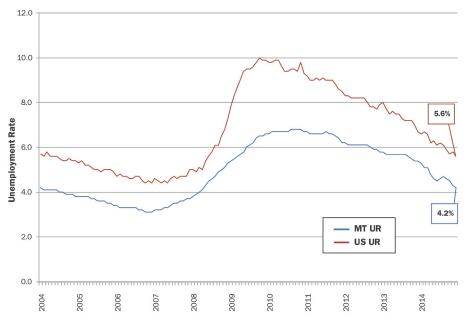


MONTANA AND U.S. UNEMPLOYMENT RATES



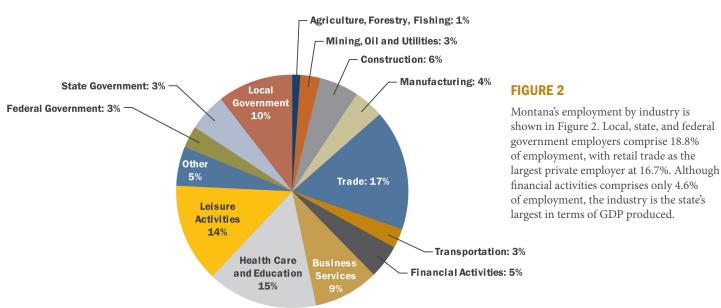
Source: LAUS and CPS, Bureau of Labor Statistics and MT Dept. of Labor & Industry.

Data for 2014 is pre-benchmark and therefore preliminary.

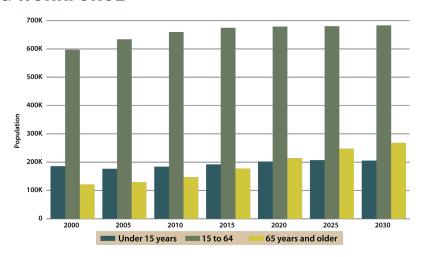
FIGURE 1

Montana's unemployment rate has dropped to 4.2% in December 2014. Economists consider "normal" unemployment levels of 4% to 5%, which allows workers to easily find jobs and businesses to easily find workers. As Montana's economy continues to grow and add jobs, businesses will start to find it difficult to find workers. Further, while employers have grown accustomed to hiring workers with skill levels at or above the requirements for the position, employers will now be facing applicant pools with skills that don't quite fit the position or require upgrading. The Department's worker training responsibilities will become more critical to the economy, with increased demands to develop flexible on-the-job training and more work aiding communication between employers and educational institutions on the skills needed for the workplace.

2013 ANNUAL EMPLOYMENT BY OWNERSHIP AND INDUSTRY



MONTANA'S AGING WORKFORCE



SOURCE: Census and Economic Information Center, Montana Department of Commerce.

FIGURE 3

The retirement of Montana's aging workforce will acerbate the worker shortage. More and more Montana workers are reaching retirement age, while the population of young workers is simply not large enough to replace them. Figure 3 illustrates the expected population by age, illustrating the little to no growth in the working age population aged 15 to 64. Even though employers have benefited in the past from a growing supply of ready and able workers to fill positions, the working-age population will be constrained, even with increased in-migration. Pockets of under-utilized workers and hard-to-employ workers must be identified and trained to fill open positions. Workplaces will likely need to become more flexible to allow more older workers and family caregivers to progress in their careers in part-time positions. Employers and existing workers will also need to employ creative techniques to update worker skills while the worker remains in the position working, as time out of the labor force for retraining will be costly for both worker and employer.

JOBS DURING RECESSION AND RECOVERY

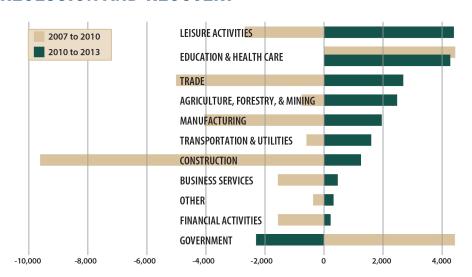


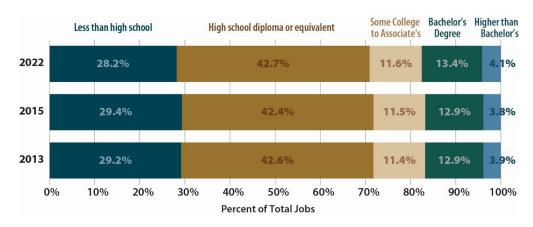
FIGURE 4

Montana's economy is different now compared to before the recession. Figure 4 shows the number of jobs lost during the recession from 2007 to 2010 to the types of jobs gained in the recovery from 2010 to 2013. The types of jobs added in the recovery are not the same types of jobs that were lost, requiring workers to change skill sets to gain jobs in the new economy. For example, the health care industry added jobs both during recession and recovery, requiring 8,000 new workers in the industry. In contrast, the construction industry lost over 9,000 jobs during the recession, with a slow industry recovery. Displaced construction workers need to be retrained to fill positions in the health industry.



MONTANA'S FUTURE JOBS REQUIRE A MORE EDUCATED WORKFORCE

PROJECTED JOBS BY THE MINIMUM EDUCATION LEVEL NEEDED TO ENTER THE JOB



SOURCE: Montana Department of Labor & Industry, 2012 to 2022 Job Projections.

FIGURE 5

Montana's industry mix is changing to require a more educated workforce. Figure 5 illustrates the minimum education requirements needed to fill Montana jobs based on the job projections produced by the Montana Department of Labor and Industry. Note that the jobs are categorized by the minimum education required – workers who meet only the minimum requirements may choose to obtain additional training and education to progress up the career ladder. Most jobs in Montana have minimum education requirements of a high school diploma or less. However, the percentage of jobs requiring higher

education levels has been expanding in recent years, and is expected to continue as Montana's economy continues to expand in knowledge-based, technology-driven careers. The job forecasts likely underestimate education and training requirements because the skill requirements for many jobs are increasing with technology. For example, mechanics now include a laptop computer in their toolbox as car electronics have become more advanced. The education requirements for mechanics (and other occupations) will increase with continued technology development.

HIGHER EDUCATION RESULTS IN BETTER EMPLOYMENT OUTCOMES

UNEMPLOYMENT AND WAGES BY EDUCATION LEVEL



SOURCE: Current Population Survey, Bureau of Labor Statistics, 2010 to May 2012 data for Montana.

FIGURE 6

Workers with higher levels of education have lower likelihood of experiencing unemployment and higher wages. Workers with a college degree or higher had low unemployment rates even during the worst of the recession. Workers with associates degrees earn roughly \$60 more per week than workers with just a high school diploma, while workers with a bachelor's degrees have wage premiums of over \$260 higher per week than those with a high school diploma. The weekly wage information also underscores the importance of workers obtaining a credential – those with some college but without a degree have little increase in wages over those with just a high school diploma.

MONTANA'S WORKFORCE

MEDIAN MONTHLY EARNINGS FOR PROFESSIONAL CERTICATION OR LICENSE RELATIVE TO NO ALTERNATIVE CREDENTIAL BY EDUCATION LEVEL: 2012

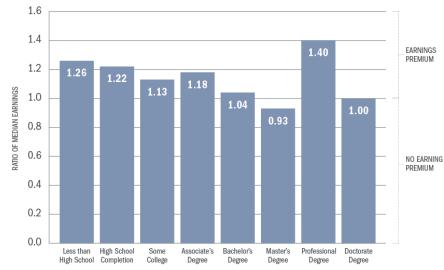


FIGURE 7

Workers who hold an alternative credential in addition to a traditional degree tend to earn more than workers who only hold the traditional degree. Figure 7 illustrates this earnings premium at each level of education, demonstrating the value an industry-recognized credential adds across the spectrum of educational attainment and skill level. By embedding industry-recognized credentials into higher education, students and workers benefit from a better return on investment once they become employed and recoup training costs through wages.

NOTE: Nonrespondents are not included in estimates of alternative credentials. Only people employed full-time for the 4 months before the survey with positive earnings are included in these analyses.

SOURCE: U.S. Census Bureau, Survey of Income and Program Participation, 2008 Panel, Wave 13.

MONTANA JOBS BY JOB TRAINING REQUIREMENTS, CURRENT AND PROJECTED JOBS BY DURATION AND INTENSITY OF ON-THE-JOB (OJT) TRAINING REQUIRED

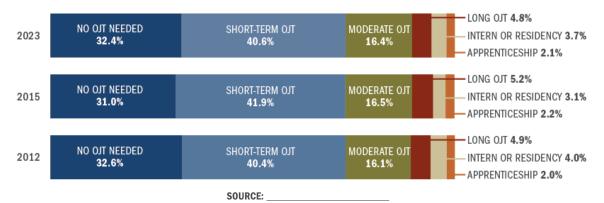


FIGURE 8

Montana's industry mix will continue to change to require a more educated workforce with greater emphasis on skills learned on the job, not just in the classroom. Figure 8 illustrates the current and projected mix of Montana jobs by the duration and intensity of on-the-job training (OTJ) required for the worker to competently perform the job. Further levels of OJT are needed for the worker to excel in their profession. Less than a third of Montana jobs can be performed without employer-sponsored training on the job. Many of the jobs not requiring any on the job training are those where the educational degree required is highly technical in nature, providing workers with sufficient skill training through the education system so that they have the needed work skills when they enter the job. The remainder of Montana jobs require employers to be actively involved in training their workforce, with roughly 16% of Montana jobs requiring moderate OJT of an employer-organized skill-building program lasting from one to twelve months, and

an additional 5% of jobs requiring OJT of over 12 months. The moderate and long term OJT periods can be shortened by combining work and classroom education, allowing workers to reach competency more quickly. The role of internship and apprenticeships is expected to stay fairly stable, but this projection does not account for the expanded role of apprenticeships training workers in non-traditional fields. The Montana Department of Labor and Industry is expanding apprenticeships offerings beyond the traditional apprenticed occupations like plumbers and electricians to non-traditional fields like health care and hightech. Rapid growth in high-tech and health care has resulted in worker shortages, and capacity to train these workers within our educational system is limited. Expanding apprenticeships into these rapidly growing fields will provide workers with alternatives to training, allowing them to earn a living while they develop their skills, and reduce strain on the educational systems struggling to keep up with demand.



WORKFORCE DEVELOPMENT PARTNERSHIPS



RevUp

As a collaborative effort between colleges in the state and Montana's Department of Labor and Industry, students have direct access to a wider variety of financial and non-financial supports to help make training affordable. Any of RevUp's Workforce Navigators, housed jointly in Job Service Offices and college campuses, can help students understand the qualifications for financial support.

Efforts are underway to align RevUp programs with existing and new apprenticeship opportunities around the state. Apprenticeships generally offer students an opportunity to earn a wage while they are gaining hands-on skills from a Montana employer and also continuing their classroom-based learning.



American Apprenticeship Initiative

The Montana Apprenticeship Initiative, due April 30, proposes a comprehensive integration and reform of the Montana Registered Apprenticeship program through enhanced coordination of key partners, aggressive outreach to employer sponsors, and elevated training programs that meet the needs of Montana's 21st Century economy. The Montana Apprenticeship Initiative will accomplish this comprehensive integration through four key strategies:

- Create the Montana Apprenticeship Clearinghouse to seamlessly link Apprenticeship opportunities for employers and potential apprentices. The Clearinghouse will link with MUS, MTWorks, MCIS, and other partner systems to streamline the Apprenticeship program, expand access to opportunities, and operationalize the Registered Apprenticeship College Consortium (www.doleta.gov/oa/racc.cfm) in Montana through online applications.
- Deliver job-related technical instruction (RTI) via distance course delivery platforms to apprentices in working in remote areas for employers who do not have access to live classroom or lab instruction.
- 3. Develop new competency-based registered apprenticeship programs for target high demand occupations utilizing partnerships between the Montana University System and Montana Registered Apprenticeship.
- 4. Engage Montana employers and industry leaders through program leadership, business investment, commitment to hire, and a comprehensive marketing and awareness campaign with tangible sponsor-commitment deliverables.



Montana HealthCARE

DLI is supporting this initiative by:

- Providing ongoing labor market information to the HealthCARE steering committee and training providers to ensure the skilled healthcare worker pipeline supplies the right number of trained workers to local employers
- Ensuring local Job Service Offices will work closely with HPCCs to identify and match job seekers with training opportunities in the healthcare fields.
- Providing MCIS as a centralized career planning clearinghouse for HPCCs, advisors, job seekers, and career specialists, providing skills assessments, localized occupation information, education and training options, and job search services, and building additional user functionality to weave in the MT HealthCARE career ladders, remediation and tutoring services, accelerated credential opportunities, opportunities for prior learning credits, and campus-specific course-planning services.
- Providing leadership and expertise to the development and management of the healthcare apprenticeship programs newly formed and funded by this grant.



Montana Career Information System (MCIS)

The Montana Career Information System (MCIS) is available at careers.mt.gov for all citizens at no cost. This tool is currently being used in over 620 sites such as middle schools, high schools, colleges, adult basic education, vocational rehabilitation offices, Job Service and other agencies working with youth and adults on career development and employment planning. The Montana Department of Labor and Industry's Research and Analysis Bureau is responsible for the program, which includes updating the labor market information produced by the Bureau. MCIS provides all the tools in one easy to use tool. Individuals can take assessments such as interest inventories and skills, explore occupations and training options, find financial aid, write resumes and cover letters, and prepare for interviews. Electronic portfolios save all of the work and research done which makes this tool a perfect place to store information for a long period of time. A student can create a portfolio in middle school and continue adding to it during high school, college and adulthood. When it's time to change jobs, going back to the portfolio to create a resume is simple. This is the only career tool available to Montanans that can be used during a person's entire lifetime. There are currently over 94,000 active portfolios being used in MCIS.