

2021

# COLORADO TALENT PIPELINE REPORT

The Talent Pipeline Report explores issues related to the supply of and demand for talent in Colorado and strategies for strengthening our talent pipeline.



Colorado Workforce  
Development Council





In accordance with C.R.S, 24-46.3-103, this Colorado Talent Pipeline Report was prepared by the Colorado Workforce Development Council (CWDC) in partnership with Colorado's Department of Higher Education (CDHE), Department of Education (CDE), Department of Labor and Employment (CDLE), including the CDLE's Labor Standards and Statistics division, Department of Human Services, the Office of Economic Development and International Trade (OEDIT), and the Department of Local Affairs (DOLA) State Demography Office. Support was provided by the Governor's Office, the Colorado Community College System (CCCS), CareerWise Colorado, The Graduate! Network, and other partners.



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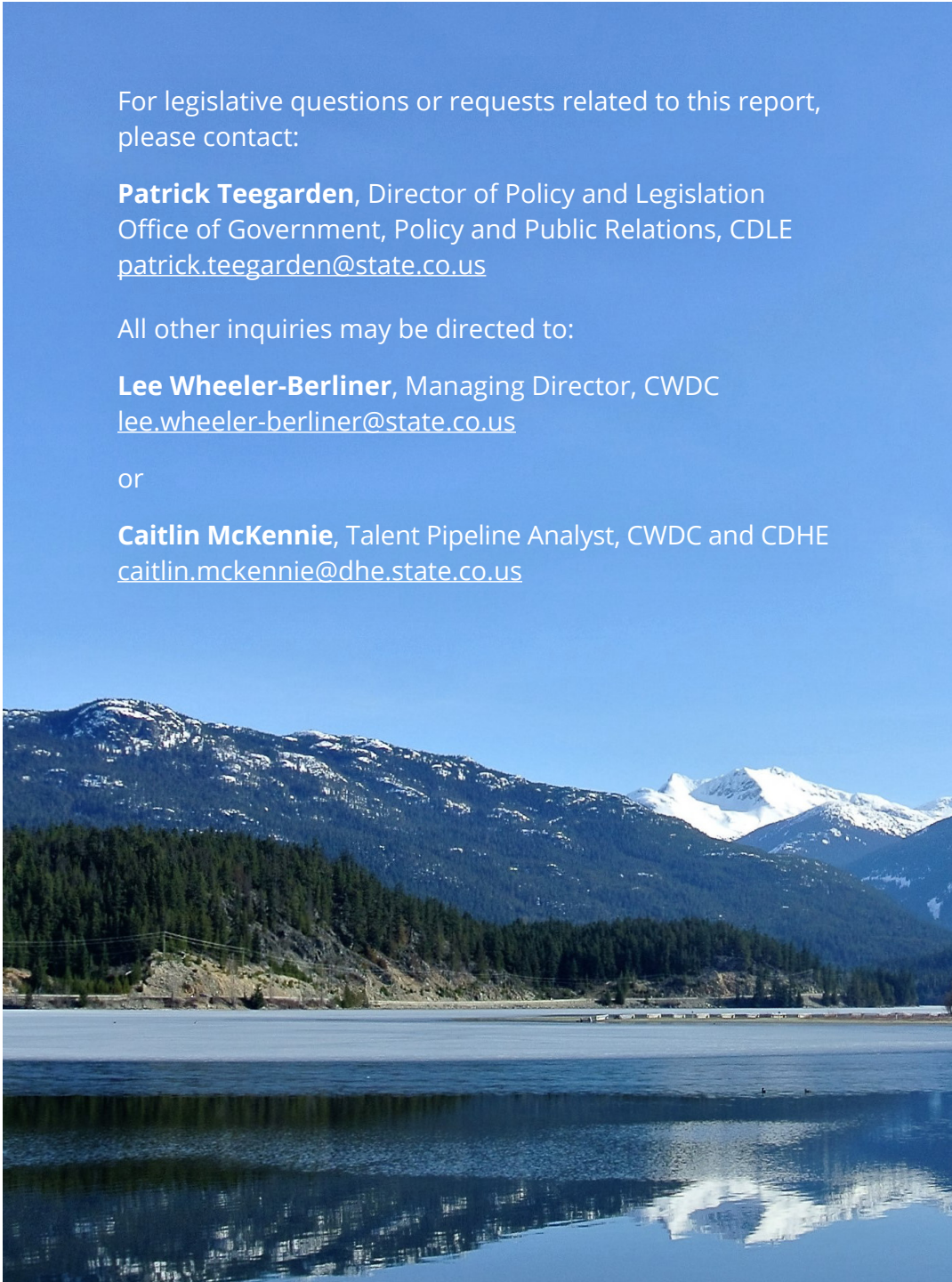
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The future of work is now as we are working to build our economy back stronger than it was before. Rebuilding includes equity, reskilling and upskilling, investment in programs with promising results, and career-connected learning to continue to foster a Colorado for All.

Every single person in our state has been impacted by COVID-19 and its effects on the global economy. The financial impacts have been the hardest, however, on those who have lost jobs, the people who have struggled to find new opportunities, and the individuals who have left the labor force. While recovery is happening and we have made great progress, I remain focused on building a Colorado economy that works for all of us.

This year's Talent Pipeline Report shows us that we do have reason to celebrate and that every Coloradan has reason to be excited for the days ahead. Since April 2020, labor force demand in Colorado has recovered at a rapid pace, with the total number of job openings surpassing unemployment in May 2021. The unemployment rate has fallen significantly in 2021, and our labor force participation in Colorado is stronger than in the nation as a whole.

The report also indicates where we need to focus our efforts moving forward. Small businesses have been impacted by the global pandemic and now face challenges regarding rising premiums, disrupted international supply chains, and constrained labor supply. We also know that women and women of color have been greatly affected, with Black and African American women having experienced the largest decreases in work participation. They need our support to come back to work, such as the support for expanded childcare.

Coloradans have never backed down from a challenge, and there is no shortage of innovative solutions or a willingness to try new concepts in our state. Lifelong opportunities to continue to develop and enhance skills are necessary for individual success in the economy of 2022 and beyond. Skills are the currency that communicate what tasks a person can perform, and how they can add value to business of any size.

My administration supports a Colorado for All. Increasing economic opportunity for individuals requires that we both enhance access to credentials, including non-degree credentials, and work with employers to adopt skills-based hiring. Shifting from degree-based hiring to a skills-based approach can open up new pipelines for organizations struggling to find talent, and allows more people with the work skills to compete for open positions to put their skills, talent, and work ethic to the highest and best use.

I invite you to dig into the information in this report, and then roll-up your sleeves and dig into the work with us to build back stronger.

**Governor Jared Polis**

## BACKGROUND

The Colorado Workforce Development Council (CWDC) is a Governor-appointed, public-private partnership with the purpose to advise, oversee, and integrate the work of the Colorado talent development network. The vision of the CWDC is that every Colorado employer has access to a skilled workforce and every Coloradan has the opportunity for meaningful employment, resulting in individual and statewide economic prosperity. The CWDC's mission is to enhance and sustain a skills-based talent development network that meets the needs of employers, workers, job seekers, and learners for today and tomorrow.



The CWDC champions TalentFOUND, the Colorado talent development network. The TalentFOUND network comprises all of the public and private entities working together to achieve positive talent development outcomes and includes more than 150 affiliates.

This is the eighth iteration of the Talent Pipeline Report. It continues to analyze and explain relevant labor market data, highlights pandemic data and recovery strategies, and provides data-informed recommendations to enhance the talent pipeline in Colorado.



# 01

## DEMAND





## EVOLVING RECOVERY, SHIFTS IN DEMAND

As Colorado and the nation emerge from a global pandemic, headwinds in the labor market exist. In this section, we will look at workforce data in relation to COVID-19. All industries were not equally impacted by COVID-19 and the challenges it presented. This section highlights leading occupations and industries, sectors facing challenges, employer feedback, and the future of work.

An important factor to note is that although the state employment and wages data lag considerably, most of the data points discussed are as of Sept. 30, 2021. This section analyzes job postings and unemployment insurance data in an attempt to look at the most recent workforce data through COVID-19 and the start of the recovery.

Businesses have had to navigate volatile health risks, mitigate revenue losses, and implement policy changes into their operations throughout the COVID-19 pandemic. Now, as we climb out of the pandemic recession, employers face major challenges surrounding labor shortages. Disentangling the mismatch between employer-employee skill and credential gaps will be extremely valuable to Colorado's economic rebuilding as we try to build back a stronger state for all Coloradans.

Today, Colorado faces a historic opportunity to respond to the changes in our society, but we must confront a complex challenge—one that is rooted in changing demographics, the implications of the knowledge economy, and the changing expectations of employers and employees.



## Employment's Road to Recovery

Colorado's labor market recovery from the pandemic recession continues at a rapid pace, although encumbrances linger. Supplemental federal unemployment benefits ended in Colorado on September 4, 2021, but job openings have continued to outpace job seekers (with the latter group remaining in decline throughout 2021 due to the pandemic's viral-related impacts). In late August, there were 122,000 jobs advertised on [Connecting Colorado](#) (a resource provided for job seekers to access job postings statewide and for employers to post current openings). From August to September, employers in Colorado added 5,100 nonfarm payroll jobs for a total of 2,741,100 jobs. Private sector payroll jobs increased 8,400 and the government sector shed 3,300 jobs.<sup>1</sup>

Through this lens, Colorado has seen a significant rebound in employer demand, gaining 302,200 private payroll jobs from April 2020 to September 2021, representing a job recovery rate of about 83 percent (surpassing the national average by roughly two percent during the same period). While the labor shortage continues to create market inefficiencies, Colorado's employment-to-population ratio remains one of the highest in the U.S., ranking seventh nationally in August.

The state's labor force decreased by 900 in September to 3,192,300 with a total share of Coloradans participating in the labor force equating to 68.2 percent. Although this participation level is slightly lower than it was in August 2021 (at 68.3 percent), it has nearly rebounded completely to pre-pandemic levels, as the rate stood at 68.8 percent in February 2020. **The state continues to outpace the U.S. labor force participation rate recovery,** with national levels totaling to 61.6 percent in October 2021.<sup>2</sup>

Similarly, Colorado's unemployment rate was slightly lower than the national rate before the pandemic. However, both Colorado and the U.S. unemployment rate remain significantly higher than they were before the pandemic. Colorado's seasonally adjusted unemployment rate fell three-tenths of a percentage point in September to 5.6 percent. The national unemployment rate declined by four-tenths of a percentage point to 4.8 percent.<sup>3</sup>

**Figure 1**  
Colorado Industry Sectors with the Fastest Payroll Job Recovery Rates

Industry	Change in Jobs (Feb. 2020 - April 2020)	Change in Jobs (April 2020 - Sept. 2021)	Percentage Recovered
Transportation Warehousing and Utilities	-4,100	12,100	> 100%
Management of Companies and Enterprises	-2,200	5,300	> 100%
Professional, Scientific, and Technical	-8,100	16,300	> 100%
Wholesale Trade	-5,600	5,800	> 100%
Retail Trade	-40,900	39,500	97%
Other Services	-26,200	23,300	89%
Accommodation and Food Services	-137,100	114,500	84%

Source: Colorado Department of Labor and Employment: Office of Labor Market Information

As of August 2021, employment in rural economies in Colorado has almost fully recovered from the pandemic recession by 97 percent, meaning that a larger percentage of Coloradans in rural areas are able to stay, work, and thrive in their local communities as a result of the rebounding economy.<sup>4</sup> The Governor's Rural Cabinet Working Group aims to increase this to 105 percent from pre-pandemic levels by June 30, 2022, as one of the FY 2021-2022 [Wildly Important Goals](#).

Over the course of 2021, the average workweek for all Colorado employees on private nonfarm payrolls increased from 32.9 to 33.5 hours, while average hourly earnings increased from \$31.02 to \$32.46, a dollar and sixty-one cents more than the national average hourly earnings of \$30.85.

**Figure 2**  
Average Workweeks & Average Hourly Earnings: Sept. 2020 - Sept. 2021

	Colorado Average Workweek Hours	Colorado Average Hourly Earnings	U.S. Average Hourly Earnings
Sept. 2020	32.9	\$31.02	\$29.43
Sept. 2021	33.5	\$32.46	\$30.85

Source: Colorado Department of Labor and Employment: Office of Labor Market Information

As a result of a Colorado statute requiring annual inflationary adjustments of the state's wage level, the Colorado Department of Labor and Employment (CDLE) announced in September that minimum wage is expected to increase by an additional 0.24 cents in 2022 to \$12.56 per hour (or \$9.54 for those who receive enough in tips for their total pay to meet or exceed the minimum wage). Responses from Colorado business groups have been largely non-reactionary to the news, as most employers are already offering their employees a higher wage rate than the projected increase in order to retain/attract workers in the highly competitive state of the labor market. Instead, major business groups are concerned about **where employers will find talent in 2022** if the labor shortage continues.<sup>5</sup>

According to an April/May [Colorado Restaurant Association \(CRA\)](#) survey, **more than 90 percent of Colorado restaurants** (responsible for nearly [10 percent](#) of the state's labor force before the COVID-19 pandemic) **continue to report they are struggling to staff up even though 84 percent of restaurant employers have modified business practices to attract and retain workers**. Between March 2020 and September 2021, Colorado's food and beverage industry employers have increased their average employee wages by **19 percent**. Furthermore, **23 percent** improved their benefit packages, with the majority of enhancements from additional paid time off and adding medical insurance.

## Leading Industries and Occupations

Figure 3 shows this year's top five occupations with the highest number of job postings from January 2021 to October 2021.<sup>6</sup> Similar to last year's Talent Pipeline Report, transportation, healthcare, and IT industries top the list. Retail salespersons are in higher demand this year relative to 2020, sitting at fourth place and knocking computer occupations down to fifth.

**Figure 3**  
Top 5 Posted Occupations (Jan. 2021 - Oct. 2021)

Occupation	Unique Postings
Heavy and Tractor-Trailer Truck Drivers	67,653
Registered Nurses	66,918
Software Developers and Software Quality Assurance Analysts and Testers	46,799
Retail Salespersons	24,992
Computer Occupations, All Other	23,448

Source: EMSI - Burning Glass 2021.4 Datarun



Figure 4 shows the top five industries with the highest number of job postings from March 2020 to August 2021.<sup>7</sup> Administrative and support and waste management and remediation services, a sector that performs routine support activities for the day-to-day operations of other organizations (e.g., office administration, hiring and placing of personnel, etc.) had nearly 250,000 unique job postings during this period.

**Figure 4**  
**Top 5 Posted Industries** (March 2020 - Aug. 2021)

Industry Sector	Unique Postings
Administrative and Support and Waste Management and Remediation Services	247,955
Professional, Scientific, and Technical Services	178,768
Health Care and Social Assistance	163,871
Retail Trade	162,349
Manufacturing	101,292

Source: EMSI - Burning Glass 2021.3 Datarun

## Industry-Level Labor Tightness

Colorado's rate of job growth over the past year is 3.9 percent, compared to the U.S. rate of 4.0 percent. From September 2020 to September 2021, Colorado has added 102,100 nonfarm payroll jobs, with the private sector growing by 92,700 jobs and the government sector adding an additional 9,400 jobs. The largest private sector job gains over this 12-month period were in:

- » Leisure and hospitality (~41,800) at 45.1 percent of the total;
- » Professional and business services (~23,500) at 25.4 percent of the total; and
- » Trade, transportation, and utilities (~17,400) at 18.8 percent of the total share.<sup>8</sup>



From the beginning of the pandemic recession through Colorado's economic rebound, demand has remained strong across manufacturing and construction sectors. The pandemic had different, confounding effects on both industries, speeding up a trending shift in manufacturing from global to more local economies (largely due to supply chain disruptions and lingering inflation concerns) and impacting the overnight housing boom, creating a surge in residential construction growth rates in Colorado and the U.S., with state building permits increasing by 50 percent on a seasonally adjusted basis between April 2020 and July 2021. Both demand side effects spurred by the COVID-19 virus spike the need for continued job growth in these sectors.



As of July 2021, estimated total nonfarm payroll jobs for the year were revised upward to approximately 2.8 million statewide. This change brings the yearly payroll job growth estimates from January 2021 through July 2021 to 167,200, or 6.4 percent. Looking forward at the 2022 calendar year, CDLE's Labor Market Information team expects to see higher numbers of payroll job numbers during the first quarter from professional and business services (~6,000), construction (~4,700), education and health services (~4,400), financial activities (~3,900), leisure and hospitality (~3,300), other services (~2,600), information (~2,600), and manufacturing (~1,600).

Few industries are expected to undergo job losses in the near-term, however, employers shedding positions will most likely be due to:

- » Skill mismatches between employer demand and the labor pool;
- » Changes in job preferences across job seekers;
- » The slowdown in services that spiked during the pandemic; or
- » Lack of consumer confidence (largely resulting from the increase in Delta variant caseloads).

Each issue listed above independently causes disparities in the labor market and carries the potential to stagnate improvements in the job market. Employer, state, and local initiatives to strengthen and enhance job quality and credential opportunities will be a critical cornerstone for Colorado's workforce and economic development for FY 2022-23 and beyond.



## COLORADO'S TOP JOBS

Colorado's economy features Top Jobs that cross a variety of industries (see [Appendix A](#)) and geographies (see [Appendix B](#)). This report uses labor market projections from the Colorado Department of Labor and Employment (CDLE) Office of Labor Market Information (LMI) to identify Top Jobs meeting three criteria:

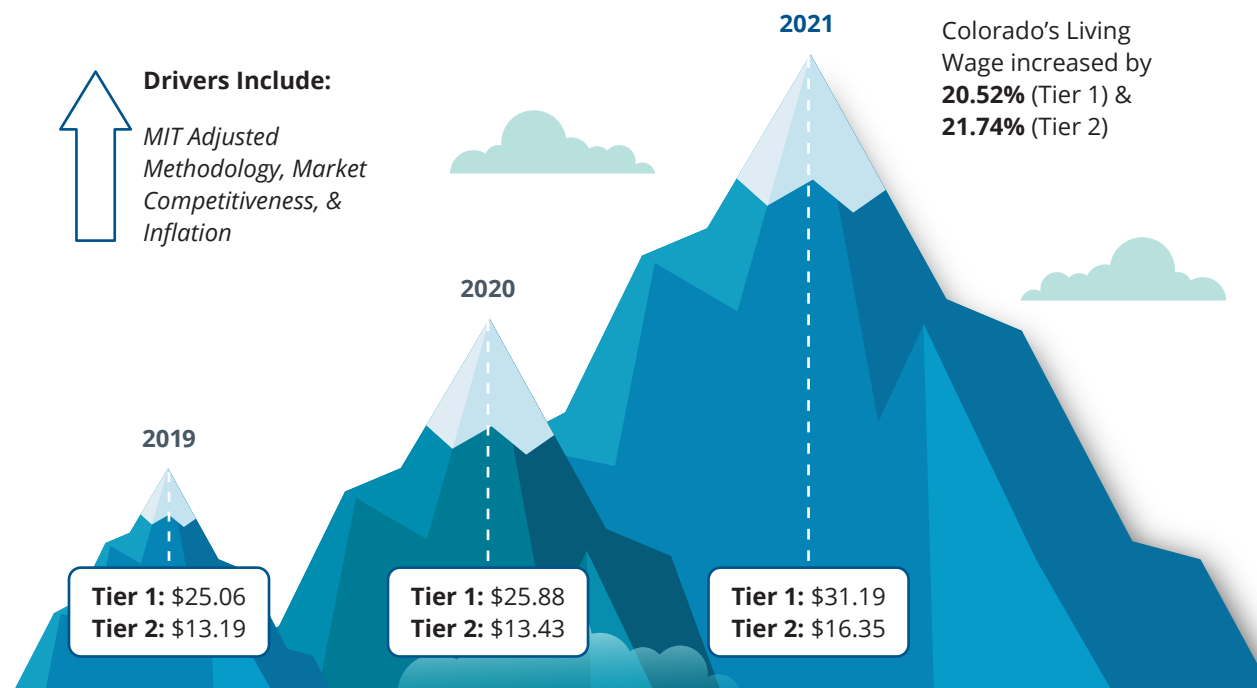
- » Projected High Net Annual Openings (>40)
- » Above Average Growth Rate over 10 years (>10%)
- » A Good Wage<sup>2</sup>

The jobs in this report are classified into two earning tiers:

- » **Tier 1:** \$31.19: a living hourly wage threshold that can support a family of three with two adults—one working—and one child.
- » **Tier 2:** \$16.35: a living hourly wage threshold that can support an individual.

Note that the living wages are from a statewide perspective and the living wage can vary from region to region. For more regional information on living wages, see the [MIT living wage calculator](#). From 2020 to 2021, the living wage in both Tier 1 and 2 has increased, indicating occupations require a higher wage than previous years to be classified as a "living wage." Specifically, when controlling for inflation, the Tier 1 jobs threshold for hourly wages increased by \$6.31, and Tier 2 increased by \$3.44. MIT [adjusted their methodology](#) for the living wage calculator in 2021, contributing to the larger changes from previous years. The methodology was updated to more accurately reflect actual costs for expenses, such as childcare. The outcome is that the basic costs were shown to be more expensive than originally projected, which means that salaries have less buying power to cover daily expenses.

**Figure 5**  
**Colorado's Living Wage Has Increased**



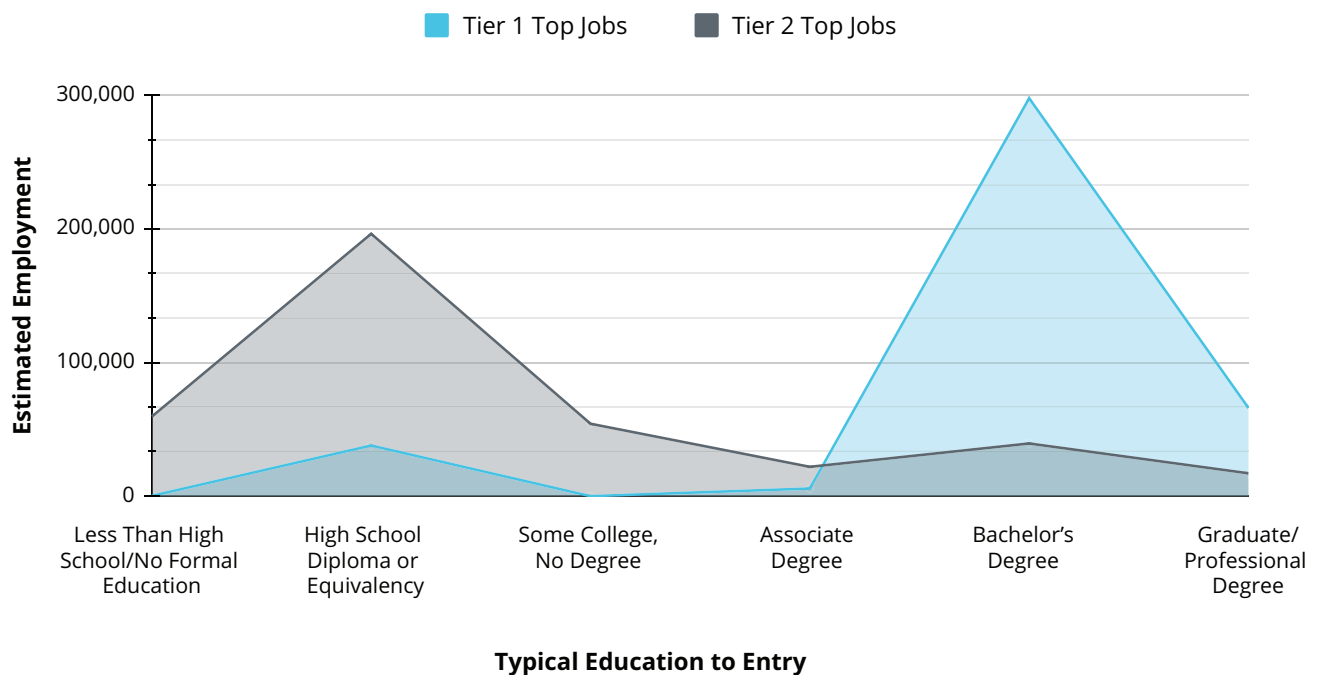
Source: MIT Living Wage Calculator

Assuming employers are actively trying to attract job-ready applicants, unique job postings that are built with skills and competency-based qualifications provide a good representation of the ceiling of demand for industry employment within a region. The general rise in the advertised wages across all occupations in 2021 indicates **labor demand is stronger than market supply in Colorado**. According to data reports pulled from [EMSI Burning Glass – economicmodeling.com](https://www.burningglass.com/economicmodeling), since April 2021 through the end of October, annual wage growth from job postings has climbed by 8.4 percent, with its associated aggregate median level now surpassing \$56,400 for the state. Unique postings peaked in July 2019, totaling 346,318 for the month, before slowing for most of the remaining months that year through the end of 2020. The magnitude of postings has increased incrementally each month in 2021, surpassing pre-pandemic levels since February 2021 and recovering 89.2 percent of July 2019’s historically high volume (standing at 308,949 monthly postings in October 2021). In response to the labor shortage, employers in 2021 are boosting their median wage levels to keep a competitive edge - a trend that is not expected to slow in 2022.

Statewide, there are 77 Top Jobs classified at Tier 1 and 122 Top Jobs classified at Tier 2. Additionally, median hourly earnings are correlated to the level of education or training that individuals have in these occupations, meaning Colorado employers are likely to provide their employees with higher earnings based on additional attainment outside of the job’s entry-level requirements. Looking at the estimated 2021 employment numbers of all the Top Jobs, 56.4 percent require a credential past high school.

Figure 6 below depicts that Tier 1 Top Jobs typically require higher education levels than Tier 2 Top Jobs, with a majority of Tier 1 Top Jobs (90.7 percent) requiring a credential past high school.

**Figure 6**  
**Colorado Top Jobs Estimated Employment by Typical Required Education to Entry**



Source: Colorado Department of Labor and Employment: Office of Labor Market Information



## Tier 1 Top Jobs and Short-term Credential Needs

A newer trend that has been emerging from Colorado employers puts less emphasis on four-year degrees, relative to previous years, and more value on shorter-term degrees, credentials and paid work-based learning. Based on data findings from the Bridging the Talent Gap survey, Colorado employers statewide voiced the importance of their workforce seizing additional professional development opportunities to accelerate attainment of top-ranked skills in 2021, with roughly half of employers who responded stating that apprenticeship programs (56 percent) and non-degree credentials (46 percent) take a priority when screening applications.

While **73.1** percent of Tier 1 Top Jobs require at least a four-year degree for eligibility (and 90.7 percent requiring a credential past high school), last year **10.8** percent of Tier 1 Top Jobs were made available to job seekers with a high school diploma or less. Jobs in this category that did require a high school diploma employed a pool of **37,910 Coloradans**. In 2021 however, all potential workers seeking this subgroup of employment were required to first attain quality, non-degree short-term credentials specific to that position – including training programs

tailored for the role, apprenticeships, attainment of accredited licenses, and/or government issued certificates.

For example, to become a commercial airline pilot, a four-year degree is not necessarily required by employer standards, however all workforce participants with this title had to meet requisite hours of training and pass multiple exams in order to acquire their pilot's license and FAA certification. Conversely, wellhead plumbers (another high-paying, highly competitive Tier 1 Top Job in Colorado and projected to grow by about 51.7 percent by 2030) have their future employees learn on the job through apprenticeships, while the farmers, ranchers, and other agricultural managers industry (with one of the highest job openings in Colorado in 2021) require hirees to gain experience through on-the-job training.

Finally, there were several Tier 1 Top Jobs that fell under the healthcare practitioners and technical occupations umbrella which require completion of a one-year college or hospital program for professional certification or licensure, or an associate two-year degree, but not a four-year degree. This occupational group was responsible for employing 144,490 Coloradans in the state last year. Massive job creation is expected within the state for this industry, with Tier 1 Top Jobs specifically projected to **grow at a rate between 48.1 percent and 89.4 percent by 2030**.

Efficient for individuals who are unable to devote four-years to a postsecondary degree, these expedited credentials act as stepping-stones to upskilling and reskilling the workforce and are intended to get employees on a long-term career pathway that is right for them.

Recent data also shows that all positions classified into this subgroup are projected to grow by at least 21 percent in the next eight years.

**Upskilling** means activities to increase the skill levels of an incumbent worker so the worker is able to retain employment and advance within a company. **Reskilling** is to support unemployed and underemployed individuals who need or want to change industries in order to return to full-time work or who need or want to obtain more appropriate work based on their skills; and to help unemployed and underemployed individuals achieve economic self-sufficiency. Reskilling may include technical training for new positions and new careers and entrepreneurial training for individuals who wish to pursue self-employment and business ownership. ([HB21-1264](#))

## CRITICAL INDUSTRIES

In addition to the industries and occupations that appear in the Top Jobs list, it has become more evident during the pandemic that labor shortages must be addressed in critical industries that influence the availability of individuals to engage in the labor force and impact the level of economic growth that is possible in our state. These industries include behavioral health, education, direct-care, and material moving.

### Behavioral Health

The ongoing pandemic, economic downturn, natural disasters, and social unrest has exacerbated Colorado's behavioral health crisis.

**Behavioral health** references an individual's mental and emotional well-being development and actions that affect his/her overall wellness. Behavioral health problems and disorders include: substance use disorders, serious psychological distress, suicidal ideation, and other mental health disorders. Problems ranging from unhealthy stress or subclinical conditions to diagnosable and treatable diseases are included in this definition and its associated industry (e.g., community and social services) includes services provided by social workers, counselors, psychiatrists, neurologists, and physicians.

According to the September U.S. Bureau of Labor Statistics (BLS) Occupational Outlook forecast, national employment in community and social service occupations is projected to expand by a minimum of 12 percent between now and 2030. This growth rate is continuing to outpace the average aggregate rate across all occupation groups, adding about 346,900 jobs in the U.S.<sup>10</sup>

The two factors largely responsible for driving this expectation are:

- » The continued need for mental health and substance use disorder services provided through occupations within the behavioral health channel; and
- » **Increased demand for school and career counselors** in the workforce.

In Colorado, the median annual wage for community and social service occupations was \$50,147 last year, about **5.5 percent above the national average** of \$47,520 according to the Colorado Department of Labor and Employment (CDLE) and the BLS. Community and social services account for 41,230 jobs in the state, or roughly two percent of total covered employment in Colorado. Similar to the national forecasts, however, we expect to see a significant uptick in job creation for this occupational group in 2022 through 2030.

Findings from a recent [RAND Corporation study](#) suggest that **financial and social constraints have negatively affected a larger share of the national population over a shorter period than any prior economic downturn or natural disaster on record.**<sup>11</sup> [National data trends](#) support this claim, as 41 percent of adults in the U.S. reported they felt higher levels of anxiety and/or depression in 2021 relative to pre-pandemic states.<sup>12</sup>

Centering on mental health under the behavioral health umbrella, Colorado in particular has a significant gap in sector employment and resource readiness. Crisis calls surged within the state in 2021, with the Mental Health Center of Denver reporting this year's numbers to be 30 percent higher relative to 2020. In April 2021, 29.3 percent of Coloradans who reported having higher levels of anxiety, depression, or both also reported having unmet needs for counseling or therapy. This is larger than the national level, whose total accumulated to 24.2 percent during the same time.



Despite strong demand indicators, Colorado currently [ranks](#) 48th in the nation overall for successfully managing the state adult population's mental health needs.<sup>13</sup> Although this data lags a few years, it signifies that Colorado has relatively lower rates of access to care combined with a sizable population that would utilize additional mental health resources – **signaling the need for job creation and increased employment for behavioral health occupations in the state.** In large part, this outcome is due to Colorado's mental health workforce availability during the pandemic, as most institutions within the private health care and social assistance industry were primarily focused on hospital intake levels reaching capacity and the recovery rates of patients with the COVID-19 virus.

Escalation of demand for behavioral health services is an important consideration, as the Center for Disease Control and Prevention's (CDC's) [Behavioral Risk Factor Surveillance System \(BRFSS\)](#) most recent data update suggests significant links between poor mental health, economic downturns, and participation in risky behaviors such as increased drug and alcohol intake, smoking, and sedentary lifestyles.<sup>14</sup> Outside of job creation for this industry, employers can support behavioral health within their organization and benefit from positive spillover effects from workers.

According to the American Psychological Association, 53 percent of employees at companies that support general wellness initiatives feel more motivated than employees without that benefit.<sup>15</sup> Furthermore, providing workplace mental health resources typically has a return on investment of fourfold, yielding roughly four dollars for every one dollar spent. Businesses could also consider providing/ expanding telehealth services to their workers. Telehealth services now make up a large percentage of mental health services offered, attracting workers through this channel with flexible hours, freedom to create your own schedule, and ability to serve a larger client pool as location no longer is a constraining factor.

A recent Behavioral Health Workforce Development Workgroup developed almost **70 recommendations to address the behavioral health workforce shortage in Colorado.** Recommendations reflected six themes: (1) expand on recruitment efforts; (2) broaden the current workforce; (3) retain current

professionals and providers; (4) develop and increase its capacity of a culturally competent licensed and unlicensed behavioral health workforce; (5) seize funding opportunities to maximize federal dollars; and (6) invest in a behavioral health workforce committed to equity, diversity, and inclusion. Many of these recommendations are expected to be implemented or overseen by the Behavioral Health Administration (BHA), a new entity responsible for leading the coordination and strategies of behavioral health efforts across state agencies and branches. The BHA will be established in July 2022.

## Direct-care

Direct-care workers (aka caregivers) are also housed under the community and social services larger occupational group discussed above and provide an estimated 70 to 80 percent of the paid hands-on long-term care and personal assistance received by Americans who are older, living with disabilities, or suffer from other chronic conditions. Common occupations associated with this industry include home health/personal health aids and direct support professionals whose responsibilities require commuting directly to client's personal homes or their communities (e.g., telehealth services are rendered infeasible for this workforce). These workforce participants typically help people with their "daily living" activities (such as dressing and bathing), providing their clients with the support they need to keep their quality of life strong and remain independent.

Despite the evident need for these workers across the state, the direct-care workforce often constitutes a low-wage, high-turnover workforce with low levels of health insurance - an effect expedited by the pandemic due to the continuation of poor benefits/ earning combining with high health exposure risks (given the nature of the job). According to the most recent data from the BLS, median pay for direct-care workers was \$27,080 per year in 2020, which is **only a marginal uptick above the poverty threshold** (maxing out at \$26,500) based on the U.S. Department of Health and Human Services' 2020 poverty definition for a four-person family/household.

Currently, home health and personal health aids account for approximately 3.5 million jobs in the U.S., however, this number is expected to increase further

between now and 2030 by an additional 1.1 million (or a **33 percent growth rate, which is much faster than the national average for all occupations**).

Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire. In Colorado, employment levels for home health and personal care aids rose in 2020 by nearly three percent, employing 36,610 individuals within the state. The mean hourly wage for individuals with these occupation titles had an average (mean) hourly wage of \$14.59 in Colorado and an annual average wage of \$30,350 - outpacing national annual earning levels by roughly 12.1 percent.

These workforce characteristics surrounding the direct-care industry will guide the challenge of how Colorado will manage the growing demand for long-term care by a rapidly aging population. To attract and retain an increased workforce for this sector, employers need to strategize how to boost job quality. Investing in the caregiver workforce generally equates to more thriving, resilient communities in Colorado. Declining employment rates in this sector means many Coloradans also lose feeling like a part of their community, as this workforce makes it possible for them to engage with others in the areas around them. Recent legislation approved minimum wage hikes set for the start of 2022, indicating the vital services individuals in this role provide our state. As discussed in the “Age” section of this report, Colorado currently has one of the fastest-growing aging populations in the country, thus demand for job creation and retention levels within this industry will continue to grow in importance looking forward.

## Education

Education, training, and library occupations (e.g., the larger occupational group encompassing teachers at all levels of education across the state) ranks seventh in the state for highest employment levels relative to other industry sectors. In 2020, this industry employed 140,310 Coloradans with median annual earnings of \$58,210 in May 2020, beating the national median annual salary of \$52,380.

Employment in education, training, and library occupations is projected to grow 10 percent by 2030, about as fast as the average for all occupations. About 920,500 new jobs are projected to be added

from 2020 to 2030. Student enrollment is also projected to increase; therefore, postsecondary teachers and preschool, elementary, and secondary school teachers will be needed to meet the demand. Education, training, and library occupations, however, are affected by state and local budgets, and budgetary restrictions may limit employment growth.

All occupations within the sector require a minimum of some college education or two-year postsecondary degree. Wage earnings increase in this sector with higher levels of educational attainment, averaging to approximately \$60,000 annually for those with a four-year bachelor’s degree and \$63,000 for those with a master’s degree across occupations within this sector.

## Transportation and Material Moving

Employment in transportation and material moving occupations accounts for 199,170 in the state according to an April 2021 [press release](#) by CDLE’s Labor Market Information (LMI) team, and is projected to grow nine percent nationally between now and 2030. This is about as fast as the average growth rate projection for all occupations, adding a projected 1.1 million jobs. Material moving workers are expected to be needed to move materials in nearly all sectors of the economy. Additionally, the economy depends on truck drivers to transport freight and keep supply chains moving.

The median annual wage for transportation and material moving occupations was \$34,080 in May 2020, below the median for all occupations of \$41,950. Colorado’s median annual earnings for this workforce were modestly higher at \$36,943, yet still slump below aggregate wage levels. It is worth mentioning that the median annual wage distribution across occupations vary substantially, with air traffic controllers and airline/commercial pilots earning roughly \$130,400 annually, water transportation workers, railroad workers, and flight attendants median earnings ranging between \$59,050 and \$64,210, and heavy/tractor-trailer truck drivers, passenger vehicle drivers, hand laborers and material movers, and delivery truck drivers/sales drivers at the lower end, with median earnings largely within the \$30,000-\$40,000 range.

## IN-DEMAND CROSS-INDUSTRY OCCUPATIONS AND SKILLS

Figure 7 showcases the five fastest-growing major occupational groups in Colorado. These occupations not only have a higher growth rate, but they also have high average annual openings. The average annual openings take into consideration annual exits (i.e., those leaving the labor force), transfers (i.e., those switching occupations), and growth. The high growth and average annual openings indicate that these occupations are “in-demand.”

**Figure 7**  
Colorado’s Fastest Growing Occupations

Major Occupational Group	Avg. 2020-2030 % Change	Median Hourly Wage	Sum of Projected Annual Openings
Computer and Mathematical	42.20%	\$44.83	280
Personal Care and Service Occupations	32.70%	\$14.11	16,645
Healthcare Support	30.60%	\$17.75	6,128
Healthcare Practitioners and Technical	28.60%	\$34.65	10,326
Food Preparation and Serving Related	28.10%	\$12.24	29,814

Source: Colorado Department of Labor and Employment: Office of Labor Market Information

Many required skills are common across occupations. Figure 8 shows the top 10 essential skills that are found in job postings in Colorado between March 2020 and June 2021. These skills are valuable across industries, making them valuable for all workers.



**Figure 8**  
March 2020 - June 2021 Colorado Top 10 Essential Skills Across all Occupations

Skill	Frequency in Job Postings
Planning	37%
Detail Oriented	33%
Innovation	28%
Leadership	27%
Problem Solving	26%
Operations	26%
Customer Service	24%
Communications	23%
Management	22%
Sales	12%

Source: EMSI - Burning Glass 2021.3 Data

The use of behavioral definitions of the skills required for a position, in conjunction with competency and skills-based hiring, gives students, job seekers, and organizations a clear understanding of what is required to perform job tasks. Training for employers who want to explore the adoption of competency and skills-based hiring and how it can benefit their business can be accessed through local workforce centers.





**Figure 9**  
**March 2020 - Aug. 2021 Colorado Top 10**  
**Qualifications Across all Occupations**

Qualification	Frequency in Job Postings
Commercial Driver's License (CDL)	92,668
Top Secret-Sensitive Compartmented Information (TS/SCI Clearance)	25,714
Certified Nursing Assistant	21,469
Licensed Practical Nurse	18,815
Master of Business Administration (MBA)	18,525
Bachelor of Science in Nursing (BSN)	13,740
Bachelor of Science in Business	12,053
Secret Clearance	13,898
Certified Information Systems Security Professional	8,398
Associate Degree in Nursing	8,070

Source: EMSI - Burning Glass 2021.3 Data

**Figure 10**  
**Jan. 2021 - Oct. 2021 Colorado Top 10**  
**Technical Skills Across all Occupations**

Rank	Skill	Growth Rate (% Change) in Skill Demand*
1	Accounting	63%
2	Nursing	18%
3	Merchandising	35%
4	Auditing	48%
5	Finance	54%
6	Basic Life Support	19%
7	Agile Methodology	28%
8	Selling Techniques	27%
9	Restaurant Operation	22%
10	Warehousing	88%

\* Growth rate between Jan. and Oct. 2021 relative to the same time period in 2020

Source: EMSI - Burning Glass 2021.3 Data

2021 brought with it some changes to the associated top technical skills across occupations. Between January 2021 and October 2021, finance (a technical skill that did not rank in prior years) has grown in employer demand by 54 percent relative to the same time last year, ranking fifth place this year. Customer service (a technical skill that commonly ranks amongst the top ten in previous reports) has been bumped down by employer demand and no longer makes the list.



## BRIDGING THE TALENT GAP SURVEY

During Colorado's 2021 legislative session, historic investments were made in workforce training and education programs to help get Coloradans back to work. To ensure these investments are guided and aligned with industry needs, partners of the TalentFOUND network administered the Bridging the Talent Gap (BTTG) survey in Colorado. The effort is driven to gather data that will help address skill gaps Colorado businesses and workers are facing and identify how education and training programs can help close those gaps.

Made possible by collaborating with workforce centers, higher education institutions, economic development leaders, sector partnerships, and other partners across the state, the survey opened in late spring 2021, targeting employers in retail, healthcare, IT, and advanced manufacturing industries. The survey provided employers with the opportunity to share their talent needs and challenges and inform spending initiatives around talent development. This information helps us understand employer perceptions of the hiring environment since COVID-19, the skills gaps based on employees' level of education, and the current resources available or needed for retraining and upskilling.







## Employer Data Findings

Five hundred and eighty-six employers responded from across the state, producing data that shed light on current economic conditions across all regions of the state through an employer lens. The questions were provided largely to human resource directors and customized for Colorado's economy, targeting the highest in-demand industries and making its context most relevant to utilize as a toolkit moving forward. This allowed for the key industries driving growth to be well represented within the sample pool, with the highest percentage of responders being associated with healthcare, retail, IT, and manufacturing. In fall of 2021, data outcomes were made publicly available via an easy-to-use [dashboard](#), providing a collective voice from all organization sizes in Colorado, with the largest share of the distribution from micro (1-9 employees) (29 percent) and small (10-99 employees) (40 percent) businesses.

The data help to further understand regional differences across the state, giving voice to urban and rural businesses and their varying and distinct needs. The general consensus across the state from employers tells us that Colorado's economic outlook is positive. When the data are broken into urban versus rural regions, however, the picture is different. Rural regions are considerably less likely to view their local economy as positive compared to urban employers who participated (roughly 45 percent compared to 66 percent).

However, regardless of urban or rural setting, respondents' view of their own organization was optimistic when asked about their anticipated growth. Data from Figure 11 shows an average of 85 percent of employer respondents expect their own organizations to expand in the next five years, regardless if their operations are in rural or urban locations across the state.

**Figure 11**  
Anticipated Business Growth from Employers in 2021 (Over the Next 5 Years)

Business Location	Positive Growth	Stay the Same	Negative Growth	Area
Colorado Employers Across the State	87%	8%	5%	All
Colorado Springs	92%	6%	2%	Urban
Denver Metro	88%	6%	6%	Urban
Northern Region	93%	5%	2%	Urban
Southeast & Eastern	75%	18%	7%	Rural
Upper Arkansas & Pueblo	77%	19%	5%	Rural
Western	82%	12%	6%	Rural

Source: The Graduate! Network, September 24, 2021



The pandemic brought formidable challenges to employers in terms of hiring. As shown in Figure 12, responses indicate roughly 65 percent of businesses claim their hiring challenges have increased.

From national data provided by the Graduate! Network, hiring challenges appear to be a function of:

- » The Great Resignation, felt most by the food and accommodation workforce and impacted by the shift to remote working and the changing work-life balance equation;
- » Conflicts emerging from AI-based screening, causing qualified candidates to be overlooked; and
- » Shifting preferences away from entry level positions and service occupations largely due to concerns around COVID-19 risks.

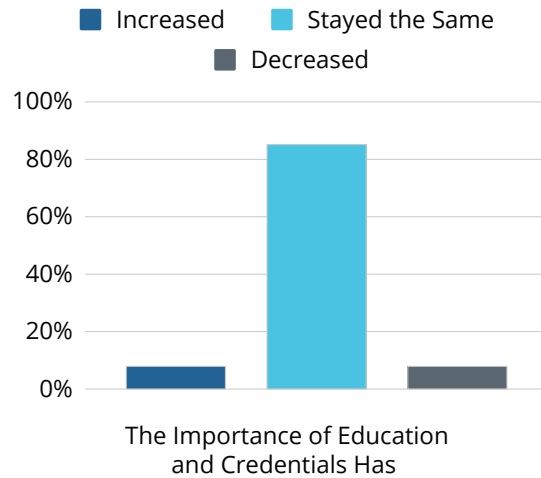
Sixty percent of employer respondents reported they are experiencing hiring challenges since the pandemic. Small businesses in particular are struggling to find workers, with unfilled job openings hitting record highs across the U.S. According to the September 2021 National Federation of Independent Business Jobs Report, 50 percent of small business owners reported job openings that could not be filled.<sup>16</sup> To overcome the labor supply and labor demand-driven constraints reported from businesses, the BTTG survey data suggest that providing enhancements in entry level work roles serves as an effective retainment strategy.

**Figure 12**  
Changes in Business Climate Since the Pandemic



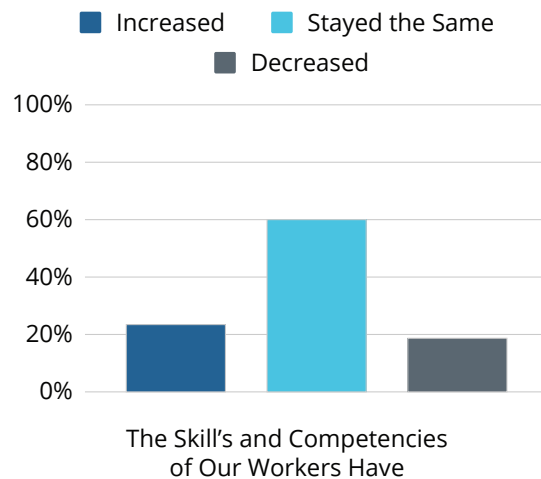
Source: The Graduate! Network, September 2021

**Figure 13**  
Changes in Business Climate Since the Pandemic



Source: The Graduate! Network, September 2021

**Figure 14**  
Changes in Business Climate Since the Pandemic



Source: The Graduate! Network, September 2021

Outside of hiring challenges, employers report the pandemic has had little effect on education importance or skills and competencies. Eighty-six percent of employers reported that the importance of education and credentials hasn't changed over the past two years. We find slightly more of a sense of increase surrounding the skills and competencies of the workforce, but overall this too has remained balanced.

Figure 15 displays employer feedback on perceived value of skills. We see a strong correlation between importance and need for development where increased importance is positively associated with need. Employers are further met with challenges when helping their staff develop these critical skills, as the top ranked skills are also positively correlated with difficulty of training. **What has been shown from the national BTTG data is that going back for professional development accelerates the development of these skills and, in particular, the five top-ranked choices.**

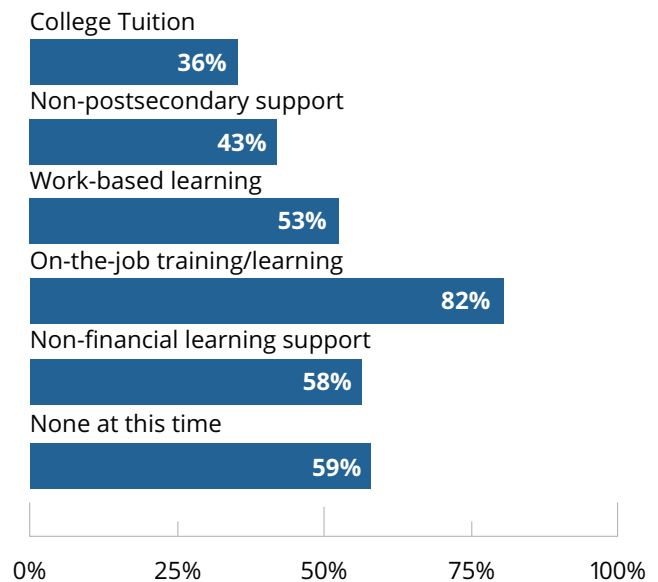
**Figure 15**  
**Most Important Skills to Employers in 2021**

Most Important Skills to Employer Respondents	Very Important	Somewhat Important
Teamwork/Collaboration	78%	19%
Communication	75%	21%
Orientation to detail	73%	24%
Service orientation	69%	22%
Critical thinking	64%	29%
Organizing, planning, and prioritizing	53%	37%
Leadership	41%	40%
Digital/computer literacy	40%	45%
Experience	40%	41%
Management	38%	38%
Resource management skills	37%	37%
Data management and analysis	23%	38%

Source: *The Graduate! Network, September 2021*

Compared to the national database, Colorado employer respondents have less anticipated need in the future for workers with bachelor's degrees or for those with a professional credential. This could reflect the already high level of attainment in the state, suggesting a healthy population of educated workers in the pipeline. When this is broken down by region, metro area, and organization size, however, there is considerable variation across the state. Overall, anticipated educational need is higher among urban employers relative to rural with two exceptions: Colorado Springs and the southeast/eastern regions of the state anticipate elevated needs for workers with a four-year degree.

**Figure 16**  
**Learning Support Provided by Employers in 2021**



Colorado businesses of all sizes are less likely to provide support for learning than those in the BTTG national dataset. Nationally, 54 percent of employer respondents provide their employees with funding opportunities for college tuition and/or professional development outside of a four-year degree. In Colorado, 36 percent of employers pay for tuition and 43 percent provide non-degree support to boost attainment and develop top skills. This funding gap is likely explained, in part, as a reflection of population differences in credential attainment in the state versus the U.S.

Figure 17 displays employer respondents' intentions in relation to their organization's support plans, starting in 2022.

**Figure 17**  
**Colorado Employers Plan to Make the Following Changes for Employee Learning Support Mechanisms**

Starting in 2022, Colorado employers plan to make the following changes for employee learning support mechanisms.	
Question	Response (N=437)
Expand their current assistance program.	13%
Continue the current assistance program at the same level.	54%
Implement an assistance program within the next 12 months.	3%
Interested in implementing an assistance program but need to learn more about it.	8%
Do not plan to implement an assistance program.	21%
Plan to discontinue a current assistance plan.	0%

Source: *The Graduate! Network, September 2021*



Additionally, Colorado employers estimate that on average, only 47 percent of tuition assistance in Colorado is utilized. Seventy percent of Colorado businesses are interested in partnering with learning providers and local colleges/universities by developing new opportunities to advance talent in the state that is equally as attractive to their workforce. Colorado employer respondents recognize that creating/expanding professional development and training programs encourages loyalty, longevity, and attracts new workers.

To improve this standing gap both of the following topics will be crucial moving forward:

- » Employer partnerships with learning providers; and
- » Providing policies that facilitate an environment for employees to pursue and complete professional development education and training leading to certifications and academic degrees.





## Next Steps: Retail Sector Employee Survey

Colorado's retail sector (which includes online and in-person stores, hospitality, and food and beverage establishments) is growing to keep up with the state's economic recovery. In June, total retail sales had increased by 19 percent relative to 2019 pre-pandemic levels, as customers report they once again value in-person shopping and hospitality experiences. Colorado's jobs opening rate specific to retail has surged past the national rate, with restaurants on track to be the **third largest concentration of jobs**.<sup>17</sup> Job postings reflect this significant recovery in demand for services, growing by 7.7 percent in September compared to August of this year.<sup>7</sup>

In the spring of 2022, the TalentFOUND network plans to administer an employee perspective survey focused on Colorado's retail sector. Retail salespersons was one of the top five posted occupations in the state between March 2020 and August 2021, but a mismatch between wage

expectations and skills have left hiring employers in this sector facing labor supply issues. Colorado stands out as one of the first states to launch a survey initiative motivated by reskilling and upskilling this sector.

This will allow Coloradans the opportunity to:

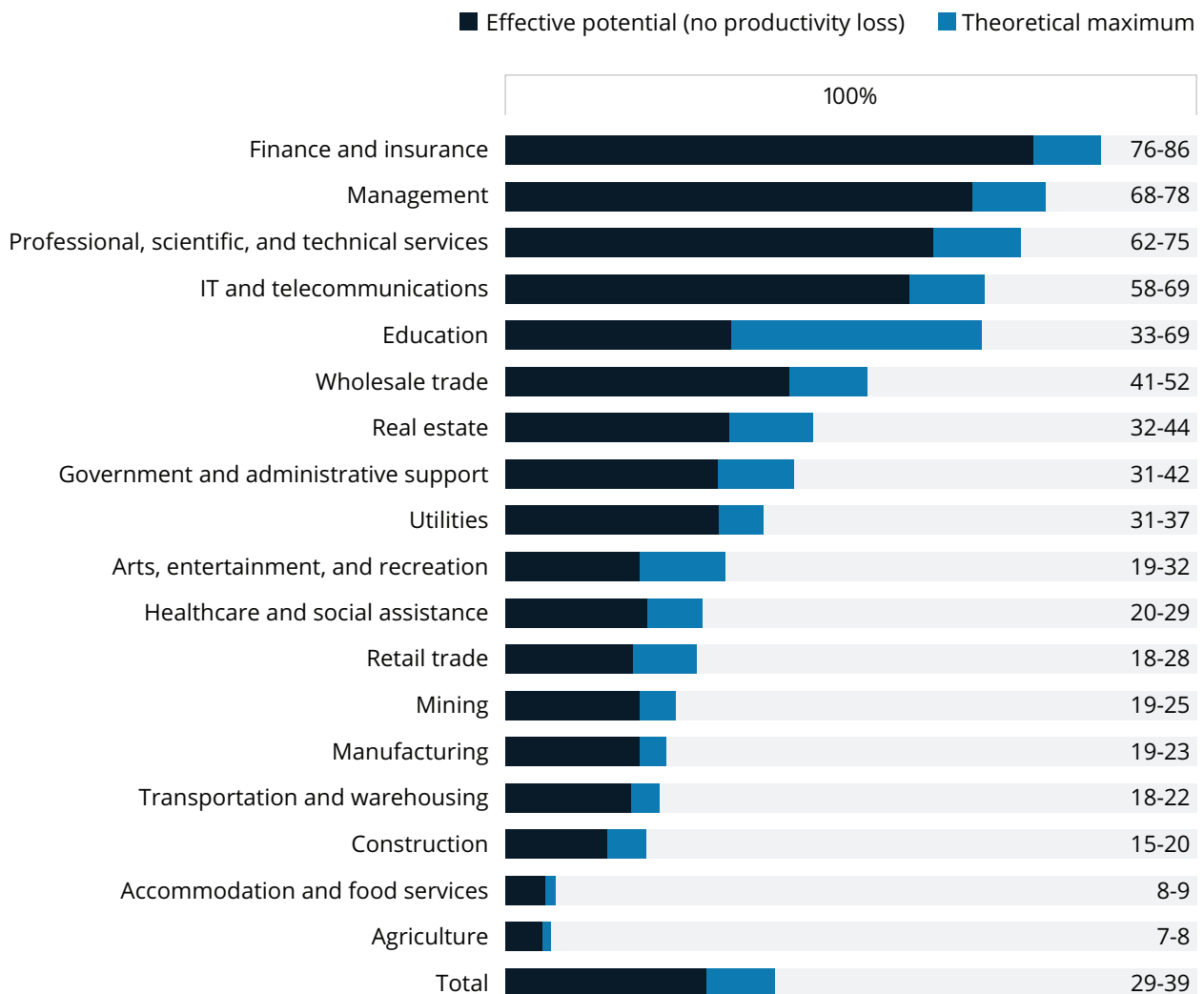
- » Think differently about jobs in the service industry;
- » Help inform employers about how they can utilize state resources to better support their employees and advance their careers; and
- » Apply reskilling and upskilling efforts as a mechanism to increase equity across this workforce.

This is a pivotal time in the state around education and training resources. The BTTG surveys will continue to provide both private and state entities the opportunity to make decisions that are informed by Colorado employers and make connections to what employers are needing as well as informing employers about available state resources.

## CONTINUED ACCELERATION OF THE FUTURE OF WORK

As a result of the COVID-19 pandemic, remote work has increasingly become a topic of interest. Findings from a Feb. 2021 McKinsey study show that the percentage of remote workers is expected to double in 2021, with more than two-thirds of employers planning for remote work to be a permanent part of their staffing plans.<sup>18</sup> This could prompt a large change in the geography of work, as individuals and companies shift out of large cities into suburbs and small cities. Alongside this growing trend, towns and cities across the country are scrambling to accommodate new cohorts of remote workers, teleworkers, and those in the workforce who have adopted a hybrid model.

**Figure 18**  
Potential Share of Time Spent Working Remotely by Sector in the U.S.



Source: McKinsey & Company, February 2021

The impacts of the pandemic continue to accelerate changes in how we work, including continued increase in the need for digital skills, access to technology, and access to broadband.

## Remote Work and Hybrid Models

The nature of work has evolved. Remote work, telework, and hybrid models have been an overwhelming success for both employees and employers, with 83 percent of employers now describing the shift to remote work as successful for their company. Currently, less than one in five executives state they would like to return to the office as it was pre-pandemic. Fifty-five percent of employees claim they would prefer to be remote at least three days a week once pandemic concerns recede. Sixty-eight percent of executives say a typical employee should be in the office at least three days a week to maintain a distinct company culture.<sup>19</sup>



The potential for remote work varies across location, sectors, occupation, and activity. [Research](#) done in 2021 on the future of work concludes that the potential for remote work is largely concentrated among highly educated workers and generally geared towards the highly educated workforce in Top Jobs.<sup>20</sup> Finance and insurance industries ranked amongst the highest in terms of remote work amenability, with three-quarters of time spent on activities that can be done remotely without a loss of productivity. Management, business services, and information technology have the next highest potential, all with more than half of employee time spent on activities that could effectively be done remotely.

We've also seen a significant shift to hybrid work from companies (e.g., allowing employees the flexibility to work a combination of on-site and remotely).

As the vaccination rollout continues, many communities are contemplating whether to integrate remote working options into their long-term plans and, if so, how. It makes sense that so many are exploring how remote work can benefit their communities: its widespread adoption in the wake of the pandemic has proven by and large to be beneficial to both workers and employers.

A [survey conducted by Morning Consult](#) published in April 2021 found that nearly half of remote employees said they would look for another job if their current employer refuses to offer remote working options long term, and listed eliminating their commute, spending more time with their families, getting more sleep, and reduced stress as just some of the benefits they have experienced since they started to work remotely.<sup>21</sup>



## Automation

AI, automation, and digitalization are poised to further disrupt traditional employment across sectors. Automation is impacting every sector of the economy; however, accommodation and food services, manufacturing, transportation, and agriculture will continue to face the most significant challenges in the years ahead. For many employers, low and middle wage jobs are the easiest to replace with independent, automated systems – potentially putting pressure on workers and wages.

The rapid pace of automation in nearly every sector is making some jobs obsolete, redefining others, and creating whole new industries. These changes are driving the need for more skilled workers who can adapt and learn new skills to remain relevant in the evolving job market. We can infer from Brookings's Automation and Artificial Intelligence analysis that higher-paying jobs requiring fewer routine tasks continue to have a lower risk of automation. In this environment, the four-year bachelor's degree is not the only measure of postsecondary success. Employers and workers are calling for new upskilling and educational delivery models that can deliver qualified and skilled workers faster and at lower costs.

### Is Automation a Threat?

Investments in innovative technology that safeguard against current and future pandemics are providing new momentum for automation. While COVID-19 may accelerate the automation of jobs, a popular debate amongst economists is whether this will result in high wages and increased productivity in some industries but hurt employment growth in others.\* There is some concern that new waves of automation will have the potential to eliminate jobs and deteriorate bargaining power across job seekers, especially for traditionally low-wage jobs.

**Once a job is automated, it is difficult to turn back**, and employers who are investing the most in technological initiatives have frequently employed essential workers through the pandemic.\*\* Occupations that are amenable to adapt automation technology often also carry a high degree of risk of viral contagion and increased likelihood for displacement if future outbreaks occur.\* While the trend toward automation predates the onset of COVID-19, it has ramped up at a time that is proving to be a critical moment, with implications that could be lasting on the workforce. The World Economic Forum's Future of Jobs 2020 Report found that COVID-19 is pushing 50 percent of companies to accelerate automation adoption and 84 percent of companies surveyed to accelerate digitalization.\*\*\*

We can also assume the pandemic's impact on automatable jobs will be different across employees who identify with different demographic groups (i.e., gender identity, race, and ethnicity). Motivated by these concerns, a recent study from the National Bureau of Economic Research found strong evidence suggesting U.S. females with mid- to low-paying jobs and minimal education credentials are at highest risk.\* This is consistent with other research findings in automation whose general consensus is that a decrease in employment demand resulting from automation is felt strongest by low- and medium-skilled workers as well as females. Thus, **automation has the potential to threaten current diversity and equity initiatives in the labor market in upcoming years.**

\* Chernoff, A; & Warman, C. (November 2020). *COVID-19 and implications for automation. Working Paper 27249. National Bureau of Economic Research. Retrieved at [nber.org/system/files/working\\_papers/w27249/w27249.pdf](https://nber.org/system/files/working_papers/w27249/w27249.pdf)*

\*\* Casselman, B. (September 2021). *Pandemic Wave of Automation May be Bad News for Workers. (2021). The New York Times. Retrieved at [nytimes.com/2021/07/03/business/economy/automation-workers-robots-pandemic.html](https://nytimes.com/2021/07/03/business/economy/automation-workers-robots-pandemic.html)*

\*\*\* World Economic Forum (October 2020). *The Future of Jobs Report 2020. Retrieved at [www3.weforum.org/docs/WEF\\_Future\\_of\\_Jobs\\_2020.pdf](https://www3.weforum.org/docs/WEF_Future_of_Jobs_2020.pdf)*



## Digital Literacy and Inclusion

As technology advances (including automation, artificial intelligence, and digitalization) and continues to disrupt the way we work, it has become clear that if Coloradans are to remain competitive, they must build digital skills so they can work alongside technology, connect with quality jobs, and adapt as work evolves. The COVID-19 pandemic has accelerated these disruptions, and has emphasized that if workers are to fully participate in work, learning, and daily life, they need access to reliable internet as well as training and educational opportunities.<sup>22</sup>

The pandemic also showed us that the digital divide persists. As of March 2021, 64,878 households with children in the K-12 system had inconsistent access to the internet.<sup>23</sup> Device gaps in Colorado are most prevalent in southern, rural counties, with Jackson and Delta counties also having a high percentage of households with no computer. Right now, **52 percent** of children without internet access live in households earning less than \$50,000, with **25 percent** in households earning less than \$25,000. **A majority (57 percent) of these children have at least one parent working in an essential industry.**

In Colorado and across the country there are significant gaps in access to web-enabled technology, and people across industries and demographics lack the skills they need to use digital tools for work, learning, and daily life. Many U.S. workers across all industries lack the digital skills they need to ensure their continued success.

Results from a [National Skills Coalition analysis](#) of digital skills of the American workforce found:

- » 13 percent of the workforce has no digital skills (workers who failed to meet one or more of three baseline criteria to even take the full digital skills assessment: prior computer use, willingness to take the computer-based assessment, or ability to complete four out of six very basic computer tasks, such as using a mouse or highlighting text on screen).
- » 18 percent of the workforce has very limited skills (workers who can complete only very simple digital tasks with a generic interface and just a few simple steps; for example, these workers might struggle to sort emails that respond to an event invitation into different folders).
- » 35 percent have achieved a baseline level of proficient skills.<sup>24</sup>

Workers with limited or no digital skills are present across all industries, age groups, and demographic groups. Black/African American and Latino workers are overrepresented among those with digital skill gaps. According to the most recent data available from the [Colorado Futures Center](#):

- » **Two-thirds of children living without the internet are Hispanic.**
- » **49 percent of children without internet access are in elementary school.**<sup>25</sup>

Currently, an estimated 80 percent of white adults in the U.S. have connection access at home. This remains true for only 71 percent of the Black or African American population and 65 percent of Hispanic adults. An estimated 13.6 million urban households who predominantly identify as people of color are without a connection. This is almost three times as many as the 4.6 million rural households who remain without access.

As of October 2021, the total number of Coloradans who lack access to a home-based broadband option is estimated to be at 674,433, [according to a new study from BroadbandNow](#), indicating the strong need in the state.<sup>26</sup> This is especially valuable to workforce development and community growth down the road, given that remote work has largely become a 'new normal' and rural areas are attracting more movers.

# 02

## SUPPLY





In 2020, Colorado had a reduced labor force participation rate and a high unemployment rate due to the COVID-19 global pandemic. The labor force participation rate for 2020 was 67.8 percent with an estimated 3.1 million Coloradans in the labor force, which was a decrease of 1.2 percent from 2019.<sup>27</sup>

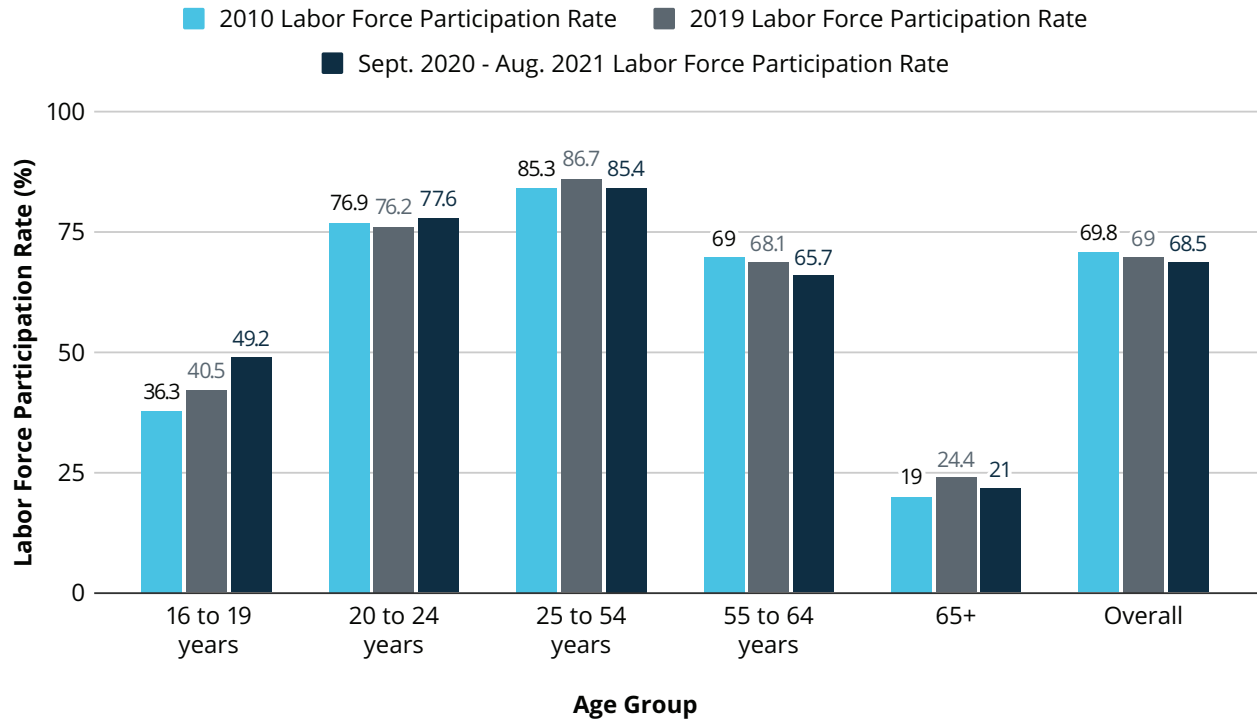
The **labor force participation rate** is the percent of the civilian noninstitutional population over the age of 16 that is either employed or unemployed (i.e., individuals seeking work but unable to attain employment).

## CURRENT LABOR FORCE

### Age

Figure 19 shows Colorado's labor force participation rate by age group over time. The three time periods highlighted are 2010 (i.e., the Great Recession), 2019, and the most recent 12-month period available (Sept. 2020 - Aug. 2021). Historically, labor participation is highest between the ages of 25 and 54 and was at 85.4 percent during the most recent 12-month period, just slightly below pre-pandemic levels by 1.3 percent.

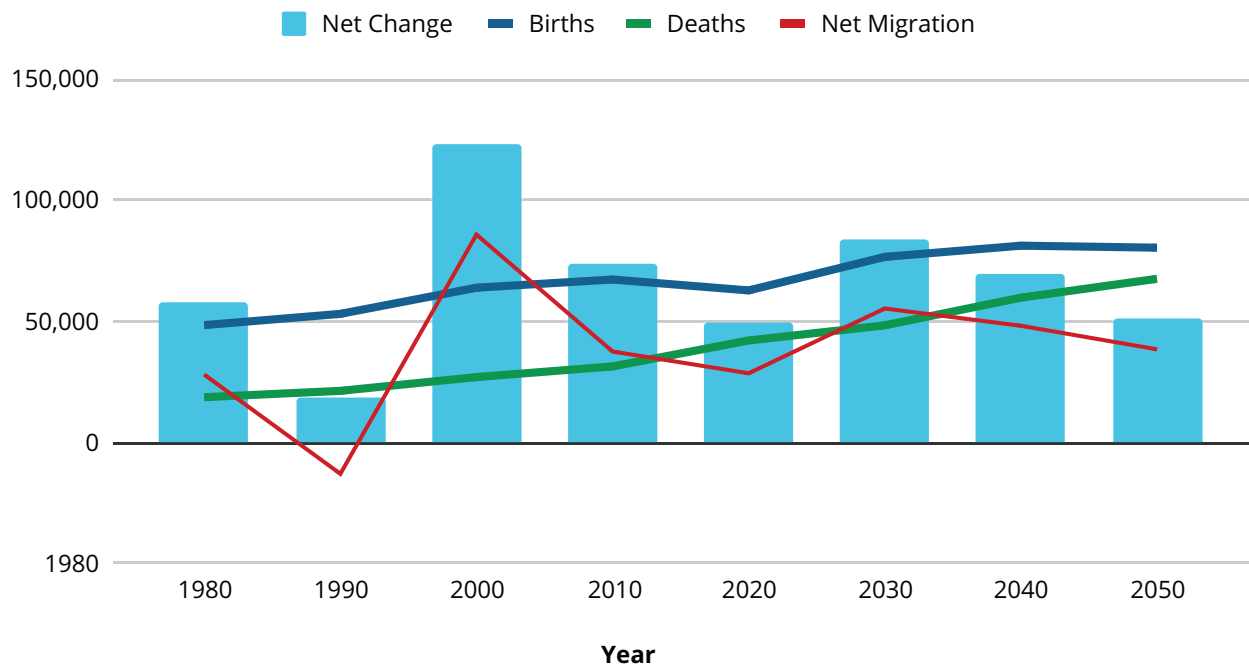
**Figure 19**  
**Colorado Labor Force Participation by Age Group**



Source: Bureau of Labor Statistics, Current Population Survey

The 65+ age group is below pre-pandemic levels by 3.4 percent, which correlates with an unexpected increase in the number of Baby Boomers (referring to people born between 1946 and 1964) leaving the labor force for early retirement during the pandemic. Colorado’s population growth is projected to slow, and the slowing of births in Colorado has led to a declining 18-and-under population by roughly half a percentage point from 2017 to 2019. **The 65+ age group, on the other hand, has seen the highest aggregate population growth, increasing by nearly 41 percent from 2010 to 2019.**<sup>28</sup> This surge of individuals 65+ will be useful to watch moving forward, as previous Talent Pipeline Reports discussed how this group was becoming an increasing percentage of the labor force, but with the pandemic we are uncertain if those individuals will return to the labor force or not.

**Figure 20**  
**Colorado Net Population Change, Births, and Deaths: 1980-2050**



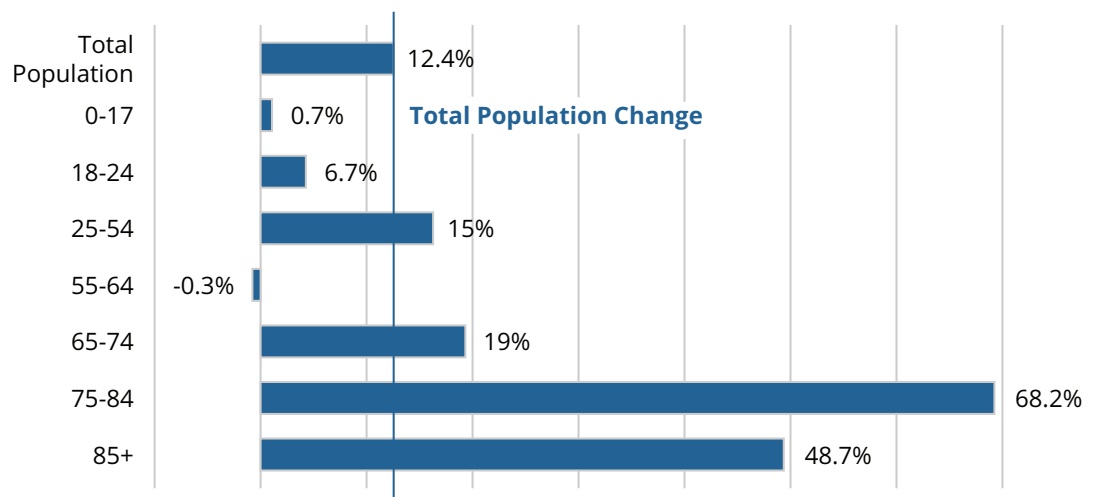
Source: State Demography Office at the Department of Local Affairs



The changing age distribution in Colorado, combined with higher death rates and lower net migration, are driving lower expectations for future labor force participation levels (see Figure 20 above). Growth rates are expected to slow significantly over the forecast horizon of 2030 as compared to historical growth. This aligns with national forecasts, as younger age groups and prime-age workers are expected to decline in U.S. workforce participation levels over the next decade, largely reflecting the aging of the population. Attracting national and international movers to the state by continuing to provide sought after opportunities geared towards students and employees will be critical for Colorado’s competitive edge moving forward.

As shown in Figure 21, current growth projections for 2030 suggest a significant tightening of the workforce is on Colorado's horizon, with the labor participation rate of non-adult youth growing less than a percentage point, the 18 to 24 age group increasing by 6.7 percent, and the 25 to 54 age group increasing by 15 percent. The largest increases are expected to be observed across the last three age groups, with the 65 to 74 category increasing by 19 percent, the 75 to 84 bracket increasing by 68.2 percent, and the 85+ group increasing by nearly 50 percent in 2030 relative to 2020 levels. With a growing population pool of individuals who typically leave the workforce to retire combined with a relatively smaller population size of younger, working-age individuals to replace them, it is likely that the sustainability of a healthy labor market participation rate will face challenges in future years.

**Figure 21**  
**Projected Change in Specific Age Group Populations in Colorado: 2020-2030**



Source: State Demography Office at the Department of Local Affairs

Although expectations for slower growth complicates workforce development strategies, Colorado's population growth is projected to continue to outpace the nation, growing at roughly twice the national rate. Between 2020 and 2030, the Colorado State Demography Office forecasts that Colorado's aggregate population will grow by approximately 12.4 percent across all age groups and will scale up from 1.7 percent of the national population to two percent by 2050.

Counties across the Front Range are expected to be impacted the most by this increase, contributing to 87 percent of the population influx between 2020 and 2030. This is thought to largely be concentrated in the Denver Metro area, accounting for nearly 50 percent of the state's projected increase.<sup>28</sup>

The recession of 2020 was the shortest in history, officially documented as lasting only eight weeks (March 2020 – April 2020). It was also the steepest, with the U.S. losing 22.2 million jobs between January and April of 2020 and Colorado losing 376,000 during that same period.<sup>29</sup> **As the labor force is driven by both type of job and characteristics of the population, creative strategies must be developed to increase the state's workforce across all age groups** – this may relate to more part time positions and job sharing for some age groups.

Colorado's aging factor is further convoluted when combined with projections for a relatively slow growth incline in population between 2025 and 2050. These two inputs will continue to impact the state's housing market and the idea of housing for workers, as a larger share of Coloradans will be aging out of the labor force but remaining in the state, boosting the number of non-working households to be higher than historic levels.



## Race/Ethnicity

Figure 22 breaks down labor force participation by race and ethnicity over time. The three time periods highlighted are 2010 (i.e., the Great Recession), 2019 pre-pandemic levels, and the most recent 12-month period available. From September 2020 through August 2021, Hispanic and/or Latinx individuals have the highest labor force participation rate at 70.9 percent, followed by Black or African American individuals at 67.4 percent and white individuals at 61.4 percent.

**Figure 22**  
Colorado Labor Force Participation by Race/Ethnicity

Race/Ethnicity	2010 Labor Force Participation Rate (%)	2019 Labor Force Participation Rate (%)	Sept. 2020 - Aug. 2021 Labor Force Participation Rate (%)
White	69.9	69.3	61.4
Black or African American	70.4	68.6	67.4
Hispanic and/or Latinx	69.7	71.0	70.9
All Races	69.8	69.0	66.6

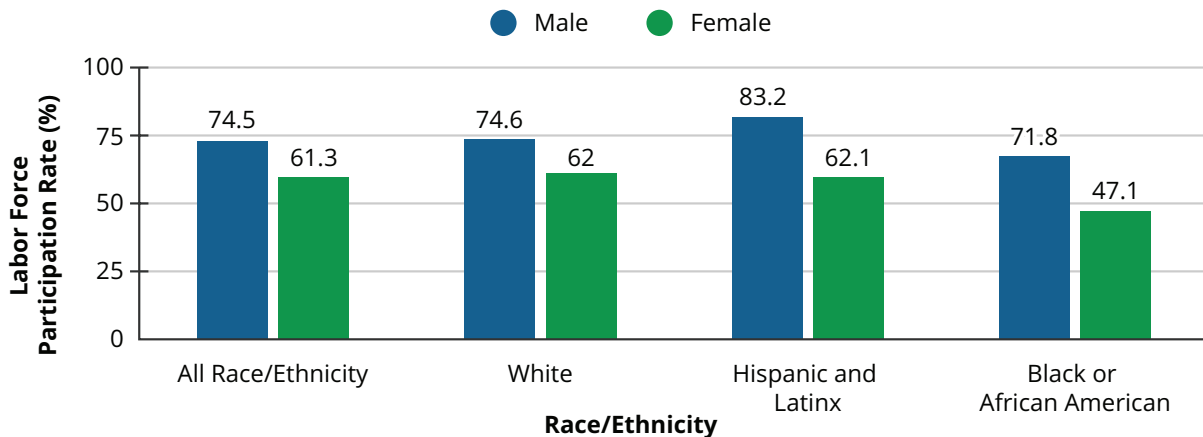
Source: Current Population Survey; U.S. Bureau of Labor Statistics

## Gender Identity, Race/Ethnicity

Figure 23 shows the labor force participation rate by gender identity and race/ethnicity. The 2020 annual data is the most recent data available for this group because of data collection and suppression constraints. Congruent with historical data, regardless of race or ethnicity, those who identify as male have a higher labor force participation rate than females. The Hispanic and/or Latinx males had the highest participation rate at 83.2 percent, while Black or African American females had the lowest labor force participation at 47.1 percent.

While we saw similar trends across the Colorado labor force from the 2020 Talent Pipeline Report (including: (1) those who identify as male representing a larger share of the workforce; and (2) Hispanic and Latinx males and females having the highest participation rates for their associated gender cohort), the share of Black or African American women in Colorado's workforce has disproportionately decreased relative to last year – declining from a labor force participation rate of 65.9 percent in 2019 to 47.1 percent in 2020.

**Figure 23**  
2020 Colorado Labor Force Participation by Gender Identity and Race/Ethnicity



Source: Current Population Survey; U.S. Bureau of Labor Statistics

Although the share of women in Colorado's labor force has been increasing since 1970, impacts brought on by the pandemic caused women's labor force participation rate to be lower than usual, with **October 2020 seeing the lowest participation rate for women in 34 years**. This aligns with national trends, as the labor force participation rate of U.S. women with young children (who have disproportionately dropped out of and remained out of the labor force since the start of the pandemic) has moved sideways over the past year and still lingers at approximately three percent below its pre-pandemic level, even with the reopening of schools. [Labor market data in September](#) suggests that the aggregate workforce for women marginally decreased further.<sup>27</sup>

According to a November 2021 [Colorado-focused study](#) published by the Bell Policy Center, this result is an outcome of the following drivers:

- » The over-representation of mothers (and women in general) in historically low-wage industries (like retail and food service) in service occupations that were hit the hardest when the economy shut down at the start of the pandemic (as mentioned earlier in the report, this is especially true for women who identify as Black or African American).
- » Child care remains a significant barrier for women to feasibly enter the labor market. Currently in Colorado, there is an insufficient supply of caregivers due to below-living wages. Further, if care is available, it is often too costly for women to afford, outweighing the benefits of market reentrance.<sup>30</sup>

Traditional labor force dynamics will also likely block women from reentry, as [recent research](#) shows that people who are out of the labor force have lower probabilities of transitioning back into employment than those who are unemployed for a time and then return to the labor market.<sup>31</sup>

Additionally, Colorado women without a college degree who have young children have had this effect magnified (relative to their male counterparts) since the beginning of the pandemic, representing a 3.2 percent overall decline in September 2020 through the first quarter of 2021. This outcome suggests that childcare access may also be restricting labor supply. Finding ways for women to return to the workforce will be pivotal for Colorado's economy moving forward.

## Credential Attainment & Labor Force Participation

From September 2020 through August 2021, individuals in Colorado who have a bachelor's degree or higher have the highest participation rate at 73.4 percent. Those with less than a high school diploma have a participation rate of 56.6 percent, a gap of 16.8 percent. As credential attainment increases, labor participation increases (see Figure 24), and unemployment decreases (see Figure 26 in the next section).

**Figure 24**

### Colorado Labor Force Participation Rate by Educational Attainment\*

Highest Level of Educational Attainment	2010 Labor Force Participation Rate (%)	2019 Labor Force Participation Rate (%)	Sept. 2020 - Aug. 2021 Labor Force Participation Rate (%)
Less than a high school diploma	58.3	57.7	56.6
High school graduates, no college**	65.7	63.7	63.4
Some college or associate degree	73	67.9	65.1
Bachelor's degree and higher***	77.3	76.8	73.4

\* Labor force participation rate by educational attainment of non-institutional population ages 25+

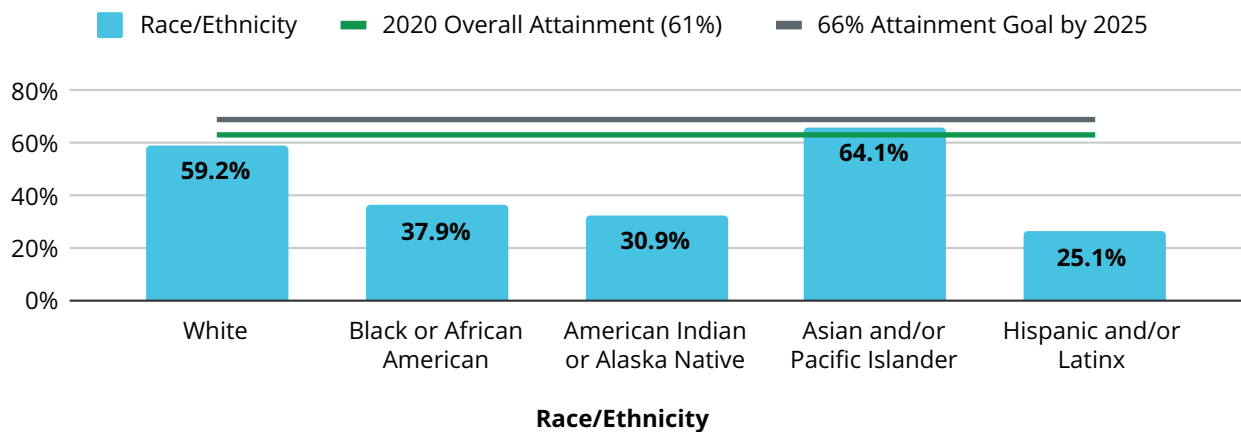
\*\* Includes persons with a high school diploma or equivalent

\*\*\* Includes persons with bachelor's, master's, professional and doctoral degrees

Source: Current Population Survey; U.S. Bureau of Labor Statistics

Figure 25 shows Colorado's 2020 postsecondary credential attainment broken down by race. Lumina Foundation developed the tool [A Stronger Nation: Learning beyond high school builds American talent](#)<sup>32</sup> to track postsecondary progress across states. Using this methodology, overall postsecondary attainment was 61 percent for all Coloradans between 25-64 years old. According to the tool, 52.4 percent hold an associate degree or higher and 8.7 percent hold a short-term credential. Overall, this indicates that 61 percent of Coloradans have a certificate, associate degree, bachelor's degree, and/or a graduate or professional degree.

**Figure 25**  
**Colorado's 2020 Postsecondary Credential Attainment**



Source: Lumina Foundation Stronger Nation Report

This is a different methodology than previous years as it expands the age range from 25-34 to 25-64 to widen the scope of higher education goals. It is important to note that the overall attainment rate includes industry certifications while the attainment broken down by race and ethnicity does not, which is why attainment rates for specific races and ethnicities appear to have decreased.\*

However, regardless of the methodology, there are still attainment gaps between demographic groups. Specifically, Colorado has significant gaps in educational attainment when measured by race and ethnicity. When compared to the statewide attainment goal of 66 percent, the following racial and ethnic disparities currently exist in 2021:

- » White - 59.2 percent attainment rate (a gap of 6.8 percent)
- » Black or African American – 37.9 percent attainment rate (a gap of 28.1 percent)
- » American Indian – 30.9 percent attainment rate (a gap of 35.1 percent)
- » Hispanic and/or Latinx – 25.1 percent attainment rate (a gap of 40.9 percent)

Looking forward, it is projected that 33.7 percent of Colorado's 18 to 64 year old population will be Hispanic and/or Latinx by 2050, compared to 21.7 percent projected in 2020.<sup>29</sup> Strategies to ensure all Coloradans receive the education and training they need to successfully participate in the labor force will be pivotal over the next 30 years.

\* The benefit of this tool is that postsecondary attainment rates can be compared across different states, it tracks states that have specific postsecondary attainment rate goals, it includes a wider age range of individuals (ages 25-64), and includes a tailored attainment rate estimate for industry-recognized certifications for each state.





## UNEMPLOYMENT

From June 2020 through June 2021, the overall unemployment rate was 7.1 percent, with June 2021 having an unemployment rate of 6.2 percent. Figure 26 looks at the unemployment rate of Coloradans by educational attainment. Those with a bachelor's degree or higher have the lowest unemployment, and those with less than a high school diploma have an unemployment rate nearly two times higher at 8.8 percent.<sup>34</sup>

**Unemployment** is defined as individuals who are not employed but are available to work and have made an active effort to find employment.<sup>33</sup>

**Figure 26**

### Colorado Unemployment Rate by Educational Attainment\*

Highest Level of Educational Attainment	2010 Unemployment Rate (%)	2019 Unemployment Rate (%)	June 2020 - June 2021 Unemployment Rate (%)
Less than a high school diploma	12.7	4.8	8.8
High school graduates, no college**	10.3	2.2	8
Some college or associate degree	9.2	2.2	5.8
Bachelor's degree and higher***	4.5	1.9	4.5

\* Unemployment rate by sex and race of civilian non-institutional population ages 16+

\*\* Includes persons with a high school diploma or equivalent

\*\*\* Includes persons with bachelor's, master's, professional and doctoral degrees

Source: Current Population Survey; U.S. Bureau of Labor Statistics

## Race/Ethnicity

Figure 27 looks at the unemployment rate by race and ethnicity over time. The overall rate for June 2020 through June 2021 was 7.1 percent. Individuals who identify as Hispanic or Latinx and Black or African American have higher unemployment rates at 8 percent and 13.5 percent, respectively, compared to individuals who identify as white at 5.7 percent. **This data compared to 2019 data reinforce that the pandemic has exacerbated disparities that predated its impacts on our economy.**

**Figure 27**  
**Colorado Unemployment Rate by Race and Ethnicity\***

Race	2010 Unemployment Rate (%)	2019 Unemployment Rate (%)	June 2020 - June 2021 Unemployment Rate (%)
White	8.4	2.4	5.7
Black or African American	12.8	4.0	13.5
Hispanic or Latinx	13.2	3.4	8.0
All Races	8.7	2.6	7.1

\* Unemployment rate by sex and race of civilian non-institutional population ages 16+ Source: Current Population Survey; U.S. Bureau of Labor Statistics

## Age, Race/Ethnicity

From November 2020 through October 2021, the unemployment rate for individuals ages 16-19 was 11.6 percent. This level has decreased by 4.1 percent relative to last year and continues to move closer to its pre-pandemic level of 7.7 percent in 2019. While the 16-19 age group appears to be hit the hardest relative to older cohorts (see Figure 28), it is obvious that the effect of the pandemic on unemployment has varied across different races/ethnicities. Individuals ages 16-19 who identify as Hispanic or Latinx were most severely impacted through this lens, a surprising outcome as this group's labor force participation rate has recovered the swiftest for both males and females outside of this age category.

It is important to note that data indicating unemployment rates for Coloradans 16-19 years old are typically turbulent and less stable from year to year. Due to small sample sizes, Black or African American unemployment data for this age group that has been available in previous years is not available for 2021.<sup>34</sup>

Notably, the 16-19 age group has also seen the most recovery emerging from the pandemic, with the August 2021 national employment level 0.8 percent higher than February 2020. This effect can partially be explained by the large concentration of individuals in this age group in the leisure and hospitality workforce, which saw large drop-offs at the start of the pandemic due to shutdowns but is now experiencing a labor shortage across the state.

**Figure 28**  
**Unemployment Rate for Coloradans by Age and Race**  
(Nov. 2020 - Oct. 2021)

Race	Unemployment Rate (%)
All Races 16-19 Years	11.6
All Races 20+ Years	5.3
White 16-19 Years	10.9
White 20+ Years	4.6
Black or African American 16-19 Years	-
Black or African American 20+ Years	16.1
Hispanic or Latinx 16-19 Years	18.4
Hispanic or or Latinx 20+ Years	6.6

- Data not available  
Source: The Graduate! Network, September 2021



## Gender Identity, Race/Ethnicity

Figure 29 shows the 2020 unemployment rate by gender identity and race and ethnicity. While Colorado's aggregate female workforce experienced a disproportionate effect on employment due to viral-related impacts such as childcare complications, Black or African American women saw the largest rise in unemployment relative to all other groups, reaching 19.3 percent in 2020. This can be explained, in part, by the outsized job losses resulting from business lockdowns in economic sectors that tend to employ a high percentage of women (e.g., tourism and hospitality, retail, and food and beverage services), and especially Black or African American women.

At a national level, Black women also make up roughly 25 percent of the public sector workforce, where state and local government jobs took a big hit during the pandemic, employing more than a million fewer workers nationally in February 2021 relative to February 2020.<sup>35</sup> Note, the 2020 annual data is the most recent data available for this group because of data collection and suppression constraints.

**Figure 29**

### Colorado Unemployment Rate by Gender Identity and Race and Ethnicity in 2021\*

Gender Identity, Race	Unemployment Rate (%)
Male, White	6.7
Female, White	7.2
Male, Black or African American	3.4
Female, Black or African American	19.3
Male, Hispanic or Latinx	9.9
Female, Hispanic or Latinx	9.1

\* Unemployment rate by sex and race of civilian non-institutional population ages 16+ Source: Current Population Survey; U.S. Bureau of Labor Statistic



## A Note About Data Reporting Methods

Unemployment and employment rates are announced by the Bureau of Labor Statistics (BLS) of the U.S. Department of Labor, who use data from the monthly Current Population Survey (CPS). These data are the main source for unemployment and employment rates throughout the nation and have been consistently utilized throughout all Talent Pipeline Reports. The CPS samples 60,000 eligible households (~110,000 individuals) each month, selected to be representative of the entire population broken into different geographical areas in each state. This sample rotates so no household is interviewed for four consecutive months. The sample excludes those living in institutions (e.g., correctional, mental health facilities, etc.) and those in the armed forces. The Local Area Unemployment Statistics (LAUS) follows the same procedure as the CPS and is supplemented by the Current Employment Statistics (CES) program and the Quarterly Census of Employment and Wages (QCEW) program to measure unemployment for states and local areas.

In 2021, the Colorado Department of Higher Education (CDHE) shifted their methodology for measuring educational attainment from previous years to align with Lumina Foundation's [A Stronger Nation: Learning Beyond High School Builds American Talent](#) tool. The tool uses a similar methodology from previous years but includes a wider age range - to account for Colorado's changing age distribution and current trends within the state suggesting increased demand for educational attainment later in life - as well as a more accurate estimate of short-term credential attainment in Colorado. The shift in data platforms offers strategic advantages, providing more comprehensive state-by-state comparisons while allowing for a more detailed dive into Colorado's equity gaps across education levels.





In addition, this report also measures labor market supply and demand through the [EMSI Burning Glass – economicmodeling.com](https://www.economicmodeling.com) data tool. EMSI - Burning Glass (aka “EMSI”) gathers and integrates economic, labor market, demographic, education, profile, and job posting data from dozens of government and private-sector sources, creating a comprehensive and current dataset that includes both published data and detailed estimates with full United States coverage.

Industry, occupation, education, demographic, job postings, and profiles data are available at national, state, metropolitan area, and county levels. Zip code estimates are available for employment, earnings, job change, and demographics data. A complete list of EMSI data sources can be found [here](#).

EMSI produces annual occupation employment counts data by applying staffing patterns to industry-based job counts data from the BLS QCEW dataset. Job counts for a particular time range are based on the most recent four quarters of data available from [QCEW](#).

EMSI’s Community Indicators data comes from the Census’s American Community Survey (ACS) API. EMSI uses the Census Bureau’s latest MSA definitions, but ACS occasionally lags, using older MSA definitions. EMSI converts the ACS data to current Census Bureau MSAs using a few different methods depending on the data type.



## IMMIGRATION INFLUX AND NEW AMERICANS

**New Americans** are defined formally as individuals who have arrived in the United States as immigrants or refugees, and their children.

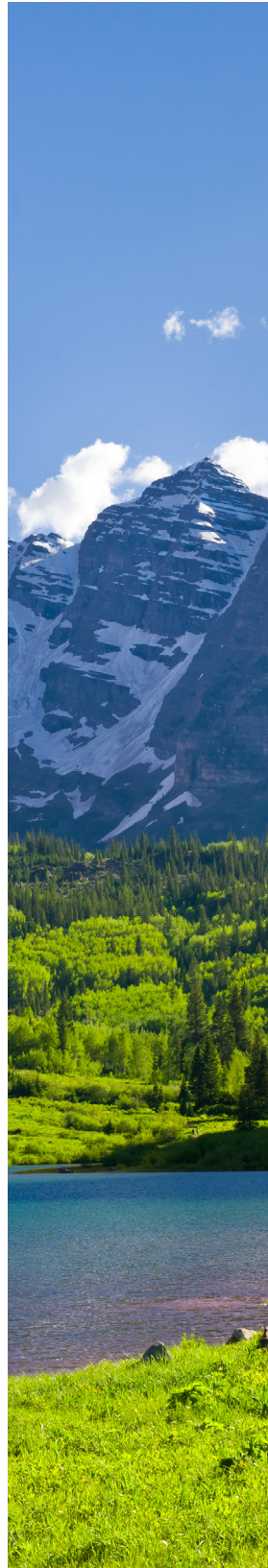
New American communities have long played a vital cultural and economic role in Colorado, contributing to shared prosperity and wellbeing through their hard work, dedication, and love for our state.<sup>36</sup>



The community is continuing to grow and diversify. In 2021, more than 30 percent of Colorado immigrants have attained an advanced degree, and more than 2,000 are foreign-trained healthcare providers, including the hundreds who have arrived through the refugee program in the past several years.<sup>37</sup> 27.3 percent of immigrants have less than a high school diploma and yet have ample skills in industries like construction, farming, entrepreneurship, or cosmetology.<sup>36</sup> Some spent decades in refugee camps; still others arrived on a student visa to study at one of our higher education institutions or were recruited to fill a workforce gap in one of our crucial industries. There were 11,631 international students enrolled at Colorado colleges and universities in 2021, providing an economic contribution of \$428.8 million.

The growth in the immigrant population has helped to strengthen America's labor force. As baby boomers retire, younger immigrants are filling crucial gaps in the market. Nationally, immigrants are more likely to hold an advanced degree than the U.S.-born. They are also more likely to have less than a high school education. Uniquely, this allows this population pool to fill critical shortages at both ends of the skill spectrum, from high-tech fields to agriculture, hospitality, and service industries.

At the state level in 2021, immigrants made up one-eighth of Colorado's workforce, with 89.9 percent of foreign-born Coloradans between the ages of 16 and 64. This could be vital to the state's workforce in the long run – as Colorado's population continues to age, the immigrant population will become even more critical to the state's economy and wellbeing: research suggests that Coloradans will increasingly depend on immigrant tax contributions and labor, including in areas such as home healthcare that serve the older adult population.







Already, Colorado depends on foreign-born labor for some of its most crucial industries, like tourism, construction, and technology. This year, immigrant workers provided approximately 25 percent of the workforce for traveler accommodation, a key occupation in our tourism industry. Mountain communities with international reputations for their world-class ski resorts, like Vail, Telluride, and Aspen, depend on immigrants as essential to their economic engines. In addition, 13 percent of STEM workers in Colorado are immigrants, helping shepherd the growth of this important sector, especially as many economies, like Denver's, move away from an over-reliance on oil and gas.

Similar to the state's total workforce population, Colorado's immigrant population has a high percentage of entrepreneurs who create jobs. As of October 2021, over 36,000 immigrant entrepreneurs employ 102,298 workers in Colorado.<sup>36</sup> Many of these entrepreneurs start small businesses such as restaurants, insurance companies, and adult care centers. This aligns with the national trend, with immigrants creating approximately 25 percent of new businesses in the U.S. according to the National Bureau of Economic Research.<sup>38</sup> The 42,844 immigrants who are sole proprietors in Colorado account for 12 percent of all self-employed residents, generating \$1 billion in business income.

As of October 2021, Colorado immigrants made up nearly a quarter of the pharmaceutical manufacturing (24.8 percent) and medical equipment and supplies manufacturing (23.9 percent) industries, as well as 15.6 percent of pharmacy and drug store workers.<sup>39</sup>

Approximately 80 percent of Colorado's immigrants have a status that makes them eligible to work, including those with temporary work authorization (such as Deferred Action for Childhood Arrivals (DACA)) or with lawful status (such as refugees or naturalized citizens). Other

immigrants working in Colorado may have employment-based visas, such as J-1 (camp counselors, au pairs), H-2A (temporary agricultural workers), H-2B (ski resort workers), H-1B (tech workers) and those in the EB categories, such as foreign nurses.

Immigrants without work authorization often become entrepreneurs, including as business owners. Each of these immigration statuses fill workforce gaps and create economic drivers in local communities that lead to shared prosperity. Overall, however, immigrants are more impacted in economic downturns, such as during the pandemic, and oftentimes are less connected to resources for which they are eligible than the U.S.-born population due to barriers such as language, digital literacy, or lack of awareness of available programs.





## INDIVIDUALS WITH DISABILITIES

Employment of people with disabilities has surpassed pre-pandemic levels and has reached historic highs in recent months, with this cohort's labor force participation rate equating to 36.8 percent in October 2021, the highest recording since the Bureau of Labor Statistics began recording employment numbers in 2008. This is a boost of about 10.5 percent relative to the same time last year and holds a magnitude significantly higher than the year-over-year increase across the non-disabled workforce, who only saw an uptick of 0.5 percent when comparing the periods. This is a key indication that **people with disabilities are recovering faster than people without disabilities**, and we can expect this labor force to continue to grow as more individuals with disabilities are provided opportunities for employment and enter the market. As of October 2021, the population of people with disabilities represents 3.6 percent of the total U.S. workforce.<sup>40</sup>

According to the most recent data update from the [American Community Survey \(ACS\)](#), there are an estimated 559,347 Coloradans who identify as living with a disability. This number translates to representing about 12.1 percent of Colorado's aggregate population. While lagged state-level data prohibits us to interpret emerging employment trends of this cohort and their impacts on advancing Colorado's economic recovery, in 2019 only 31 percent of individuals with disabilities were employed in the state (compared to 71.6 percent of the total state population ages 16 and over who do not have disabilities).<sup>41</sup>

Over 25 percent of Coloradans with disabilities have a bachelor's degree or higher and 33.8 percent have attained some college courses or received a degree from a two-year program. Notably, the latter surpassed Colorado's annual attainment level for people without disabilities by approximately 5.8 percentage points. When compared to the workforce population without disabilities, Coloradan workers with disabilities make up larger shares of the following occupations in the state:

- » Service Occupations (20.9 percent vs. 16.6 percent)
- » Sales and Office Occupations (21.2 percent vs. 19 percent)
- » Natural Resources, Construction, and Maintenance Occupations (9.3 percent vs. 8.8 percent)
- » Production, Transportation, and Material Moving Occupations (13.4 percent vs. 9.6 percent)

Frequently the first and most intractable barrier underemployed or unemployed Coloradans with disabilities face is an over-emphasis on what is expected that he or she cannot, should not, or is not doing. The lack of balance between a focus on functional limitation rather than on the person's talent and ambitions is expensive and wasteful. The workforce development system in Colorado is committed to providing the high-quality services necessary to prepare individuals with disabilities to compete for jobs and fully participate in Colorado's workforce.





## WHO WORKS WHERE: RACE/ETHNICITY AND MAJOR OCCUPATIONAL GROUP

An **occupation** is the kind of work an individual does to earn a living (e.g., accountant, manager, etc.).

In 2020, Black or African American workers in Colorado had a higher representation in military (16 percent of the occupation), healthcare support (9 percent), transportation and material moving (8 percent), and protective service (7 percent) occupations.<sup>2</sup> These occupational groups have an average median annual salary of \$39,497.<sup>2</sup>

Looking at where a majority of each demographic group works, an estimated 50 percent of Black or African American workers are employed in office and administrative support, transportation and material moving, food preparation and serving related, healthcare support, and sales and related occupational groups.<sup>2</sup> These occupational groups have an average median annual wage of \$34,899.<sup>2</sup>

The same approach was used to look at Hispanic or Latinx and white workers. In 2020, Hispanic or Latinx workers had a higher representation in farming, fishing, and forestry (44 percent of the occupation), building and grounds cleaning and maintenance (37 percent), construction and extraction (31 percent), and production (28 percent) occupations.<sup>2</sup> These occupational groups have an average median annual salary of \$37,806.<sup>2</sup>

However, an estimated 50 percent of Hispanic or Latinx workers are employed in office and administrative support, food preparation and serving related, transportation and material moving, sales and related, and construction and extraction occupations. These occupational groups have an average median annual wage of \$38,318.<sup>2</sup>

In 2020, white workers had a higher representation in legal (84 percent), management (82 percent), arts, design, entertainment, sports, and media (81 percent), architecture and engineering (81 percent), and life, physical, and social science (81 percent) occupations.<sup>2</sup> These occupational groups have an average median annual salary of \$85,376.<sup>2</sup>

An estimated 45 percent of white workers are employed in office and administrative support, sales and related, business and financial operations, food preparation and serving related, and transportation and material moving occupations.<sup>2</sup> These occupational groups have a median annual wage of \$43,450.<sup>2</sup>





## APPRENTICESHIPS

Apprenticeships can be found woven throughout various industries and occupations and warrant demographic analysis. A registered apprenticeship provides 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. Between FY 2018 and FY 2021, there were 9,354 registered apprenticeship enrollments in Colorado.

At a national level, there has been a notable 70 percent increase in new apprenticeship programs since 2011. According to the most recent federal data update from the [Department of Labor](#), the top five ranking industries for active number of apprentice participants in the U.S. include:

- » Construction (with 4,793 active programs);
- » Public Administration (with 635 active programs);
- » Manufacturing (with 1,682 active programs);
- » Transportation and Warehousing (with 145 active programs); and
- » Utilities (with 570 active programs).<sup>42</sup>

Registered Apprenticeship Programs (RAPs) can go a long way in furthering a company's equity efforts, as they provide apprentices a way to earn a living while learning in-demand skills that lead to high-quality jobs in growing industries. While RAPs have increased access to employment opportunities for countless workers, their potential to level the employment playing field has not been fulfilled. Women, people of color, people with disabilities, and others continue to be underrepresented in RAPs; according to the [Urban Institute](#), only about **one in four apprentices in tech programs are women**.<sup>43</sup> The numbers are even lower for Latinx and Black women. In [2019](#), 88 percent of new apprentices coming into federally registered programs were men, and of those who provided their race, 80 percent identified as white.<sup>44</sup>

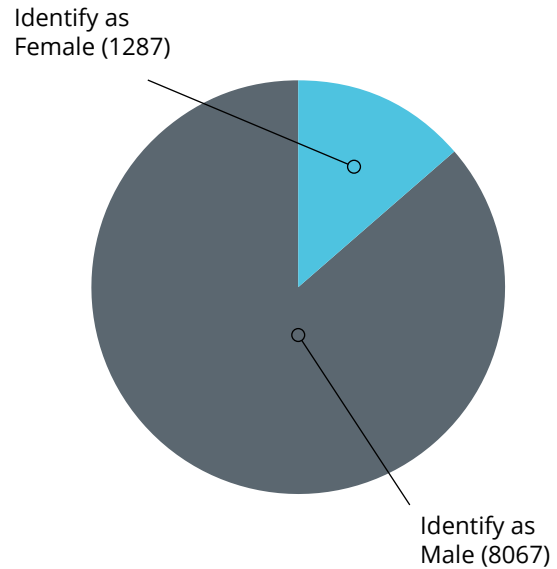


Apprenticeships are known to help workers gain the skills they need to obtain quality jobs that pay a living wage to the benefit of employers, workers, and the economy. Adding more of these opportunities across sectors of the state’s workforce is also a strategic tool for industries looking to help advance an equitable economic recovery. Although the pandemic has affected everyone, it’s evident that some historically excluded demographic groups have been hit harder than others. Apprenticeships are one example of Colorado’s commitment to building a strategy of earn-and-learn models, where people reskill and upskill on the job versus leaving the workforce in order to pursue education or training opportunities.

CDLE’s [Office of the Future of Work](#) (OFOW) prioritizes registered apprenticeships as critical to our future workforce, as it launches the State Apprenticeship Agency (SAA) and implements registered apprenticeship expansion grants statewide. Apprenticeship programs throughout the state will be discussed in more detail in the strategies section.

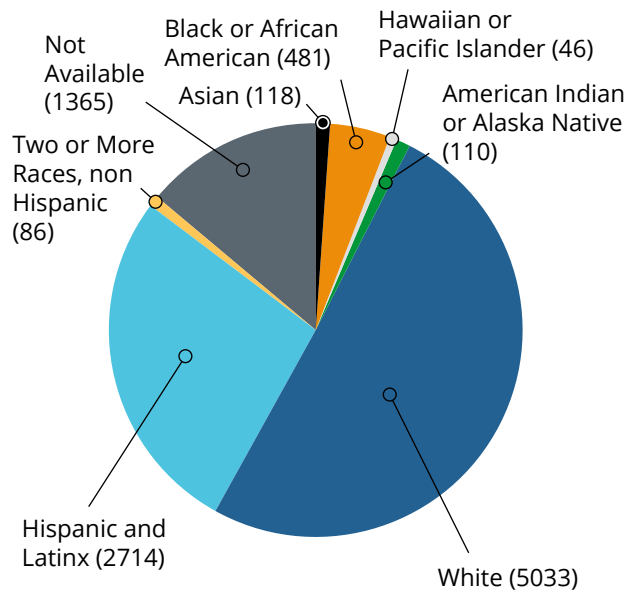
Apprenticeships are a longstanding model that has helped forge the modern American economy. Colorado is advancing apprenticeships as we recover from the pandemic, build a future-ready workforce, and create an equitable economy that works for all Coloradans.

**Figure 30**  
Annual USDOL Apprentice Enrollments by Gender Identity (FY 2018 - FY 2021)



Source: Colorado Department of Labor and Employment

**Figure 31**  
Annual USDOL Apprentice Enrollments by Race/Ethnicity (FY 2018 - FY 2021)



Source: Colorado Department of Labor and Employment



# 03

## **STRATEGIES TO ALIGN SUPPLY WITH INDUSTRY DEMAND FOR ECONOMIC RECOVERY**







The CWDC utilizes the total number of unique job postings in Colorado as a measure of labor demand. Since April 2020, labor force demand has recovered at a rapid pace, with total job openings surpassing unemployment as of May 2021. This is a general sign that Colorado is experiencing a labor shortage. In September, there were a total of 107,115 unique job postings across all occupations in the state. This is a 4.7 percent increase relative to September 2020.<sup>2</sup> Despite unemployment rebounding significantly in the state during 2021, it still remains down by three percent from January 2020, equating to 85,900 jobs.<sup>45</sup> To address the labor shortage, it will likely be important that employers offer new incentives to attract employees, such as opportunities for workers to upskill or reskill and childcare strategies.

Colorado has a high concentration of entrepreneurs who create new businesses, generating more jobs relative to other states in the country. From 2010 to 2020, the state had the fourth-highest proportion of new and young businesses (e.g., those five years and under).<sup>28</sup> The most recent data from the Ewing Marion Kauffman Foundation Indicators of Entrepreneurship show that **Colorado is the highest-ranked state for net new jobs created per capita by businesses, with 81.12 percent of new startups still active after their first year of existence.**<sup>28 46</sup> This outcome can partially be explained by Colorado's positive, local business

climate that has long experienced job growth in occupations that cannot be outsourced. This factor, alongside heavy investments in statewide infrastructure advancements, has enabled a surge of entrepreneurship in all parts of the state.

Ninety-eight percent of businesses operating in Colorado are classified as small-sized organizations.<sup>47</sup> The Colorado Small Business Development Center Network (SBDC) defines these operations as businesses employing 500 or less job seekers. Statistically, however, 89 percent of small business owners hire only 20 employees or less to efficiently run their operations.<sup>47</sup> Still, these employers are a prominent source of job creation in the state, employing about one-third of all workers in Colorado in 2021 (compared with 28 percent nationally).<sup>48</sup> Although this job creation generator largely remained idle while lockdowns restricted economic growth during the pandemic, in the spring of this year, the types of small businesses that frequently drive job growth (particularly in the leisure and hospitality and construction sectors) began to reemerge and participate more fully in Colorado's recovery. By June, the number of active small business owners began to approach pre-pandemic levels, though it will likely take some time before many of these organizations are able to hire back the same size workforce.



Based on the 2021 Bridging the Talent Gap (BTTG) data findings, the majority of employers associated with smaller operations are looking for individuals with adaptability and professional experience. Some of the top skills needed most among small and medium-sized businesses include teamwork/collaboration, critical thinking, and communication skills. Teamwork/collaboration was shown by employers to be the top demanded skill. Interestingly, 80 percent of Colorado employers from the survey responded that those in the labor pool with at least a bachelor's degree already possess this skill.

As we climb out of the COVID-19 recession, there is still uncertainty on how the pandemic will have lasting impacts on businesses statewide. If the recovery will be anything similar to the Great Recession, however, the continuation of new business growth and the support towards small and medium-sized operations will likely be vital factors. Cross-functional collaboration across business, education, economic development, and workforce will increase the ability to address the complexities facing the labor shortage and will allow us to maximize the use of resources and develop and scale successful strategies.

We are at a critical crossroads on our journey to build a resilient workforce and economic mobility for all Coloradans. In this section, we discuss numerous programs and strategic initiatives supporting Colorado's workers, learners, and businesses.

As of Nov. 2, 2021, Colorado passed the 80 percent threshold for vaccinated adults with at least one dose, public health orders have been eliminated or reduced, and sectors of our economy are returning to full operations. Efforts must continue to focus on the talent pipeline in order to facilitate an equitable economic recovery that creates more opportunity for prosperity throughout the state. State agencies are working towards an overarching objective: Reduce Colorado's unemployment rate of 6.2 percent (estimate for June 2021) to 4.5 percent by June 30, 2022, with a longer term recovery effort to reduce Colorado's pandemic high unemployment rate of 12.1 percent to 3.6 percent or lower by June 30, 2023.

Achieving this objective requires a targeted focus on specific actions that were initially articulated in the 2020 Talent Pipeline Report and updated through the National Governors' Association Workforce Innovation Network in summer 2021. This plan, CO POWER '21, is both an action plan and a vision that articulates the collective priorities of Colorado's talent development network, defines indicators of success, and provides an outline for investment opportunities to support economic recovery in three phases: Stabilize, Accelerate, and Prepare.



## CO POWER '21

The **talent ecosystem** refers to the interconnected, complex network of entities that create a positive employment climate in the state, inclusive of individuals, employers, sector partnerships, training providers, education systems, and policy makers.

### Stabilize

The Stabilize phase is focused on strengthening the use of data and evidence to answer key questions about the efficacy of our talent ecosystem and to identify and convey the programs and education/training providers that are most effective at facilitating learner completion of programs that prepare them for jobs in high-demand, high-growth industries.

This body of work requires aligning information and digital tools available to our system, and includes mapping all existing data resources that inform our talent ecosystem, identifying gaps in information, closing those gaps through resource acquisition and actions of the Colorado Data Trust, and deploying information in consumable ways to the public through data visualization tools and other available methods that provide users with clarity and transparency.

**Primary Phase Objective:** Ensure the efficacy of the talent ecosystem and provide the information the public needs to make informed decisions about their future.

### Accelerate

The Accelerate phase is focused on building and expanding pathways to quality jobs aligned to the Talent Pipeline Report. This phase focuses on building cost-reduction and innovative financing mechanisms for regions and occupations where there are significant, critical shortages. This body of work includes new investments in high-potential pathways, expansion of current initiatives that have an earn-and-learn focus, increased partnership work with businesses and regional organizations to ensure education and training alignment with hiring organization needs, and strengthening the referral network across programs so that individuals most in need of support can access resources. Efforts in this phase also target employers to support adoption of practices that open more doors for individuals through competency and skills-based hiring and retention strategies.

**Primary Phase Objective:** Increase enrollment in programs, training, and apprenticeships connected to quality jobs and in-demand industries.

### Prepare

The Prepare phase is focused on upskilling and reskilling individuals for the future of work. This phase includes the expansion of the available resources to reduce the cost of and barriers to existing education and training and the creation of new programs to support competency and skill development. Efforts will also establish clear connections from engagement to training to gateway jobs to careers, and support individuals in navigating the available options while arming them with access and portability of their prior education and training histories for their lifelong learning and employability needs.

**Primary Phase Objective:** Increase skill development and credential attainment.



## EQUITY IN THE TALENT PIPELINE

Each phase of CO POWER '21 must be pursued with an intentional focus on equity that examines who benefits and who is left behind by existing structures so that state-supported education, training, and business stabilization programs can provide the foundation for an equitable recovery. In order for Colorado's economy to work for everyone in our state, approaches to education, hiring, and advancement must be re-envisioned, with historically excluded populations at the center of their redesign. Training and technical assistance for businesses and organizations are being launched to implement the [Talent Equity Agenda](#). Resources are available that can guide the design and implementation of programs and initiatives that maximize equitable opportunity.

The Prosperity Now Scorecard ranks Colorado 12th nationally on overall prosperity of the state's residents, yet at the same time ranks Colorado 37th when it comes to racial disparities between white residents and residents of color. This gap has significant implications and spotlights a critical need to strengthen how we educate, train, hire, and promote our current workforce.

In September 2020, the [Colorado Talent Equity Agenda](#) was published by the Colorado Workforce Development Council in collaboration with partners of the talent development network and incorporating feedback from stakeholders. The Talent Equity Agenda makes the case for targeting resources, raising awareness, and accelerating shared strategies to close racial economic disparities in Colorado and measure the results.





## Moving to Action with the Talent Equity Agenda

For Colorado to fully realize economic recovery, talent development efforts must be operationalized through a racial equity lens. Without intentional and active work to restructure and align how we educate, train, hire, and advance all Coloradans, systemic racism will continue to negatively impact individuals, organizations, and the talent pipeline. In March 2021, the Colorado Workforce Development Council hosted four stakeholder forums with over 300 stakeholder organizations participating from across Colorado's talent development network. This process included alignment with the work of key partners including:

- » [The Colorado Inclusive Economy](#)
- » [Prosper Colorado](#)
- » [Colorado Department of Labor and Employment, Office of the Future of Work](#)
- » [Colorado Department of Higher Education, Office of Educational Equity](#)

At the forums, organizations shared how they were moving to action with the strategies outlined in the Talent Equity Agenda, and affirmed the value in the data points below to indicate progress within Colorado.

### Data Points

- » Career Navigation and Advancement
  - Increase in pre-apprenticeship and apprenticeship participation by people of color.
- » Postsecondary Credential Attainment
  - Increase completion of postsecondary education programs by underrepresented students of color by five percent from 14,296 to 15,011 by June 30, 2022.
  - Increase the number of campuses engaging in climate and policy audits from six to 20 by June 30, 2022 and to 30 by June 30, 2023.
  - Conduct site visits with 19 campuses around equity action plans by June 30, 2022 and with 31 campuses by June 30, 2023.
  - Work with Equity Champions Coalition to develop a baseline set of equity questions for recommended use in culture/climate surveys with 10 campuses utilizing the questions by June 30, 2022 and 20 by June 30, 2023.
  - Host second annual Day of Dialogue and quarterly roundtables to report on current data, share best practices, train on using the equity toolkit, and elevate student voices by June 30, 2022.
  - Execute on 10 milestones to create a new Office of Educational Equity (OEE) website as a central repository for resources, stories, data, and best practices by June 30, 2022.
  - Make progress on an additional seven strategies from the Affordability Roadmap, including: increasing accessibility to financial aid through increased Free Application for Federal Student Aid (FAFSA) support, credit recognition and transferability of prior and work-based learning to reduce cost and time-to-credentials, saving students money on textbook expenses, and designating Hunger Free and Healthy Minds campuses by providing additional assistance for food and behavioral health by June 30, 2022.
- » Unemployment
  - Decrease in overall unemployment among people of color from 7.1 by June 30, 2022.

## Equity in Apprenticeship Programs

[Equitable apprenticeship programs](#) are those that recognize that workers competing on the same career ladders start from inherently different positions, with different resources, support, or connections. Equity is at the center of CDLE's apprenticeship efforts. In July 2021, CDLE was awarded \$10 million from USDOL for its Innovation, Diversity, and Equity in Apprenticeship grant which will increase participation in apprenticeship by youth, women, people of color, justice-involved individuals, individuals with disabilities, and individuals impacted by the COVID-19 pandemic. Additionally, CDLE has committed to increasing the number of new apprenticeships filled by racial or ethnic minorities by five percent over the next year.

### CO-Tech Apprenticeship Program

In spring of 2020, CDLE awarded the [Colorado Community College System](#) (CCCS) a \$2 million grant as part of the Apprenticeship: Closing the Skills Gap Program. Allocations from funding support information technology (IT) and cybersecurity apprenticeships in Colorado through 2024. In September 2021, CCCS announced four colleges to lead the [CO-TECH apprenticeship program](#) – focused on **making high-wage, high-demand IT occupations accessible to 1,600 adults statewide, regardless of previous education credentials**. The four collegiate institutions ([Arapahoe Community College](#), [Community College of Denver](#), [Front Range Community College](#), and [Pueblo Community College](#)) will receive subgrants to partner with employers in expanding Registered Apprenticeship opportunities in IT and cybersecurity careers, making it easier for businesses to partner with community colleges to quickly start and hire apprentices, and tapping into the existing pipeline of community college students.

### CO-HELPS Apprenticeship Program

The Colorado Healthcare Experiential Pathways to Success ([CO-HELPS](#)) program was created to develop and scale healthcare apprenticeships in Colorado. The program will leverage a \$12 million grant from the U.S. Department of Labor (USDOL) and over a \$5 million dollar match from businesses to create 5,000 adult healthcare apprenticeships and pre-apprenticeships between July 2019 and July 2023. In partnership with CDHE, CDLE, and the CWDC, CCCS colleges, [Emily Griffith Technical College](#), [Aims Community College](#), and [Colorado State University](#) will work with business and industry to design a curriculum that meets the needs of today's growing healthcare system. As of September 2021, CO-HELPS has supported 548 participants.







## Equity in Postsecondary Education

The Office of Educational Equity (OEE) at the Colorado Department of Higher Education (CDHE) establishes statewide policy, acts as a facilitator of best practices, and provides technical assistance to remove equity gaps in the state. The office, led by the Chief Educational Equity Officer, is committed to promoting the public value of higher education and encouraging the public to direct funding in a way that mirrors diversity in the state and erases racial/ethnic/income equity gaps. The work of the OEE includes the following areas outlined below.

### Equity Champions Coalition

The Equity Champions Coalition (ECC) advances statewide policy and informs higher education support and services for Colorado's most vulnerable students to remove educational completion gaps by race, ethnicity, and income. The Coalition helps develop a collective vision and strategic direction to guide the Office of Educational Equity. The ECC works alongside CDHE to implement high-impact strategies across institutions, collaborate on best practices, collect and analyze data, and identify necessary work to continue to close gaps.

### Equity Report

CDHE and ECC published the [Report on Educational Equity: Creating a Colorado for All](#). The report provides a historic look at educational inequities and offers recommendations to create a framework, informed by data, to identify elements and actions that collectively create an equitable education system.

The report includes:

- » A vision framework, identifying an equitable education system and what it includes;
- » Principles of a world-class education system to help achieve that vision;
- » Practical improvement strategies that align to these principles as a guide to ongoing activities over the time period of the coalition; and
- » Measures of success and accountability structures to promote enrollment, persistence, and completion against equity gaps.

### Educational Equity Day of Dialogue

Governor Jared Polis proclaimed March 15, 2021, as Educational Equity Day ([read the proclamation](#)). The first Equity Day of Dialogue convened education partners across Colorado and highlighted the recently published [Report on Educational Equity](#).

Objectives/key deliverables from the Day of Dialogue include:

- » State of Equity address communicating the significance of educational equity work and associated data - not only now, but where to go;
- » Communication of the action plan developed as part of the Equity Report and plan for continued engagement of partners;
- » Initial pledge and signing with campus presidents and student organizations committing to the work outlined in this report; and
- » The Equity Day of Dialogue (convening yearly on March 15).

## CO POWER '21 IMPLEMENTATION

Implementation of this plan requires an expanded model to lead and drive the identified initiatives forward and to ensure that work is aligned across agencies and that all Coloradans have access to the opportunity for an equitable recovery. The Colorado Workforce Development Council (CWDC) functions as the backbone organization for statewide collective impact efforts on talent development. In this role the CWDC fulfills the common functions of a backbone organization with a specific focus on convening partners, establishing a shared vision and goals, and data collection and analysis. The CWDC also works to enhance the capacity of the [TalentFOUND network](#) to deliver support, information, and training to Coloradans.



Strategic leadership for talent development is provided by the Governor-appointed members of the CWDC, and structures are in place for shared visioning and decision making with agency partners and stakeholders. The **Colorado Ready Collaborative** is being implemented as a means to maintain accountability for actions in the CO POWER '21 plan and work with a change management approach that will shift how our systems operate in both difficult and prosperous economic conditions. As a new team of state agency staff, the Colorado Ready Collaborative will expand shared staffing concepts between the CWDC and other agencies to enhance the alignment of our work. A project manager in the CWDC Office will coordinate ongoing interactions of the Collaborative, execute recovery plans, and implement strategies outlined in state and federal stimulus proposals. The Collaborative is a subset of the overall TalentFOUND network that includes local partners working hand-in-hand with state staff on the actions described below.

The CWDC will be the convener and driver of the Colorado Ready Collaborative. The initial focus is on the objectives contained in this plan. Stimulus funding under the American Rescue Plan Act is now flowing from the state to local governments and community-based and regional partners based on legislation passed in the 2021 legislative session. Additional funds from state, federal, or private investments into the system, which can be allocated through the CWDC in a pooled funding model or through direct program investments, can synergistically enhance the sustainability of this work and increase opportunities for innovation. These resources can shift concepts into action, and as objectives are accomplished or policies shift, the Collaborative will stay agile to meet the demands of the state. Therefore, while this plan has been finalized to launch the Collaborative, a [CO POWER '21 Playbook](#) will be a living document that tracks specific indicators and projects as we progress on this journey.

**More information about the CO POWER '21 plan phases and objectives is detailed in the sections below.**





## STABILIZE

Actions in the Stabilize phase focus on identifying all available data sources, resolving open data questions through resource acquisition or use cases for the Colorado Data Trust, and enhancing user-facing platforms to ensure that data and information can be easily understood by the public.

### Access Data

- » A catalog of data resources was developed in 2021.
- » Use cases for the Colorado Data Trust will be deployed in 2022.

### Use Data

- » For employers, the Working Metrics platform to assess job quality will be piloted in 2021 and assessed for broader deployment.
- » A CLIFF Effect dashboard has been developed with the Atlanta Federal Reserve to inform individuals of the impact of training choices on public benefits.
- » My Colorado Journey will be enhanced with job search outcomes and employer benefits to better support career growth.



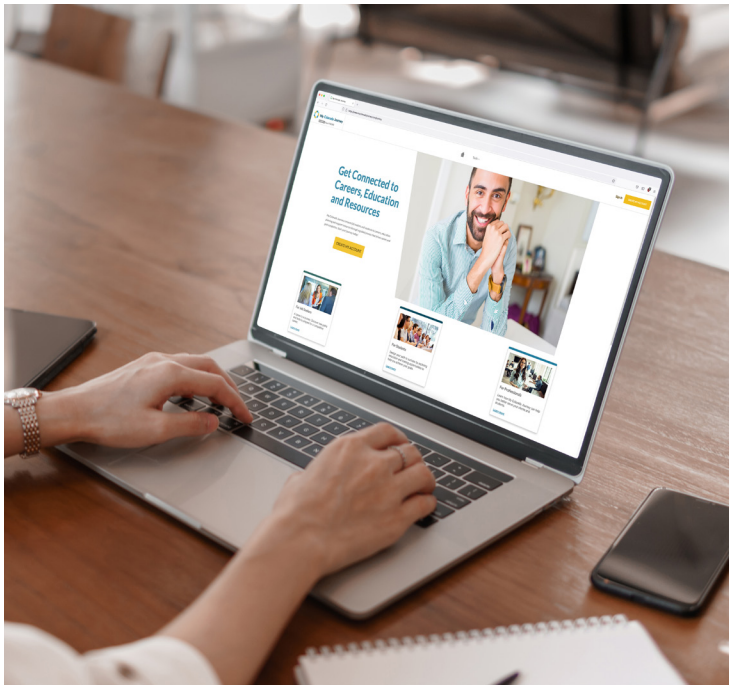
## My Colorado Journey

My Colorado Journey (MCJ), a free, statewide career and academic exploration platform, connects job seekers and students to careers, education planning, and support resources through a guided process that drives action and goal completion. In PY21, MCJ enhanced the user experience for job seekers, students, and professionals. Unique users increased to more than 30,000, with 30 percent of monthly visitors being returning visitors, and 39 new outcomes were added, bringing the total number of outcomes in the platform to 51.

Specific changes include:

- » **Career exploration offers improved cohesiveness.** Career Clusters Survey results link directly to the Occupation Finder, which allows individuals to search and filter more than 800 occupations. Following that, the Search for Programs connects individuals to relevant education/training programs, while View Open Positions connects individuals to job openings. And a new Public Profile feature allows individuals to share their profile with employers and other individuals.
- » **More than 180,000 national education programs, plus Colorado's Eligible Training Provider List,** are now listed in the Program Search Model, connecting individuals to a wide variety of education and training programs leading to high-demand, high-wage jobs.
- » **Users have access to Enrich's scholarship and financial literacy tools** through MCJ and at no-cost to users.
- » **A new Community Service Provider widget was added,** connecting individuals to local nonprofits that can provide them the resources they need.
- » **Schools have the ability to create their own Individual Career and Academic Plans** by leveraging the new "Admin" permission set that allows the management of Individuals and Professionals in an organization and the creation of new Outcomes.

The usage of the platform from July 2020 through June 2021 can be seen in Figure 32.



**Figure 32**  
**My Colorado Journey Usage:**  
**July 1, 2020 - June 30, 2021**

Total unique users	31,601
Average percentage of monthly users who are new users	70%
Average percentage of monthly users who are returning users	30%
Total professional users	2,064
Total trainings held	32
Total participants trained	390





## **ACCELERATE**

Actions in the Accelerate phase will focus on expanding current programming that connects individuals with careers.

### **Invest in High-potential Pathways**

- » Connect the supply and demand sides of our Colorado economy through the generation of more high-demand, high-wage credentials and pathways.
- » Increase the wraparound services, coaching, digital tools, and other resources to support individuals pursuing training.

## Career Pathways

In Colorado, industry-driven, competency and skill-based career pathways ensure that education, training, and workforce systems stay attuned and responsive to the needs of the labor market in order to ensure businesses have access to an appropriately skilled talent pipeline and to prepare students and workers with the skills and credentials they need for jobs and careers.

### Energy

Energy career pathways were published on [My Colorado Journey](#) in June 2021. With the passage of HB21-1149, additional career pathways will be added and published on My Colorado Journey in June 2022, including photovoltaic and renewable careers. An overview of the key themes and opportunities that emerged from career pathways discussions with energy industry employers from July 2020 to June 2021 are included in [Appendix C](#).

### Manufacturing

Manufacturing career pathways are currently hosted on a platform other than My Colorado Journey. During FY 2022, manufacturing career pathways will be updated and are scheduled to be published on My Colorado Journey in June 2022.

### Transportation

During FY 2022, transportation career pathways are being developed with industry subject matter experts and will be published on My Colorado Journey in June 2022.

### Agriculture

During FY 2022, agriculture is in the sector development phase, which aims to grow the network of regional sector partnerships within the industry, engage local industry and statewide trade associations, and identify other shared tables. By investing in the sector, it strengthens capacity to lead efforts to address talent shortages. The agriculture career pathways will be built out in fall 2022 through spring 2023 for a June 2023 release on the career pathways section of the [My Colorado Journey](#) platform.

## Expand Earn-and-learn Initiatives

- » Utilize disaster response grants (COResponds and RecoverCO) to the maximum potential to put individuals back to work.
- » Expand apprenticeships in health care, IT, and other fields through
  - Collegiate Apprenticeship Program
  - Apprenticeship Hubs and other activities through the Apprenticeship Expansion Grants

Colorado applied for and received two national dislocated worker grants totaling \$10.6 million from USDOL to address COVID-19 layoffs and business impacts across Colorado. The COResponds Grant places individuals in temporary subsidized jobs and wraparound supportive services, with the long-term goal of permanent employment. The RecoverCO Grant provides employment and training services to displaced workers. As of October 2021, this grant has nearly met its enrollment goal of 800 Coloradans. As local workforce areas creatively work with employers to meet their hiring needs, they are promoting skills-based hiring practices and built-in wage progressions to attract and retain talent while expanding the applicant pool.





## State Apprenticeship Expansion, Equity, and Innovation (SAEEI) Grant: Innovation, Diversity, and Equity in Apprenticeship (IDEA) Grant

On June 22, 2021, through the Employment and Training Administration, Colorado was awarded \$10 million in [State Apprenticeship Expansion, Equity and Innovation \(SAEEI\) grants](#) to bolster states' efforts to expand programming and inclusive recruitment strategies to attract a diverse workforce. Awarded funding was provided to states that demonstrated a commitment to increase their diversity, equity, and inclusion efforts. These grants also aim to develop partnerships with new industries and non-traditional occupations, including industry sectors hardest hit by the pandemic, and align Registered Apprenticeships with other work-based learning opportunities within state education and workforce systems.

The CDLE Office of the Future of Work (OFOW) has met with workforce, education, and industry leaders to identify funding priorities for Colorado's IDEA grant. Efforts from these meetings conclude the \$10 million in grant funding for this 3.5 year program will:

- » Simplify barriers for employers and ease the bureaucratic burden for Registered Apprenticeship adoption;
- » Provide ongoing support for programs focused on diversity, equity, and inclusion (DEI);
- » Design and communicate a clear pathway to upward mobility for students and job seekers; and
- » Create a shared infrastructure for the workforce and education systems by maximizing resources and addressing policy and implementation challenges.

**The program will impact an estimated 800 to 1,250 youth and adults impacted by COVID-19, women, people of color, justice-involved individuals, and individuals with disabilities in Colorado.** Starting in July 2021 and ending in June 2025, apprenticeship scholarships of up to \$3,000 per apprentice will provide supportive services and support on the job learning and related instruction via workforce, K12, college, and outreach to the community.



### Scale Up Grants

CDLE will use a competitive procurement process to select employers and industry groups for the purpose of:

- » Using equity strategies to increase participation in apprenticeship by youth, women, people of color, justice-involved individuals, individuals with disabilities, and individuals impacted by COVID-19 pandemic
- » Expanding or establishing apprenticeship programs in 1) Healthcare/Behavioral Health, 2) IT/Cybersecurity, 3) Education/Public Sector, 4) Advanced Manufacturing, 5) Transportation/Logistics, and 6) Energy/Infrastructure
- » Building or modifying apprenticeship curricula

Contracts will range from \$10,000 to \$50,000.



### Local Area Support

- » Ongoing technical assistance and training plans from consultants to local business services on Registered Apprenticeship (RAP) model to build capacity
- » Build cohort of career services representatives to serve as the RAP point of contact for workforce center and non-workforce center career service professionals (e.g. DVR, high school guidance counselor), and work with consultants/partners/CDLE to ensure that new under-represented populations (non-walk-ins) are served



### Key Grant Outcomes

- » Create sustainable infrastructure for RAP expansion in Colorado
- » Expand the number of apprentices and RAPs
- » Grow diversity in RAP occupations and participants
- » Increase alignment of RAPs with state workforce, education, and economic development systems
- » Enhance marketing and communications around RAP opportunities and DEI strategies



## Strengthen the Referral Network

- » Develop new partnerships between human services agencies and workforce centers to maximize the investment of SNAP employment and training funding and braid resources to best serve individuals eligible for public assistance.
- » Promote and invest in career coaching to guide individuals through their education and career journey.



## Public-private Partnerships

Colorado is a national leader in advancing the Next Gen Sector Partnerships model, and since 2007, more than 30 industry-driven, regional sector partnerships have been launched.

Colorado sector partnerships are critical to effective business engagement that supports economic growth and recovery. Colorado has been intentional about investing in industry-driven approaches to grow Colorado's economy. Since the first Sectors Summit in 2013, local Colorado communities have been developing sustainable sector partnerships where businesses and support partners from healthcare providers to early childhood and education providers come together at a shared table to identify common priorities, set goals to increase competitiveness, and produce results that impact individuals and businesses in their sector, regional communities, and across the state. This coordinated approach has been critical to surfacing innovative solutions to complex challenges that provide benefits for businesses, students, and job seekers

alike. Programs that have been developed by sector partnerships have included apprenticeships, internships, industry tours, boot camps, middle school and high school camps, training programs, and more.

For the 2020-2021 reporting year, sector partnerships were faced with many challenges that included lack of engagement from businesses and public partners, lack of funding, competing business priorities, changes in conveners, and changes in public partner support. As a result, many sector partnerships are working to relaunch to more closely align with the changes in the industry and the economy.

Despite the challenges, in response to the 2021 Sector Partnership Impact Survey, 100 percent of conveners and convening teams recommend participating in sector partnerships; 63 percent of sector partnerships have equity-specific goals; and 60 percent of businesses had new or enhanced ideas, products, and joint ventures. See [Appendix D](#) for the complete 2021 Sector Strategies update.





## Skilled Worker Outreach, Recruitment, and Key Training (WORK) Act

The WORK Act is a public-private collaboration with the purpose to increase awareness, enrollment, and completion of training programs to expand the skilled workforce. Eight grantees were awarded nearly \$3.2 million for the final cycle with a performance period of October 2019 through May 31, 2021. Grantees used the funds to support outreach and recruitment efforts for the training programs and connect new labor force participants with a diverse group of partners and providers across key industries in Colorado.

With the completion of the program in 2021, grantees have reported impressive outcomes from the program to date; more than 56,000 engagements with potential trainee/students, more than 12,000 enrollments with roughly 7,000 completions, and more than 4,000 students employed.

Target audiences for outreach, as required by the legislation, include populations typically underrepresented in their industry, veterans, youth, dislocated workers, justice-involved individuals, and residents of neighborhoods impacted by large infrastructure projects in Denver. Programs must offer a credential, industry- or state-recognized certificate, associate degree, professional license, or similar to program “completers.”

Past grantee successes include curriculum changes to meet industry need, additional certificates offered, program expansion to new communities, increased industry partnerships, and sustainability plans to continue the WORK Act efforts.

See [Appendix E](#) for the final WORK Act report, supplemented by program success stories.

## Regional Economic Complexity and Smart Growth

Colorado's rural workforce faces urgent mobility challenges exacerbated by the COVID-19 pandemic. Areas whose economies are highly dependent on a single industry (e.g., coal mining and/or oil and gas extraction) are challenged with potential job and tax revenue losses as extractive industries are expected to eventually recede. There is substantial risk for workers in rural and urban communities to grow apart as segmented access to employment and infrastructure drives a yawning socioeconomic split.



Changing circumstances, such as those driven by resource depletion or shifts in consumer preferences, can shake the economic foundations of rural communities, decreasing the labor force participation and leaving municipalities without a healthy tax base. Due to these interacting factors, the need for regions to reabsorb disrupted industries is at an all-time high. Through stimulus funding opportunities, the [Office of Just Transition](#) and the CDLE [Office of Future Work \(OFOW\)](#) have come together to strategize on how “single-industry communities” can both expand their economic sectors to incentivize workers to relocate and attract new industries that would benefit from the already existing skills present in that region.

A tool for small and mid-sized cities built largely on a single economic sector, “**smart growth economic development**” refers to a place-based strategy that builds upon existing assets, strengthens communities, and creates long-term value by attracting a range of investments. The Office of Future of Work's forthcoming 2022 Economic Complexity Report is a tailored case study for a Just Transition community. The report will include analysis aimed at building a more resilient economy by providing coal workers access to jobs with economic mobility, and will showcase how Colorado can leverage place-based economic and mobility data to ensure equitable outcomes for the state's COVID-19 recovery initiatives as well as the diversification of rural economies for long-term resilience. As a joint effort with OFOW, this work builds on the Brookings Workforce of the Future Initiative's ongoing [work with the Texas Workforce Commission](#) and applies a Colorado lens to new research to inform policy aimed at improving job quality, increasing workers' economic mobility, and fostering shared prosperity in the region.



As Colorado's economic recovery from the pandemic recession continues at a rapid pace, improved local information will help workers, companies, and policymakers keep pace with the speed of transformation and create growth that provides opportunity. Being prepared at this pivotal moment will better position communities to make strategic, smart growth investments that will increase an area's competitiveness through informed decision-making.

## Colorado Office of Just Transition

Colorado, like the nation, is transitioning away from coal as a fuel for generating electricity. This is due to increased competition from other lower-cost energy sources as well as laws and regulations to protect public health and counter climate change. While this transition is creating many new opportunities, it will also result in the loss of stable, high-paying jobs and economic opportunities in communities where coal is mined and burned to fuel the economy. This transition is likely to last a decade or longer, during which **between 2,000 and 3,000 good, high-skill jobs will be eliminated in a handful of small communities** - communities that will also lose major percentages of their property tax bases and be challenged to reinvent and revitalize themselves to continue to thrive economically after coal.



In 2019, the Colorado General Assembly made a “moral commitment to assist the workers and communities that have powered Colorado for generations” by supporting “a just and inclusive transition” away from coal. It created the Office of Just Transition (OJT) which, among other things, created the [Colorado Just Transition Action Plan](#) with two overarching goals:

- » To help each coal community end up with more family-sustaining jobs, a broader property tax base, and measurably more economic diversity than when this process began in 2019.
- » To help coal workers who are laid off from the coal industry or related businesses secure good new jobs with family-sustaining incomes, and to help them do so without sacrificing their families’ economic security. This includes achieving secure retirements for older workers who may not wish to stay in the workforce.

In 2021, the legislature backed up this commitment with House Bill 21-1290, which appropriated \$15 million to the Office of Just Transition to begin to implement the Action Plan. This included \$7 million specifically for “coal transition worker assistance programs,” ranging from helping individual coal workers with planning and training assistance prior to dislocation to assisting them with apprenticeships and other programs once they have left the coal industry.

While some of these workers may choose to move away from coal communities, one top goal of the Action Plan is to help retain as many workers as possible by providing good opportunities for them to continue to thrive where they are. By definition, one asset all coal transition communities will have is a skilled and capable workforce, and a key goal of the Action Plan is to leverage that asset to help communities start, build, and attract businesses that will create stable, family-sustaining jobs, help diversify local economies, and ensure strong futures for the communities that have contributed so much to Colorado’s economic prosperity.





## Colorado Office of New Americans

With the passage of [HB21-1150](#) Colorado joined more than a dozen states in creating an office dedicated to ensuring the integration and inclusion of immigrants and refugees into our economic, social, and civic lives. This codifies CDLE's [New American Initiative](#), which was created in late 2019. With one in eight workers in Colorado an immigrant, and almost a quarter of Colorado's households living with a foreign-born family member, this work helps prepare Colorado for capitalizing on the skills and talents of newcomers. Immigrant community members face the same challenges as other Coloradans, but these challenges are also exacerbated by additional barriers such as language and unrecognized educational and occupational credentials. Colorado's workforce system has the capacity to address many of these challenges, and CDLE, as well as other state agencies such as the Department of Regulatory Agencies (DORA), are committed to creating the conditions for immigrants to succeed.

- » Colorado is one of very few states to include New Americans as a priority population in its WIOA State Plan and to collect data to ascertain the engagement and success of New Americans in its workforce programs. CDLE intends to support local workforce partners in increasing the number of New Americans served in its programs by 10%, and one of the tools to help them get there is a [New American Toolkit](#). This new resource aims to help front-line staff integrate immigrants into existing services.
- » DORA's Division of Professions and Occupations is also committed to improving the [access of foreign-trained professionals](#) to Colorado-recognized credentials and to ensure policy, where possible, is updated so that Colorado captures the skills of newcomers, such as through [this report](#) on foreign-trained physicians by the Nurse Physician Advisory Task Force for Colorado Healthcare (NPATCH).

## Location-neutral Jobs

As we head into 2022, we are seeing more communities contemplating whether to integrate remote working options into their long-term plans through providing location-neutral positions. Location-neutral work has the potential to deepen employers' talent pools and improve employees' quality of life. It can also diversify local economies, bring additional income to local businesses, and connect communities to businesses and industries outside the region. Rural communities stand to benefit considerably from the widespread adoption of remote working arrangements. A 2021 report from an [EMSI Burning Glass – economicmodeling.com](#) analysis found that anywhere from 14 to 23 million Americans are planning to move as a result of the wider adoption of remote work; many of them are planning on moving from large cities to less densely populated areas.<sup>49</sup>

To attract a larger workforce to Colorado, local and state entities, stakeholder groups, and community-based organizations need to provide more opportunities for current residents, entice those who have left to return, and promote more affordable housing options across the state and/or longer-term rental stays. Each will require its own specific roll-out plan and success metrics, so it's important that a project's goals are clearly defined and understood by everyone involved.

## Location Neutral Employment (LONE) Incentive

In 2019, OEDIT launched the [Location Neutral Employment \(LONE\)](#) program, providing companies with an additional cash incentive for each remote worker employed in an eligible rural county outside the county where the project is based. Each LONE award is capped at \$300,000 per company and is intended to spur an upsurge in remote hiring in rural areas as an additional layer on a competitive [Job Growth Incentive Tax Credit](#) award.

This year, the LONE program has gained further momentum and has partnered with [Pax8](#), a homegrown cloud distribution technology company launched in 2020 and based in Greenwood Village, Colorado. Through the LONE program, Pax8 grew its rural initiative faster and broader than anticipated. The pandemic and the resulting remote work environment accelerated the initiative at Pax8 along with the strategic partnerships it had established with community leaders throughout the state. The company was able to hire individuals with the required technical training and experience needed in communities across the state. An added benefit is that Pax8 is one of the only companies offering IT career opportunities in these areas, decreasing competition and creating a great avenue for recruitment. It also allowed them to expand their service and technical support teams, enhancing the partner experience.

Rural hiring also increases diversity within Pax8, as they have been able to attract people from different backgrounds, including people of color, veterans, and LGBTQ individuals. In addition to the benefit of a richer company culture, diversity has proven to be a critical component of the company by positively impacting the business's bottom line. [Studies](#) show that a diverse workforce creates more value, provides multiple insights and perspectives, and offers different approaches to typical business situations. Companies use these methods to develop unique plans and solutions, gaining a competitive market advantage.<sup>50</sup>









Figure 33 shows the top five posted occupations using postings classified as remote from August 2020 through August 2021. Software developers and software quality assurance analysts and testers, insurance sales agents, and computer occupations top this list for the second year in a row. Since the fourth quarter of 2020, customer service representatives occupations have decreased across job seekers in Colorado, bumping down to fifth place and being replaced by computer occupations, with 6,211 unique job postings in 2021. Most of these jobs require technical training and expertise, further supporting the need for upskilling and reskilling to fit our current talent pipeline needs. Marketing managers occupations gained one place this year relative to last year's levels, ranking fourth overall in the state with 5,433 total unique postings between August 2020 and August 2021.

**Figure 33**  
**Aug. 2020 - Aug. 2021 Top Five Posted Remote Occupations**

Occupation (SOC)	Unique Postings
Software Developers and Software Quality Assurance Analysts and Testers	16,169
Insurance Sales Agents	7,501
Computer Occupations, All Other	6,211
Marketing Managers	5,433
Customer Service Representatives	5,239

Source: EMSI - Burning Glass 2021.2 Data

Figures 34 and 35 list the top five essential and technical skills associated with job postings that are classified as remote. For the most part, essential skills are similar to those of all occupations, but the technical skills are different for remote occupations and show a focus on computer and mathematical occupational skills. Agile methodology, software engineering, Python, and software development show up in remote occupations in place of nursing, merchandising, auditing, and selling techniques when looking at all occupational postings.

**Figure 34**  
**June 2020 - June 2021 Top Five Essential Skills for Remote Occupations**

Essential Skill	Frequency in Posting
Communications	36%
Leadership	36%
Customer Service	34%
Management	32%
Sales	25%

Source: EMSI - Burning Glass 2021.2 Data

**Figure 35**  
**June 2020 - June 2021 Top Five Technical Skills for Remote Occupations**

Technical Skill	Frequency in Posting
Agile Methodology	9%
Software Engineering	8%
Python (Programming Language)	7%
Software Development	7%
Accounting	7%

Source: EMSI - Burning Glass 2021.2 Data

As Colorado continues to move closer to a full economic recovery, more and more companies have adjusted to a "new normal" of standard practices that include more part- and full-time remote and hybrid work opportunities. **Remote job postings have experienced a surge in annual growth**, with a total percentage change of +124 between September 2020 and September 2021, adding an average of 17,368 jobs with flexible locations.

## Remote Work Initiative

To ensure Coloradans are prepared for the evolution of remote work, the CWDC partnered with the Office of Economic Development and International Trade (OEDIT), the Economic Development Council of Colorado (EDCC), and the Office of the Future of Work to launch a remote work initiative.

This multi-tiered initiative will equip workers with the skills needed to succeed in remote work environments. It will help strengthen Colorado's ability to attract businesses, secure talent, and retain a location-neutral workforce. The initiative includes a remote work certification, incentives for businesses to hire remote workers, and support for communities to enhance the necessary infrastructure for a remote workforce. The initiative provides an opportunity to increase access to employment, particularly for rural workers who will now have access to jobs anywhere in the state.

The [Remote Work Initiative website](#) serves as a hub for remote work information across the state and will highlight innovative approaches and best practices and share resources for individuals, employers, and communities to adopt remote work strategies.

### Remote Work Certificate

Launched in 2021, the CWDC, CDLE, and OEDIT enlisted the online expertise of CSU Global to help prepare workers and employers to thrive in a virtual team environment.

[Two separate online certificate programs](#) were designed to help workers and employers alike prepare to succeed in a virtual workplace environment.

- » Worker certificates provide participants with strategies for successful productivity, collaboration, and advancement within remote and hybrid work environments.
- » Employer certificates equip managers and leaders with the best practices, tools, insights, and skills needed to effectively lead remote individuals and teams in any industry.

These certificates will keep Colorado's workforce connected, productive, and prepared for evolving work environments.

## "Finish What You Started"

On April 6, 2021, CDHE together with the Colorado Opportunity Scholarship Initiative (COSI), and One Million Degrees (OMD) announced the launch of "[Finish What You Started](#)," a two-year pilot program providing wraparound support services for low-income Adams County adults (aged 25+) to obtain college credentials or degrees. OMD will work closely with COSI, community-based organizations, and local college partners to recruit and enroll 150-200 students and measure outcomes, persistence towards degree completion, and improved earnings in the workforce. The overarching goal is to expand the program statewide as a part of Colorado's plan to achieve 66 percent credential attainment.

"Finish What You Started" is structured as an outcomes-based contract with upfront funding to deliver services and bonus payments tied to successful re-enrollment, persistence, and completion outcomes being reinvested into the program over time. CDHE is among the first state higher education agencies nationwide to use the Pay for Success (outcomes-based contract) model, partnering with Third Sector, who collaborates with government agencies to develop innovative contracts that align policy, dollars, data, and services to improve social outcomes by explicitly funding effective supportive services.

Recruiting for the program began in May 2021, combining financial support with additional services such as career planning and student coaching, connection to community and public resources (e.g., transportation assistance, childcare centers, legal aid services, housing support, etc.), and career connections. The initiative is geared towards serving students of color and first-generation students with some college education, but who have not completed their academic programs, encouraging them to re-enroll in postsecondary education and graduate.

## COVID-19 Response - From Viral Onset to Pandemic Recession Emergence

As variants continue to spread, it is helpful to be aware of the state resources provided to all Coloradans in response to the COVID-19 pandemic. From the pandemic's onset, CDLE and the workforce system across the state have worked together with community-based organizations and local, federal, and other state government entities to develop effective solutions to help Colorado [build back stronger](#).

These efforts, in large part, focus on the following goals:

- » Mitigate job loss and provide aid to job seekers and employers;
- » Create public awareness of changing policies and new resources;
- » Provide financial assistance to those hit hardest by the pandemic's impacts;
- » Manage the massive influx of unemployment insurance claims associated with the economic disruption of the virus; and
- » Create a feasible roadmap for a speedy economic recovery that is tailored to meet the needs of each region across the state.

In 2021, state agencies, local governments, legislatures, community-based organizations, stakeholder groups, and workforce councils collaborated with Governor Polis on how to utilize state and federal funding resources for stimulus proposals to expedite the state's economy out of the pandemic recession. The [Colorado Recovery Plan](#) is the roadmap of this effort. This package of legislation was designed to speed our recovery and rebuild a more just and resilient Colorado where every Coloradan has a fair shot to thrive, and no one is left behind. The plan looked comprehensively at where state dollars can have the greatest impact. It considers prior federal stimulus investments and the fact that this pandemic has impacted each sector of our economy and each part of our state differently.







Developed with bipartisan input from lawmakers and community partners across the state, this plan prioritizes one-time investments, like broadband infrastructure and affordable housing development, that will have the greatest stimulative effect and benefit the hardest hit communities.

The five high-level goals driven to meet the challenges at hand include:

- » Strengthening small businesses;
- » Revitalizing our infrastructure;
- » Supporting Colorado families;
- » Investing in rural Colorado; and
- » Developing our workforce.

By investing in our roads, schools, workers, and businesses, we will create good-paying jobs and keep Colorado competitive. An innovative economic gardening proposal will help medium-sized businesses that are poised to take off, grow, and expand. A startup loan fund will break down barriers to capital for entrepreneurs eager to meet needs in communities where businesses have closed.

This package has allocated funding targeted to boost agriculture supply chains, increase access to childcare, and build the infrastructure of tomorrow. It aims to make communities more livable by increasing access to affordable housing and revitalizing main streets and downtowns. It also prioritizes Colorado's future by investing in renewable energy, resource conservation, and environmental protection.



## Colorado Jumpstart

In 2021, CDLE launched [Colorado Jumpstart](#), an incentive program that offered eligible unemployed Coloradans financial assistance up to \$1,600 if they returned to the state's workforce full-time between May 16 and June 26, 2021. By early June 2021 (a little less than three weeks since the program's launch date) the initiative received roughly 8,000 applications.

Funded by federal dollars from the Coronavirus Relief Fund, the initiative was part of a 2021 executive order signed by Governor Jared Polis as restrictions eased and businesses struggled to bring their staff back. Since June 2021, a handful of states have announced similar initiatives to the Colorado Jumpstart program, as a national labor shortage across service industries left many businesses reeling.

## Services to Support Individuals in Upskilling and Education

Supportive services such as behavioral health resources, child care, and financial assistance can reduce barriers to help Coloradans in their pursuit of upskilling and education opportunities.

### Colorado's Public Workforce System

The federal [Workforce Innovation and Opportunity Act \(WIOA\)](#) funds programs that provide employment services, education, and training to re-enter the workforce. These programs focus on employment and reemployment services for youth and adults who have not been in the labor force, are unemployed, underemployed, special populations, veterans, incumbent workers, and those in the gig economy. These programs are delivered through county- and state-run workforce centers. WIOA also funds services to support individuals in completing education and training programs.

Collectively, these programs deliver robust services for individuals most in need of support to obtain training, complete their high school equivalency degree, or discover how disability and work can co-exist. Colorado's public workforce system served 9,385 employers and 376,593 individuals in PY20, with 62 percent of job seekers successfully retaining employment one year later. The total statewide economic impact through wages returned to the economy was \$228,835,710.

The Colorado [2020-2023 WIOA State Plan](#) went into effect July 1, 2020. The development of the plan was a collaborative effort of local and state partners. The four goals identified within the plan and their associated strategies emphasize the importance of collaboration among partners and programs in order to provide excellence in serving the citizens of Colorado.

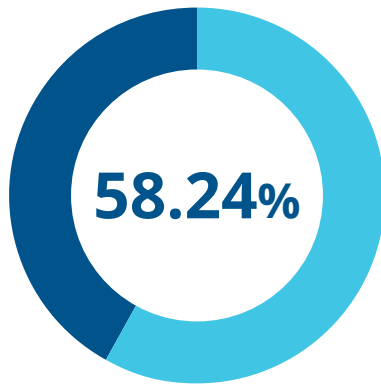
[Appendix F](#) is the full annual report for activities under WIOA during PY 2020. The snapshot on the following page highlights the results of services delivered under Titles I and III of the Act calculated by Colorado's Workforce Intelligence Data Expert group.

# IN COLORADO



## 376,593

**JOB SEEKERS UTILIZED**  
THE PUBLIC WORKFORCE  
SYSTEM IN PY2020



**OF JOB SEEKERS WERE**  
SUCCESSFULLY EMPLOYED

with 61.72% successfully retaining  
employment one year later

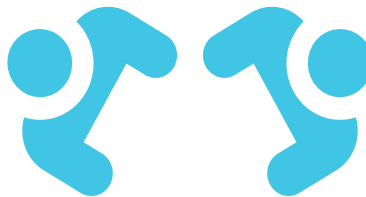
## 9,385

**BUSINESSES**  
WERE SERVED BY THE PUBLIC  
WORKFORCE SYSTEM IN PY2020

788,973 JOBS POSTED



**\$228,835,710**  
**IN WAGES RETURNED**  
TO THE ECONOMY



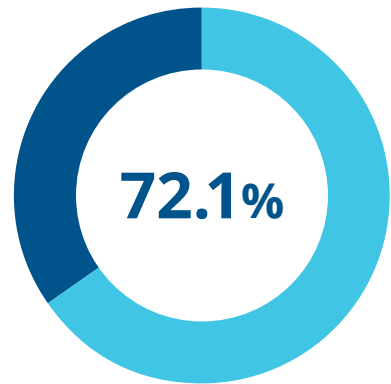
## 93,563

**JOB SEEKERS RECEIVED**  
IN-PERSON SERVICES THROUGH  
OUR STATEWIDE NETWORK OF  
WORKFORCE CENTERS, SUCH  
AS RESUME ASSISTANCE AND  
INTERVIEW SKILLS IN PY2020



## 5,032

**INDIVIDUALS WERE**  
ENROLLED IN MORE EXTENSIVE  
TRAINING PROGRAMS IN PY2020



**OF THOSE INDIVIDUALS**  
WERE SUCCESSFULLY EMPLOYED

with 75.4% successfully retaining  
employment one year later



### Employment Support and Job Retention Services Program

On May 28, 2019, Governor Jared Polis signed into law the Employment Support and Job Retention Services Program (HB19-1107), creating the Supportive Services Program at CDLE. The program provides up to \$400 in support services to Colorado job seekers or newly employed individuals who are working on employment goals and may not qualify for or have access to other resources. Administered by Goodwill of Colorado, the program launched in January 2020 and is authorized through June 30, 2022. Goodwill entered into Memorandums of Understanding with service providers in 60 counties across the state including workforce centers, departments of human services, community resource centers, and non-profit organizations. The service providers determine eligibility, distribute funding, and are reimbursed by Goodwill.

In the first 18 months of operation, the Supportive Services Program provided funding to 1,027 eligible individuals, and 93 percent of service providers reported that the program had a high or extremely high impact on the long-term success of eligible participants.

#### Top Five Eligible Expenses:

- » Other (including laptops, training, clothing, scrubs and shoes, drug tests, background checks and work supplies): 40 percent
- » Emergency Housing: 20 percent
- » Transportation/Vehicle Repairs: 14 percent
- » Utility Payments: 9 percent
- » Fees Related to Employment: 7 percent

### Colorado Tutoring Corps Initiative

With funding from the [Governor's Emergency Education Relief Fund \(GEER II\)](#) program, AmeriCorps members across the state committed to a 10-month term of service this year, gaining experience in education and youth development while earning a modest living stipend and an education award to pay back student loans or further one's education.

Three pillars of this initiative center on the following roles:

- » Colorado Reading Corps Tutor: Help students become better, more confident readers by providing evidence-based support in a preschool classroom or one-on-one with K-3rd-graders;
- » Math Corps Tutor: Help 4th-8th-graders who are struggling in math by providing evidence-based support in small groups; and
- » Corps for a Change Re-Engagement Specialist: Provide support and resources for high school students and their families with a focus on reducing dropout rates and increasing graduation rates.

[Serve Colorado](#) and [Colorado Youth for Change](#) partnered to receive 2021 funding to create the Colorado Tutoring Corps Initiative, expanding their tutoring and student support programs in the wake of the educational turmoil created by COVID-19. The Colorado Tutoring Corps Initiative will place 470 AmeriCorps members in communities across the state to provide evidence-based math and reading tutoring interventions to pre-K through 8th grade students and provide student and family engagement interventions to high school students. The program expects to serve 10,000 students in over 26 school districts in the 2021-2022 school year.

### Lives Empowered

On Dec. 4, 2018, the CWDC became the first state government entity to receive a \$4 million dollar investment from Walmart to support workforce development through the [Lives Empowered initiative](#). The CWDC regranted the funding to support local and regional communities to launch retail sector partnerships committed to piloting upskilling training for incumbent retail workers. Case studies on communities' work have been published, and a statewide framework for upskilling will be published in early 2022. The framework will be a tool for other communities and industries to help increase economic mobility and skill development for frontline workers, many of whom have the skills to move up but are hindered from doing so because they lack the education or credentials required.

## PREPARE

Actions in the Prepare phase focus on upskilling and reskilling individuals for the future of work.



### Increase Credential Attainment

- » Increase affordability of postsecondary education through the identified strategies in the CDHE Strategic Plan and the [Roadmap of Containing College Costs and Making College Affordable](#).
- » Improve credentialing, by completing a state definition and inventory of quality non-degree credentials and promoting the acquisition of those to individuals in both the K-12 and postsecondary education environments.
- » Promote credential completion by connecting individuals with some college credit but no degree to the resources necessary to return to education programs.

### Increase Skill Development

- » Increase digital access through the Office of the Future of Work's plan to enhance digital literacy and close the divide, which also requires scaling access to broadband.
- » Invest in reskilling, upskilling, and next-skilling workers.
- » Develop and implement the Education Strategic Plan and Work-based Learning Blueprint.

## Postsecondary Credential Attainment and Affordability

As of fall 2021, nearly 75 percent of Colorado jobs require some type of postsecondary credential, with 90.7 percent of Colorado's Tier 1 Top Jobs requiring a minimum of a postsecondary credential. The latter is an increase from the [2020 Talent Pipeline Report](#) of 1.9 percentage points.

Despite being one of the most educated states in the country (ranking second to Massachusetts in 2021 in terms of the share of associate degree holders, college-experienced adults, and bachelor's degree holders), Colorado sends 56 percent of its high school seniors to a college, university, or certificate program, and roughly 50 percent of students submit a FAFSA application — a major source of financial aid and a key indicator of student success.

In response to these workforce demands, CDHE together with the Colorado Commission on Higher Education adopted the [Colorado Rises Strategic Plan](#), which includes four urgent strategies that drive toward a thriving Colorado community and economy: Increase Credential Completion, Erase Equity Gaps, Improve Student Success, and Invest in Affordability and Innovation. In particular, by closing equity gaps – ensuring all Coloradans have a pathway to postsecondary education and success in life – we can achieve the stated goals. Colorado's stark equity gaps illustrate that we're simply not doing enough to remove barriers to postsecondary education for all Coloradans whose talent and contributions are foundational to Colorado's future.

As of October 2021, the total share of credential attainment across the state is at 61 percent compared to the goal of 66 percent by 2025. Additionally, CDHE remains committed to advancing affordability through institutional cost containment and innovative practices. The [Roadmap to Containing College Costs and Making College Affordable](#) outlines practices ranging from reducing debt to additional supports that help students complete higher education to institutional practices that save costs, such as comprehensive reviews and more transparency for return on investment and outcomes.

By removing financial barriers for students to achieve a credential or degree while aiming at improving access to education and training opportunities, Colorado can increase the number of students who complete their programs and enter the workforce with a degree or competitive skills.

The Equity Champions Coalition (ECC) seeks to advance statewide policy and inform higher education support and services for Colorado's most vulnerable students with the goal of eliminating gaps. The Coalition serves as advisors to CDHE by developing a collective vision and strategic direction to guide the work of the Office of Educational Equity. The ECC also works alongside CDHE to guide the implementation of high-impact strategies across institutions, collaborate on best practices, collect and analyze data, and identify necessary work to continue to close gaps.







### Colorado Opportunity Scholarship Initiative (COSI)

In the spring of 2020, the [Colorado Opportunity Scholarship Initiative \(COSI\)](#) awarded additional grants to support COVID-19 displaced workers. The two-year grants began in July 2020 with an annual award of approximately \$75,000. The funds must be used to hire or modify an existing position to provide programming/services in specific focus areas that will support students in accessing higher education, successful persistence, completion, and transitioning to the workforce.

Each grant sets specific goals within the two-year timeline (2020-2022), including:

- » Enrollment - Targeted enrollment of displaced workers.
- » Persistence - Continued enrollment each semester.
- » Completion - 150 credential or degree completions within the two-year grant timeline.

The grant process requires applicants to prioritize new or re-engaged students who lost their jobs due to COVID-19. The students must enroll and complete, within the grant term, a certification or degree program that aligns with Colorado Top Jobs.

Prior to the displaced worker support, COSI awarded six grants in spring 2020. The two-year grants will each support 900 credential or degree completions in total. In the first five years, \$47 million has been awarded (leveraging \$28 million in additional local and private dollars) to serve more than 75,000 students across its programs. Internal studies using the latest available data (2018-2019) show most COSI students enrolled in the Community Partner Program Grant (CPP) program persist at rates up to 19 percent higher than their peers from similar socioeconomic and ethnic backgrounds. Additionally, as of spring 2019, 1,869 students supported by COSI community partner programs had completed a postsecondary degree.

In the spring of 2021, the COSI board approved 40 proposals that will provide more than \$3 million in scholarships for Colorado students. The COSI board awarded \$3,012,782 to match locally funded scholarship dollars one-to-one during the third and final round of awards for the 2020-2021 fiscal year. This funding will support more than 1,740 students across the state. The scholarships are multi-year awards ranging from \$1,000 to \$10,000, depending on program and financial need, and most students will receive the scholarship within the next two to four years.

The 40 awards represent 29 counties (\$2,450,838), 10 institutions of higher education (\$461,944), and one workforce grant (\$100,000). In total for the fiscal year, COSI awarded more than \$7.5 million which, when combined with matching dollars, will result in \$15 million in scholarship funds to students across the state.

In late September 2021, COSI awarded \$15 million to 21 providers across the state for a program aimed at getting Coloradans back to work after the pandemic. The [Back to Work](#) grant requires providers to prioritize workers affected by the COVID-19 pandemic and provide participants with wraparound and financial support to access and complete their credential or degree within the grant term.

The [Colorado Recovery Plan](#), explained in depth in [Appendix G](#), expanded COSI's Displaced Worker Grant, initially deployed in spring 2020. In addition, [Ready to Rise](#), a campaign funded by [HB21-1264](#), aims to raise awareness of the opportunities available to individuals through the Colorado Recovery Plan and the \$147 million investment through legislation and other bills focused on addressing the economic impacts of the pandemic through connecting individuals to work, education, and training.

## Early Childhood Education

Investing in early childhood education is essential to supporting children to develop to their full potential, for families to be able to work, and for our local and state economies to thrive. Colorado has taken tremendous steps forward to advance a unified system of early childhood programs and services that will reach far into the future. In November 2020, Colorado voters overwhelmingly passed [Proposition EE](#) (referring to passed legislation that requires nicotine products to be taxed at 62 percent of their market list price starting July 2027), which allocates significant funding for a universal, voluntary preschool program for all children the year before they enter kindergarten, beginning in fall 2023.

Then in early 2021, stakeholders rallied around a recommendation from the Early Childhood Leadership Commission to support the creation of a state department that could implement the new preschool program as well as better align services for families. The Colorado legislature passed [HB21-1304](#) to create a new state Department of Early Childhood (DEC) to coordinate a unified early childhood system and ensure the equitable distribution of resources and programming, including the new universal, voluntary preschool program. This new department will launch on July 1, 2022.

Stakeholders from across Colorado are working to develop a [transition plan](#) for the new department as well as create recommendations to implement the new universal preschool program. Fundamental to this work is the need to continue to recruit, retain, and support a high-quality early childhood workforce, which was hit hard by the pandemic. This is a critical area of focus as we look to the future, and we look forward to partnering with communities across the state to ensure that Colorado develops and maintains a strong, well-supported, and diverse early childhood workforce.



## Career Development Incentive Program (CDIP)

One way for high school students to gain career competencies is to obtain an industry-recognized credential. The [Career Development Incentive Program \(CDIP\)](#) provides financial incentives for school districts to promote students in grades 9-12 to complete qualified industry-recognized credentials (e.g., internships, residencies, pre-apprenticeships or apprenticeships, Advanced Placement courses). Participating districts or charter schools can receive up to \$1,000 for each student who completes one of the qualified programs successfully. For a list of approved industry-recognized credentials, see [Appendix H](#).

In the 2020-2021 school year there were 49 participating school districts, over 4,800 credentials reported, and almost \$4.4 million dollars funded. Completing industry-recognized credentials while still in high school helps students save money on education and training post high school and helps them transition into the workforce. See [Appendix I](#) for the complete 2020-2021 HB15-1170 PWR Coordinator update.



# 04

## RECOMMENDATIONS





State agencies and affiliates of the TalentFOUND Network recognize the importance of the implementation of the one-time stimulus funding opportunities made possible by the federal and state response to build back stronger. The strategies referenced above emphasize the importance of social and human capital for economic recovery and sustainability. Additionally, substantive progress was made through the passage of bills in the 2021 Legislative Session, and updates on key pieces of legislation can be viewed in [Appendix G](#).

The talent pipeline in Colorado is comprehensive, and workforce development encompasses all manner of education, upskilling, and support for all current and future workers, regardless of age. An effective talent and workforce development ecosystem must therefore support career-connected education and training for the population now learning in full-time education and for the three million Coloradans currently working throughout the state.

As we move into the 2022 Legislative Session, the following priorities and recommendations can further strengthen the talent pipeline by focusing resources and policy change on all components of the system. Additionally, legislators and local policy makers are encouraged to look at the reports coming from interim committees authorized in the 2021 Legislative Session, such as the Student Success and Workforce Revitalization Task Force, and to consider those priorities alongside the recommendations in this document to guide the implementation of new concepts.

## 2021 RECOMMENDATIONS

### Enhance opportunities for employers to implement talent development strategies

- » **Recommendation:** Enhance the promotion of the Skill Advance Colorado program and the other skills training/workforce development courses through dedicated staff in all regions of the state. The program has shown strong success and outcomes, serving 14 counties, 90 businesses, and more than 4,000 learners during state fiscal year 2021.
- » **Recommendation:** Increase marketing and outreach to companies to raise awareness and understanding of skills-based hiring and work-based learning opportunities, and provide financial support for these efforts as needed.







### Strengthen critical industries so all businesses can thrive

As discussed in the Demand section, specific industries need to be supported so that more individuals can actively engage in the labor force.

- » **Recommendation:** Invest in a tiered and expanded behavioral health workforce that includes paraprofessional staff, including peer specialists and peer navigators. A statewide initiative to train the workforce could include a state-run training and certification, a reimbursement avenue for the paraprofessional workforce, and processes for supervision and monitoring of the workforce, which is often delegated to the providers. The new Behavioral Health Administration would be responsible for working with partners such as CDHS, HCPF, and others to support implementation of this recommendation and to track the effectiveness of these models.
- » **Recommendation:** Implement strategies to expand a diverse early childhood workforce and streamline workforce pathways to ensure that high quality training opportunities articulate into transferable college credits to allow the early childhood workforce to apply experience and training toward further credential and degree attainment. The strategies pursued should be inclusive of providers; leadership positions; and greater consultative roles that support the early childhood workforce such as coaches, early childhood mental health consultants, home visitors, and related roles.

Additionally, functionality should be developed in the Professional Development Information System (PDIS), the early childhood workforce registry in Colorado, to allow for consultative and other professionals to move between early childhood roles in a smooth manner to retain the expertise of these professionals in the greater early childhood workforce. These efforts should be combined with an assessment of early childhood workforce compensation concerns to understand how that contributes to early childhood workforce recruitment and retention issues. The Office of Early Childhood will collaborate with the Departments of Higher Education, Labor and Employment, and Education as well as the Colorado Community College System and others to achieve these goals.



### Structure supports necessary to enhance the participation of targeted populations in the labor force

As highlighted in the Supply section, dramatic shifts have occurred in labor force participation for specific demographic groups.

- » **Recommendation:** Build into new policies both a requirement that all new and existing workforce development and existing higher education programs specifically market to, and reach out to, underserved businesses and individuals, and allocate resources necessary to conduct appropriate outreach.
- » **Recommendation:** Increase funding for non-degree credentials that business needs through state-based financial aid or another funding source, so that individuals have more access to training that will lead to career advancement.
- » **Recommendation:** Prioritize the incorporation of a transferable skills training curriculum into academic institutions at the secondary and postsecondary level to increase the market value of degrees and credentials.
- » **Recommendation:** Expand the use of Fair Chance hiring, coupled with skills training in cooperation with the Department of Corrections or nonprofits operating in pre-release and post-release programs, to help ensure the successful integration of our incarcerated population back into their communities.



# 05

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## APPENDICES





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Appendix B: [Colorado Top Jobs by Region](#)

Appendix C: [2020-2021 Career Pathways Annual Report – HB 15-1274](#)

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**2021 Colorado Talent Pipeline Report**

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