





2022 MONTANA LABOR DAY REPORT

September 2022

STATE OF MONTANA

Greg Gianforte, Governor

MONTANA DEPARTMENT OF LABOR & INDUSTRY

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EXECUTIVE SUMMARY

On Labor Day 2022, the state is experiencing a booming economy, with more Montanans working than ever before. Businesses have continued to thrive, grow, and increase production in the face of worker shortages by increasing productivity and raising wages to attract workers. Tight labor markets will continue to be a challenge to economic growth in Montana. Highlights include:

- In 2021, Montana added 19,568 jobs the most jobs added in one year ever measured.
- Since February 2020, Montana experienced the 5th fastest total employment growth (4.4%) and 3rd fastest payroll job growth (3.8%) among states.
- In 2022, unemployment rates fell to 2.3%, the lowest ever observed, with the number of unemployed Montanans also hitting a record low of 13,097.
- Competition for Montana's workers and increases in productivity led to significant increases in wages. Montana's average annual wages grew 5.9% in 2021, the 10th fastest in the nation.
- Montana's average annual wage was \$51,331 in 2021, the 45th highest among states and Montana's highest ranking in over 20 years.
- Wage growth outpaced inflation in 2021, for 1.3% real growth in average annual wages.
- Montana was one of 7 states to accelerate labor productivity through the pandemic.
- Montana's 2021 GDP grew \$2.4 billion in 2021, for the 3rd fastest pace of growth among states.
- The 6.7% growth in 2021 was nearly four times faster than the pre-pandemic average.
- Annual real GDP growth in Montana was the fastest in the state since 1980.
- Montana's entrepreneurial spirit shined as a record 4,697 new establishments were added in 2021, over 1,200 more than the previous record set in 2020.

Rapid economic expansion has brought prosperity, but fast growth creates challenges. For businesses, finding workers in a tight labor market continues to be difficult, while households have seen their budgets strained by inflation, particularly for housing and energy costs.

- In the second half of 2021, monthly unfilled job openings rose above 40,000 per month and have sustained at that level ever since.
- Worker quits have contributed to the high number of job openings, sustaining nearly 20,000 per month in 2022.
- Retirements of baby boomers is driving the worker shortage, with the number of retired Montanans reaching 200,000 in 2022.
- Wage increases have lured more workers into the labor force.
- Higher entry-level wages have increased labor force participation rates for Montanans under 25, up to 62% compared to only 57% in 2015.
- Workers are moving to Montana for jobs. Domestic in-migration has increased Montana's population by 1.8%, the 3rd fastest among states.
- Increased migration has also created more demand for housing, leading to increased prices and reduced affordability.
- Montana's home prices increased 44.3% between the first quarters of 2021 and 2022, the 6th fastest among states. The U.S. average was 34.3%.
- In 2021, payroll construction jobs only just surpassed 2007 levels, suggesting an investment in the construction workforce is necessary.

Montana's economy has shown strong expansion in the last two years. Although rising housing and gasoline costs have dampened economic enthusiasm, Montana's labor market has continued to grow. Workers continue to enjoy plentiful opportunities for high-wage jobs and businesses continue to thrive. Through productivity improvements, investments in worker training, and tapping into underutilized labor sources, Montana's economy will continue to flourish.



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A MESSAGE FROM COMMISSIONER ESAU

Dear Governor Gianforte,

I am proud to submit to you the Montana Department of Labor & Industry's 2022 Labor Day Report, our annual report on the state of Montana's economy over the last year. The Montana economy has experienced record-breaking growth under your leadership, with historically low unemployment rates, employment growth over three times the long-term average, growing entrepreneurialism, and strong wage growth for our workers.

Montana's economy exploded in 2021 with one of the strongest recoveries across the nation. More jobs were added in 2021 – 19,600 jobs – than in any other year in history. Put in perspective, an average of only 6,800 jobs were added annually in the five years prior to the pandemic. Annual real GDP growth ranks 7th among states, expanding at 6.7% – the fastest growth experienced in the state since 1980.

An essential ingredient in this economic growth has been a skilled and experienced workforce. More Montanans are working than ever before, and the productivity of our labor force continues to grow and expand. The Montana Department of Labor & Industry is proud to continue our work to empower and train Montana workers to take advantage of our growing economy.

Thank you for your continued dedication to strengthening our economy, and your commitment to the prosperity of Montana's businesses and workers.

Sincerely,

Laurie Esau

Commissioner

Montana Department of Labor & Industry.

LABOR DAY REPORT INTRODUCTION

Montana posted a record-breaking year of economic growth in 2021. Unemployment rates were at or near all-time lows. Employment growth in 2021 was the fastest ever recorded. Growth in total output, as measured by real GDP, grew at nearly three times the pace seen prior to the pandemic, with the 7th fastest growth among states. More Montanans are working than ever before, and worker wages are rising quickly. Montana's record-breaking growth in 2021 increased the economic prosperity of Montana's workers, business owners, and their families.

Although the rapid economic growth in 2021 has been positive for Montana's workers and businesses, it has also brought some growing pains. Large nationwide increases in the prices for housing, fuel, and other goods have arisen from from high federal stimulus spending and rising consumer demand that has outpaced the supply chain. That supply chain has been partially constrained by worker supply concerns, with many businesses struggling to find workers. Even though more Montanans are working than ever before, an aging population has translated into slow growth of our labor pool. On Labor Day 2022, Montanans find themselves in a booming economy that is pushing the boundaries of possibility.





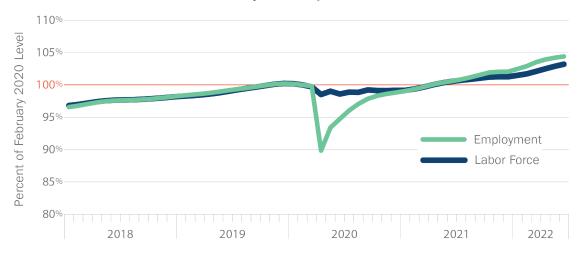
SECTION 1:

MONTANA'S RECORD-SETTING YEAR

A Competitive Job Market

In 2021, Montana's economy rolled from a recovery into a strong expansion. The widespread availability of the vaccine, lifting of pandemic restrictions, and consumer activity drove a significant increase in hiring activity as businesses and workers looked to get back to their pre-pandemic lives. Total employment in Montana rose quickly, pushing unemployment rates down. By May 2021, Montana's total employment surpassed its pre-pandemic peak (**Figure 1**). Out of all fifty states, Montana experienced the 5th fastest total employment growth (4.4%) and 3rd fastest payroll job growth (3.8%) since February 2020.² In 2021, Montana added 19,568 jobs – the most jobs added in one year in the history of the data series. To put this rapid growth into historical perspective, average employment growth in Montana during the five years of expansion prior to the pandemic was a steady pace of 6,832 jobs added per year. Montana's 2021 job growth was nearly three times that pace.³

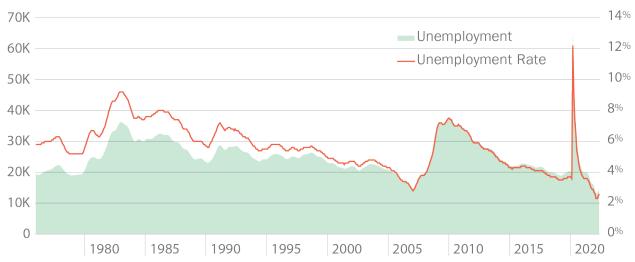
Figure 1:Montana Labor Market Recovery and Expansion



Source: US Bureau of Labor Statistics and Montana Dept. of Labor and Industry, Local Area Unemployment Statistics

Montanans responded to the increasing economic opportunity by returning to the labor market. Like employment, Montana's labor force reached pre-pandemic levels by April 2021. Through the first half of 2022, Montana's labor force had over 17,000 more workers than it did before the pandemic. Increasing wages incentivized many Montanans to rejoin the labor force while domestic in-migration brought more workers to Montana. This rapid growth in the labor force has not kept up with rising worker demand, however, leading to record lows in the number of unemployed workers and nearly two vacant job openings for every unemployed person. By March and April of 2022, unemployment rates had fallen to 2.3%, the lowest observation since the data began being collected in 1976. The number of unemployed workers dropped as low as 13,097, also a new low.

Figure 2: Montana Unemployment and Unemployment Rate 1976-2022

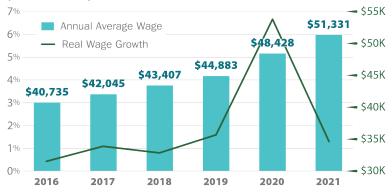


Source: US Bureau of Labor Statistics and Montana Dept. of Labor and Industry, Local Area Unemployment Statistics

Record low unemployment rates spurred investments in productivity and competition for workers, each contributing to increased worker wages. Montana's productivity rose 1.7% in 2021, being one of only 7 states with accelerating productivity gains through the pandemic.⁶ Montana's average annual

wages grew 5.9% in 2021, the 10th fastest increase in the nation and the second fastest year in history (behind 2020).⁷ With an average annual wage of \$51,331 in 2021, Montana ranks 45th among states, the highest ranking since 2000.⁸ Fast growing wages have been a boon to Montana workers, especially as inflation has cut into purchasing power. In 2021, Montana's average annual wage had real growth of 1.3% as it outpaced accelerating inflation.

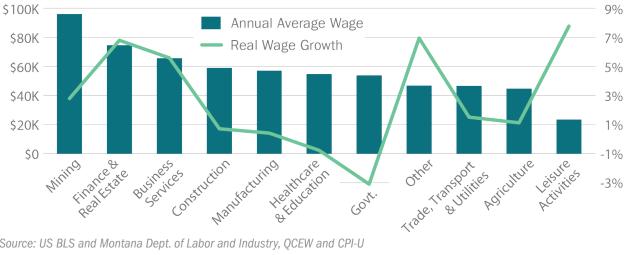
Figure 3: Montana's Average Annual Wage and Real Growth (2016-2021)



Source: US BLS and Montana Dept. of Labor and Industry, QCEW and CPI-U

Real growth in average annual wages was experienced across nearly all industries in Montana (Figure 4), including within those that pay wages both above and below the statewide average. The fastest growth in average wages was in leisure activities, where real wage gains were over 7%. Workers in this industry benefitted significantly from employers increasing hourly wages to recruit workers. Two other industries with strong real wage gains were finance and real estate with 6.3% real growth and business services with 5.2% real growth. For finance and real estate, a hot housing market contributed to rising wages in the industry while rising wages in business services is in part a reflection of high wage remote work becoming more prevalent in Montana.

Figure 4: 2021 Average Annual Wage, with Growth, by Industry



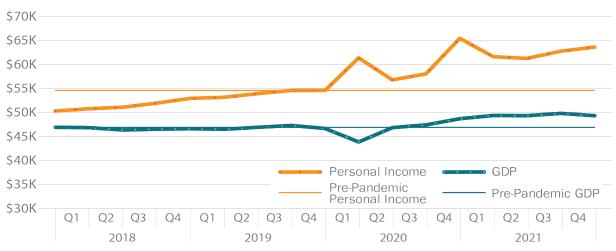
Source: US BLS and Montana Dept. of Labor and Industry, QCEW and CPI-U

Strong Growth in GDP and Personal Income

Strong consumer demand also led to large increases in the total output produced by Montana's economy, as measured by Gross Domestic Product (GDP). As seen in Figure 5, Montana's GDP recovered from the pandemic by the end of 2020 and continued to grow by nearly \$2.4 billion in 2021.9 Montana's 2021 GDP growth was the 3rd fastest among states. 10 Montana's GDP growth far surpassed the inflation experienced in 2021, with real (inflation adjusted) GDP growing by 6.7%, the 7th fastest real GDP growth among states.¹¹ For a historic comparison, the average annual real GDP growth in the ten years prior to the pandemic (2009 to 2019) was 1.7% per year. The 6.7% growth in 2021 was nearly four times faster than the pre-pandemic average, and the fastest annual growth experienced in the state since 1980.

As GDP increased, the share of total GDP realized as income for Montanans also increased. Without a dip necessitating a recovery of personal income, Montana's personal income continued to grow through 2021 at the 12th fastest rate in nation.¹² Personal income measures the income received by Montanans from economic activity, and includes wages, business income, royalties and rental payments, and government transfer payments. On a per capita basis, personal income rose to \$56,672 per Montanan, almost \$16,000 higher than just a decade earlier. Montana's per capita income of \$56,672 in 2021 ranks 31st among states. The slight dip in GDP in the first quarter of 2022 did not extend to personal income, which continued to grow to start the year.

Figure 5: Montana Personal Income and GDP 2018 - 2022 Q1 (millions of dollars)



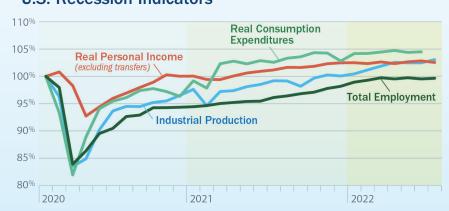
Source: US Bureau of Economic Analysis

RECESSION?

U.S. real GDP fell in the first and second quarters of 2022, a common indicator of a recession. Montana's real GDP also fell in the first quarter, with second quarter data not yet available. The Ukraine conflict and resulting trade embargoes put a sudden negative shock on the supply of oil while domestic energy production was unable to quickly ramp up replacement supply. As a result, oil and gas prices spiked for businesses and consumers. Previous spikes in the price of oil have led to recessions, as oil is an important input into the production and shipping of many goods. Further, consumers were already struggling with inflation, and the rising cost of gasoline stressed households and resulted in fewer discretionary spending dollars available for other goods and services.

Contradicting these warning signs, other economic indicators remain strong in both Montana and the nation (see figure). Businesses have continued to add jobs, and unemployment rates are at very low levels. Although consumer spending has leveled off, it remains at high levels, and industrial production continues to expand.

U.S. Recession Indicators



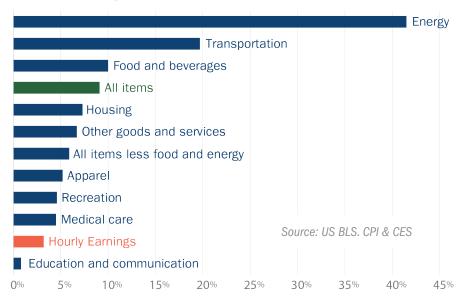
Source for Chart: FRED, Federal Reserve Bank of St. Louis, Aug 2022.

These indicators suggest that economic growth in 2022 is certain to be much slower than the record-breaking pace in 2021. In Montana, the recovery from the pandemic recession was more robust, giving the state an ample cushion of prosperity even if global growth slows.

Strong Growth Has One Bad Outcome - Inflation

The pace of economic expansion and growth of wages and incomes created strong demand for goods and services. At the same time, global supply disruptions from coronavirus, the Ukraine conflict, and historic levels of federal spending created shortages of inputs, resulting in businesses being unable to keep up with the rapidly expanding demand from consumers amplified by historic federal stimulus. These market dynamics resulted in rising prices, with inflation continuing to accelerate throughout the year. Now in 2022, persistent and high inflation (with the Rocky Mountain West among the regions of the U.S. with the largest increases) has threatened the Montana economy and placed strain on businesses, workers, and families.¹³

Figure 6: Percent Change in Prices (June 2022 compared to June 2021)



Steady increases in prices are normal, but the 9% over-the-year inflation experienced during summer 2022 was a 40-year high, and a significant change from the 2% average prior to the pandemic. ¹⁴ Such high inflation is harmful to the economy as both consumers and businesses struggle to keep up with the change. Most dramatic has been the price increase in energy—up over 40% relative to last summer. ¹⁵ The rising price of gasoline is caused by rising demand as people returned to previous travel and commuting habits, and by a large drop in supply due to restrictions on domestic energy production, the Ukraine conflict, and the resulting trade sanctions. The price spikes in gasoline are particularly harmful for Montanans, who tend to spend more of their income on fuels than consumers in other states. ¹⁶ Rising energy costs are also driving up prices in other sectors such as groceries and retail due to the almost 20% increase in transportation costs. ¹⁷

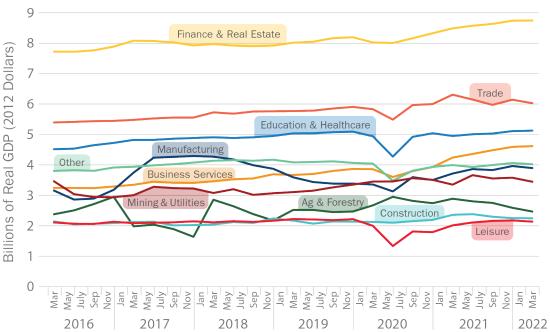
Following national trends, Montana has also seen large increases in housing costs as home prices and rents have climbed with increasing demand and limited supply. Shelter costs have risen over 5% in the year ending June 2022—a large amount considering that shelter composes nearly one third of household expenses. The price increases in both transportation and housing costs may influence which jobs workers are willing to accept, as they may not be able to afford to live near or travel to work.

One important comparison to consider is whether the costs needed for living are rising faster or slower than wages. Montanans have experienced real wage growth (wage growth faster than inflation) for most of the decade, but the recent pace of inflation has cut into the gain in purchasing power. Before 2021, real growth in the average hourly wage for private sector workers was strong, but the inflation of the past year and a half has been faster than growth in the hourly wage. The Federal Reserve Bank has responded to inflation by raising interest rates and making a tradeoff of slowing growth to reduce demand and temper price increases. Measures of inflation are starting to show signs that prices may be leveling out.

The Industries Behind the Growth

Montana's 2021 GDP growth (**Figure 7**) was fueled by growth in some of its largest industries. Financial activities, which includes finance, insurance, and real estate, added nearly \$480 million in GDP, enjoying large growth from strong housing and stock markets throughout the year. Trade also saw strong GDP growth with \$319 million added due to fast growth in the first quarter of 2021, spurred by stimulus measures and the release of pent-up demand from 2020. Business services and manufacturing also had notable GDP growth in 2021.

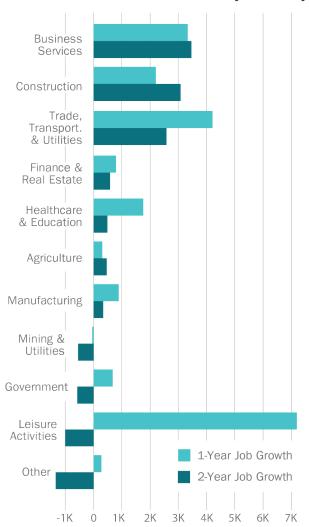
Figure 7:
Montana Real GDP by Industry



Source: US Bureau of Economic Analysis

The slowdown in GDP growth at the start of 2022 was experienced across many industries, though more than half of the over-the-quarter decline came from the mining (including oil and gas) and agriculture industries. Each of these industries was impacted by the fallout from the war in Ukraine. A slowdown in spending due to inflation had impacts as well. GDP in trade fell nearly \$150 million in the first quarter of 2022. Business services continued its growth at the start of 2022, albeit at a slower pace.

Figure 8: Montana's 2021 Job Growth By Industry



Source: US BLS and Montana Dept. of Labor and Industry, QCEW

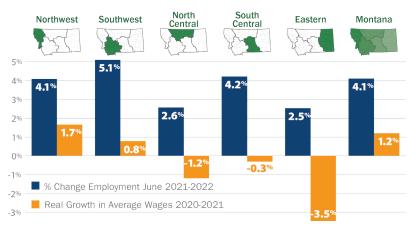
Montana's strong employment gains reflect a combination of industries rebounding from pandemic employment losses and others growing beyond their 2019 employment levels (Figure 8). In 2021, only the mining and utilities sector had job losses. All other industries added jobs above 2020 levels. Montana's job growth beyond pre-pandemic levels was driven by strong gains in the construction, business services, and trade industries. The business services industry has added nearly 3,500 jobs above its 2019 levels, benefitting from growth in tech businesses as well as workers taking advantage of remote work opportunities. Construction has added the second most jobs with 3,000 more than 2019. The construction industry has seen large gains due to high demand for housing. Montana's largest employing industries, healthcare and trade, also saw large increases in employment gains over pre-pandemic levels. Not every industry had returned to their 2019 employment levels by the end of 2021. Leisure activities and the other industry (which includes information) had over 1,000 jobs remaining to recover to their prepandemic level.

Employment is Growing Statewide

In 2022, all of Montana's regions have seen continued employment growth over 2021 levels (**Figure 9**). A growing labor force has made employment growth possible as unemployment rates have fallen in all but two Montana counties. The Northwest and Southwest regions have had the most population growth, and in turn, the fastest employment growth. Halfway through 2022, employment in the Southwest region has increased by 5.1% compared to June 2021, while the Northwest region has growth of 4.1%.

Widespread employment growth was not, however, accompanied by even wage growth across the state. Despite statewide gains in average annual wages, the inflation of 2021 cut into real average annual wages for some parts of the state. Montana's western regions had real growth in average wages with an increase of 1.7% in Northwest Montana and 0.8% in the Southwest, enough for real increases in statewide average annual wages. However, in more rural regions, prices grew faster than average wages. Eastern Montana had the steepest decline (-3.5%), followed by North Central (-1.2%), and South Central Montana (-0.3%).

Figure 9: Employment and Real Wage Growth by Region



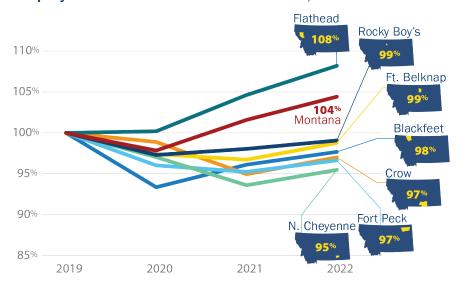
Source: Real payroll wages from QCEW and unemployment from LAUS.

In Montana's reservation areas, the recovery to previous employment levels has been mixed. Most of Montana's reservations had a drop in total employment in the pandemic year of 2020. While some areas began to recover in 2021, others did not see a recovery until 2022 (Figure 10). The Flathead Reservation stands apart with employment growing 8% compared to 2019—faster growth than Montana experienced statewide. Rocky Boy's and Fort

Belknap Reservations returned close to their previous levels at 99% of 2019 employment. The Blackfeet Reservation, which has a relatively larger share of employment in leisure and hospitality tied to the tourism economy in Glacier National Park, saw the largest decrease of any reservation in 2020, but has since climbed back to 98% of 2019 employment. The Crow, Fort Peck, and Northern Cheyenne Reservations have all had employment remain lower than it was in 2020. The economies of the Crow and Northern Cheyenne Reservations are more connected to mining and power generation activity in the Colstrip area. With the partial closure of Colstrip powerplant as well as decreased mining activity, these areas will take longer to recover their employment losses.

Reservation economies tend to have higher unemployment rates compared to surrounding counties. All of Montana's reservations had higher unemployment rates in 2021 than Montana's unemployment rate of 3.4%. Unemployment on most reservations trended down prior to the pandemic (Figure 11), except for the Crow and Northern Cheyenne Reservations, which had large spikes in unemployment due to

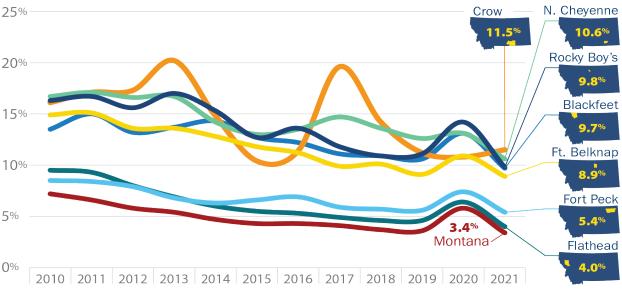
Figure 10: Employment on Montana Reservations, Indexed to 2019



Source: LAUS 2019-2022. Annual average for 2022 includes data as of June 2022.

declines in mining and power generation. In 2021, the Crow Reservation had the highest unemployment rate at 11.5%, followed by Northern Cheyenne (10.6%), Rocky Boy's (9.8%), Blackfeet (9.7%), Fort Belknap (8.9%), Fort Peck (5.4%), and Flathead (4%).

Figure 11: Unemployment Rates, Montana Reservations 2010-2021



Source: Local Area Unemployment Statistics. Annual rates, 2010-2021.

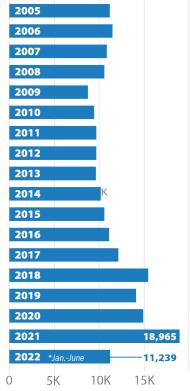
Rapid Growth in New Businesses

The economic growth Montana experienced in 2021 and 2022 can be credited in part to the entrepreneurial spirit of Montanans. Compared to other states, Montana has the second highest rate of proprietary employment with nearly 27.2% of workers employed in their own businesses. Proprietary employment helps increase Montana incomes, with proprietary income making up nearly 11% of Montana's personal income in 2021.

Entrepreneurial activity has increased over the past few years in Montana, and these trends continued in 2021 and 2022 despite the disruptions from the pandemic. **Figure 12** shows Montana's monthly business applications increased to roughly 14,900 during 2020, and then grew to nearly 19,000 in 2021. They are on pace to increase again this year, with just over 11,200 applications as of June 2022.

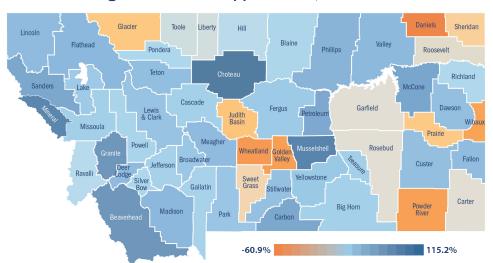
Geographically, the western regions of the state have had the fastest growth in business applications with counties in other regions also posting notable growth (Figure 13). Chouteau County ranks first in the percent increase in business applications with growth of 115% from 2020 to 2021, followed by Musselshell (103%), Mineral (100%), and Beaverhead (80%). Montana's largest counties also had strong growth in business applications, including Flathead (45% growth), Yellowstone (29%), Missoula (21%), and Gallatin (17%).

Figure 12:Montana Business
Applications



Source: Business Formation Statistics, U.S. Census Bureau, MT 2005-2022

Figure 13: Percent Change in Business Applications, 2020-2021

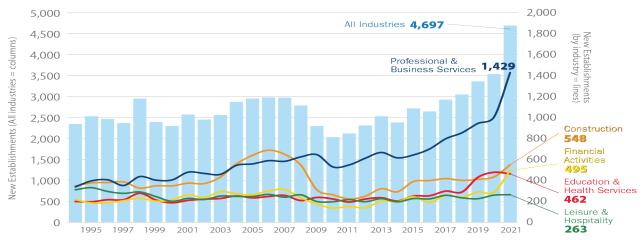


Source: Business Formation Statistics, U.S. Census Bureau, MT 2020-2021

Montana's high level of entrepreneurialism leads to more businesses, job creation, and more employed workers. Figure 14 shows the growth of new business establishments. In 2021, the number of new business establishments was 1,200 higher than in 2020, reflecting the strong expansion and job growth experienced that year. Much of the growth in new establishments has been concentrated in the professional and business services sector, which had 1,429 new establishments in 2021. The sharp growth in this sector is likely reflective of an influx of teleworkers, as the growth has been driven by single-person establishments in subsectors such as custom computer programming and the administrative and management consulting.

The construction and financial activities industries also had notable increases in new establishments in the past year. Growth in these industries reflects increased demand for housing, real estate services, and lending services. With Montana's population growing faster over the past decade than the number housing units, demand for housing is outstripping supply and home values are rising.²⁰

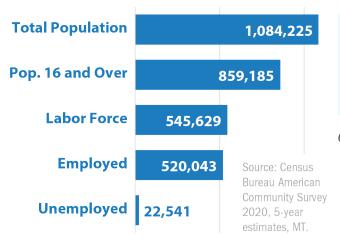
Figure 14:New Establishments by Industry, Selected Industries, Montana



Source: Bureau of Labor Statistics, Business Employment Dynamics, age and size tables. Total establishments are from the QCEW.

The Montana Worker By the Numbers

Montana Population by Labor Force Status

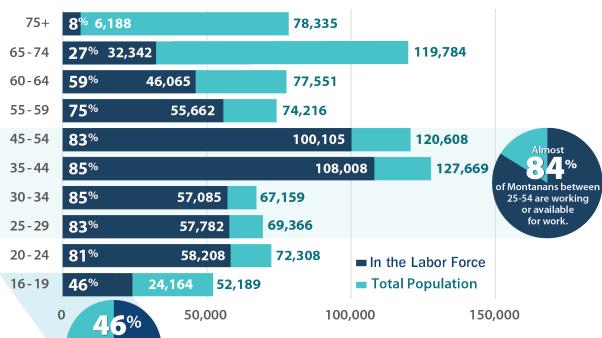


63.5% 60.5% Employed or Available to Work

63% of Montana's working age population (16+) are working or available for work.
60.5% are employed.

Both rates are slightly higher than the national average.

Population by Age Group and Participation in Labor Force

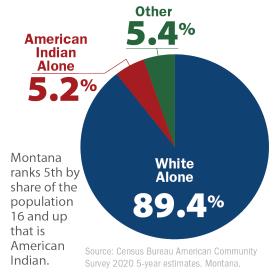


Source: Census Bureau American Community Survey 2020 5-year estimates.

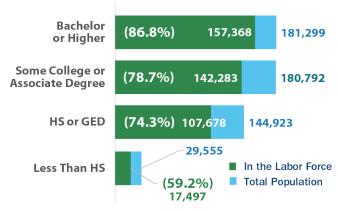
Montana ranks 6th highest among states by share of the population 16 and up that is over the age of 65 (23%). For those entering retirement age at 65, the share that participate in the labor force decreases from 59% to 27%.

The Montana Worker By the Numbers

MT Population 16 and Older by Race

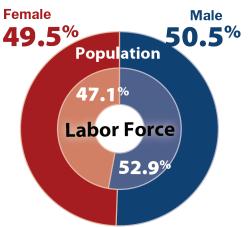


Population and Labor Force Participation by Educational Attainment



Source: Census Bureau American Community Survey 2020 5-year estimates, Montana, Age 25-64. Labor force participation rates are in parenthesis.

MT Population 16 and Older by Gender



Source: Census Bureau American Community Survey 2020 5-year estimates. Montana.

While Montana's population is almost evenly split across gender, men make up a larger share of Montana's labor force.

Montana Average Annual Earnings for Full-Time, Year-Round Workers



Source: American Community Survey 2020, 5-year data.

of Montanans 18 and up are veterans, which ranks Montana 3rd among states by share of the veteran population. Veterans tend to have lower labor force participation compared to non-veterans.





SECTION 2:

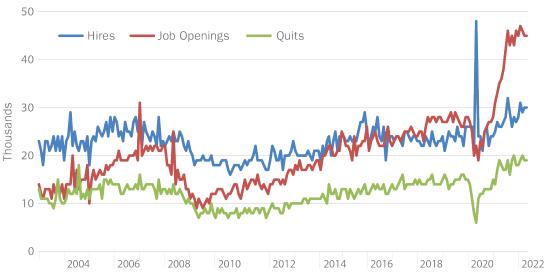
MORE MONTANANS ARE WORKING THAN EVER BEFORE, BUT IS IT ENOUGH?

The strong economic recovery has added more and more jobs to our state, with more Montanans working than ever before. However, Montana's worker supply has been growing slowly in the past decade due to an aging population, with more workers retiring from the labor force than there are younger people to replace them. The combination of these demographics and the strong economic expansion has created a worker shortage in Montana. For Montana's economy to continue to grow, businesses and policy makers must find ways to increase our labor productivity (producing more output per worker) and tap into underutilized worker groups.

Unfilled Job Openings Increase

In a clear representation of Montana's worker shortage, unfilled job openings in Montana rose above 40,000 per month in the second half of 2021 (**Figure 15**).²¹ Montana's low unemployment rate increased recruitment times, and workers used the large number of available opportunities to switch jobs or bargain for higher pay. Worker quits in Montana rose above 20,000 a month in the second half of 2021, contributing to the large number of unfilled jobs as employers had to fill vacated positions. Identifying underutilized worker groups and increasing worker productivity will be necessary for businesses to grow through the continued shortage of labor.

Figure 15: Montana Job Openings, Hires, and Quits 2003-2022



Source: US BLS, JOLTS

Where Did the Workers Go?

The long-term trend of baby boomers reaching retirement age and exiting the labor force is the primary driver of the worker shortage.²² However, other pandemic-related factors have increased absences and exacerbated the current worker shortage.²³ **Figure 16** shows that the number of retirees has been climbing since the 1990s, while workers who are not in the labor force due to other reasons have remained relatively steady despite population growth. Other reasons include attending school, illness or disability, caring for family, and other.

Figure 16: Reasons Not in the Labor Force, Montana



Source: IPUMS Current Population Survey 1995 to June 2022. 12-month moving average.

About 34,200 Montanans are out of the labor force because they are caring for family (both caring for children and elderly, ill, or disabled adults). Those who don't work due to family responsibilities tend to be younger, have lower levels of education, and lower family income than those in the labor force. Women make up 78% of those not in the labor force due to caring for family.

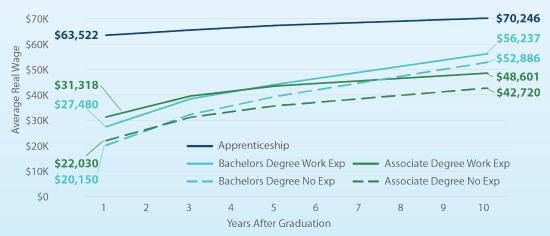
The most common reason for staying out of the labor force for workers under age 25 is school attendance, with 77% of this population attending school. Attending school limits the amount of time these students can participate in the labor force, but the investment in education benefits the economy in the long-run, leading to increased productivity and better wage outcomes. Labor force participation among young workers has increased over the last several years, with 62% of workers under age 25 participating in the

POSTSECONDARY EDUCATION SYSTEM IMPROVES PRODUCTIVITY AND IMPORTS WORKERS

Ensuring workers have the right education and skills to fill jobs is one way to increase productivity and alleviate the workforce shortage. Montana's postsecondary education system graduated over 11,700 students graduating per year, which helps fill the state's estimated 16,800 annual job openings requiring some postsecondary education. Nearly 75% of graduates from Montana postsecondary institutions work in Montana at some point in the ten years following graduation.

Graduates who work in Montana fill good-paying jobs. The median income of graduates is \$31,800 a year after graduation and progresses to roughly \$54,000 ten years after graduation. Prior work experience and type of education affect wages, with prior work experience resulting in earnings of about \$11,000 more than those without work experience. Education level also matters, with those graduating from the Montana's Registered Apprenticeship program having wages higher than other degrees, as shown in the figure below.

Apprenticeship, Bachelor's, and Associate Degree Wages by Work Experience



Source: MTDLI, OCHE, RMC, CC, UP, and apprenticeship graduate data wage match. Wages reflect average real wages reported in 2021 dollars using the CPI-U. Apprenticeship includes all degree types. Work experience defined as working at least two quarters per year in the five years prior to graduation. All apprenticeship completer have work experience.

labor force in 2022 compared to only 57% in 2015. Greater demand for workers and increased wages have likely drawn more of these young adults into the labor force. As these young adults obtain training and look for career opportunities, they may be attracted by employers who allow for progression of skill and wages and a good company culture.²⁴

Compared to the early 2000s, a greater share of the population over 65 are continuing to stay in the labor force; however, that trend is not enough to make up for the number of workers aging into retirement. Employers may need to make more effort to retain workers nearing retirement and provide flexible work opportunities for the retired population. Almost half of all retirees say they would return to work under the right conditions.²⁵ Most people retire because they want to do other things and spend time with family.²⁶ Others indicate they're retiring due to poor health or lack of job prospects.²⁷ Getting more retirees back into the labor force may require positions with flexible hours, remote work, part-time work, and accomodating disabilities.

Montana's historically low unemployment rate suggests there are very few workers available who are not already attached to an employer. Others who are not available for work are performing important functions for society (such as caring for family) or may be inhibited by disability, school attendance, or other life circumstances. Other factors influencing the worker supply include a lack of affordable housing, transportation, or childcare; the need for flexible or long-term scheduling or remote work; and the need for other workplace accommodations. Getting more Montanans to work will mean understanding why people are not participating in the labor force and designing work opportunities to fit their needs.

In addition, employers may need to find ways to make the workplace more productive. Labor productivity has been increasing, meaning more work can be accomplished with fewer workers.²⁸ To get more done with a limited supply of workers, employers may need to find ways to optimize the workplace by automating tasks and investing in better training and labor-saving technology.

Migration Increases Labor Supply

Increased demand for workers can be eased by in-migration to the state. Montana has net positive in-migration over the long-term, meaning more people move to Montana than leave. Between 2010 and 2019, about 6,200 more people moved to the state than left the state each year. However, this growth accelerated after the pandemic. Between April 2020 and July 2021, net in-migration was 22,000 people. Due to fast migration, Montana's population grew at a rate of 1.8% during this time, ranking 3rd fastest of all fifty states (Idaho ranked first and Utah ranked second). Net migration brings new workers, new business development, and leads to economic growth. However, migration comes with its own set of challenges, such as increased housing demand that outpaces supply.

For the last decade, Gallatin County was the fastest growing area of the state with about 2,100 more people moving to the county than leaving each year from 2010 to 2019. Migration accelerated in Gallatin County in 2021, with net migration of about 3,300 people. However, Flathead County had the most net in-migration during the pandemic. About 4,300 people moved to the area in 2021 – nearly four times the average migration seen during the decade prior. **Figure 17** shows net migration in Montana counties between April 2020 and July 2021.²⁹

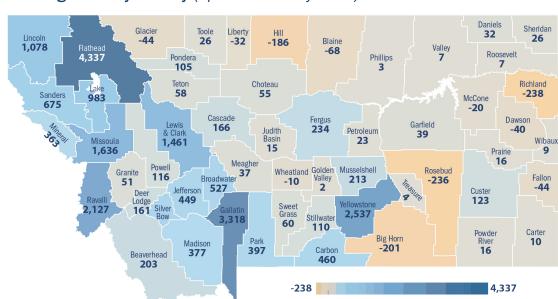


Figure 17: Net Migration by County (April 2020 to July 2021)

Source: U.S. Census Bureau. Components of Population Change. 2021.

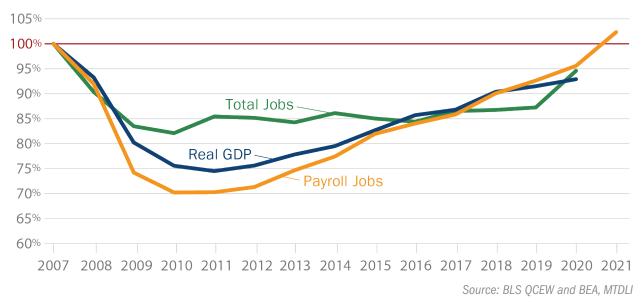
Housing Affordability Inhibits Worker Supply

Housing affordability continues to constrain lower wage workers' ability to live in areas experiencing rapid growth. Montana's home prices increased by 44.3% in the two years ending in 2022Q1. Montana's home price growth ranks 6th fastest of all states and is growing faster than the U.S. average of 34.3%.³⁰ Rising home prices and the limited housing supply affects renters as well. Across the U.S., rent has increased by 7% in the first six months of 2022 compared with two years prior.³¹ Newly advertised rents suggest faster growth, with newly advertised rental units increasing at a rate of 20% over the two-year period.³²

Housing affordability depends on housing prices and income levels. Housing costs rising faster than incomes strain household budgets and can affect workers' abilities to live near their jobs. While housing prices increased by 44.3% in the two years ending 2022Q1, average hourly earnings for the private sector increased only 8.5%. Montana's typical home values are higher than the U.S. average while Montana's average wages/incomes are lower than the U.S. average, suggesting homeownership is less affordable in Montana than other parts of the nation.

For prices to remain affordable, the supply of housing must match demand. However, real GDP and employment in the construction industry have been slow to recover from the 2008 recession, suggesting years of underinvestment. **Figure 18** shows construction GDP, payroll construction jobs, and total construction jobs indexed to their 2007 level. Total construction workers (including the self-employed) remained lower in 2020 (50,000 workers) than 2007 (54,000 workers)), when the industry had its previous highs. Payroll construction jobs recently surpassed their 2007 levels, with 33,000 workers in 2021 compared to 32,000 in 2007. Investment in the construction workforce is necessary for quickly increasing the supply of housing.

Figure 18: Total Jobs, Payroll Jobs, and Real GDP in the Construction Industry *Indexed to 2007*



Improving training opportunities or access to labor-saving technology can increase productivity and offset a smaller workforce. Apprenticeship is an important training pathway for workers in the construction trades. In 2022, Montana's Registered Apprenticeship program is training workers at historic rates, with nearly 700 new apprentices and more than 50 new sponsors added already this year -- above the pace of the past several years.

Conclusion

Although rising costs for housing and gasoline have dampened the economic enthusiasm in 2022, it remains true that Montana's economy posted an amazing year for economic growth in 2021, with many indicators posting record-breaking levels. Higher employment and wage earnings have made Montana workers and their families more prosperous and raised the standard of living. High consumer demand and entrepreneurialism have made Montana businesses more profitable, bringing more income back to owners. The surging economy has created greater opportunities for Montanans throughout our state.

As the state looks forward to the future, policy-makers, businesses, and workers are all eager to find new ways to do business, guaranteeing continued economic success. Our entrepreneurs continue to drive new innovative products and production practices, while workers continue to find ways to work smarter and better than before. Finding ways to tap into retired workers or those with other life constraints is key to fueling our economy, but the Montana Department of Labor & Industry continues to find new partners and advocates for workforce flexibility every day. Montana's economy is poised to take advantage of every opportunity in our prosperous future.

Endnotes

- 1 U.S. Bureau of Economic Analysis Real GDP.
- 2 U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics and Current Employment Statistics
- 3 Local Area Unemployment Statistics (LAUS), Bureau of Labor Statistics (BLS) and Montana Department of Labor & Industry (MTDLI).
- 4 U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics (LAUS) and Job Openings and Labor Turnover Survey.
- 5 U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics (LAUS).
- 6 U.S. Bureau of Labor Statistics, State and Regional Labor Productivity
- 7 U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages.
- 8 Ibid.
- 9 U.S. Bureau of Economic Analysis, Real GDP.
- 10 Ibid.
- 11 Ibid.
- 12 U.S. Bureau of Economic Analysis, Personal Income.
- 13 According to the U.S. Bureau of Economic Analysis, Seasonally Adjusted Real Personal Consumption Expenditures dropped \$196 billion (a 1.4% decrease) in December of 2021, and recovered two months later, but have decreased in May and June of 2022. Consumer sentiment is an indicator of how optimistic consumers feel about their finances and the state of the economy. According to the University of Michigan Surveys of Consumers, consumer sentiment in July 2022 is 48 index points lower than it was in July 2019.
- 14 U.S. Bureau of Labor Statistics, Consumer Price Index for Urban Consumers.
- 15 Ibid.
- 16 BEA Personal Expenditure Data by State.
- 17 U.S. Bureau of Labor Statistics, Consumer Price Index for Urban Consumers.
- 18 BLS, Relative Importance of Shelter in CPI-U, June 2022.
- 19 Business establishments represent new business locations with a payroll, regardless of whether the business entity is new.
- 20 According to a report from Pew Charitable Trusts, Montana's population increased by 10% from 2010 to 2020 while it's housing units increased by only 7%. https://leg.mt.gov/content/publications/fiscal/2023-Interim/November-2021/Horowitz Montana HousingShortage 29N-ov2021.pdf. Median home values in Montana have increased from \$254,000 in 2019 to \$273,000 in 2020 according to the Census Bureau. See MTDLI's home prices dashboard for more information: https://lmi.mt.gov/Home/Home-Prices
- 21 U.S. Bureau of Labor Statistics, Job Openings and Labor Turnover Survey.

- 22 The labor force consists of people either working or actively seeking work.
- 23 IPUMS, Current Population Survey, number of workers absent in the previous week.
- 24 Onboarding Young Workers in a Post-Pandemic World. Orellana & Tomaskovik-Devey (2022). https://www.umass.edu/employmentequity/onboarding-young-workers-post-pandemic-world.
- 25 The American Working Conditions Survey Finds That Nearly Half of Retirees Would Return to Work. Nicole et al. 2019. https://www.rand.org/pubs/research_briefs/RB9973-1.html.
- 26 Report on the Economic Well-being of Households in 2018-May 2019. https://www.federalre-serve.gov/publications/2019-economic-well-being-of-us-households-in-2018-retirement.htm.
- 27 Ibid.
- 28 U.S. Bureau of Labor Statistics, labor productivity (output per hour) has increased by 12% in 2021 compared to 2012
- 29 U.S. Census Bureau. Components of Population Change. 2010-2019 average compared with 2020-2021.
- 30 FHFA. HPI. Purchase-Only Indexes. Not seasonally adjusted.
- 31 BLS. CPI. Rent of Primary Residence. Not Seasonally Adjusted. 2020 Jan-June to 2022 Jan-June.
- 32 Zillow. ZORI for All Homes Plus Multifamily. 2020 Jan-June to 2022 Jan-June.



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