

Creating a Future Ready MT

With a growing economy, low unemployment and the impending retirement of the Baby Boomer generation, Montana needs skilled workers to continue our economic growth. But if Montana capitalizes on this opportunity, providing the necessary education and training to meet the workforce demands, workers and employers will both benefit, in turn strengthening the state's overall prosperity. This is why Governor Steve Bullock has convened state and local leaders, employers, educators, and other stakeholders to set ambitious attainment goals, driven by data, and agree to collectively pursue the strategies below to meet those goals.

Background

In 2013, Governor Bullock joined a growing number of states that were setting attainment goals by declaring in his State of the State address that Montana would increase the number of Montanans with a college degree, certificate or credential from 40% to 60% by 2025. Five years later, Governor Bullock has convened the Future Ready MT Cabinet to re-examine this attainment goal, make adjustments if needed and identify the concrete policy and strategic changes Montana can make to significantly move the needle.

Since 2013, efforts and initiatives across state government, in partnership with the private sector, have helped make some progress toward Montana's 60% goal. The Lumina Foundation reports that as of 2016 (most recent available data), 44% of Montana adults ages 25-64 have a workforce-relevant certificates or post-secondary degree.ⁱ The national average rose from 40% in 2013 to 46.9%.ⁱⁱ

2016 Attainment

| Highest degree/credential | Montana | National Average |
|----------------------------------|--------------|------------------|
| Graduate or professional degree | 9.5% | 11.9% |
| Bachelor's degree | 22.1% | 20.7% |
| Associate degree | 10.4% | 9% |
| Certificate/workforce credential | 2% | 5.2% |
| TOTAL W/CREDENTIAL | 44% | 46.9% |
| <i>Some college, no degree</i> | <i>21.4%</i> | <i>15.8%</i> |

With an impending shortage of skilled workers, employers and other stakeholders feel a sense of urgency when it comes to ensuring Montana's workforce has the skills and credentials needed for the jobs of today and of tomorrow.

- The Montana Department of Labor and Industry projections show that the minimum education requirement for most Montana jobs will remain roughly the same over the next ten years, with one-third (33.4%) requiring a minimum of some college or an associate's degree or higher.ⁱⁱⁱ
- A Burning Glass analysis of 71,000 online job postings for Montana in 2017 found that about half of those job postings list require some credential or degree, with another 25% classified as "middle skill" with no specific credential listed, but likely requires more than a high school diploma.^{iv}
- The Georgetown Center on Education and the Workforce forecasts that by 2020, 69% of Montana jobs will require postsecondary education.^v This includes 37% requiring some college,

an associate's degree, or a postsecondary vocational certificate, 23% requiring a bachelor's degree and 7% requiring a master's degree or higher.

MDLI also notes that workforce outcomes including the probability of finding work and median income increase with the level of educational attainment. As the tasks and work activities required in most occupations evolves with additional automation, skills like creativity, adaptability and critical thinking will be more in demand.

The Future Ready MT Cabinet convened from June 2018 – April 2019 to raise awareness about this important conversation and consider whether existing state efforts and programs could be enhanced to further advance Montana's progress. The Cabinet examined labor market projections and asked employers directly about their workforce needs and sought advice about the value of credentials, both degree and non-degree, to workers and employers. Finally, the cabinet also took into consideration the value of post-secondary attainment for individuals in terms of wages earned and quality of life outcomes, as well as the broader impact to Montana's economic competitiveness.

Future Ready MT 2025 GOAL

The Future Ready Cabinet recommends that the Governor adopt an overall attainment goal of 61% by 2025 and direct state agencies to align agency goals and strategic plans with this goal wherever possible. Specific recommendations are broken into type of credential. For the purposes of this report and Montana's attainment goal, "high quality certificate" includes formal award from a postsecondary education program requiring 15 credits or more, as defined by IPEDS.^{vi} An "apprenticeship completer" includes individuals in Montana ages 25-64 who have completed an apprenticeship program and have no other post-secondary degree. "Other industry recognized credentials" are credentials that do not fit into the other categories but have a foundation in industry-developed standards are portable across employers and state borders. Montana's plan for identifying and tracking these credentials will be further refined through a process led by the State Workforce Innovation Board (SWIB).

Attainment goal by credential type

| Highest degree/credential | Montana 2016 | Goal 2025 |
|--------------------------------------|--------------|------------|
| Graduate or professional degree | 9.5% | 10% |
| Bachelor's degree | 22.1% | 25% |
| Associate degree | 10.4% | 15% |
| High quality certificate | 2% | 5% |
| Apprenticeship completer | 0.4% | 3% |
| Other industry recognized credential | unknown | 3% |
| TOTAL W/CREDENTIAL | 44% | 61% |
| <i>Some college, no degree</i> | <i>21.4%</i> | <i>15%</i> |

Future Ready MT Strategies

Dual Enrollment

Montana students enrolled in dual credit or dual enrollment courses are more likely to go on to post-secondary and are more likely to complete a degree. This is especially true for students who are the first in their family to attend college, are Pell Grant-eligible and those with average (“C”) high school GPAs. Dual enrollment has increased dramatically in Montana over the last four years, growing from 2,500 enrollments in 2012-2013 school year to 6,000 in 2017-2018, or about 30% of juniors and seniors.

- Recommendation: continue to expand access to and participation in dual enrollment courses, across a variety of course types and in high schools of all sizes.
- Goal: grow enrollment to 60% of high school juniors and seniors by 2025

Career and Technical Education and Work-Based Learning

Montana defines work-based learning as *a continuum^{vii} of activities that engage employers and extend the classroom into the workplace, connecting acquired knowledge and skills to a student’s future employment*. Offering career and technical education (CTE) and work-based learning (WBL) opportunities for students in high school as well as post-secondary helps students explore multiple occupations and helps those students identify viable pathways toward a career. In addition, many CTE and WBL programs come with the opportunity to obtain industry-recognized credentials, such as a certified nursing assistant (CNA) certificate, child development associate (CDA), OSHA 10 certification or National Institute for Metalworking Skills (NIMS).

- Recommendation: develop a process to evaluate which industry-recognized credentials are credentials of value to employers in Montana. Working with industry partners, the Office of Public Instruction (OPI), the Board of Public Education (BPE) and the Office of the Commissioner of Higher Education (OCHE), the SWIB should begin this process by July 1, 2019.
- Recommendation: encourage high schools to identify industry recognized credentials (like CNA) that can be completed during high school and offer these credentials through CTE courses.
- Recommendation: encourage school, employer and student participation in WBL opportunities, particularly for middle and for high school students through public awareness, reducing policy barriers, and making funding available.
- Goal: Increase the number of CTE concentrators from 4,719 (2018) to 8,000 students in 2025.
- Goal: Increase the number of students taking dual enrollment CTE courses to 5,000 students in 2025.
- Goal: Establish a baseline of students who have obtained IRCs in school year 2018/2019 and increase by 5% per year through school year 2024/2025.

Return to School and Reverse Transfer

Roughly 125,000 Montana residents of working age have some college credit from the Montana University System, but no degree. In fact, between 2001-2015, 8,815 resident students started a four-year degree program in the MUS and earned 100 or more credits, yet did not earn a degree and are no longer enrolled in the MUS. Similarly, 4,951 resident students started a two-year degree program in the MUS and earned 45 or more credits, yet did not earn a degree and are no longer enrolled in the MUS.

- Recommendation: identify students within reach of associate's and bachelor's degree (within 15 credits) and target outreach with information about courses and/or apprenticeship opportunities and funding to help them complete.
- Recommendation: identify students who qualify for an associate's or bachelor's degree and acknowledge the credit accumulation with an appropriate degree, as well as follow-up coaching and support.
- Goal: 10% (12,500) of eligible "return to school" students successfully complete degree or credential.

Apprenticeship

Apprenticeship is a centuries-old model for education and career preparation, however it has been traditionally underutilized in America, often dismissed as "only for the trades" or as a fallback for lower-performing students. Today, employers in a growing number of sectors recognize the value of this customizable training model and are starting to use apprenticeship for occupations such as injection molder, pharmacy technician, web developer and brewer. While Montana's total number of apprentices is small today, at 2,465 individuals between the ages of 25-64, the number of new apprentices has nearly doubled in the last five years.

- Recommendation: continue to provide support to the Montana Registered Apprenticeship Program to conduct outreach to employers and support apprentices toward completion.
- Goal: increase the number of new apprentices by 25% by 2020 and the completion rate to 50% by 2020.
- Goal: increase the diversity of individuals enrolled in apprenticeship programs by increasing the number of Women, Native American and Veteran apprentices by 25 annually.

Retention and Degree Completion

Montana, not unlike other states, suffers from a leaky pipeline. Eighteen percent of Montana resident students enrolling in AA programs complete their degree within three years, while 52% of students enrolling in a BA program complete within six years. Nationally, efforts such as Complete College America (CCA) identify college completion "Game Changer" strategies that if adopted at MUS campuses, would increase retention and ultimately lead to a higher percentage of Montanan's with a post-secondary degree.

- Recommendation: implement CCA Game Changer strategies (Math Pathways, "15 to Finish" and Corequisite Design) at scale on all MUS campuses, with a focus on efficiency and sustainability.
- Recommendation: implement second generation CCA Game Changer strategies across the MUS, including Academic Maps with Proactive Advising and the "Momentum Year."
- Recommendation: using funding from NASH/Lumina Foundation, complement CCA Game Changer Strategies with comprehensive implementation of High Impact Practices (HIPs), which include First Year Seminars, Undergraduate Research, Internships, Education Abroad, and other techniques that have been shown to increase student retention and degree completion.
- Recommendation: establish national best practices for data collection, analysis, dissemination, and use data-informed decision making as core of continuous program enhancement.
- Recommendation: explore options to ease the transition of veterans to post-secondary, including through prior learning assessments.
- Goal: increase three-year degree completion for AA programs in Montana to 25% by 2025.
- Goal: increase six-year degree completion for BA programs in Montana to 60% by 2025.

Military Service

Military service provides the opportunity to attain degrees and industry recognized credentials through career and technical education, work-based learning, and completion of traditional college programs at a reduced cost to the student.

- Recommendation: promote military service as a valuable career track for students to attain post-secondary education, training, certification, and career opportunities.
- Recommendation: explore options to ease the transition of veterans to post-secondary, including through prior learning assessments.

Awareness and Accountability (Implementation/Data/Tracking)

In order to ensure both the success and sustainability of these efforts, the Future Ready MT goals and strategies must be widely understood by the public and by policy-makers and formally adopted wherever possible. In order to avoid misconceptions about the value of post-high school training, education, and military service, Montana will make progress toward the Future Ready MT attainment goals through broad ownership and adoption of the goals and strategies outlined here, a communications plan to address the misconceptions and an accountability dashboard to track progress.

- Recommendation: implement a marketing and communications campaign for students (and parents) about the many pathways to success.
- Recommendation: broadly share these goals the state leaders, including the Legislature and seek formal adoption by the Board of Regents, Board of Public Education, and the State Workforce Innovation Board.
- Recommendation: create a public-facing dashboard to track the Future Ready MT attainment goal and implementation progress for each strategy and subgoal.

ⁱ *A Stronger Nation: Learning beyond high school builds American talent*. February 2018. Lumina Foundation, www.strongernation.luminafoundation.org/report/2018/#nation. Accessed 15 June 2018.

ⁱⁱ Note: Workforce-relevant certificates have only been included since 2014, contributing to a small spike for Montana's total as well as the national average.

ⁱⁱⁱ Wagner, Barbara, Montana Department of Labor and Industry. Presentation to Future Ready MT Cabinet. 1 May 2018.

^{iv} Montana State Job Postings Analysis. Bain and Company, April 2018.

^v Carnevale, Anthony P. *Recovery: Jobs and Education Requirements through 2020 State Report*. Georgetown Center on Education and the Workforce, June 2013

^{vi} IPEDS definition of certificate: *A formal award certifying the satisfactory completion of a postsecondary education program*. Postsecondary is defined as *the provision of a formal instructional program whose curriculum is designed primarily for students who are beyond the compulsory age for high school. This includes programs whose purpose is academic, vocational, and continuing professional education, and excludes avocational and adult basic education programs*.

^{vii} [Link to WBL continuum](#)