



STATE OF MONTANA

Labor Day Report to the GOVERNOR 2015

ANNUAL REPORT ON THE CURRENT
STATE OF MONTANA'S ECONOMY



Montana Department of
LABOR & INDUSTRY

STATE OF MONTANA
Labor Day
Report to the
GOVERNOR

2015

AUGUST 31, 2015

STATE OF MONTANA

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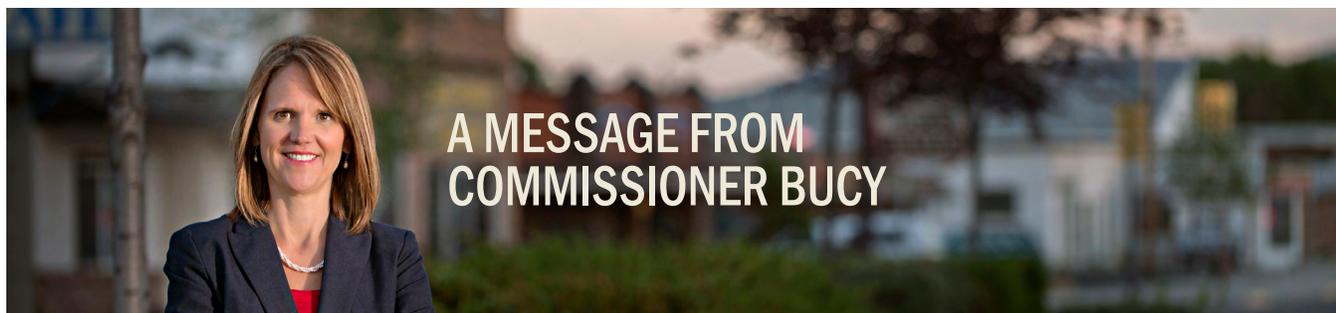
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Governor Steve Bullock,

As the Commissioner of the Department of Labor and Industry, it is my privilege to present the 2015 Labor Day Report to you and the citizens of Montana. This past year has seen strong economic growth for our state, and we continue to be among the nation's leaders in putting people to work.

In the last year, Montana businesses and industries added thousands of new workers to their companies. At 4 percent, our state's unemployment rate is far lower than the national average of 5.3 percent. More Montanans are in the workforce today than ever before and low unemployment leads to faster wage growth for workers statewide.

Our local communities are benefiting from more than low unemployment levels. Montana has become the leader in company startups for the country. We should be proud of our new businesses and the workers they are hiring. These startups provide a huge boost to our economy.

Challenges remain for our state and we are aggressively striving to address them. With looming retirements from Montana's baby boomer generation, Montana faces a workforce shortage. Over the next decade, we project Montana's labor force will add approximately 6,400 new jobs per year, but we will not have enough workers to fill those positions. As your Labor Commissioner, I recommend that we continue to engage the private sector in solving this problem. The private-public partnerships that you have built in the last two years are the key to maintaining Montana's strong economic growth.

The State of Montana has been very successful over the last year to train our future workforce through new collaborations with the Montana University System and local businesses including historic investment in the high-demand fields of energy, manufacturing and health care. These partnerships include Montana Registered Apprenticeship programs and RevUp Montana which allow high school graduates, two-year and tribal college students, and people seeking a change in careers to earn a paycheck while they learn high-demand workplace skills.

Looking ahead, I know that we in Montana are well positioned to meet any challenge head-on. We have incredible momentum, and I feel confident that Montana's future is bright. Our children have more career opportunities than any previous generation of Montanans, and I am so proud of our work to support working families and grow prosperity for all Montana communities.

Governor Bullock, thank you for your leadership and dedication to Montana workers, businesses, and communities. I look forward to another year of strong economic growth for our state.

Sincerely,

Handwritten signature of Pam Bucy in blue ink.

Pam Bucy, Commissioner
Department of Labor and Industry

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LABOR DAY REPORT SUMMARY

On Labor Day 2015, Montana's workers and businesses are enjoying higher wages, strong output growth, and an ideal unemployment situation. With the rest of the nation finally catching up to Montana's performance, consumers and businesses are gaining confidence that our economy is resilient enough to absorb global financial shocks. The U.S. and Montana economies are once again leading the world in economic strength and maintaining stability for developed and emerging economies alike. This Labor Day, Montana's economy has:

- The 6th fastest wage growth in the nation for both the five-year and ten-year timeframes, with the 11th fastest wage growth over the last year. Montana's wages increased by 3.5% over the last year to an average annual wage of \$38,874. Inflation-adjusted wages rose by 1.8%, increasing the standard of living for Montana families.
- Personal income increased by 4% over the year, ranking 21st fastest growth among states and faster than the national average. Personal income over the last ten years has increased at 4.5% per year (average compounding rate), ranking 7th in the nation.
- Gross Domestic Product (GDP) at the state level increased by 4.5% each year in the last five years, ranking 5th in the nation.
- Montana ranks 14th among states for job growth in the last ten years, with employment growth in 2014 remaining solid despite a slowdown in the mining industry and lower commodity prices. Employment growth in the 1st quarter of 2015 exceeded expectations, demonstrating our economy's resilience to these global forces.
- Montana's unemployment rate is at ideal levels, down to 4.0% in mid-2015. Montana's annual unemployment rate of 4.7% in 2014 was the 13th lowest in the nation.

Strong economic growth means that Montana's economy is no longer facing concerns of high unemployment. In fact, Montana is now facing a worker shortage because of a large aging baby-boomer population retiring without enough younger workers available to replace them. The number of people of typical working age (16 to 64 years) is expected to be flat in the next 15 years, restricting the supply of workers. Even with increased labor force participation, unemployment rates are expected to reach extremely low levels. While a worker shortage has several positive economic benefits, like rapid wage growth, more full-time work, and greater career advancement opportunities for workers, a constrained labor supply can also limit economic growth if businesses cannot find workers to produce their product.

- Nearly 6% of Montana's labor force is already over 65 years of age, the fourth highest share in the nation.
- While many Montanans continue to work past retirement age, there are still expected to be at least 130,000 retirements in the next ten years. In comparison, there are only about 123,000 Montanans aged 16 to 24, and not all of these young Montanans will choose to be in the labor force.

- Montana is expected to add roughly 7,800 jobs per year in 2015 and 2016 at a rate of 1.6%, then slow to job growth of 5,950 jobs per year from 2017 to 2024. The faster growth in the near term is expected as a continuation of the strong job growth Montana has experienced in recent years, with the worker shortage slowing growth in the long-term to only 1.1%. Although slower than recent years, the 1.1% pace in the long term is just slightly above the long-term employment growth average of 1% annually since 1980.
- Montana is only expected to add 4,100 workers per year for the next ten years, leaving a shortfall in the number of workers needed to fill the expected jobs. Labor force participation must increase considerably.
- Another source of available labor is to increase the number of hours worked each week by workers. Montana has a high share of part time employment. Among Montana workers aged 16 to 64, roughly 22% work less than 35 hours per week – the sixth highest percentage of part-time workers in the nation.
- Even accounting for increased migration and increased labor force participation rates, Montana’s unemployment rates are projected to reach levels of 1% - 2% within the next decade.¹

Efforts are currently underway to address Montana’s expected worker shortage, such as streamlining worker training systems to ensure all workers have opportunities to upgrade their skills without taking time off the job. Higher wages and more job opportunities will attract more workers into the labor market and increase labor participation rates, but these natural market forces may not be enough to fill the demand for workers. Policy makers and businesses are implementing strategies to encourage greater labor force contributions by individuals with traditionally low labor force participation rates, such as mothers and family caregivers, the disabled population, and workers with low levels of education and training. Businesses that successfully implement creative recruitment and retention strategies will have a competitive edge in our future economy.

Montana’s economy is strong, with stable employment gains expected in the future. Both workers and businesses must work together to improve productivity, streamline workforce education systems, and adapt Montana’s workplaces to accommodate workers of all types. With these changes, Montana’s workers and businesses will continue to enjoy economic prosperity with strong gains in wages, solid job growth, and continued personal income and output growth.

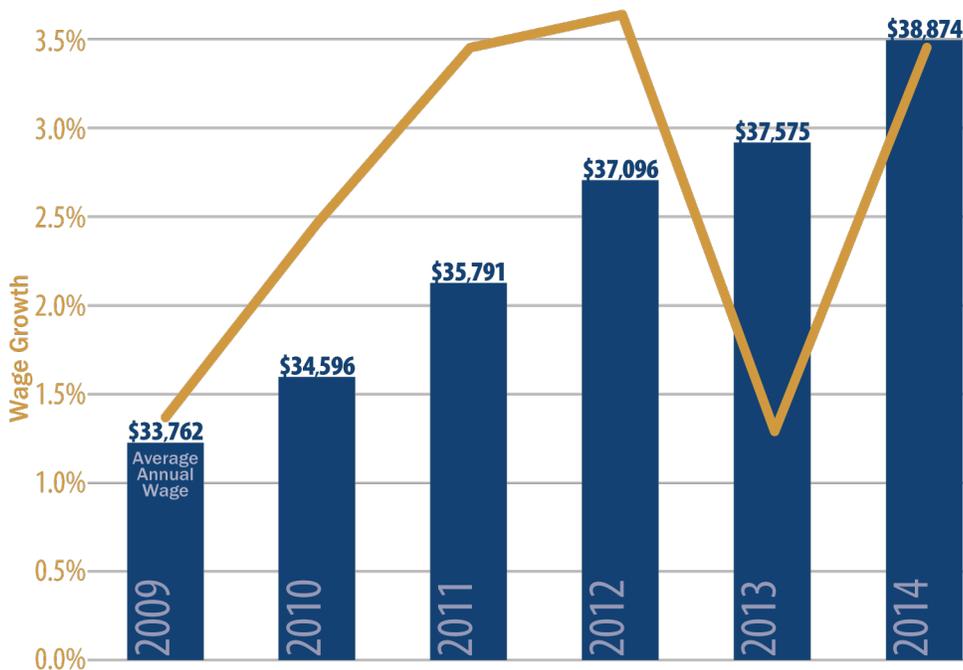
MONTANA'S WAGE GROWTH EXCEEDS EXPECTATIONS

Montana once again posted strong wage growth in 2014, with the average wage increasing 3.5% over the year to \$38,874. Montana's average annual wages are illustrated in **Figure 1**, with the growth rate over the prior year shown on the left hand axis. Montana's wage growth was faster than the nation as a whole (3.1%), ranking 11th fastest among states. Consistent with previous wage growth, the increases were the fastest in the private sector, with private wages increasing by 3.7% over the year.² Federal, state, and local government all had wage growth less than 3%. With inflation at only 1.6% over the year, real wages increased by 1.8%.³ Real wage gains, or those above the rate of inflation, mean that Montanans can afford more goods and services with their earnings than they could the year before, resulting in an increase in the standard of living for Montana families.

Montana's wages have been growing faster than the nation for most of the last ten years, ranking 6th fastest wage growth among 50 states for both the five-year and ten-year timeframes. In dollar terms, the Montana's average wage grew by \$1,300 over the last year, and by over \$5,100 in the last five years. Montana's wages have grown at a compounding annual growth rate of 3.4% over the last ten years from 2004 to 2014 compared to only 2.7% for the nation as a whole.

Montana's industry mix helps to explain why our wage growth has outpaced the nation. Health and education, trade and transportation, and leisure activities are some of the largest employing industries in the state, resulting in large worker demands. These industries, as well as mining and utilities, are more concentrated in Montana than in the nation as a whole, and have faster wage growth than the national average for their respective industries over the past ten years. In particular, the development of the Bakken oil field has increased average wages significantly in recent years,

FIGURE 1
MONTANA AVERAGE ANNUAL WAGES AND GROWTH OVER PRIOR YEAR



Source: Quarterly Census of Employment and Wages, Bureau of Labor Statistics

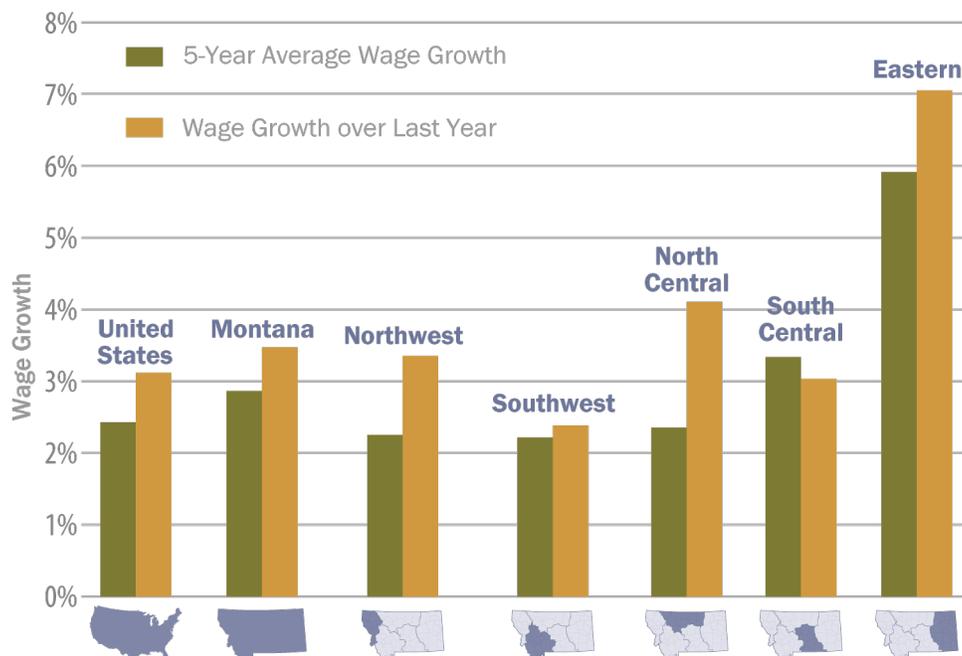
particularly in the eastern half of the state. The oil development has influenced wages both through the addition of high-paying mining jobs and through higher wages for all jobs in the eastern counties due to tight labor markets.

**Since the turn of the century,
Montana's wages have been regaining
ground relative to the nation
because of our rapid wage growth.**

Figure 2 illustrates the wage growth in the United States, Montana, and in Montana's five regions for the five-year and one-year timeframes. For the past five years, wage growth in the Eastern and South Central regions of Montana have outpaced other regions in the state. In 2014, wage growth has become more balanced throughout the state, with all regions except South Central having faster wage growth in the last year than their five-year average. The South Central region posted wage growth of 3%, faster than inflation, but slower than in prior years. The Eastern portion of Montana still posted very large 7% wage increases despite a moderation in employment growth.

Rapid wage growth over the past few years has helped Montana's wages catch up to those in the rest of the nation. Montana's average wage of \$38,874 ranks 47th out of 50 states, too low for Montana's working families, but up one place from 2012. South Dakota, Idaho, and Mississippi have lower wages than Montana. The average private sector job in Montana paid about a thousand dollars less than the overall average at \$36,499, ranking 49th among states for private sector wages, above only

FIGURE 2
WAGE GROWTH COMPARISON AMONG U.S., MONTANA, AND MONTANA'S
REGIONAL ECONOMIES



Source: Quarterly Census of Employment and Wages, Bureau of Labor Statistics

Mississippi. Montana sank to this low wage ranking over a long period of time, with our average wage relative to the national average declining for most of the second half of the 20th century. Since the turn of the century, Montana's wages have been regaining ground relative to the nation because of our rapid wage growth.⁴

Montana's lower wage levels compared to the nation can be partially explained by the prevalence of part-time work. The average job in Montana had a work week of only 32.8 hours in 2014 – the shortest work week in the nation.⁵ Montana's short work week is an indication that many jobs are part-time. But Montanans are known for being hardworking, and many people work multiple jobs or have their own business to compensate for lower earnings. In fact, Montana usually falls in the top ten states for the percentage of workers holding multiple jobs.⁶ Once the hours from multiple jobs are included, the typical Montanan works 38.1 hours per week, moving the state to the middle of the pack in terms of hours worked per week.⁷

Montana's wages rank better when comparing hourly wages, ranking 44th among states.⁸ However, Montana's hourly wage is more competitive among low-wage workers than among high-wage workers. The 10% of Montana workers with the lowest wages earn an average hourly salary of \$8.77 per hour compared to \$8.82 nationally, ranking Montana as the 23rd wage rate among low-earning workers. For the lowest earning 10% of workers, Montana's wages are 99% of the U.S. average. The wage rates among the lowest earning workers are likely bolstered by Montana's minimum wage, which is higher than the national mandatory minimum wage. Montana's low unemployment rate also places upwards pressure on the wage levels for low-wage jobs.

Montana starts to slip behind the national average when comparing wages for high-wage jobs. Montana workers earning at the 25th percentile earn hourly rates of about 95% of the U.S. average, but those at the 50% quartile earn 89% of the national average. For high-wage jobs, Montana workers fall far behind national high-wage earners, earning only 84% of the hourly rates for the top quartile of workers, and only 79% of the hourly rates for the highest 10% of workers. In other words, Montana's poor ranking among states is because of disparity among high-wage jobs, while low-wage jobs have wage rates fairly competitive with the national averages.⁹

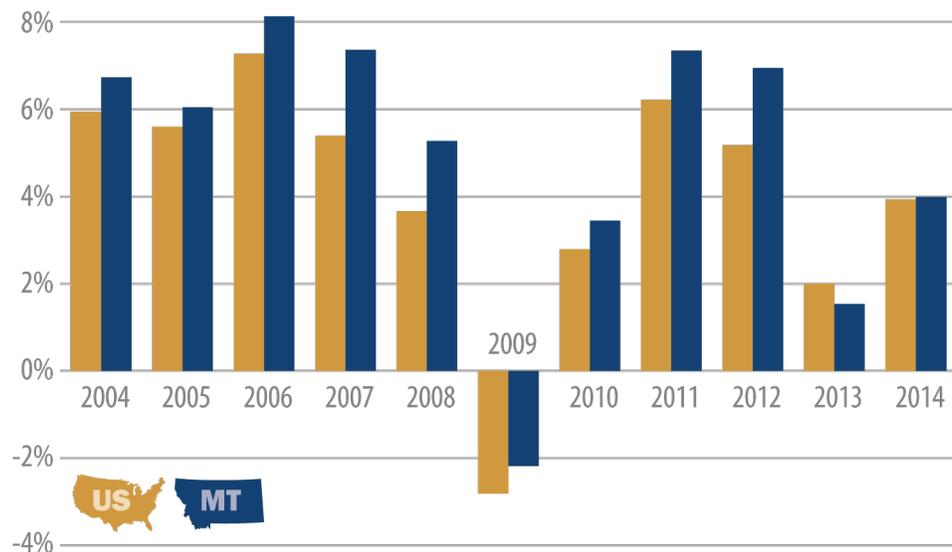
THE U.S. PERSONAL INCOME GROWTH FINALLY CATCHES UP TO MONTANA

Montana's economy over the last five years has outpaced the national average and been in the top ten for states in nearly every economic metric. Last year's Labor Day Report boasted that Montana had the 5th fastest total employment growth, 13th fastest personal income and GDP growth, and the 5th fastest wage growth from 2012 to 2013.¹⁰ Montana's economic performance remains strong, but our rankings are slipping as the rest of the nation finally catches up. Montana's wage growth has moved from 5th fastest to 6th fastest over the last five years. Personal income growth has moved from 13th fastest to 21st, although Montana's ten-year growth remains at 7th fastest among states. Employment growth in 2014 was strong, but slipped to 28th among states due to a slow 4th quarter. Employment growth ranking over the ten-year timeframe is stronger at 16th among states. Montana's economy has performed well in the last decade, and emerged from the recession better than other states. Our economic performance in 2014 follows these positive trends.

Figure 3 illustrates Montana's personal income growth compared to the U.S. for the last ten years. Montana's personal income grew 4% in 2014, nearly equal to the nation and ranking 21st among states. Montana has outperformed the U.S. economy in personal income growth throughout the last ten years with the exception of 2013. Montana ranks 7th among states for the fastest personal income growth since 2004.¹¹ Personal income growth in 2013 was lower in both Montana and in the U.S. due to the fiscal cliff, payroll tax cut expiration, and federal government sequester, all of which reduced the amount of spending in the economy and

PERSONAL INCOME measures the amount of income received from economic activity, including wages, benefits paid to workers, proprietor income, dividends, interest, rent, and transfer payments to individuals (transfer payments primarily come from government and include social security, veterans' benefits, and other similar transfers).

FIGURE 3
PERSONAL INCOME GROWTH IN U.S. AND MONTANA



Source: Bureau of Economic Analysis

slowed economic growth. These impacts were primarily felt in the first quarter of 2013, but the federal government shutdown in the fall of 2013 also suppressed economic activity towards the end of the year. The tourist-related industries around Glacier and Yellowstone parks were particularly impacted by the closure of the national parks, reducing Montana's personal income growth to 0% in the 4th quarter of 2013. The Montana economy demonstrated resiliency with a return to growth in the 1st quarter of 2014, posting personal income growth stronger than the U.S. during 2014 despite an oil-related slowdown in the last half of the year.

Personal income is often measured on a per capita basis, with Montana's per capita income of \$40,601 ranking 35th in the nation. The state's per capita income moved up one spot from 2013 with an increase of \$1,235 (3.1%) over the year, led by strong growth among both wages and proprietor income. Montana has a higher ranking among states for per capita income than for wages because of a high rate of entrepreneurial activity. Roughly 10.6% of Montana's personal income is derived from proprietor income, higher than the 9.4% in the nation as a whole and ranking 11th in the nation for this metric.

Similarly to personal income growth, Montana's GDP growth in the past five years ranks 5th among states with a compounding annual growth rate of 4.5%, compared to 3.9% for the nation as a whole. State GDP measures the value of goods and services produced within the state. State GDP growth in the last five years was fastest in the manufacturing industry. Over the last two years, GDP growth in Montana has moderated to a respectable pace of 2.9%. Improvements in the growth rates of other states has moved Montana to 29th place for GDP growth among states over the last year.

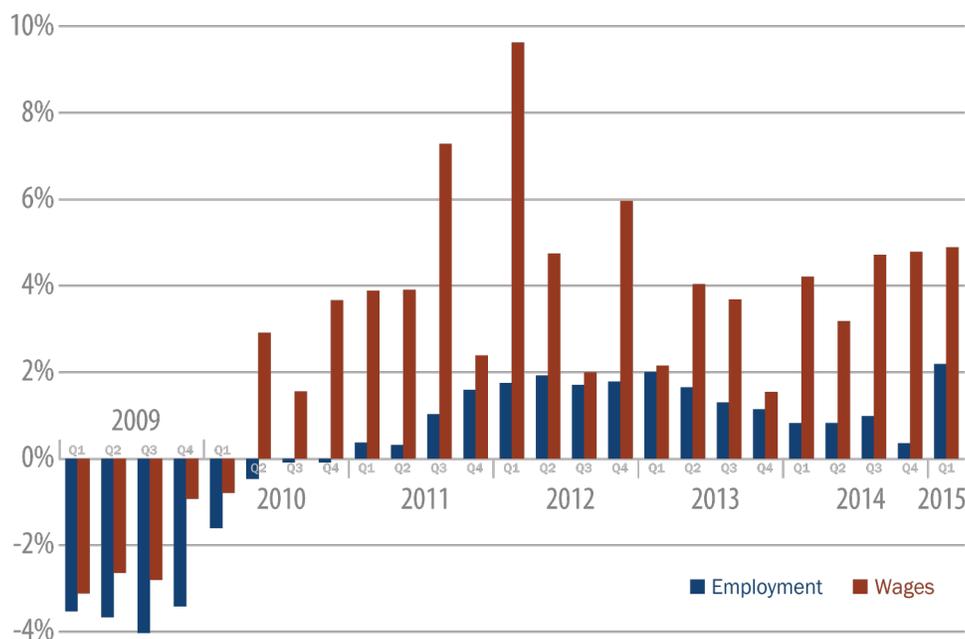
NATIONAL AND GLOBAL INFLUENCES IMPACTING MONTANA'S ECONOMY

National GDP growth in 2015 has been slow thus far, with a national weather-related slowdown in the first quarter, followed by a rebound in the second quarter. Some of the inconsistency in output growth is related to the decline in oil prices in the last half of 2014, which reduced business investment in oil exploration.¹² However, lower gas prices also have positive economic impacts through greater spending on other consumer products. A long-awaited improvement in U.S. wage growth has also contributed to greater consumer spending and GDP growth.

In Montana, the impacts of the oil price decline are also balanced. Oil and gas development in Eastern Montana and North Dakota has benefited the economy in the last few years, and was critical to statewide economic and fiscal stability during the recession. Workers throughout Montana found good-paying employment in the Bakken until employment in their own local economies improved, while increased tax revenues from oil production helped counter the decline in other types of tax revenues. The oil fields have also been an important customer for transportation, construction, and professional service businesses, who otherwise faced lower demand during the recession.

When the oil price declined in the second half of 2014, Montana's employment growth was impacted, particularly in the eastern region of the state. **Figure 4** illustrates Montana payroll employment and total wage growth by quarter. Total wages are the sum of all payroll wages paid in the state. Although total wages showed strong growth over the year, employment growth in Montana slowed in the second half of 2014. Growth resumed in the first quarter of 2015.

FIGURE 4
MONTANA PAYROLL EMPLOYMENT AND TOTAL WAGE GROWTH BY QUARTER



Source: Quarterly Census of Employment and Wages, Bureau of Labor Statistics

Unemployment insurance claims also rose above expectations when the price of oil dropped abruptly in November 2014. Montana unemployment insurance claims in October 2014 were about 2,200 claims lower than the prior year. New unemployment insurance claims spiked in the second week of November after the price of oil dropped, moving claim totals in the latter half of November to only about 500 claims below 2013 levels.¹³ However, the impacts quickly dissipated as prices stabilized, with claim levels recovering before the turn of the year.

With the slowdown in oil-related activity, transportation, construction, and professional service firms that have supported the Bakken development in recent years are likely to shift focus to other customer markets. Consumer industries within Eastern Montana will also be impacted by having fewer oil workers in the area. However, many of the wells in the Bakken region have low production costs, allowing for oil production to continue profitably despite the lower oil price. Workers have shifted from exploration work to production work, but the large backlog of work has kept many employees on the job.

The oil price instability has not resulted in the feared “oil bust,” but rather a slowdown in exploration activity. Oil production has remained fairly steady over the year, and experts predict that Montana’s petroleum refining industry is likely to weather the oil price volatility fairly well.¹⁴ The continued stability in petroleum is important, as petroleum refining represents over half of Montana’s manufacturing output. Oil and gas extraction comprised 1.2% of Montana’s GDP in 2013, while output from petroleum and coal manufacturing is roughly three times that at 3.9% of GDP.

The oil price deflation is partially due to economic slowdowns in China, the Eurozone, and other global economies. With the economy steadily gaining steam, the U.S. is once again providing economic leadership and stability to the global market. However, these positive changes also mean

drawbacks for Montana's exporting industries, including agriculture, energy, manufacturing, tourism, and professional services. As the U.S. economy gains strength, so does the dollar compared to other currencies. A stronger dollar makes imports cheaper for consumers, and reduces demand for U.S. exports because they become more expensive for global customers. The dollar is expected to continue to gain strength when the U.S. Federal Reserve Bank increases interest rates.

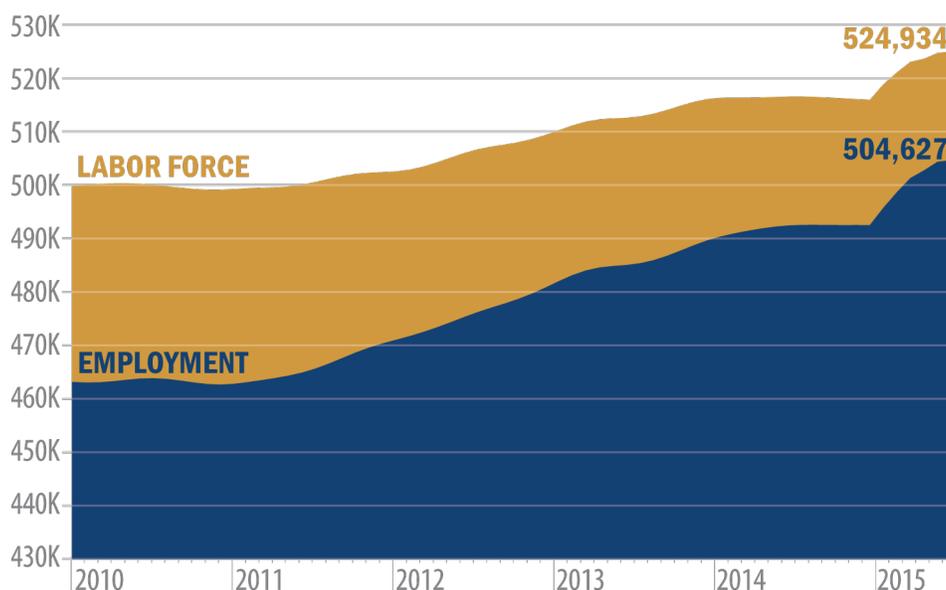
In 2015, Montana's economy continues to generate job growth above the long-term average and to make record-breaking wage gains. Thankfully, the rest of the nation has started to catch up with Montana's economic expansion, with the steady job and wage gains needed for consumers and businesses to continue gaining confidence in our economy. Stronger growth in the rest of the nation is good news to Montana, helping to stabilize our economic growth.

MONTANA JOB GROWTH CONTINUES AT STRONG PACE

Montana's economy continues to add jobs in 2015, adding an average of over 2,000 jobs per month in the first half of the year. This strong job growth has thrust Montana's total employment levels over half a million jobs for the first time in our state's history. Continued job growth in 2015 builds on the strong job growth our state has posted in the last four years, with 2012 and 2013 employment growth in Montana over 2%—over twice the historic average of about 1%.

Total employment growth in 2014 was slightly slower than the prior two years at 1.3%, adding 6,237 jobs over the year. Job growth of 1.3% in 2014 remains above the long-term average, but concerns and uncertainty about the oil price decline slowed employment growth in the second half of the year. **Figure 5** illustrates Montana's monthly employment and labor force levels over the last five years. The pace of total job growth slowed in the latter half of 2014, but resumed a fairly rapid pace in the first half of 2015.

FIGURE 5
MONTANA TOTAL EMPLOYMENT AND LABOR FORCE



Source: Local Area Unemployment Statistics, Montana Department of Labor & Industry and Bureau of Labor Statistics

LABOR FORCE PARTICIPATION RATES INCREASING BUT GREATER PARTICIPATION STILL NEEDED TO FILL JOB DEMANDS

The strong job growth over the past five years has reduced unemployment and increased wages. Montanans have also reacted to the stronger economy by increasing labor force participation rates. Montana's labor force is illustrated in **Figure 5** along with employment totals. The difference between the labor force and the employed is the number of unemployed people.

Labor force participation refers to the percentage of the population over the age of 16 that is either employed or looking for work. Labor force participation is influenced by economic opportunity – a growing economy increases the labor force because jobs are plentiful and wages are growing. Labor force participation usually decreases during recessionary periods as workers become discouraged looking for work, and choose to pursue other life interests like caring for family or furthering their education. In fact, Montana's labor force decreased significantly during the recession, falling over 2% during 2008 and 2009. But when Montana's economy improved, better wage growth and lower unemployment rates led to a quick recovery of Montana's labor force participation rates. In contrast, the U.S. labor force has recovered much more slowly and is only 1.5% above the pre-recession peak.

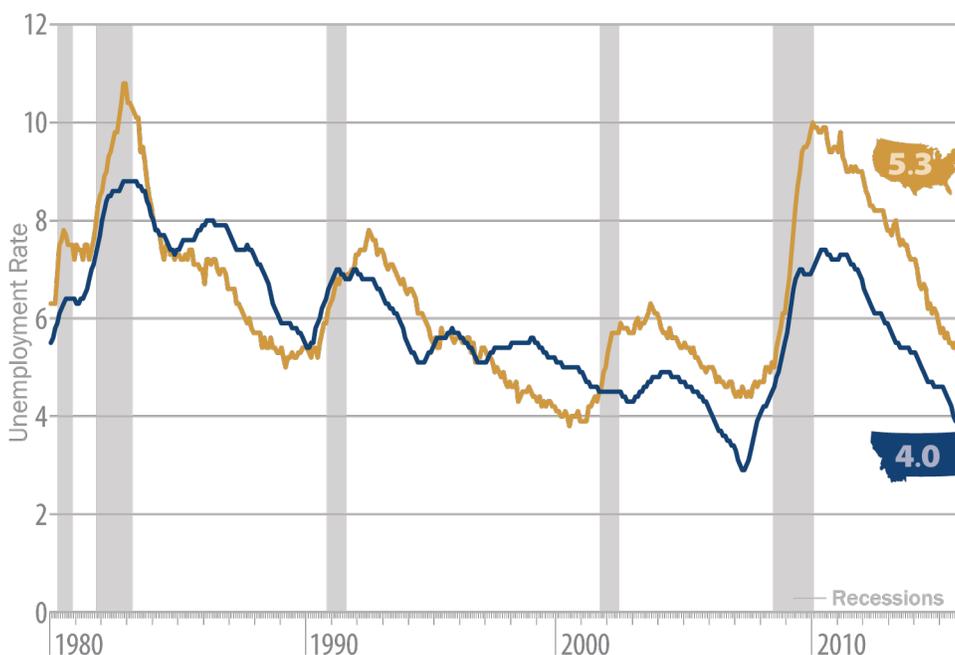
Montana's labor force participation rate was at 64.8% in 2014, higher than the 62.9% for the U.S. and ranking 20th highest among states. Montana's participation rate increased by nearly a full percentage point from the 2013 level of 63.9%, adding roughly 2,700 workers. Montana's participation rates are good, but they need to be even higher to accommodate future job growth. Montana's unemployment rates are currently at ideal rates, but expected to go lower in the future.

UNEMPLOYMENT IN MONTANA AT IDEAL LEVELS

Montana's unemployment rate is currently at ideal levels, hitting 4.0% in July 2015. Economists generally consider unemployment rates between four to five percent as “normal” unemployment, which is the level of unemployment that provides a healthy balance of most workers being able to find jobs at reasonable pay and businesses being able to find workers with the right skills and experience to do the job. Unemployment rates higher than the normal level indicate workers will find it difficult to find jobs, causing financial stress to families and ultimately reducing demand for Montana's products due to lower wage income available for spending. Unemployment rates lower than the normal level suggest worker shortages, where businesses have a difficult time finding workers to fill positions. Without workers, businesses can't produce goods and services, slowing the growth of our state's economic production.

Montana's annual unemployment rate of 4.7% in 2014 was the 13th lowest in the nation. Montana's unemployment rate has been lower than the U.S. rate since the 2001 recession, hitting its all-time low of 2.9% in 2007. **Figure 6** illustrates the U.S. and Montana unemployment rates since 1980 with the recessions highlighted. The 2007 recession caused unemployment to spike up by four and a half percentage points, hitting a recessionary high of 7.4% in 2010 before Montana's economy started recovery. However, with strong employment growth since 2010, those high unemployment rates are now several years behind us.

FIGURE 6
UNEMPLOYMENT RATES SINCE 1980, U.S. AND MONTANA



Source: Local Area Unemployment Statistics and Current Population Survey, Bureau of Labor Statistics and Montana Department of Labor & Industry

MONTANA'S LOOMING WORKER SHORTAGE

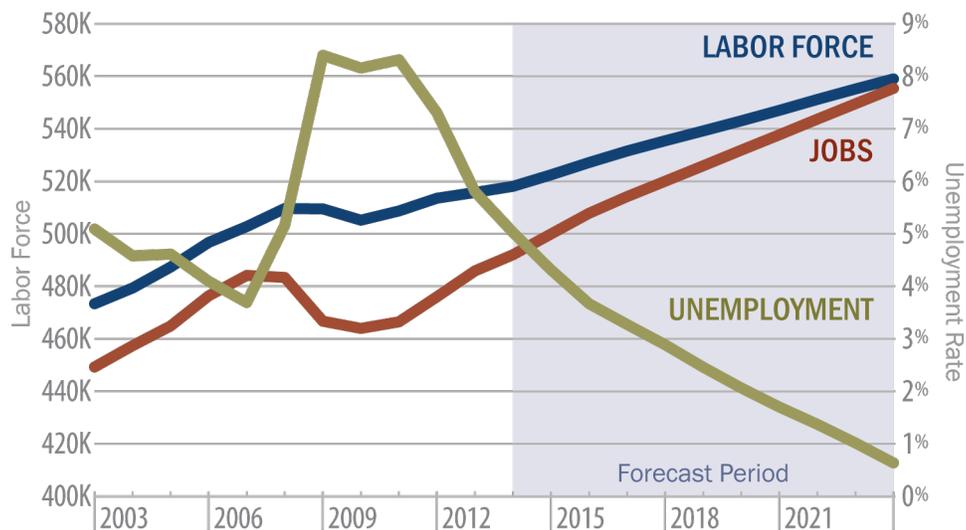
Montana's continued economic growth is threatened by a shortage of workers, with our population demographics restricting labor force growth. Nearly 6% of Montana's labor force is already over 65 years of age, the fourth highest share in the nation. An additional 97,000 workers are between the ages of 55 and 64 and close to retirement. While many Montanans continue to work past the typical retirement age, there is still expected to be at least 130,000 retirements among the baby-boomer population within the next ten years. In comparison, there are only 123,000 Montanans aged 16 to 24, and not all of these young Montanans will be in the labor force.¹⁵ There are simply not enough young people in Montana to make up for the expected retirements of the baby boomer population.

The Montana Department of Labor and Industry projects that Montana's labor force will only grow by 4,100 workers per year for the next ten years, leaving a shortfall in the amount of workers needed to fill the expected 6,500 jobs per year. These projections are based on Census Bureau population projections that predict that the size of Montana's working-age population will be stagnant, even with increased migration. The projections also assume that labor force participation rates return to pre-recession levels due to higher wages and more job opportunities. Even accounting for increased migration and greater labor force participation, Montana's unemployment rate is expected to reach levels of 1% to 2% within the next decade.¹⁶

Figure 7 illustrates the expected job growth, labor force growth, and unemployment rates for the next ten years. By 2024, the labor force is projected to add nearly 41,000 new prospective workers at an annual average growth rate of 0.8%, slightly slower than the growth of the overall population (0.9%) because of the aging population. Employment is expected to grow faster than the labor force, pushing the unemployment rate down to extremely low levels.

Tight labor markets caused by worker shortages can provide economic benefits for workers because jobs are easy to find and wages increase rapidly. However, economic growth can be constrained if businesses cannot find the right workers, or enough workers, to produce their goods. Montana's overall economic growth will be slowed by worker shortages unless Montana finds ways to increase the available labor by increasing participation rates to record highs, shifting to more full-time jobs, and investing in productivity-enhancing technologies.

FIGURE 7
LABOR FORCE PROJECTIONS 2014-2024, with EMPLOYMENT PROJECTIONS AND UNEMPLOYMENT RATE



Source: Montana Department of Labor & Industry, Research and Analysis Bureau

SOLUTIONS TO MONTANA'S WORKER SHORTAGE

Montana is pursuing a number of options to address the upcoming worker shortage. Many of Montana's efforts focus on enhancing or working with market forces to increase the availability of labor. One solution is to increase the number of hours worked by each worker. Montana has a high share of part-time employment. Among Montana workers aged 16 to 64, roughly 22% work less than 35 hours per week – the sixth highest percentage of part-time workers in the nation.¹⁷ While part-time jobs may be ideal for semi-retired workers, students, and others who choose to only work part time while pursuing life goals, many workers would prefer full-time employment.

Montana will also need to pursue efforts to increase labor productivity, thus producing more output for every hour worked. Labor productivity is not determined by how hard a worker works, but is instead determined by how efficiently a worker works. Enhancing productivity is achieved with better workforce education that allows workers to continuously upgrade skills and knowledge so that businesses can implement the latest technologies and practices. Better productivity also requires more communication and networking with researchers who are identifying best practices, and communication with upstream and downstream businesses to identify ways to save labor hours. Some productivity enhancing investments will occur naturally in response to market forces. For example, as labor becomes more expensive, businesses will invest in productivity-enhancing machines and technologies to allow each worker to produce more output. The new technologies

SKILL SHORTAGE VS. WORKER SHORTAGE

Many people use the terms 'skill shortage' and 'worker shortage' interchangeably to describe a situation where businesses are having trouble finding the right workers. But to a labor economist, these terms are very distinct, and refer to two separate problems.

A skill shortage refers to when the skills needed to fill open positions do not match the skills of the workforce. Skill shortages can often result after recessions because the industry mix of the economy changes. For example, in the last recession, the construction industry lost nearly 30% of its employment levels, and has been slow to regain jobs. In contrast, the healthcare industry added jobs throughout the recession, requiring more workers to fill openings. Because unemployed construction workers are unlikely to have the skill sets required in the health care industry, significant retraining is needed to update the workforce for the new economy. The Montana Department of Labor and Industry, along with other workforce education and training partners, has worked to address this skills gap by retraining unemployed workers into in-demand jobs. Many of Montana's businesses have made efforts to address skill shortages by improving communications with local community colleges to provide on-the-job training specific to the employer's needs.

In a worker shortage, a lack of skills is not the only problem. A worker shortage means that there simply aren't enough people to fill open positions. A worker shortage can also be a result of changes in the economy from a recession when the geographical distribution of job growth is different from the original job losses. For example, during the last recession, the Northwestern region of the state experienced the greatest job losses, but jobs were growing in Eastern Montana related to the oil fields. There was a geographical mismatch between the open jobs and the available workers, resulting in a worker shortage in the east, but high unemployment in the west.

The worker shortage expected in the next ten years is due primarily to demographic factors, where the growth of the population of working-age people is limited. One of the solutions to a worker shortage, however, is exactly the same as a skills shortage. With workers in short supply, each individual worker is valuable to our economy. Workforce and education systems must streamline training efforts to ensure the worker is trained quickly, reducing the time spent out of the workforce for education. The Montana Department of Labor and Industry is working with Montana employers and the higher education system to expand apprenticeship programs and other on-the-job training opportunities so that Montana workers and businesses can upgrade worker skills without taking time off the job.

will produce more output with fewer labor hours, allowing economic growth to continue despite the labor shortage. Ultimately, Montana's growth depends on our ability to increase technology, productivity, and innovation.

Montana's workforce and education systems will also need to continue efforts to make worker training more affordable and easily accessible. More efficient education and training systems, particularly those for adults already in the labor force, are necessary to give working professionals the opportunity to earn income while learning new skills. Businesses must also have greater involvement in the training systems, providing more on-the-job training to perfect worker skills and working with the education systems to ensure that curriculums teach the right skills for the job. All of these efforts must be pursued to steadily increase productivity levels of Montana's workforce so that each worker can achieve their highest levels of success.

FINDING MORE WORKERS: WORKER GROUPS WITH LOWER LABOR FORCE PARTICIPATION

Increased employment opportunities and higher wages will naturally provide more incentives for workers to enter the labor force. But there are also pockets of workers with labor force participation rates that are lower-than-average who are good targets for recruitment efforts. **Figure 8** shows the differing labor force participation rates of worker subgroups in Montana's economy. Women, particularly those who maintain families caring for children or aging parents, have lower labor force participation rates than men. American Indians have lower labor force participation rates than all Montanans. Disabled Montanans, many who are veterans, also have lower labor force participation rates than the Montana average. These populations can be targeted with additional efforts to bring them into the labor force. For example, disabled workers may need special accommodations with equipment and work hours in order for them to be most productive at work. In rural areas, better transportation infrastructure can help workers get to work sites, while better internet infrastructure would allow for more work-at-home opportunities.

There is some evidence that Montana workers are already making strides in making work flexible for their employees. For example, nearly 6.1% of Montana's workforce works from home, the fourth highest percentage in the nation.¹⁸ But that still puts the majority of workers in traditional work arrangements that may not work for every employee. Significant changes to the culture of Montana's workplaces may be necessary in the future to maximize the employment contribution of every worker.

ADDRESSING THE GENDER PAY GAP

Women, particularly those who have left the workforce to care for children or aging parents, are a good target for businesses to find workers to help meet labor demand in the future. Often, caregivers were previously successfully working in a career before leaving for family needs. These workers are already educated, trained, and experienced in their chosen careers, requiring little additional education and training before they are ready to work. Women are also more likely to work part-time than men, suggesting that increasing the work hours of women could also help fill job demands.

FIGURE 8
2014 MONTANA LABOR FORCE STATUS BY DEMOGRAPHICS

Group	Civilian Population (Non-institutional, 16+ years)	Labor Force Participation Rate	Percent of Montana Population	Percent of Employed	Unemp. Rate
Total Population 16+ Years	808,000	64.8%	100.0%	100.0%	4.6%
Men	402,000	68.9%	49.8%	52.4%	5.4%
Women	407,000	60.8%	50.4%	47.6%	3.7%
White	749,000	65.2%	92.7%	93.6%	4.3%
American Indian	45,274	58.8%	5.6%	5.3%	22.8%
Veteran (18 and Over)	97,000	49.6%	12.0%	9.0%	5.8%
Disabled	67,000	47.3%	8.3%	5.4%	14.2%
FAMILY STATUS					
Married men, spouse present	212,000	70.4%	26.2%	28.8%	3.4%
Married women, spouse present	213,000	63.5%	26.4%	26.2%	2.8%
Women who maintain families	35,000	62.5%	4.3%	4.2%	5.1%
AGE GROUP					
16 to 19 years	49,000	45.3%	6.1%	4.0%	7.3%
20 to 24 years	73,000	77.0%	9.0%	10.4%	7.6%
25 to 34 years	131,000	83.9%	16.2%	21.0%	4.5%
35 to 44 years	110,000	88.5%	13.6%	18.8%	3.7%
45 to 54 years	122,000	82.2%	15.1%	19.4%	4.0%
55 to 64 years	153,000	66.1%	18.9%	19.4%	4.5%
65 years and over	170,000	21.7%	21.0%	7.2%	3.1%
EDUCATIONAL ATTAINMENT (POPULATION 25 TO 64 YEARS ONLY)					
Less than High School	32,000	59.9%	6.1%	4.2%	14.1%
High School Graduate	149,000	74.8%	28.3%	26.8%	7.3%
Some College or Associate's	189,000	78.1%	35.9%	35.7%	6.1%
Bachelor's or Higher	156,000	86.0%	29.7%	33.3%	3.9%

Source: Bureau of Labor Statistics, Current Population Survey, 2014. Information on education level, American Indian, and disabled workers from the 2013 American Community Survey 3-Year estimates and therefore are not directly comparable to other figures.

Economic studies suggest that access to paid family leave after the birth of a child significantly increases the likelihood that workers will return to work, with most employers reporting positive or neutral costs of providing leave because turnover rates decreased.¹⁹ In 2014, about 13,000 Montana workers became the parents of a newly born or newly adopted child.²⁰ Although this population is small compared to the overall population of workers, it also represents nearly twice the annual growth in worker demand expected in the future. Retaining these parents in the workforce would certainly help meet the need for workers and also provide some support for parents during a time when they face high medical costs and significant demands on their time.

Addressing the gender pay gap and providing greater opportunity for female workers would also increase women's labor force participation and increase the average hours worked. The median earnings for Montana women who work full-time, year-round are only 75% of the median earnings for men, confirming that a gender pay gap exists in Montana.²¹ Economic research on the gender pay gap has found many reasons for the differences in pay between men and women, including different career and education choices, differences in work experience, and also gender bias. Resumé studies are a common type of gender pay bias research, where researchers send identical resumé

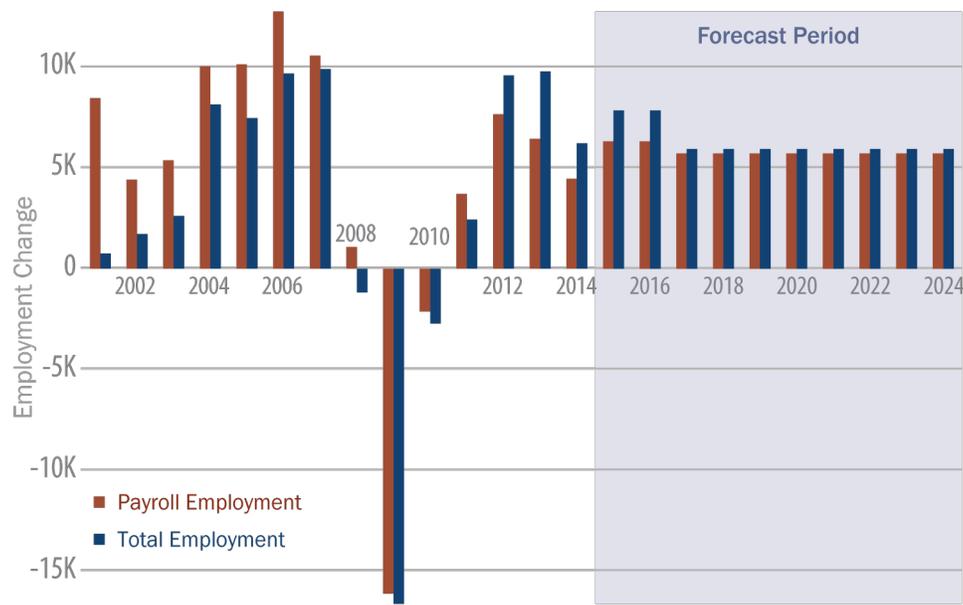
to employers, but half of the resumés have a female name (Barb) and the other half list a male applicant (Bob). These studies consistently find that employers are more likely to offer the job to the male, with starting salary offers 7% to 15% higher than those offered to females, despite identical qualifications listed. Both male and female managers are equally likely to demonstrate gender bias in hiring and pay, suggesting that the historic and cultural beliefs that result in gender pay bias are common to us all.²²

FUTURE EMPLOYMENT GROWTH

The looming worker shortage in Montana is expected to slow job growth in the upcoming years. The Montana Department of Labor and Industry tracks employment growth with two different metrics: total employment (which includes the self-employed), and payroll employment. Total employment counts include the number of people employed. With a limited number of workers, there are a limited number of people to fill the jobs and be included in the count. Payroll employment counts the number of people being paid by Montana employers. In both metrics, jobs that are open and left unfilled because no worker could be found would not be counted. **Figure 9** illustrates the employment forecasts produced by the Montana Department of Labor and Industry for the next ten years.²³

Montana is expected to add roughly 7,800 jobs per year in 2015 and 2016 at a rate of 1.6%, then slow to job growth of 5,950 jobs per year from 2017 to 2024. The faster growth in the near term is expected as a continuation of the strong job growth Montana has experienced in recent years, with the worker

FIGURE 9
MONTANA JOBS ADDED OVER PRIOR YEAR, TOTAL AND PAYROLL, HISTORIC, AND PROJECTED



Source: Historic total employment data from the Local Area Unemployment Statistics. Historic payroll employment from the quarterly census of employment and wages. Projected data from the Montana Department of Labor & Industry 2015 Employment Forecasts.

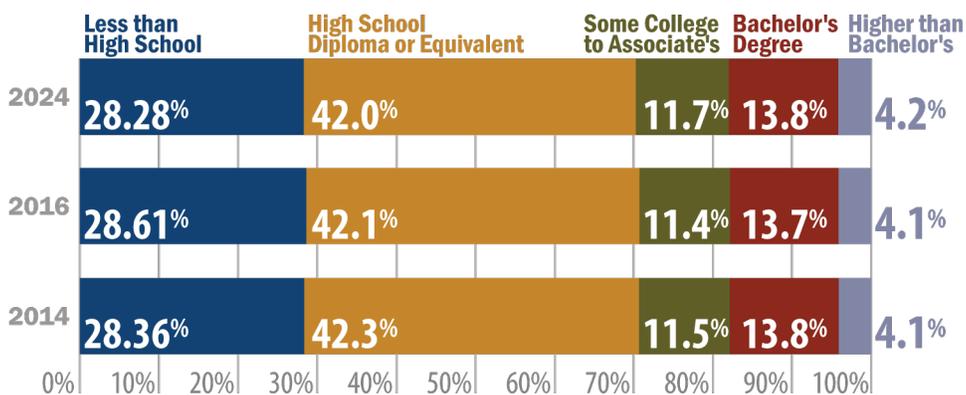
shortage slowing growth in the long-term to only 1.1%. Although slower than recent years, the 1.1% pace in the long term is just slightly above the long-term employment growth average of 1% annually since 1980. The health care industry is expected to have the highest job demands, requiring 1,300 jobs per year through 2024. Mining, professional and technical services, and construction are expected to grow the fastest in percentage terms. Construction employment growth is finally gaining traction after a tough recession and prolonged recovery. Although employment growth in mining is expected to stall over the next two years in response to lower oil prices, growth is expected to return in the next ten years, resuming its place as one of Montana’s fastest growing industries. Professional and technical services is expected to be Montana’s fastest growing industry in percentage terms, adding an average of 600 jobs per year for the next ten years. The growth of Montana’s professional and technical service industry represents the emergence of a knowledge-based service sector, which generally provides higher wage, professional jobs with good benefits.

Throughout the next ten years, workers will need to continue to improve their skill sets to adapt to the changing world economy, and the changing mix of industries and jobs expected in the future. **Figure 10** illustrates the minimum education requirements of Montana’s future jobs in 2014, 2016, and 2024. In general, Montana’s workforce will need to be slightly more educated than before, with a higher share of college undergraduate and graduate degrees. Occupations requiring higher education levels are projected to grow faster than occupations at low education levels, resulting in an overall shift towards a more educated workforce.

Figure 10 displays the minimum education requirements needed to enter a job. Workers intending to progress in their careers will require additional education to succeed. Montanans with higher levels of education also face lower unemployment rates, lower poverty rates, and earn higher wages. Well-educated workers are also more likely to become entrepreneurs and to recommend productivity-enhancing processes to their employers.

Currently, Montana’s workforce is fairly well-educated in comparison to other states. For people 25 years and older, 92.5% of Montanans have a high school degree – the highest percentage in the nation. For bachelor’s degrees, Montana is about equal to the national average, with 29% of people

FIGURE 10
MONTANA JOBS BY MINIMUM EDUCATION REQUIREMENTS, CURRENT AND PROJECTED



Source: The Montana Department of Labor & Industry 2014 to 2024 Occupational Employment Forecasts.

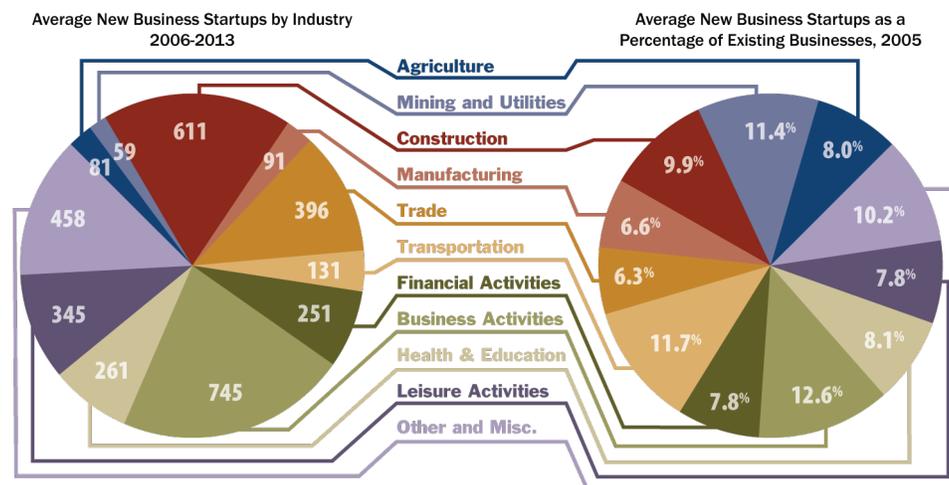
25 and older holding bachelor's degrees or higher education, ranking 20th among the 50 states. However, Montana's educational attainment slips behind other states for graduate degrees, with only 9.1% of the population 25 and older having a graduate degree, ranking 33rd in the nation and behind the national average of 10.9%. In comparison, over 17% of the population over 25 has graduate degrees in the top-ranking state of Massachusetts.²⁴

MONTANA ENTREPRENEURS CONTINUE TO LEAD NATION

In addition to higher wages and better productivity, highly educated workers are more likely to become entrepreneurs, and Montana continues to excel in this metric. Montana's business openings rate was at 6.4% of existing businesses in 2014, ranking 5th among states.²⁵ Montana also has one of the highest percentages of households owning a business.²⁶ Montana's entrepreneurialism has continued to drive job growth in the state, with businesses less than five years old comprising about 14% of Montana's total employment.²⁷

New business startups occur in every industry in Montana, with business activities and construction having the largest number of business startups among industries. **Figure 11** illustrates the business startups by industry, showing both in the average number of new businesses per year from 2006 to 2013 and the startup rate as a percentage of existing businesses. Even though construction has an average of 611 startups per year, there are a large number of construction firms, placing this industry in the middle for startups as calculated as a percent of existing businesses. The highest startup rates are found in the business activities, transportation, and mining sectors.

FIGURE 11
NEW BUSINESS STARTUPS BY INDUSTRY



Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, and U.S. Census Bureau QWI

MONTANA INDUSTRIES

Since the recession, Montana's fastest growing industry in terms of jobs has been healthcare, but the trade industry has surged in 2014 to claim the fastest growing industry spot. **Figure 12** illustrates the employment change, wage growth, and GDP growth by industry sector in 2014. Retail and wholesale trade posted strong employment gains in 2014 by adding nearly 1,250 jobs at 1.7% growth. Wages for workers in the trade sector have also posted solid gains with a 3.8% increase in the average annual wage, moving it up to \$32,870. The retail sector has been doing well because wage gains for all workers has put more money in the pockets of Montana consumers, plus lower fuel prices have allowed for greater spending on discretionary items.

Employment growth in health care slowed in 2014, adding only about 950 jobs over the last year at a pace of 1.4%. This job growth is lower than recent years. Employment growth in health care from 2010 to 2013 averaged 1.9% per year. However, GDP growth in the health care industry was slightly faster than the five year average. Faster GDP growth with slower employment growth suggests that health care industry improved productivity levels over the last year. Average wages in the health care industry are higher than the overall annual average wage at about \$41,150 per year.

Another industry showing signs of productivity enhancements is manufacturing, where employment grew by 2.9% over the year (adding over 500 jobs), and GDP grew at a very good pace of 5.8%. Manufacturing has been an important component to Montana's economic growth over the last five years, with very large gains of 15.4% GDP annual average growth. Montana's largest manufacturing products in terms of employment include food and beverages (including locally crafted beers), wood products, petroleum and coal refining, fabricated metals, machinery, and nonmetallic minerals. Miscellaneous manufacturing also is a large employing manufacturing sector,

FIGURE 12
MONTANA INDUSTRY PERFORMANCE BY DIFFERENT METRICS

	Payroll Employment Change 2013-2014		GDP Growth		Wages	
	Percent Change	Job Change	Last Year	Last Five Years 2009-2014	2014 Average Annual Wage	Growth in Average Wage 2013-2014
Trade	1.7%	1,244	5.0%	4.7%	\$32,869	3.8%
Education and Health Care	1.4%	958	4.1%	4.0%	\$41,141	2.5%
Construction	3.8%	908	2.9%	2.5%	\$46,209	2.9%
Manufacturing	2.9%	536	5.8%	15.4%	\$45,724	4.3%
Leisure Activities	0.6%	379	5.6%	4.8%	\$16,730	5.4%
Government	0.3%	241	1.5%	1.9%	\$43,283	2.5%
Agriculture	3.2%	155	-0.8%	9.7%	\$35,054	7.1%
Transportation	1.1%	128	4.1%	5.9%	\$41,426	1.5%
Financial Activities	0.2%	44	3.2%	4.4%	\$50,810	3.9%
Mining & Utilities	-2.6%	(311)	-2.7%	3.5%	\$86,496	4.9%
Business Services	-0.8%	(323)	5.9%	4.3%	\$46,472	5.8%
Other	-2.9%	(687)	-0.1%	1.3%	\$32,051	2.2%
Total	0.7%	3,272	2.9%	4.5%	\$38,880	3.5%

Source: Quarterly Census of Employment and Wages, Bureau of Labor Statistics and MT Department of Labor & Industry. GDP statistics from Bureau of Economic Analysis.

which includes medical equipment manufacturing, among other products. These industries are also the largest manufacturing sub-industries in terms of GDP, but the output value from petroleum and coal product manufacturing is more than the output from all other manufacturing combined.

The construction industry gained ground in 2014, adding about 900 jobs at 3.8% growth, making it the fastest growing industry over the year in percentage terms. Construction was hit hard by the 2007 recession, losing about 30% of the total workforce, and has taken a long time to recover from those losses. The construction industry is expected to grow by about 3% in the next few years, but is not expected to regain its peak employment levels until after 2020 due to the heavy job losses during the recession. Construction workers earn average annual wages that are about \$7,000 higher than the wages earned by all workers in Montana.

Employment growth in mining has been fairly volatile in the last ten years, with the large gains related to the development of the Bakken oil fields. Surprisingly given the decline in oil prices in 2014, the job losses in mining are not in the oil and gas industry. Oil and gas employment levels in Montana have stayed fairly steady over the year, adding roughly 24 jobs. Instead, the job losses in mining have come from other types of mining and from the support activities related to mining. Low prices for all commodities and a slowing global economy have negatively impacted all types of mining in Montana. Mining comprises only about 2% of employment in Montana, but it represents a larger share of GDP (about 5%) because of its high annual wages. Mining has the highest average annual wage of all the industries in Montana.

Although oil and gas is not the cause of the employment losses in mining, the oil price decline may be related to employment losses in the business service industry over the past year. The business service industry includes the temporary employment services industry, which helped to provide workers to the oil fields. However, because this industry provides workers for many different industries, it is not possible to confirm that these job losses are related to the changes in the oil and gas industry. Data from the first quarter of 2015 indicates that the business services industry has returned to growth.

The third industry posting job losses in 2014 is the information industry, which is included in the catchall 'other' category in [Figure 12](#). The information industry includes data processing, telecommunications, and cable broadcasting, but the job losses in the industry come from the newspaper, radio, and movie publishing and broadcasting services. The news publishing industry has undergone significant consolidation and restructuring in the last several years that have resulted in job losses.

Government posted little employment change over the last year. In the past few years, the federal sequesters, fiscal cliff, and other cuts in federal government spending have reduced government employment in Montana. In general, the government sector grows at the same pace as the overall population, but growth in this industry has been slower than population growth in recent years.

SIZE OF MONTANA'S INDUSTRIES

Montana's largest industry depends on which metric is used to measure size. **Figure 13** illustrates the contribution of Montana's industries to employment, GDP, and personal income earned from work. Each of these metrics give a slightly different understanding of the economy. Healthcare, leisure activities, and trade are large employing industries in Montana and require large numbers of workers to fill open positions. However, financial activities is the largest industry in terms of GDP.

Regardless of size, all industries are essential for the proper functioning of Montana's economy. For example, the information industry provides internet services throughout Montana. While it is one of the smallest industries in terms of both GDP and employment, all other industries rely on its services. All industries work together to make the economy grow.

FIGURE 13

MONTANA INDUSTRIAL COMPOSITION BY GDP, EMPLOYMENT, AND PERSONAL INCOME

Gross Domestic Product



Employment



Personal Income



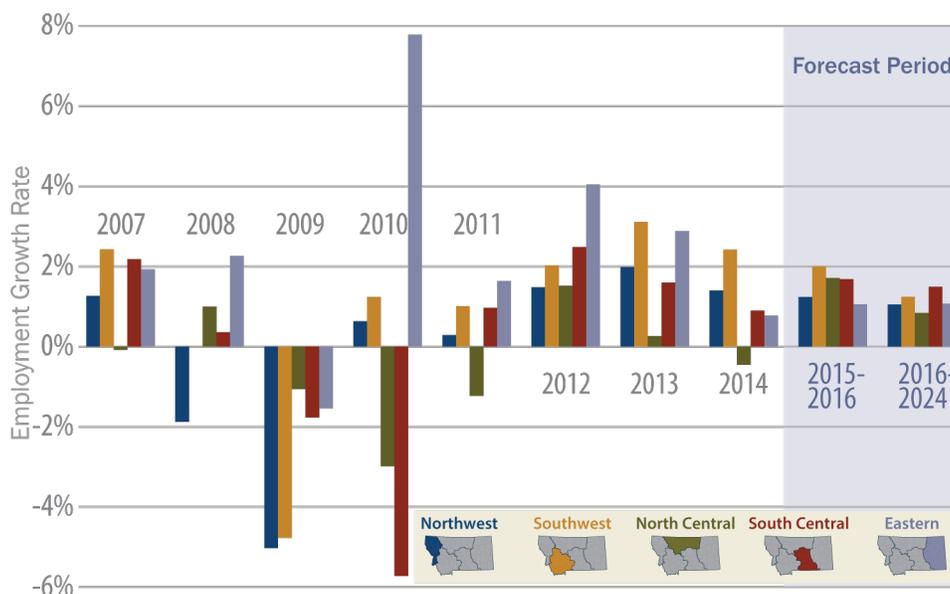
Source: Bureau of Economic Analysis and Quarterly Census of Employment and Wages

REGIONAL GROWTH

During the recession and recovery, employment growth rates in the eastern portion of Montana led the state because of the rapid expansion of oil and gas drilling. In 2014, lower prices for oil and agricultural commodities have slowed employment growth in the Eastern region of Montana, with the more populated regions of the state posting the strongest economic growth. **Figure 14** illustrates the total employment growth rates since 2007, along with the expected job growth in the upcoming ten years, for each Montana region. Employment growth was fastest in the Southwest region, which includes Bozeman, Helena, and Butte, in both 2013 and 2014. The Bozeman area has been expanding in the businesses and professional services sector, which includes occupations like engineers, computer programmers and economists. Rapid employment growth in the professional and technical services industry is reflective of a general shift in Montana towards a more service-based economy.

The development of the Bakken oil fields spurred rapid employment growth in the Eastern region after the recession, but growth has slowed slightly over the past couple years due to cost controls implemented by the oil industry and reduced profits from the decline in oil prices in late 2014. In fact, worker shortages and a shift towards employment in the higher-paying mining industry caused the east to lead the state in wage gains for much of the last few years. The Eastern region has the highest average wage of all regions at \$43,390. However, with the decline in oil prices and agricultural commodities, growth in this region has stalled. Jobs still increased over the year, but growth in the fourth quarter was minimal, and payroll employment from the first quarter of 2015 suggests job losses in the region. As oil prices stabilize, so will employment in the east.

FIGURE 14
EMPLOYMENT GROWTH RATES SINCE 2007, AND PROJECTED RATES BY REGION



Source: Montana Department of Labor & Industry 2015 Employment Forecasts

The South Central region has also benefited by the oil and gas industry in recent years, particularly with the expansion of the petroleum refineries in the Billings area. These jobs pay well, and have put upward pressure on wages. Similarly to Eastern Montana, the South Central region had a slowdown in employment growth in 2014 due to lower oil prices, but the diverse economy in the region is expected to weather the downturn well. The South Central region is expected to be the state's fastest growing area in the long term, largely because of the expansion of the consumer economy in Montana's largest city. The Billings region also serves as a healthcare hub for all of the central and eastern portions of Montana, and parts of Wyoming. The demand for these services is expected to increase in future years as the population ages.

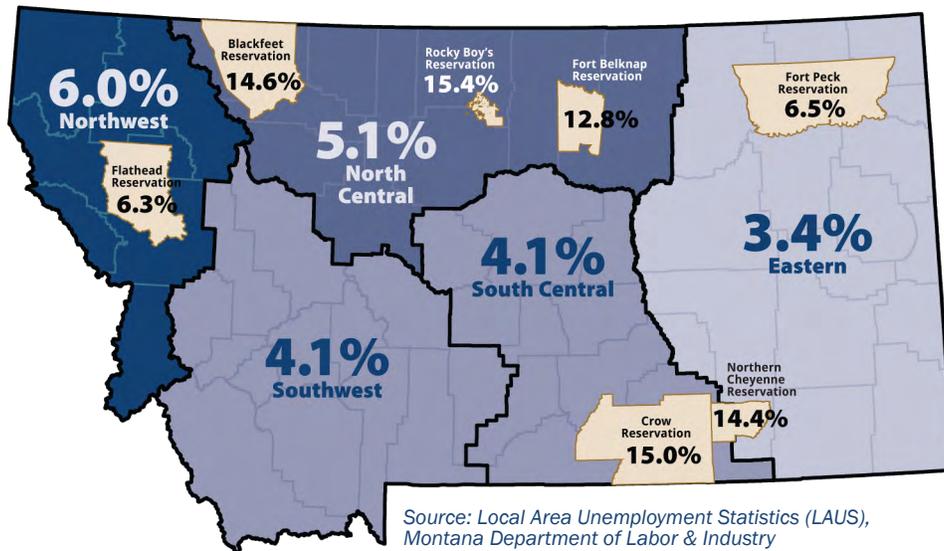
Unfortunately, the North Central region of the state posted another disappointing year in 2014, with job losses over the year after slow growth in 2013. Payroll employment estimates indicate gains in manufacturing and transportation, but federal government spending cutbacks have impacted growth in the region. Wage growth continues to be strong, however, and employment data from the first quarter of 2015 suggest that the North Central region is adding jobs and becoming more dynamic. Employment forecasts for this region expect a recovery of the employment losses, then a return to a growth rate lower than the other regions in the long-term.

As one region's growth disappoints, another exceeds expectations. The Northwestern area of the state is gaining strength, now posting respectable job growth for the last three years. Much of the growth in the Northwest has been in the retail and wholesale trade industry, which has been supported by stronger wage growth and more discretionary spending by consumers. The financial activities industry (which includes real estate) has also added about 200 jobs to the region in 2014. Wage growth has picked up in the Northwest region, which will add even more momentum to economic growth. Average wages in the Northwest are lower than the state average, at \$35,030 in 2014 compared to a statewide average of \$38,880. Payroll employment data from the first quarter of 2015 indicate strong growth in both jobs and wages in the Northwest, with gains in the consumer based industries of trade, leisure activities, construction, and health care.

With stronger job growth, unemployment rates in all of Montana's regions have decreased over the year. **Figure 15** illustrates the 2014 unemployment rates for each region, along with the reservation unemployment rates. Unemployment rates declined in all of Montana's five regions, with the largest drop occurring in the Northwest portion of the state. The Northwest's 6.0% unemployment rate is still higher than desired, but the job gains in recent years demonstrate that this region is regaining strength. Unemployment rates continue to fall the further you move east, with a low rate of 3.4% in the Eastern region of the state. Some counties in this region continue to have unemployment rates at or below 2%, marking worker shortages in the region.

Also illustrated in **Figure 15** is the unemployment rates of Montana's seven reservations. Montana's reservations are some of the most economically sensitive regions of our state, and unemployment rates on the reservations are often two to three times higher than their surrounding areas. **Figure 16** illustrates the unemployment rates of the reservation areas, along with job and wage growth. All of the reservations have improving unemployment rates over the last year with large declines on the Crow, Northern Cheyenne, and Rocky Boy's reservation. The Flathead reservation also posted job growth over the last year, bringing down unemployment rates. Rocky Boy's unemployment rate is highest, but job growth has reduced unemployment over the last year.

FIGURE 15
2014 UNEMPLOYMENT RATES FOR MONTANA'S REGIONS AND RESERVATIONS



However, the economic news is less favorable for the Blackfeet reservation, which experienced employment losses over the last year. The labor force also declined on the Blackfeet reservation, resulting in lower unemployment rates despite the job losses. The contradiction between the declining unemployment rate suggesting positive growth, and employment losses indicating a contraction underscores the importance of including different economic metrics when analyzing economies. Montana's reservation communities often have labor force participation rates below the rest of Montana because job opportunities have been scarce over a long period of time. Few job opportunities and low wages reduce economic engagement.

FIGURE 16
2014 EMPLOYMENT AND WAGE GROWTH FOR MONTANA'S RESERVATIONS

	2014 Unemp. Rate	Change from 2013	2014 Employment	Job Change from 2013	Labor Force Change from 2013	Wages	Change from 2013
Blackfeet	14.6%	-0.7%	3,773	-6.8%	-6.0%	\$34,274	6.1%
Crow	15.0%	-5.4%	2,541	2.9%	-3.7%	\$36,055	4.0%
Flathead	6.3%	-0.9%	11,667	2.1%	1.1%	\$32,167	1.9%
Fort Belknap	12.8%	-0.9%	762	-0.8%	-1.8%	\$42,634	-2.5%
Fort Peck	6.5%	-0.4%	4,157	-0.9%	-1.4%	\$34,199	3.1%
N. Cheyenne	14.4%	-2.5%	1,396	1.2%	-1.7%	\$36,337	3.3%
Rocky Boy's	15.4%	-1.9%	1,086	0.2%	-2.0%	\$42,544	-9.3%

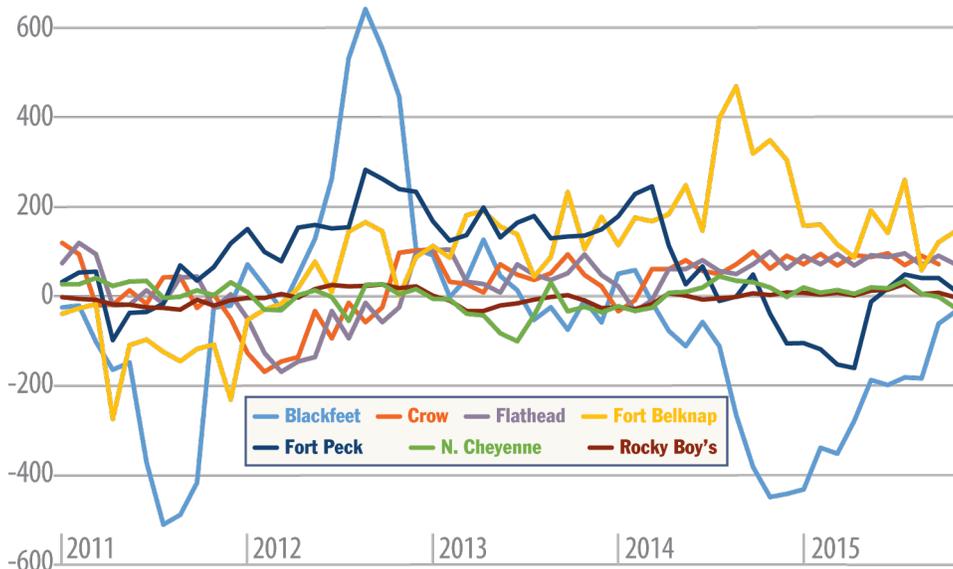
Source: Local Area Unemployment Statistics and Quarterly Census of Employment and Wages, Montana Department of Labor & Industry

In order to help research and understand the unique challenges faced by reservation economies, the Montana Department of Labor and Industry recently expanded the types of data available for Montana's reservation areas. Monthly unemployment rates calculated with the same data and same methodology used to publish county labor market information are now being published. These unemployment rates are directly comparable to the unemployment information published for the U.S., Montana, and all other areas in the U.S. Providing this data will allow for better comparisons of reservation areas to other regions, allowing for improved economic research and information.

Examining employment growth on the reservation by month is now possible for Montana's reservations because of increased data availability. Such an analysis is presented in **Figure 17**, showing the monthly over the year changes in employment for Montana's seven reservations. The Blackfeet reservation had a large spike in employment in 2012, but has experienced job losses over the last year. The Fort Peck reservation has benefited from the oil and gas exploration in the Bakken in the last several years, posting steady job gains until the price of oil started to decline in the second half of 2014. Recent 2015 data shows a return to growth on the Fort Peck reservation. The Fort Belknap reservation has been successful in adding employment opportunities over the last year, reducing unemployment levels by 0.9 over the last year to 12.8%. Both the Crow and Flathead reservations have shown steady growth since 2013, but the Northern Cheyenne and Rocky Boy's reservations have seen little change.

Reservation economies have a high level of their employment in government, but part of the high concentration is because of the categorization of tribally-owned businesses. The government category includes the typical federal, state, and local government employment, but also includes tribal employment and any tribally-owned enterprises, even if the enterprise is operated as though it is a private business. For example, a hotel that is owned by the tribe would be counted in the government industry, not the leisure activities industry.

FIGURE 17
OVER-THE-YEAR EMPLOYMENT CHANGE FOR MONTANA'S RESERVATIONS BY MONTH



Source: Local Area Unemployment Statistics (LAUS) for Reservation areas, Montana Department of Labor & Industry

Even accounting for these measurement issues, the reservation areas in Montana generally have a higher reliance on federal government funding than other areas of the state, particularly in the education and health care sectors. The cutbacks in federal funding from the fiscal cliff and sequester has therefore impacted the reservation areas more so than the rest of the state, with job losses in the health care, education, and government sectors in 2013 and 2014. However, most reservation economies have returned to a more positive growth path in 2015.

WHAT'S IN AN UNEMPLOYMENT RATE? DIFFERENT METRICS USED TO MEASURE THE LABOR MARKET

The unemployment rate is a metric used by economists to measure how easy it is to find a job, if a worker is looking for a job. If a person is either employed or unemployed and looking for work, they are included in the labor force. The unemployment rate is the ratio of the number of people unemployed and looking for work over the labor force.

However, during recessions or in areas with low job growth, many unemployed workers can give up looking for work. Workers who have given up looking for work are not included in the labor force, and therefore not included in the unemployment rate metric. There are two other metrics that do include people who have given up looking for work. Labor force participation rates indicate the percentage of the population that is in the labor force. Employment to population ratios measure what percent of the population is employed. Both of these metrics should be used with unemployment rates to get a well-rounded view of the economy.

However, both the labor force participation rate and the employment to population ratio are more affected by long-term demographic shifts than economic changes, making these metrics a poor choice for measuring the strength of the job market. As Montana's population ages, more people will move into retirement status. These demographics will bring down employment-to-population ratios and labor force participation rates regardless of whether the economy is performing well.

Labor force participation rates on Montana's reservations range from 49% on the Fort Belknap reservation to nearly 70% on the Crow reservation, according to data from the U.S. Census Bureau. For comparison, Montana's labor force participation rate is about 65% in the Census data. Some reservations have labor force participation rates below the state average, and some reservations are higher than the state average. However, all reservations have employment-to-population ratios lower than the Montana average because of higher unemployment on most reservations combined with lower labor force participation on some reservations. The employment-to-population ratios for Montana's reservations range from 46% to 50%, compared to about 60% for the state as a whole.

Source: 2013 American Community Survey 3-Year Estimates

MONTANA'S ECONOMIC GROWTH EXPECTED TO CONTINUE

Montana's economy outperformed the nation again in 2014, with rapid wage increases, strong employment growth, and declining unemployment. Wage and employment growth has occurred throughout Montana, with the western half of Montana strengthening growth to rebalance the economy geographically. The decline in oil prices has impacted our state, slowing growth in the Eastern region of Montana in particular, but the economy is resilient and diversified enough to withstand these changes. Data from the first half of 2015 suggests Montana's economy has already overcome the challenges of low commodity prices, and is finding opportunity in other industries and areas.

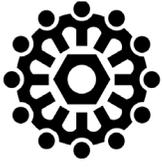
The path forward is not without challenges. With a stronger domestic economy and weakness overseas, the dollar will continue to appreciate in the next few years, slowing demand for Montana's exports. The Federal Reserve is expected to increase interest rates over the next year, which will further strengthen the dollar and influence national economic growth. Continued concerns about debt in Greece and the Eurozone are also likely, as are concerns about slower growth in China. However, the U.S. and Montana economies have displayed strength and resilience in the face of these challenges over the last year, and this momentum is likely to continue.

Larger challenges present themselves with the aging of Montana's workforce and the lack of young people to replace retiring workers. Montana's limited working-age population will cause tightness in the labor market in the future, with unemployment rates expected to reach very low levels within the next ten years. More job opportunities and higher wages will naturally bring more workers into the labor force, but these natural forces may not be enough to meet the labor demands of Montana's employers. Actions must be taken to streamline education and workforce training programs to allow workers to learn while on the job, reducing costly time out of the labor market.

The Montana Department of Labor and Industry continues to take the lead in addressing the worker shortage and other issues faced by the Montana economy. The Department will continue to partner with businesses to address worker shortages, developing apprenticeships and other programs to ensure workers are quickly trained with the right skills for today's economy. Workers will need to take advantage of these training programs to continuously upgrade skills. Businesses will need to make investments to upgrade production processes and improve human capital. Businesses will also need to look for ways to attract workers from groups with lower labor force participation, which may require changes to the types of benefits offered or to hiring and promotion practices to remove unintended gender bias. These strategies will be needed for Montana's businesses to continue to successfully compete globally with rising labor costs. With actions designed to improve training, hiring, and retention practices, Montana will meet these upcoming challenges and continue to outperform the nation and other states in economic growth.

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