



2021 MONTANA MANUFACTURING REPORT

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

This report is on the state of Montana manufacturing conducted for the Montana Manufacturing Extension Center (MMEC). The report and analysis was done by the Bureau of Business and Economic Research (BBER) at the University of Montana. This is the 25th year that BBER and MMEC have collaborated to produce reports on Montana's manufacturing climate. The three primary topics are: the state of manufacturing at the state and national level in a general economic context; a survey of Montana manufacturers about the state of Montana manufacturing; and an impact survey of firms which used MMEC's consulting services.

STATE OF MONTANA MANUFACTURING

Montana's manufacturers face different challenges than the nation as a whole because the composition of manufacturing production is different and is primarily concentrated in nondurable production – the Bureau of Economic Analysis defines nondurable goods as goods that have an average life of less than three years. The two largest manufacturing sectors in Montana, petroleum and coal, and wood product manufacturing, are not among the seven largest sectors nationally, demonstrating how the Montana manufacturing sector differs substantially from the experience of the country.

Some summary facts about Montana manufacturing in 2020 are:

- Over 3,900 manufacturing firms are in operation in Montana, including sole proprietors;
- Manufacturing accounts for roughly 16% of Montana's economic base;
- Manufacturing jobs paid about \$52,111 in earnings, compared to the state average of \$46,743;
- Accounts for 5.1% of total private state income equaling \$1.1 billion;
- Employs 4.3% of Montana's nonfarm workforce, with about 20,400 employees;
- Produced 6.1% of Montana's output with a value of \$3.1 billion;
- Grew more than double the national average in employment, income and output.

In the aftermath of the 2020 COVID-19 recession, Montana manufacturing bounced back relatively quickly from the deep economic drop in the second quarter of 2020. Last year, we predicted that nondurable manufacturing would return to pre-COVID levels within a year or so. Employment in this sector returned to pre-pandemic levels in early 2021. Durable manufacturing is forecast to return to the long-run trend a year or so later, in line with our predictions from a year ago.

Montana manufacturers are active in global markets as well. The three largest export sectors for Montana in 2020 were: chemicals, machinery and transportation equipment. Food, beverages and tobacco fell out of second place during the pandemic. By far the largest export market is Canada, accounting for almost 30% of Montana's manufactured exports. In 2020, the remaining large export markets were: China (2), South Korea (3), Belgium (4), and Japan (5).

MONTANA MANUFACTURERS SURVEY

This section of the report presents the findings of the 2021 Montana Manufacturers Survey. The initial Montana manufacturers survey was conducted in 1999. Since then, the Bureau of Business and Economic Research at the University of Montana has conducted this survey each year. The purpose of the survey is to learn the manufacturers' assessment of their plant's economic performance in 2020 and their outlook for 2021. This year, the annual Montana man-

Manufacturers survey included a question about the effects of the COVID-19 pandemic.

Manufacturing in Montana is predominantly performed by small businesses. The U.S. Census Bureau reports 1,666 manufacturing firms with employees in Montana, and 51% of Montana manufacturers have five or less employees. There are no manufacturers with 300 or more workers in the state.

Highlights from the 2020 manufacturing survey:

- About one-third of manufacturing firms saw an increase in total sales and profits from 2019;
- Fifty-eight percent of firms did not reduce production capacity;
- A minority of firms (25%) reduced employment;
- Over one-third of Montana's manufacturing firms experienced a significant worker shortage; and
- The primary impacts of the COVID-19 pandemic on manufacturing in 2020 were the inability to find employees and intermediate goods supply either because of shortages or high transportation costs.

EVALUATION OF MONTANA MANUFACTURING EXTENSION CENTER

The Montana Manufacturing Extension Center works with manufacturers to create and retain jobs, innovate, reduce costs, increase profits, and save time and money. MMEC employees typically make on-site visits to manufacturing clients to assess problems, suggest appropriate solutions and assist with implementation. MMEC closely monitors its performance by welcoming feedback and carefully following an evaluation procedure developed by the National Institute of Standards and Technology (NIST) and administered by an independent third party.

The primary NIST survey findings from 2020 are as follows:

- Montana manufacturing clients were very satisfied, with 63% of respondents saying they relied exclusively on MMEC as a business service provider;
- MMEC's net promoter score for 2020 was 87/100.
- Staff expertise was again the most important factor for firms to use MMEC services;
- The most important challenges facing surveyed MMEC clients were ongoing continuous improvement/cost reduction strategies, employee recruitment and retention, and product innovation/development;
- 2020 survey respondents said that working with MMEC resulted in 310 new and retained manufacturing jobs and directly or indirectly added approximately \$2.2 million to Montana individual income tax revenue over the previous 12 months. Since 2000, MMEC visits have resulted in 6,496 created or retained jobs and \$1.35 billion in increased or retained sales;
- The Montana return on investment for MMEC during 2020 was 4.4 to 1; and
- MMEC clients paid approximately \$220 thousand in fees during 2020, yielding a return on investment of about 82 to 1.



Bureau of Business and Economic Research
Gallagher Business Building, Suite 231
32 Campus Drive
University of Montana
Missoula, Montana 59812
Phone: (406) 243-5113
Email: bbermail@business.umt.edu

www.bber.umt.edu