



To: Chairman Bogner
Members of the Economic Affairs Interim Committee

From: Patrick Nelson, Administrator, Workforce Services Division

CC: Laurie Esau, Commissioner, Department of Labor & Industry

DATE: June 3, 2022

RE: Change in Apprenticeship Ratios

Chairman Bogner & Members of the Committee:

Thank you for the opportunity to provide information to you about Montana's Registered Apprenticeship Program, and specifically about changes to the Program's rules regarding the required ratios of master journeymen to apprentices.

Montana's Registered Apprenticeship Program is among the Department of Labor & Industry's best success stories. Since 2000, the Program has coordinated more than 11,100 apprenticeships in 110 occupations, involving more than 1,300 employers around Montana.

Apprenticeships offer a path for workers to earn while they learn on the job, allowing an individual to remain in the labor force and earn a paycheck while obtaining certification in their chosen career field. Once an apprentice completes a registered apprenticeship program, they obtain an industry-recognized credential that demonstrates to employers in Montana and across the United States that they are qualified to hold skilled positions in their chosen field.

While the majority of apprenticeships are conducted in the construction and manufacturing industries, in recent years the apprenticeship program has expanded to include a wide array of fields, from health care and child care workers to accountants and bookkeepers to IT specialists and programmers.

The nature of today's labor market in Montana has made finding skilled workers a growing challenge for employers. Feedback from employer sponsors and experience in other states has shown that requirements for supervision of apprentices by master journeyman can be updated, consistent with proper training and safety. Updating these ratios enables employers to expand their apprenticeship programs and offer more Montana workers a pathway to a good-paying, skilled career.

In 2021, at Governor Gianforte's direction, the Department began a modernization of the Program's rules regulating the ratio of apprentices to supervising journeymen. Specifically,

the Department changed its requirement generally mandating two supervising journeymen per apprentice (2:1) to one supervising journeyman for two apprentices (1:2).

Overall, the reception from employer sponsors to the changes has been overwhelmingly positive. **Since the changes took effect on January 28, 2022, 266 new apprentices have been added to the program.** The changes have proven to be particularly beneficial to smaller “mom & pop” employers that may only employ one or two journeymen – the ability to add additional apprentices has helped them significantly expand their workload capacity.

Some 30 new apprenticeship employers have also been added to the program. Employers have indicated that the ability to add several apprentices to their workforce – instead of just one or two – made the process of participating in Registered Apprenticeship more worthwhile.

Broadening the pipeline of apprentices in training and increasing the number of participating employers will have significant downstream benefits for Montana’s workforce. Apprentices now able to begin their training this year will be able to supervise and train apprentices of their own in the years to come.

Below are the Department’s responses to the questions about these changes provided to us by the Committee.

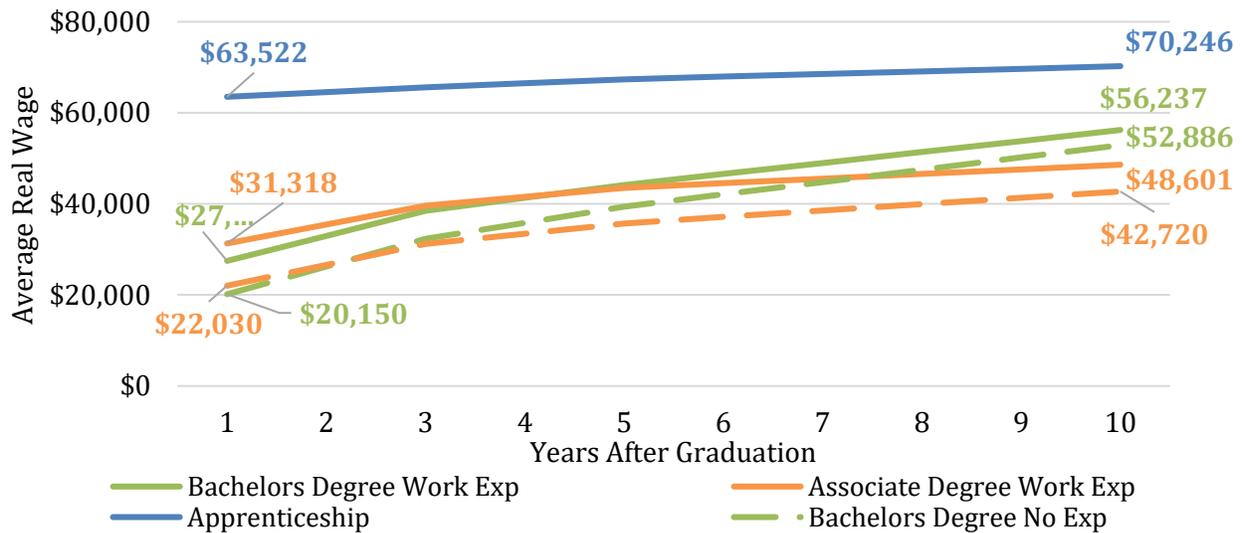
1. What do apprenticeship ratios look like in other states, particularly in the West?

Federal regulations give states latitude in determining the ratio of apprentices to journeymen, consistent with proper supervision, training, and safety. Different states in the western United States have adopted differing ratio requirements.

The changes made to Montana’s ratios this year – to two apprentices to one journeyman – bring it closer in line with neighboring states. Idaho permits up to four apprentices per journeyman, depending on the type of work being conducted. North Dakota and South Dakota permit as many as three apprentices per master electricians. Wyoming permits two apprentices per journeyman.

2. What have been the economic impact of these ratios, including annual and lifetime earnings of graduates, timeline for graduation to journeyman and master, graduation completion rates, rates of workplaces accidents, etc.

Montana’s Registered Apprenticeship Program has a demonstrated record of success in putting individuals on the path to a good-paying, in-demand career. One year after graduation, average wages for individuals who complete an apprenticeship are more than twice that of degree holders from other institutions.



Importantly, most individuals who complete a Montana apprenticeship stay in Montana – 94% of workers who complete an apprenticeship are still working in Montana a year after graduation, earning a wage of \$63,500. Eighty five percent of apprentices who graduated before 2017 were working for a Montana employer five years later. And these are in-demand jobs – over the next 10 years, approximately 49% of projected worker demand in Montana will be in apprenticeable occupations.

3. What other states have changed apprenticeship ratios and what has been the impact of those changes relative to economic indicators?

While the Department does not actively track efforts in other states to update apprenticeship ratios, there are indications that states are either exploring an update to their ratio requirements, or have made them recently. For example:

- [A May 2022 article in the Delaware Business Times](#) urged the State of Delaware to update its apprenticeship ratios, and specifically cited Montana’s changes as a model for providing employers with more flexibility to offer apprenticeships.
- In 2012, the State of Maine updated its ratios from one apprentice electrician per journeyman to two apprentices per journeyman.
- In 2011, the Alberta government changed its ratio from a 1:1 apprentice-journeyman ratio to a 2:1 ratio for most occupations, citing a need to improve the industry’s ability to train more workers to meet increasing demand.

4. What led the Department to request this change?

In 2021, as Montana’s economy reopened from the COVID-19 pandemic, a need for workers in critical industries like health care, construction and manufacturing became acute.

Employment in Montana’s construction sector grew by 12.3% from 2020-2021, despite the pandemic – one of the fastest rates in the nation.

The Department received feedback from employers that the existing apprenticeship ratio rules unnecessarily limited their ability to meet the short- and long-term needs of their customers by restricting the number of apprentices they could train at any given time.

As a result, at Governor Gianforte’s direction, the Department began exploring an update to its ratio requirements to determine what changes could be made to strengthen Montana’s skilled workforce pipeline and expand the opportunities of apprenticeship to more Montana workers.

5. What data supports the change?

Montana’s need for workers in apprenticeable occupations is acute. According to data compiled by the Department’s Research & Analysis Bureau, Montana faces significant workforce shortages in critical sectors through 2030, including carpenters, electricians, plumbers, nursing assistants, and child care workers,.

For example, about 100 electrician apprentices complete their programs each year, while DLI estimates nearly 350 annual new job openings for electricians through 2030. The need to expand apprenticeship opportunities to help Montana address these workforce gaps was clear.

Additionally, the value that apprentices receive from completing their program is evident. Our responses to Question Two above note the positive career outcomes from apprenticeships, and the Department’s goal was to make these opportunities more available and accessible for Montana workers.

As noted above, neighboring states like Idaho, Wyoming and the Dakotas have operated Registered Apprenticeship programs safely and successfully with ratios similar to or even more expansive than the ratios adopted by Montana for some time. That experience has shown that apprenticeships can be conducted safely and consistent with training and qualification standards at the expanded ratio levels.

6. Who did you involve in the decision-making process for this proposal?

The Department sought and received input from a variety of stakeholders in the apprenticeship program in 2021, and conducted a formal public comment period after the rules were proposed in September. A variety of feedback on the proposal was received. There was some concern about the proposed changes, principally from organized labor through petition-style form letters that were circulated online and among members.

Small- and medium-sized employers expressed broad support for changing the apprenticeship ratios, citing their need for more workers to meet customer demand and their ability to train more apprentices safely and successfully at the higher ratio levels.

For example, Nick Nordlund, a Foreman at Encore Electric in Gallatin Gateway, wrote:

“We support this based off of the size projects we build and the demand for manpower on our projects. We believe that one journeyman electrician is capable of leading and training two apprentices. With the shortage of skilled tradesmen and tradeswomen, as well as the retiring of qualified journeymen, there is huge need to bring more people into the electrical field. Reversing the ratio will be a big step to opening opportunities for all contractors to grow with Montana as we build projects safely, on time, and on budget.”

7. How has the Department addressed concerns raised in this proposal?

The Department understands concerns raised about safety and supervision under the modernized ratio rules. Our Registered Apprenticeship Program specialists regularly conduct reinspections of apprenticeship employers to ensure that program guidelines are being met. These evaluations allow the program to determine the progress of an apprentice in related instruction, work performance and to ensure there is ongoing maintenance of the appropriate progress records.

It is important to note that these new ratios simply set minimum standards, and that employers are free to remain at higher ratio levels if they choose. For example, anecdotal feedback from some employers indicates that some may choose to adopt a 1:1 ratio – essentially splitting the difference between the previous regulations and the revised rules.

The effect of the changes – and the Governor’s goal in making them – is simply to give more flexibility to better structure apprenticeships in a way that best suits the safety and training needs of the employer and the apprentice.

8. What metrics are in place to track the success of this change?

The ultimate goals of the revised ratios are twofold: a more robust pipeline of skilled workers for Montana employers, and more available opportunities for Montanans to participate in and complete apprenticeships.

Since the rule changes were adopted in January, 266 new apprentices have been added to the program across Montana.

Depending on the occupation, an apprenticeship can take several years to complete. We expect it to take some time before we can fully measure the success of these changes, as

employers evaluate the opportunities created by the modernized ratio rules, make determinations about their future workforce needs, and recruit and hire new apprentices.

However, early results are promising: employers have reacted very favorably to the changes, many are already taking steps to adopt a 1:2 or 1:1 ratio by adding apprentices, and more employers are now seeing the value of participating in the apprenticeship program.

9. What is the plan of action if success is not achieved after this ratio change?

The Department closely tracks enrollments, completion and attrition rates, and other metrics that measure the success of the apprenticeship program and will continue to do so. We also continually evaluate feedback we receive from employers and apprentices themselves. Should further changes prove necessary to the ratios or other apprenticeship guidelines, we will evaluate them when appropriate.