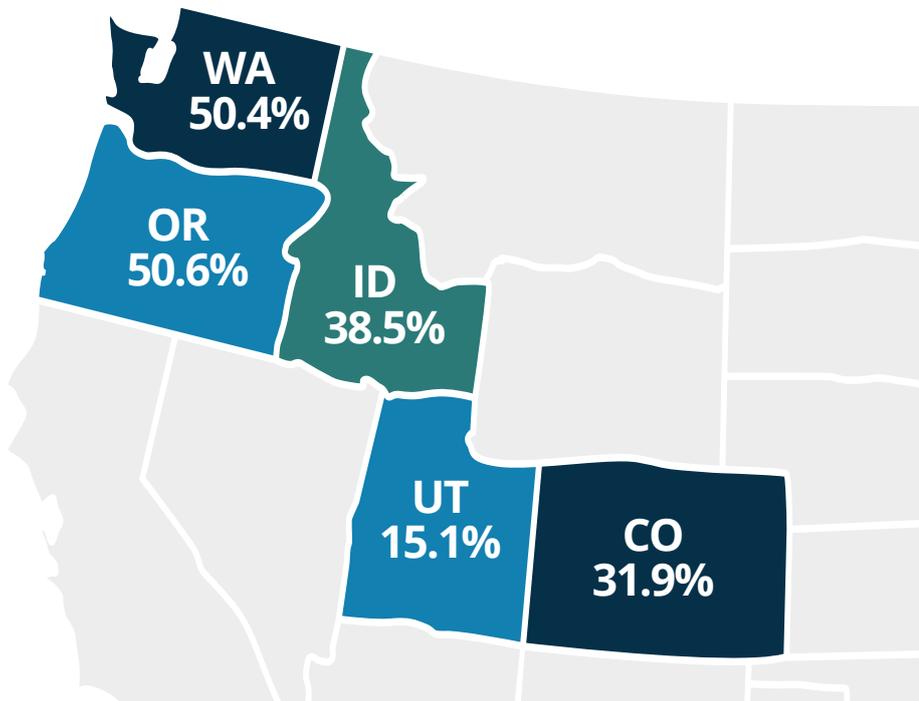
Notes: These data are collected from Lightcast labor market analytics and represent total unique job postings across all industries from November 2017 to November 2022. They are filtered to only rural counties in these states, as defined by the USDA's Economic Research Service.

Source: Lightcast™ Analyst 2022, Datarun 2022.4

Through these fluctuations, health care jobs continued to dominate the job listings in rural counties. Between 2017 and 2022, more than half of the total postings in rural Washington and Oregon, and about a third of postings in Colorado and Idaho, were health care positions. Only Utah breaks with this trend with just 15% of total rural postings in health care. (See Figure 2.)

Health care jobs are also one of the fastest-growing industries in the rural West. As Figure 3 shows, in the last five years, the health care sector added more than 20,000 job postings in rural counties in the five states we profiled.

## Jobs Postings in Rural Counties in Health Care Nov. 2017-Nov. 2022



**Figure 2.** Health care postings dominate the job boards in rural regions. The percentage of these postings ranged from 50.6% in Oregon to 15.1% in Utah.

*Notes: These data are collected from Lightcast labor market analytics and represent total unique job postings for health-care-related positions from November 2017 to November 2022 in rural counties. They are represented as a percentage of total postings for all job types in these areas during this time frame.*

*Source: Figure based on data from Lightcast™ Analyst 2022, Datarun 2022.4*

## Science and Technology Sector Is a Key Area of Growth

One of the most interesting trends within the data is the rise in postings for jobs in the science and technology industries, which join health care and construction as the top three growth industries in the rural regions studied for this report. This shift is notable because positions within these industries often offer high-wage

career paths. A sample of these roles includes systems engineer, network engineer, software engineer, cybersecurity analyst, internal audit specialist, technology analyst, and data scientist.

### Examining the Science and Technology Sector in the Lightcast Data

In this report, we focused specifically on the growth of science and technology sector positions (e.g., software developers, engineers, and data analysts) because these positions offer strong future potential and salaries.

Lightcast data offers two views of this sector — the view of the industries that engage in scientific and technology work and a view of the occupations and career paths in science and technology fields. When we assess the opportunities available to local talent, we need to consider both the industries and the occupations. The industry view provides a sense of the types of companies or entities that are growing in a region and can help us assess questions like: Do the businesses experiencing growth tend to offer high wages or good benefits? Do specific industries fare better in economic downturns?

However, because industries employ people across a wide range of job titles — for example, a software company employs facilities managers as well as software engineers — it is also important for job seekers to consider the growth of specific occupations.

**Lightcast data represents science and technology industries and occupations in the following ways:**

- 1. Industry view:** The industry classification “Professional, Scientific, and Technical Services” captures the businesses most commonly viewed as scientific or technical. This classification is a recognized industry from the North American Industry Classification System ([NAICS](#)). Examples of the types of businesses in this classification include engineering; specialized design services; computer services; consulting services; research services; and other professional, scientific, and technical services. For a full list of business types in this sector, see the [NAICS](#) page.
- 2. Occupation view:** The classification of STEM occupations most closely aligns with commonly viewed occupations in the scientific and technical fields. This definition comes from the [Standard Occupational Classification \(SOC\)](#) system that the BLS provides.

**Figure 3** shows that rurally located businesses and organizations in the professional, scientific, and technical industries (e.g., Bayer, Deloitte, H&R Block, and Paychex) posted 13,000 more jobs in 2021 than they did in 2017. These industries, though they include a wide range of jobs, have a large concentration of positions in technology and science.

## Job Postings in WA, OR, ID, UT, and CO Rural Counties, 2017-2021



*Figure 3: Healthcare, construction, and technical sectors drive growth in rural employment.*

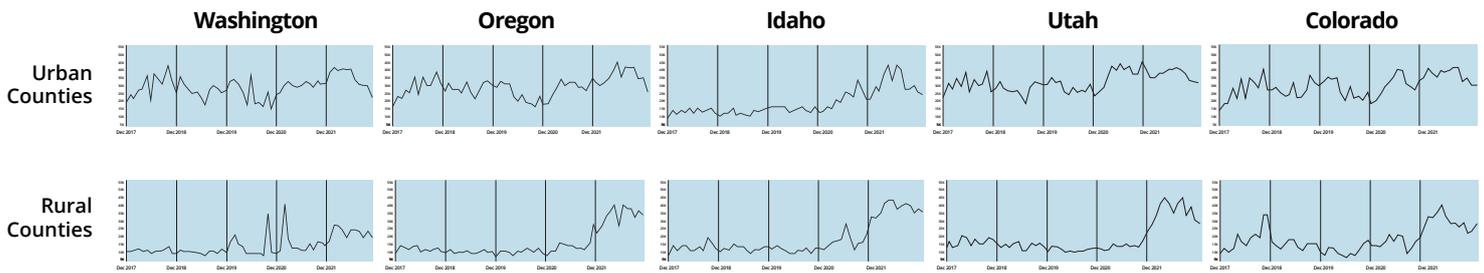
*Notes: These data are collected from Lightcast labor market analytics and represent total unique job postings in each industry from November 2017 to November 2022 in rural counties of WA, OR, ID, UT, and CO. Industries with negative growth and job postings labeled as "Unclassified Industry" were omitted from the visualization.*

*Source: Figure based on data from Lightcast™ Analyst 2022, Datarun 2022.4*

Indeed, when we looked at the occupations and career paths reflected in the job listings, rural parts of these Pacific Northwest and Mountain West states showed growth in the STEM career paths. **Figure 4** shows that, after the initial COVID shock, rurally located companies in Washington, Oregon, Idaho, and Utah increased their demand for talent in the STEM fields. The percentage increase in demand for new STEM hires in rural regions in these states outpaced that of the urban regions in these states. These increases have reverted to some degree in each of the states but still represent net gains relative to 2019, possibly signaling a permanent shift.

## Rural Job Postings for STEM Occupations

Rural posting increase post-pandemic amidst sporadic growth in urban areas:



**Figure 4.** The demand for new hires in the STEM sector rose after COVID.

Notes: These data are collected from Lightcast labor market analytics and represent total unique job postings for STEM occupations in rural counties from November 2017 to November 2022. STEM occupations are defined here based on the SOC system as published by the BLS. Source: Lightcast™ Analyst 2022, Datarun 2022.4

The increased demand for talent in the STEM fields in rural counties is encouraging; however, it is important to remember that the rural regions have had few jobs in these fields relative to the urban regions. Even gains of a few hundred positions would register as noticeable growth.

This circumstance can be seen in Washington state, where urban area postings for talent in STEM fields increased by 5,674 from January 2018 to January 2022 — a 49% increase. In contrast, rural Washington areas gained only 287 STEM postings over the same time period; however, these seemingly modest gains amounted to a 113% increase. This trend carries throughout all five states, where the combined increase in urban STEM field postings of 17,203 equates to a 61% increase in listings, while in rural areas, 3,444 additional STEM field postings led to a 183% increase.

Importantly, only a fraction (10% to 20%) of these jobs are listed as remote positions. This means that these rural-based companies are recruiting new hires who will both work and live in rural locations, creating the potential for a multiplier effect across the studied rural economies. That companies seem to want in-person talent may suggest that companies still prefer a workforce that meets together, that only local talent can understand their local needs, or both.

### Drivers of Tech Employment Growth

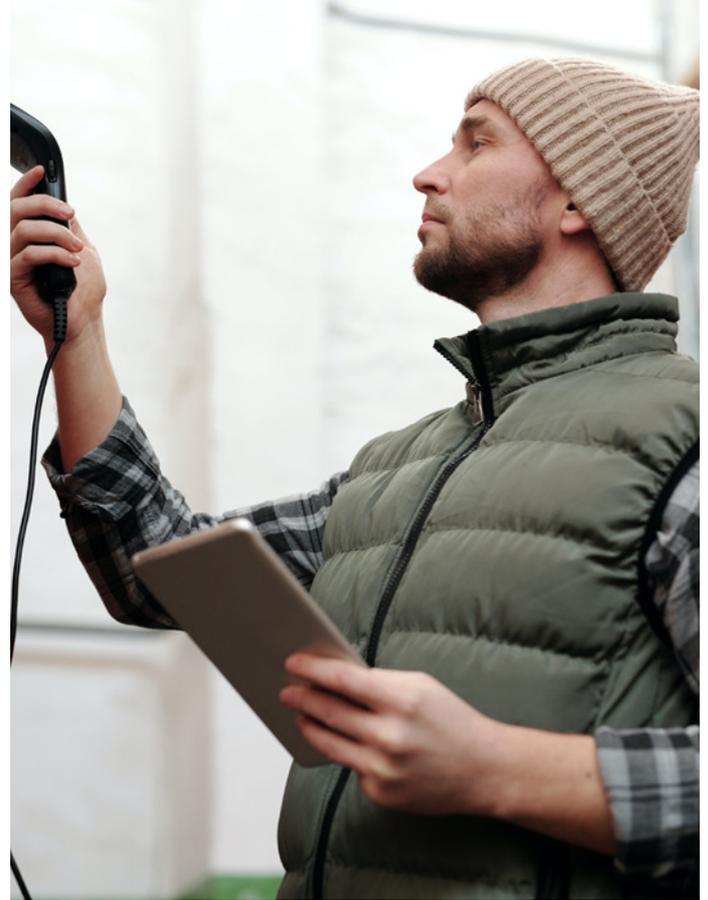
What is driving the growth [in rural tech employment opportunities] is both affordability of housing for workers and lower land and labor costs for the employer.

**Mike Schindler**  
**CEO, Operation Military Family**

## Skills Demand and Local Talent Are Misaligned

According to the data, shifts in the employment landscape across the five states studied brought an increase in the demand for bachelor's degrees and new skills that may not be available in current rural talent. Lightcast data capture the education and skill requirements listed in each job posting. A large (indeed the largest) share of positions posted in rural areas do not list any education or degree requirements. However, in 2022, the share of positions requiring a bachelor's degree more than doubled from 14% in 2017 to 33% in 2022.

Through this increase, the bachelor's degree overtook the share of positions that explicitly require a high school diploma or GED, which held steady at 20% from 2017 to 2022. This shift might be surprising in light of the recent momentum behind certifications and microcredentials, but Ismar Vallecillos, director of regional opportunities for WGU, noted that it likely represents employers recognizing that "a bachelor's degree sharpens soft skills and communications skills, which are vital to the workforce."



### Increased Demand for and From Rural Healthcare Workers

Several trends are impacting rural healthcare. Frontline caregivers are being asked to do more and more, and the demand for non-physician providers is greater than ever. That is driving an increased emphasis on post-secondary training, including bachelor's degrees and other credentials. Also, many organizations are slowly raising wages for frontline caregivers to better match their academic and clinical preparation.

**Kevin McEwan**  
***Chief Nursing Officer, Madison Memorial Hospital***

Although the requirement for bachelor’s degrees is rising, residents in rural counties generally have the least access to higher education. According to [national 2019 data](#), 21% of adults over the age of 25 and residing in rural areas held a bachelor’s degree, compared with 35% of those living in urban areas. In the five Pacific Northwest and Mountain West states we explored, the [U.S. Department of Agriculture’s \(USDA\)](#) recent analysis shows that between 21% (Oregon) and 33% (Colorado) of rural residents in these states hold a bachelor's degree. Similar to the national data, the level of degree attainment in rural regions of these states trails that of their urban regions by 7 to 12 percentage points.

their own. Acknowledging the diversity of rural communities, he said, “There are cultures within cultures in many small communities, and the push for education isn’t always the same. In general, we experienced roughly a 10-year span when about 70% of high school students in rural communities went on to college. Lately, that number has decreased — especially among young men. Many young men are choosing to stay close to home and work blue-collar jobs. That’s likely attributed to the traditional activities and lifestyles those young men experience growing up in rural areas.”

Kevin Jacka, CEO of The Rural Alliance, a Washington state-based education nonprofit, noted that recent trends do not suggest that these gaps will shrink on

## Degree Requirements in Job Postings 2017-22

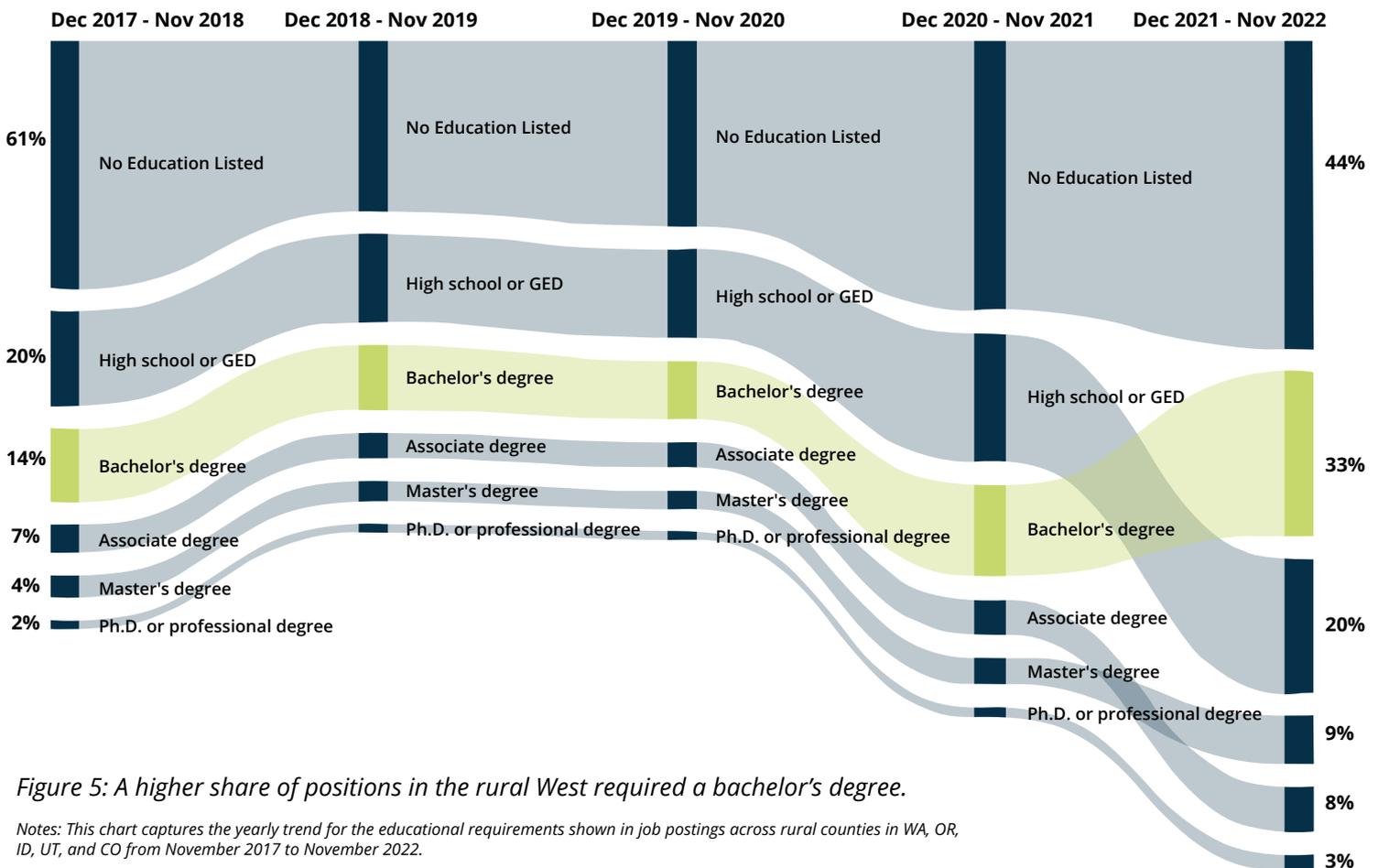


Figure 5: A higher share of positions in the rural West required a bachelor’s degree.

Notes: This chart captures the yearly trend for the educational requirements shown in job postings across rural counties in WA, OR, ID, UT, and CO from November 2017 to November 2022.

Source: Lightcast™ Analyst 2022, Datarun 2022.4

When we consider skills required for common positions in the region and the skills available by local talent, notable gaps between skills and talent also surface. Lightcast aggregates the skills from 100 million distinct individuals based on recently updated, publicly available resume databases<sup>4</sup>. Given the focus on recently updated profiles, these data might reasonably reflect individuals who are likely job seekers or at least individuals attentive enough to their profiles that they may consider a new position.

### Degrees vs. Certifications: An Unsettled Debate

This is a “watch and see” for me. With the ability to make money on the internet, regardless of degrees, I think we may see two different economies and workforce opportunities. The traditional and specialized workforce (degrees) and the entrepreneurial/digital workforce (no degrees required).

**Mike Schindler**  
***CEO, Operation Military Family***

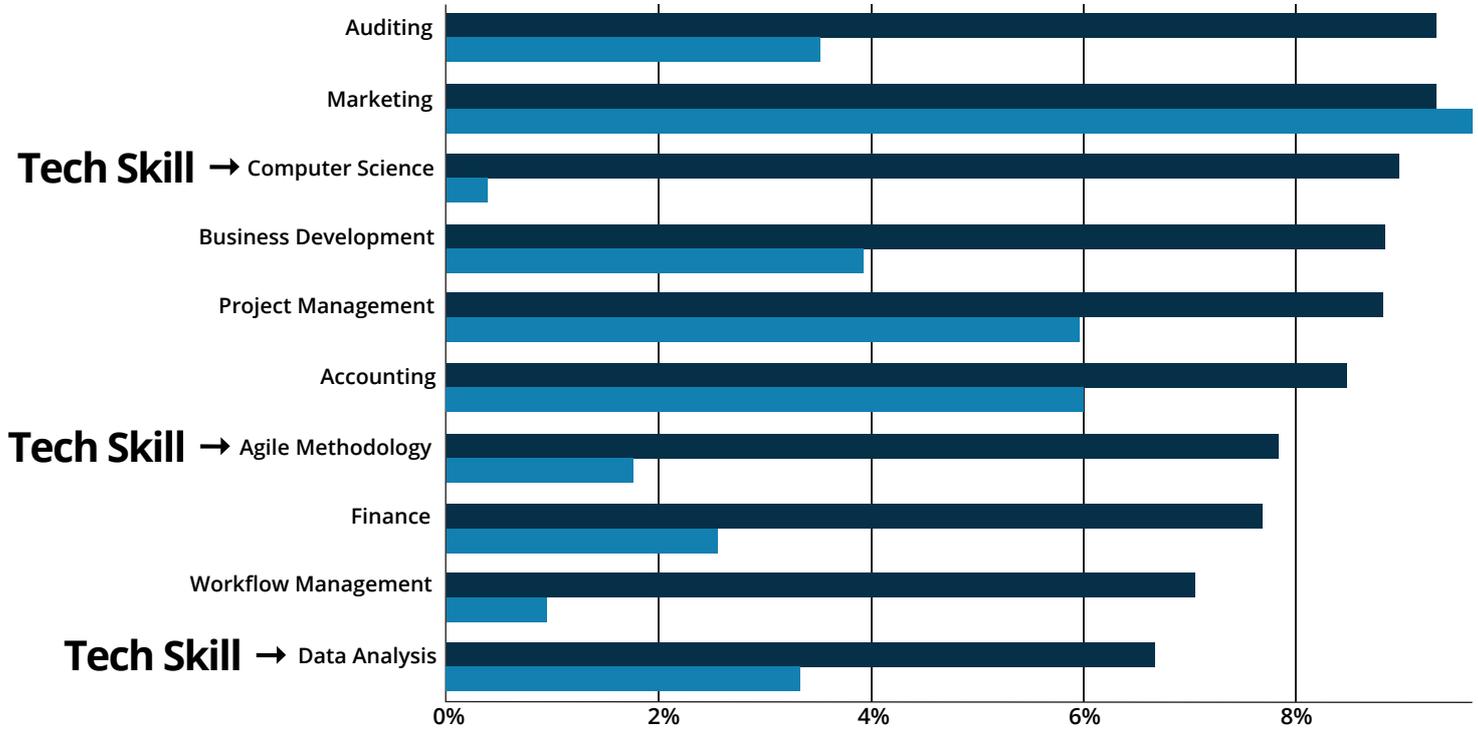
These profile data, when compared to the top 10 specialized skills in rural job postings in Pacific Northwest and Mountain West states, showed significant underrepresentation of high-demand skills, particularly skills in the technology sector. Almost 9% of positions in these rural regions seek a candidate with computer science skills, but less than 1% of profiles from rural talent list this as a skill. Nearly 8% of postings seek talent experience with Agile methodology, but fewer than 2% of profiles list this skill. Almost 7% of postings seek talent with data analysis skills, but just over 3% of profiles list this skill. Outside of technology, skills including workflow management and finance, and business development also appear underrepresented on career profiles.

For job seekers, the required combination of skills and degrees may depend on the specific role they are targeting. According to Dr. Andre Alfred, Vice President, Azure Security - Microsoft, “In tech and cybersecurity, skills are the primary lens, as there are many auto-didactic learners that have mastered complex computing concepts. However, skills plus degree is a standout, superior combination.”

<sup>4</sup> Lightcast reports that profiles data are gathered from “publicly available information on the web, third-party resume databases and job boards, the recruiting industry, opt-in data from employers and applicant tracking systems, sales and marketing CRM databases, and various consumer/identity databases.”

# Skills Requirements in Rural Job Postings 2021-22

● The frequency this skill is required in job postings ● The frequency this skill is listed on rural professional profiles



**Figure 6.** Educational Requirements in Rural Job Postings 2021-2022

Notes: This chart represents the most frequently listed required skills in job postings within the professional scientific and technical services industry across rural counties in WA, OR, ID, UT, and CO from September 2021 to December 2022. Also captured is the frequency that these skills are listed on individuals' professional profiles in the same rural areas.

Source: Lightcast™ Analyst 2022, Datarun 2022.4

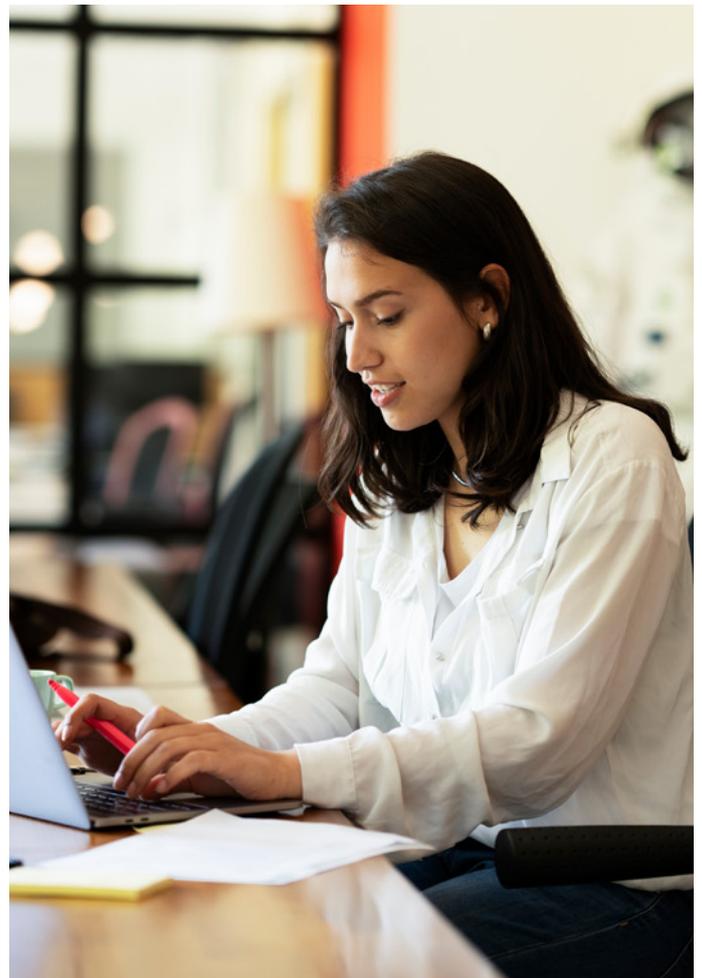
## Rural Job Seekers in the New Employment Landscape Need to Balance Employment Growth With Wage Potential

Among the many stories of the “great resignation” were accounts of individuals rethinking their career paths and charting new goals. Those who are looking for new career directions and want to apply their talent to local positions in the rural West will be well-served to look for a balance of sector growth and income potential.

When we considered both employment opportunities and income potential, we noted that the highest paying jobs in the rural regions are not necessarily in industries with strong employment growth. In rural Utah, for example, job listings in the utilities sector are among the highest paying, with an average salary of \$149,000, according to data from the BLS<sup>5</sup>. However, this sector of jobs has declined by 11% in the last five years. At the same time, the highest-growth sectors are not necessarily the highest-paying opportunities. For example, in rural Idaho, construction has posted a 43% increase in open positions; however, these positions pay \$54,000, on average.

In our analysis and focus on actionable insights, we sought to uncover jobs that are among the highest paying and in some of the highest-growth fields. In rural Utah, for example, jobs in manufacturing offered an average salary of \$79,000, far less than the posted utilities jobs, but the sector grew by 28% in the last five years. However, in rural Idaho, job listings in the professional, scientific, and technical services sector increased by 33% in the last five years, far less than the growth in construction, but had an average salary of \$106,000.

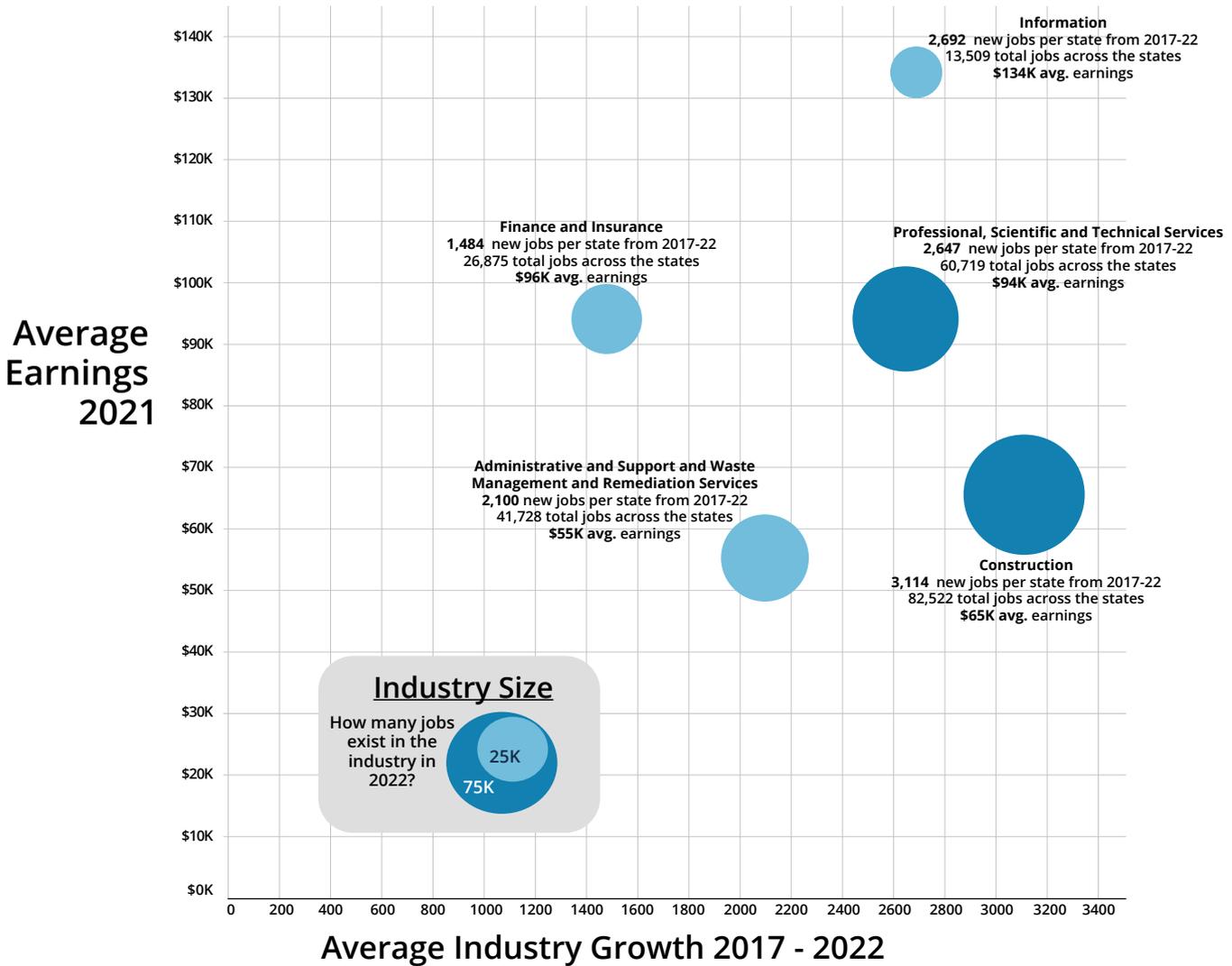
Again, reflecting the rise of technology sector jobs on the rural landscape, in each of the five states we studied, jobs classified as professional, scientific, and technical offer this balance of growth and salaries. Growth in these positions ranged from 10% to 45% with salaries between \$62,000 to \$106,000. Though less consistent across the states, jobs in finance and insurance as well as information industries (e.g., print and digital media, telecom, information processing, data processing, information services, etc.), also commonly show strong growth and salaries.



<sup>5</sup> The Lightcast data on industry wages are an arithmetic mean based on BLS industry data for wages and salaries, which are reported in Lightcast down to the dollar. <https://kb.emsidata.com/glossary/average-annual-wage-industry/>

# Washington, Oregon, Idaho, Utah, & Colorado Opportunities in Rural Areas

## The 5 Fastest Growing Industries in the Pacific Northwest and Mountain West



Notes: This chart captures the 5 fastest growing industries in rural counties of Washington, Oregon, Idaho, Utah, or Colorado, as measured by the increase in job postings from November 2017 to November 2022. This growth is represented by an industry's position along the horizontal axis. Average earnings per worker as reported for each industry by the BLS are represented by vertical position. The relative size of each industry as measured by total jobs is represented by the approximate size of an industry's bubble and may not be to scale.

Source: Figure based on data from Lightcast™ Analyst 2022, Datarun 2022.4

## Conclusion

The rural economy has shifted dramatically over the last 50 years and has its own story of both enduring and emerging from the pandemic. Rural economies, once dominated by agriculture, are now more diverse, with talent working across health care, education services, retail, manufacturing, finance, and more.



### Remote to Rural Migration

During the pandemic, many people in Microsoft and other companies have moved to rural areas, which shows that with the right experience, training, and skills, remote working has unlocked an equitable career path for people in various locations, so while I am not seeing specific recruiting initiatives, we are not turning down great talent wherever they live.

**Dr. Andre Alfred**  
***Vice President, Azure Security - Microsoft***

Our analysis shows that this evolution has not only continued but may have taken interesting shifts as a result of the pandemic. As millions of workers shifted from offices to working from home, many observers suggested that this could be an economic boon for rural populations. In 2022, Lightcast recorded more than 3.58 million fully remote positions nationally across a range of industries and job classifications. These positions created new opportunities for rural talent to work in jobs and companies that previously required moving to urban areas. In and of themselves, these national remote positions shifted the employment landscape for rural talent. Our analysis, however, shows a potentially deeper and more localized shift in rural economies as well.

In the five Pacific Northwest and Mountain West states we examined, rural talent now has more access to rural-based technology and STEM positions (and the healthy salaries and career paths that come with them) than at any point in recent history.





Though new and exciting opportunities are coming online for rural talent in these states, local talent will likely need to build the skills and background to access these jobs. Additionally, the persistent demand for talent in the health care sector has lifted the demand for talent with a bachelor's degree and specialized skills, both of which appear underrepresented in the local talent pool.

Rural talent hoping to take advantage of the shifting economic landscape will want to invest their attention and efforts to build the skills and background in fields that offer a beneficial balance of employment growth and strong wages. For now, the increased demand for talent with bachelor's degrees and specialized skills will necessitate greater investment in rural education and expanding workplace experiences.

That said, the marketplace for certifications is still unregulated, and it isn't clear to employers what certifications and microcredentials can serve as a reliable demonstration of skills. There is room and opportunity for statewide initiatives to bring rationalization to the marketplace so that employers can back away from bachelor's degrees as a default and pursue skills-based employment offerings. However, employers have to trust the new signals to move away from the bachelor's degrees they've been using for decades as a demonstration of ability.

## Flexible Work and Workforce

The big thing I'm seeing is the need for many companies to be more flexible in how they hire. They can't simply build a building and expect to have all the people they need to come and work there. Many are looking at a diverse workforce; for example, a company could have workers spread across Colorado, California, Idaho, and Utah. Many companies are looking at a distributed workforce.

**Jay Larson**  
**CEO and Founder, Idaho Technology Council**

Finally, local workforce and community development agencies will want to keep an eye on how the landscape continues to evolve. We likely have not yet seen the last surprises COVID has to offer. It will be important to refer back to data sources that show what jobs employers are looking to fill and the skills they have to offer.

The durability of the shifts we document in this report will likely be tested in the upcoming year, with economists widely predicting that an economic downturn is on the horizon. We will only know how this latest shock to the system shifts the landscape if we keep our eye on the data.

## Developing and Hiring Rural Talent Is the “Right Thing to Do”

We are seeing a substantive growth in rural employment opportunities due to remote work. The question is: Are current rural residents able to take advantage of that shift, or is it primarily urban expats looking for quality of life and cheaper housing options? I can point to examples of organizations not only providing workforce training for current rural residents but also advocating for employer recruitment within rural communities. Those organizations are doing that not just because it's good business — but it's equitable and the right thing to do.

**Erika Borg**  
***Strategic Advisor, AWB Institute***

## Methodology

### Definition of Rural

The USDA's Economic Research Service (ERS) provides nine recognized methods for [defining rural areas in the U.S.](#) These methods rely on data from the Census Bureau's list of places, Census Bureau's list of urban areas, Office of Management and Budget's metropolitan areas, and ERS rural-urban commuting areas. Lightcast allows for the segmentation of data based on many geographical factors, including county designation. This aligns with the USDA's rural definition #7, which identifies urban counties as:

**“Containing a core urban area of 50,000 or more people, together with any adjacent counties that have a high degree of social and economic integration (as measured by commuting to work) with the urban core.”**

For the purposes of this investigation, rural counties were identified as all counties not defined as urban as of the 2020 Census, according to this recognized definition.

### Data Collection and Analysis

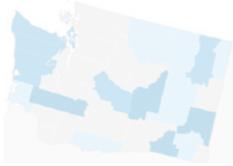
Quantitative data was collected from various sources, including custom data queries and pre-cast reports from [Lightcast Analyst](#), Datarun 2022.4. Lightcast is an online platform providing access to a curated data set which integrates federal and state labor market data into a single database. It allows for focused investigation of the data based on geographic filters, industries, occupations, job titles, skills and education requirements, demographics, and wages. It relies on [sources such as](#) “the Bureau of Economic Analysis (BEA), the U.S. Census Bureau, the Bureau of Labor Statistics, and others.” Additional data are collected from tens of thousands of job postings on public job boards, company websites, and other sources. These data include job titles, responsibilities, skill and education requirements, advertised salary, and many other relevant pieces of information that help describe the labor market both historically and its current state. Lightcast also provides access to over 120 million individual profiles of workers in the U.S. These profiles are anonymized and standardized into a common format that allows for aggregation by several factors, including geographic location, industry, occupation, job title, etc.

Exploratory analysis using these data provided context and focus for the project's initiative to discover relevant and important details about the job postings in the Pacific Northwest states, the skills and education that these postings require of applicants, and the skills and education that professionals in these same locations are providing on their publicly available profiles. Exploration of the fastest-growing, the largest, and the highest-paying industries and occupations in these locations provided the data for focused analysis of historical performance, current state, and projection of greatest opportunities for both employers and job seekers in these markets.

### Additional descriptions and data were gathered from:

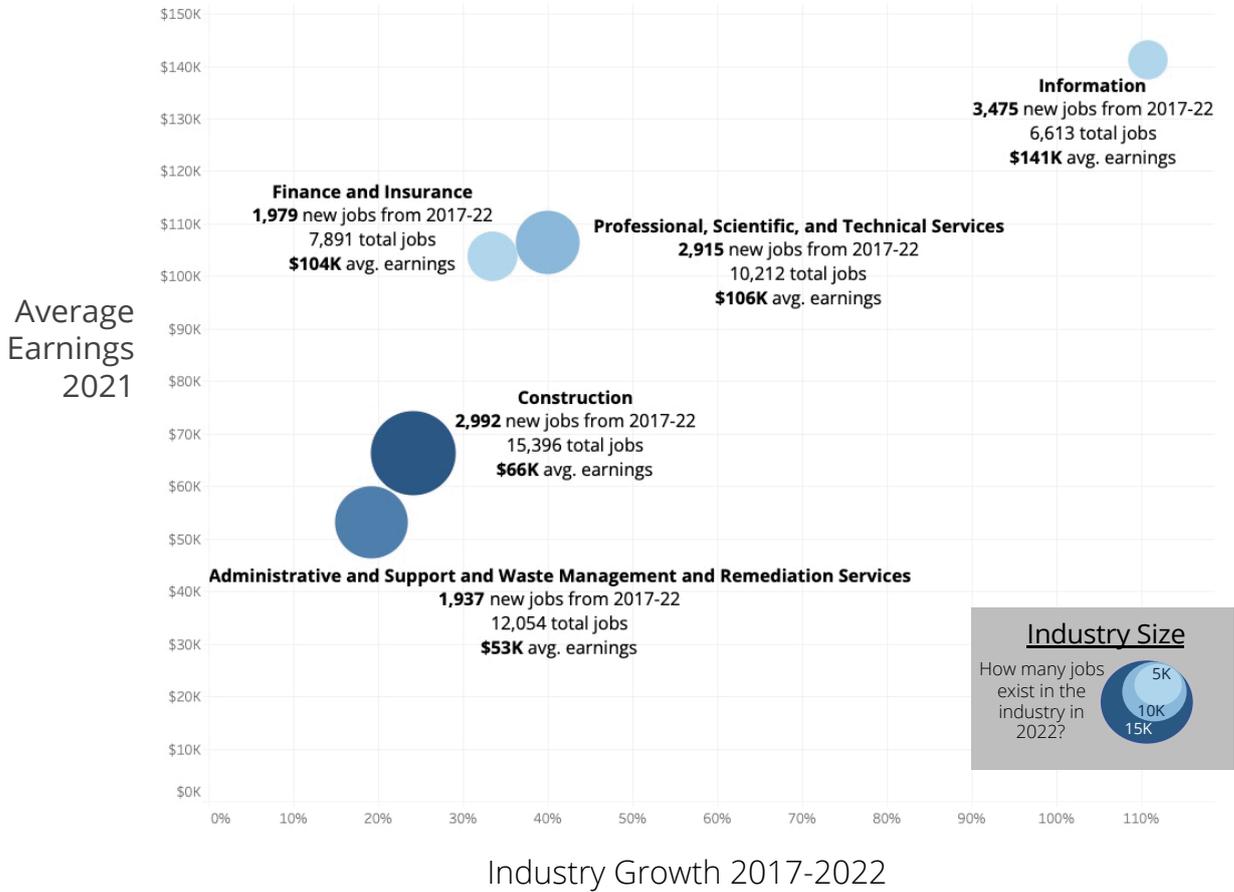
- The BLS, including its [SOC](#) system, on which the list of relevant STEM occupations was based for this analysis.
- The U.S. Census Bureau and the [North American Industry Classification System](#) (NAIC), which is a standard used by federal statistics agencies to classify business establishments into recognized industries, also referenced as sectors here. Information on industry wages was collected via Lightcast and is based on these BLS data. Certain job postings collected in the Lightcast data were identified as belonging to “Unidentified” industry and were excluded from this analysis.

# Appendix

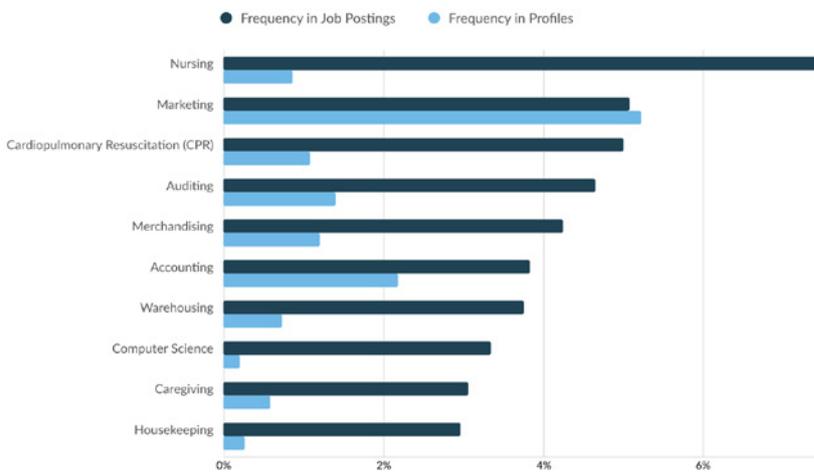


## Washington Opportunities in Rural Areas

### The 5 Fastest Growing Industries in Rural Washington



### The Top-10 In-demand Skills in These Industries



#### Key Take-aways

- Skills-Gaps - Many of these in-demand skills are not listed very often on the profiles of rural professionals.
- Healthcare- and STEM- related skills show the highest gaps.
- Some of these skills are in demand for jobs in multiple industries.

**Figure 7a.** Rural job seekers must find the balance of strong growth and wages in their area.

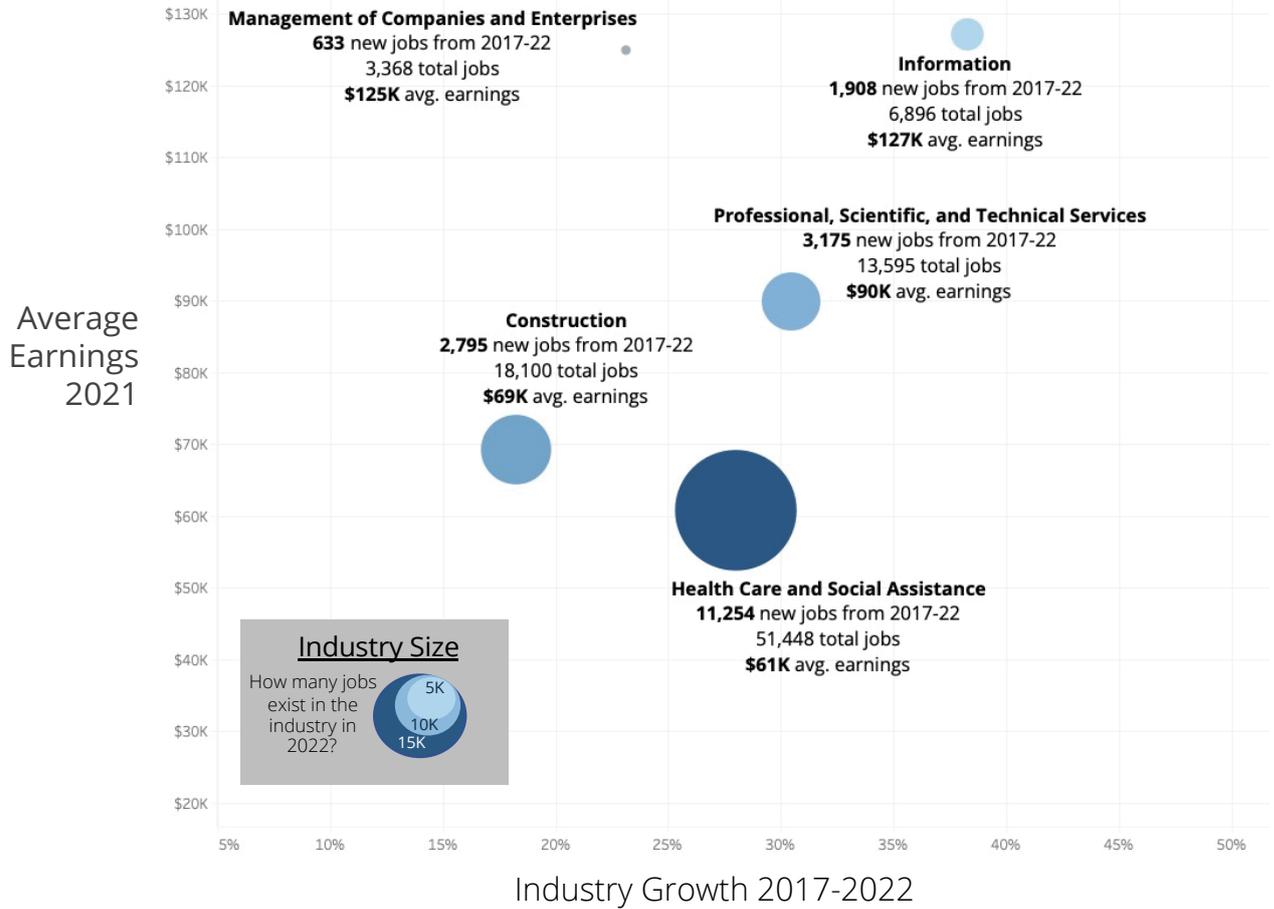
Notes: This chart captures the five fastest-growing industries in rural counties of Washington, Oregon, Idaho, Utah, and Colorado, as measured by the increase in job postings from November 2017 to November 2022. This growth is represented by an industry's position along the horizontal axis. Average earnings per worker as reported for each industry by the BLS are represented by vertical position. The relative size of each industry as measured by total jobs is represented by the approximate size of an industry's bubble and may not be to scale.

Source: Figure based on data from Lightcast™ Analyst 2022, Datarun 2022.4

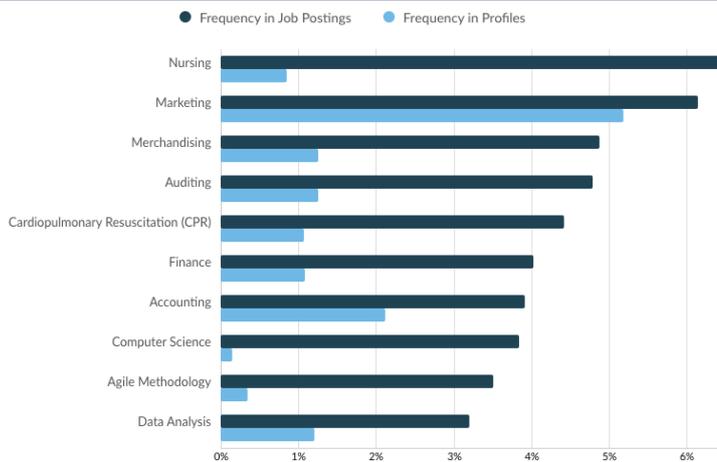


# Oregon Opportunities in Rural Areas

## The 5 Fastest Growing Industries in Rural Oregon



## The Top-10 In-demand Skills in These Industries



### Key Take-aways

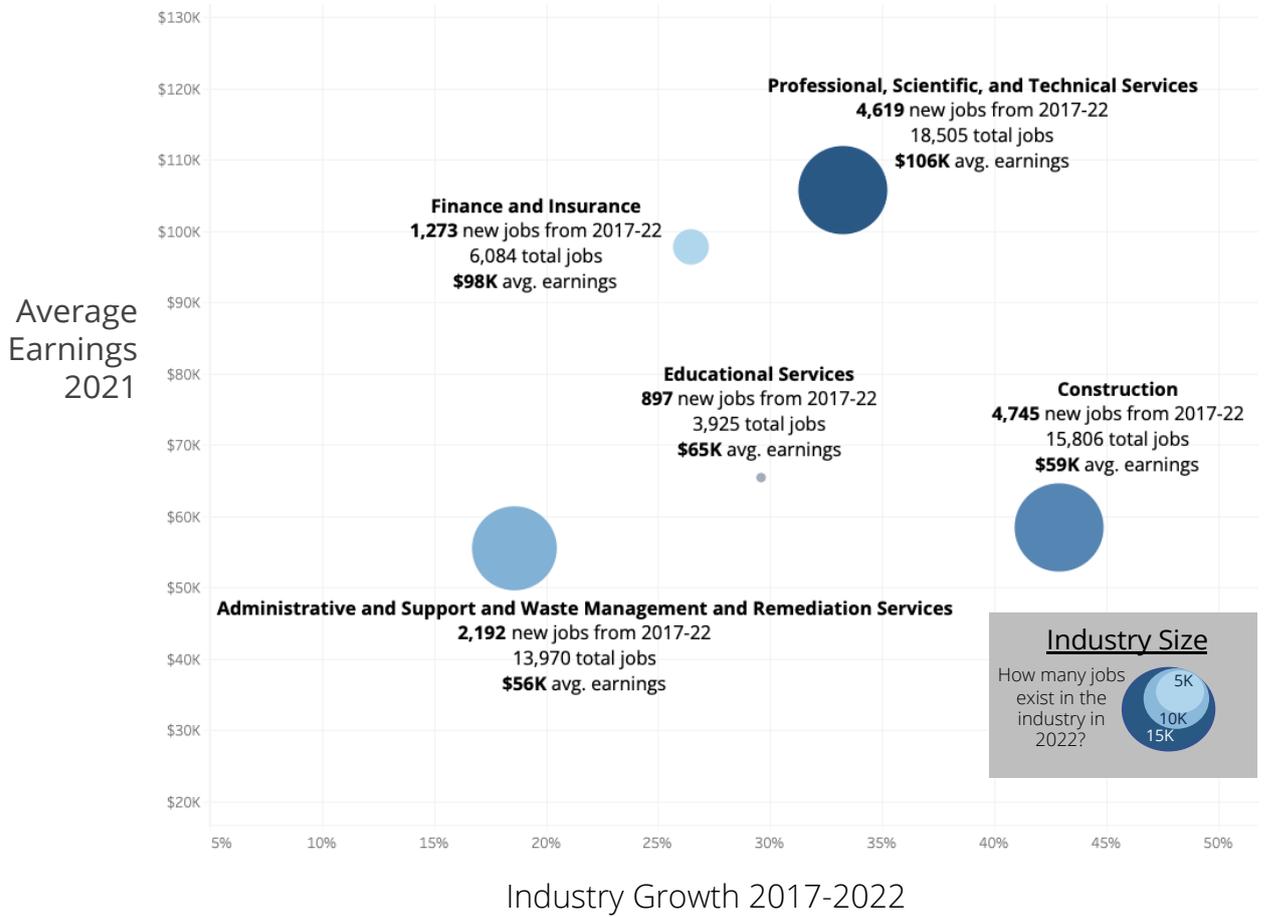
- Skills-Gaps - Many of these in-demand skills are not listed very often on the profiles of rural professionals.
- Healthcare- and STEM- related skills show the highest gaps.
- Some of these skills are in demand for jobs in multiple industries.

**Figure 7b.** Rural job seekers must find the balance of strong growth and wages in their area.

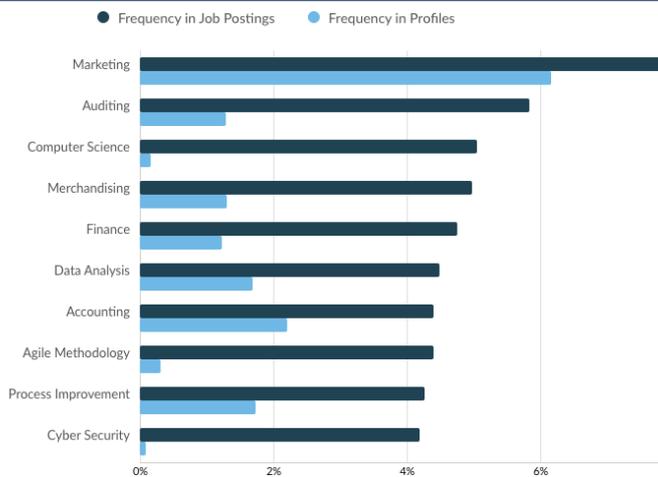


# Idaho Opportunities in Rural Areas

## The 5 Fastest Growing Industries in Rural Idaho



## The Top-10 In-demand Skills in These Industries



### Key Take-aways

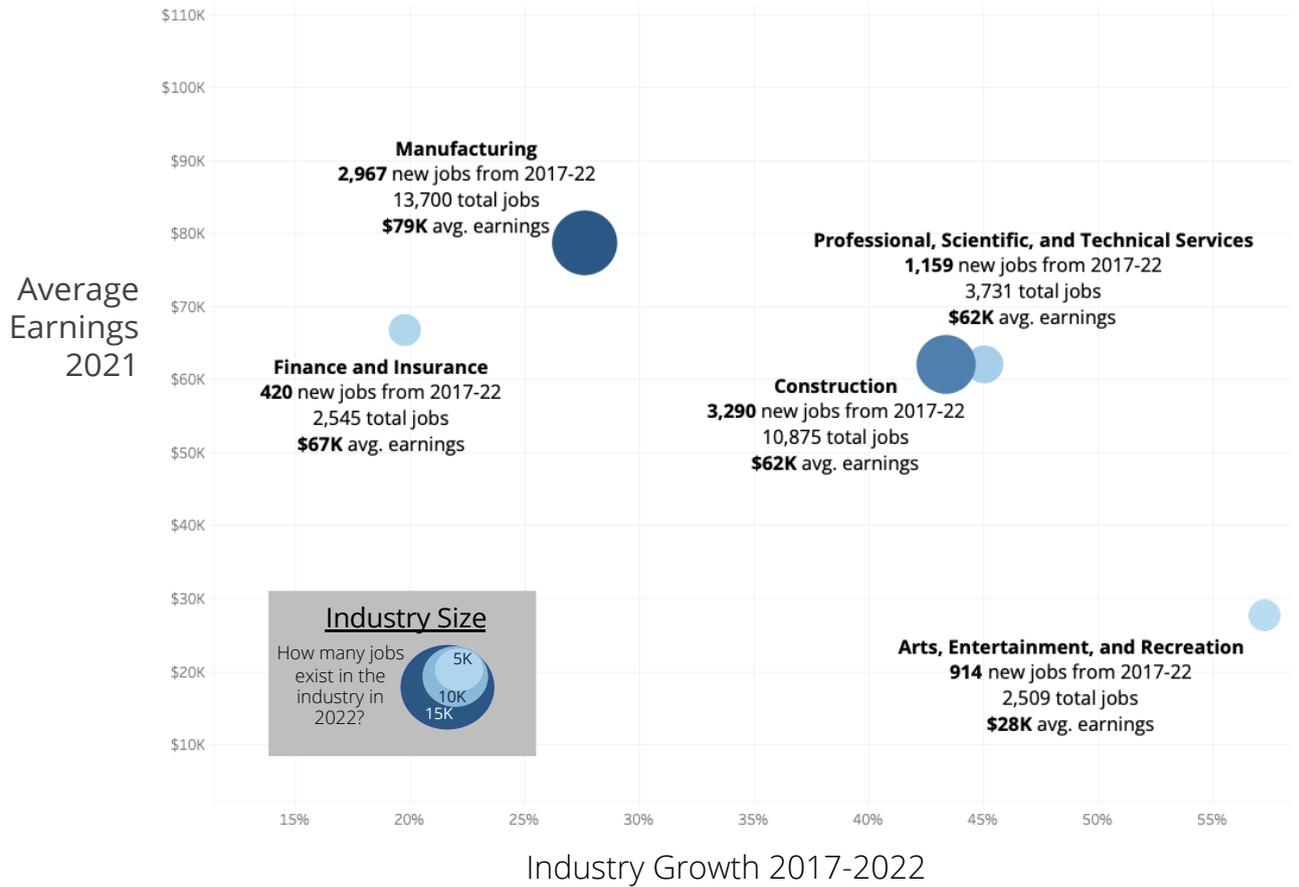
- Skills-Gaps - Many of these in-demand skills are not listed very often on the profiles of rural professionals.
- Healthcare- and STEM- related skills show the highest gaps.
- Some of these skills are in demand for jobs in multiple industries.

Figure 7c. Rural job seekers must find the balance of strong growth and wages in their area.

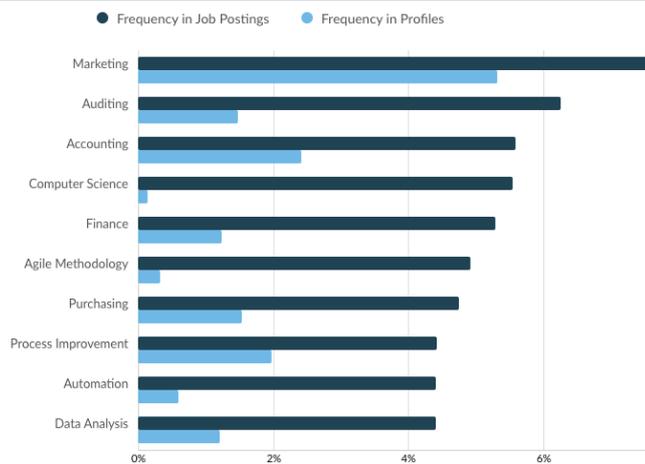


# Utah Opportunities in Rural Areas

## The 5 Fastest Growing Industries in Rural Utah



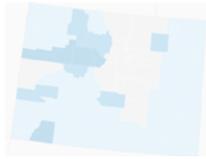
## The Top-10 In-demand Skills in These Industries



### Key Take-aways

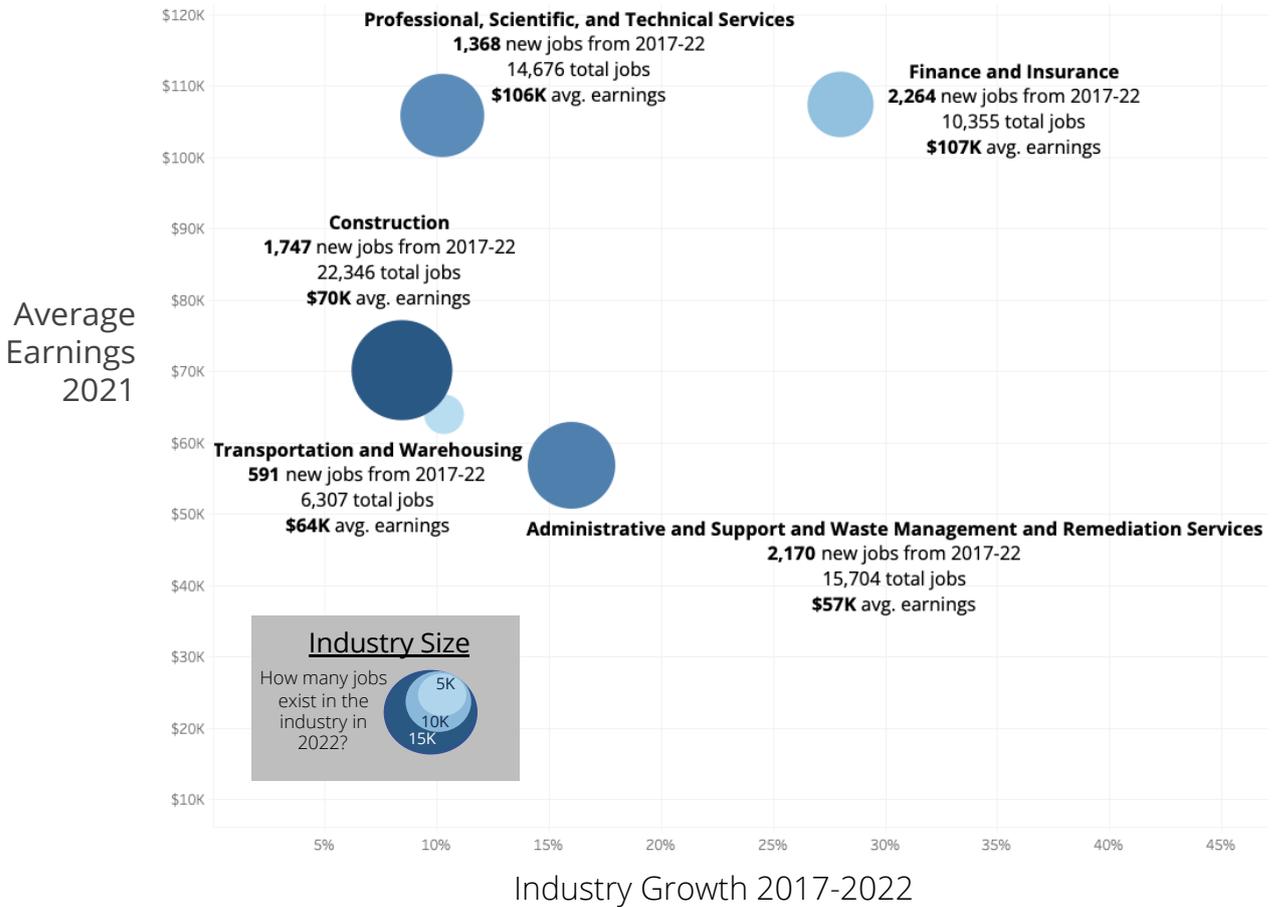
- Skills-Gaps - Many of these in-demand skills are not listed very often on the profiles of rural professionals.
- Healthcare- and STEM- related skills show the highest gaps.
- Some of these skills are in demand for jobs in multiple industries.

**Figure 7d.** Rural job seekers must find the balance of strong growth and wages in their area.

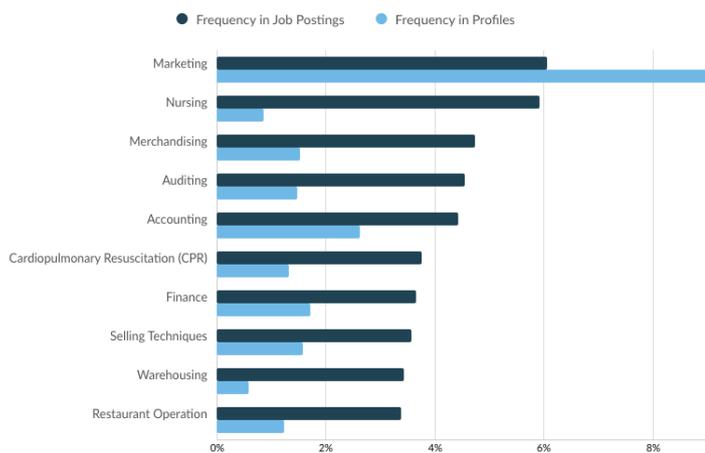


# Colorado Opportunities in Rural Areas

## The 5 Fastest Growing Industries in Rural Colorado



## The Top-10 In-demand Skills in These Industries



### Key Take-aways

- Skills-Gaps - Many of these in-demand skills are not listed very often on the profiles of rural professionals.
- Healthcare- and STEM- related skills show the highest gaps.
- Some of these skills are in demand for jobs in multiple industries.

Figure 7e: Rural job seekers must find the balance of strong growth and wages in their area.



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