



# 2024 MONTANA MANUFACTURING REPORT

*Prepared by*  
The Bureau of Business and Economic Research  
University of Montana





## Executive Summary

This report examines the state of manufacturing in Montana and was conducted for the Montana Manufacturing Extension Center (MMEC) by the Bureau of Business and Economic Research (BBER) at the University of Montana. This marks the 28th consecutive year of collaboration between BBER and MMEC to analyze Montana's manufacturing climate. The report focuses on three main areas: the economic context of manufacturing at both state and national levels, a survey of Montana manufacturers regarding the state of manufacturing in Montana, and an impact survey of firms that utilized MMEC's consulting services. The economic analysis and survey cover the year 2023 and the expectations of the immediate future, while the MMEC impact survey was carried out from April 2023 to February 2024.

### The State of the Overall Economy

The global economy in 2024 faces a complex mix of challenges shaped by geopolitical tensions, shifting monetary policies, and the lingering effects of the COVID-19 pandemic. Global economic growth has been modest but steady, with advanced economies like the U.S. navigating inflationary pressures and labor market constraints, while Europe struggles with sluggish growth and energy challenges. Emerging markets, particularly in Asia, continue to drive a significant portion of global expansion, though China's slowing consumption and real estate concerns raise risks for broader economic stability.

Key insights into the global and U.S. economies in 2024 include:

- Global GDP growth was projected to be 3.0% in 2024, below the pre-pandemic average of 3.4%.
- U.S. growth remained resilient in 2023 at 2.5%, supported by strong consumer spending, while Europe's growth lags due to inflation and energy costs.
- Labor markets across advanced economies are tight, with job openings significantly outpacing hires in key sectors like manufacturing, healthcare, and hospitality.
- Workforce challenges are driving increased investment in employee training, apprenticeships, and skills development, particularly in advanced manufacturing and technical roles.
- Technological adoption, including automation, artificial intelligence (AI), and advanced energy systems, is transforming industries, with manufacturers accelerating investments to address labor shortages and improve productivity.

In the U.S., the adoption of advanced technologies is reshaping workforce demands, with a growing emphasis on upskilling employees to manage and maintain AI-driven systems and automation. While this technological shift offers solutions to persistent labor shortages, it also highlights gaps in workforce readiness, pushing industries to expand training programs and apprenticeships. At the same time, global supply chains are stabilizing, but geopolitical risks and inflationary pressures remain significant, shaping economic conditions into the coming year. These dynamics underscore the critical need for innovative strategies in workforce development and technological advancement to maintain economic momentum.

### Manufacturing in Montana

Montana's manufacturing sector faces unique challenges compared to the national landscape due to its distinct composition, which is primarily concentrated in nondurable goods — items with an average lifespan of less than three years. The largest manufacturing sectors in Montana are petroleum and coal products, and food, beverage, and tobacco products, which are not among the top seven sectors nationally, highlighting the state's distinctive manufacturing profile.

Key statistics for Montana manufacturing in 2023 include:

- Over 5,099 manufacturing firms are in operation in Montana, including sole proprietors.
- Manufacturing accounts for 17% of Montana's base industry earnings totaling about \$12.3 billion.
- Manufacturing jobs paid about \$65,000 in wages, compared to the state average of just under \$57,000.
- The industry accounts for 5.5% of total private state labor earnings, equaling \$1.95 billion.
- Manufacturing employs 4.4% of Montana's nonfarm workforce, with about 22,700 employees.
- Manufacturers produced 6.4% of Montana's inflation-adjusted Gross Domestic Product, with a value of \$2.9 billion; and
- Montana manufacturing employment and output growth was almost double the national average in 2023.

Montana's manufacturing sector has largely rebounded from past economic disruptions, with many industries returning to or exceeding pre-pandemic levels of activity. While traditional natural resource-based industries, such as timber, agriculture, and mining, remain foundational, the sector is evolving, with significant contrasts between regions

dominated by resource-based manufacturing and those fostering technology-driven industries. Areas centered around agricultural and natural resource manufacturing benefit from proximity to raw materials, enabling cost-effective production in sectors like food processing, wood products, and energy. However, these industries often face challenges tied to global commodity price fluctuations and labor availability in rural areas.

In contrast, regions with access to universities and skilled workforces are driving growth in advanced manufacturing sectors, including medical and pharmaceutical products, electronics, and aerospace components. These industries are less dependent on raw materials and instead thrive on innovation and connectivity to global markets. This diversification into technology-driven production underscores Montana's broader shift toward complex and specialized manufacturing, highlighting its resilience and adaptability in meeting evolving economic demands while balancing the distinct strengths and challenges across its regions.

### Montana Manufacturers Survey

This section of the report presents the findings of the 2024 Montana Manufacturers Survey, conducted by the Bureau of Business and Economic Research, to assess manufacturers' economic performance in 2023 and their expectations for 2024. Montana's manufacturing industry remains predominantly composed of small businesses, with over 80% employing fewer than 10 individuals and only 25 firms statewide with 100 or more workers. The survey collected 143 responses, primarily from durable manufacturing firms.

Highlights of the 2024 manufacturing survey:

- Sales and production in 2023 showed steady or improved performance for most manufacturers, with 46% reporting increased sales. However, profitability declined, with 35% of firms, particularly in nondurable manufacturing, experiencing losses due to tight margins and high input costs.
- Major capital expenditures were made by 55% of respondents in 2023, exceeding expectations from the prior year's survey and highlighting increased investments in equipment. Durable manufacturers led the surge in modernization efforts, while nondurable manufacturers focused on product innovation, with 35% introducing new product lines.
- Workforce stability improved, with 23% of manufacturers reporting employment growth in 2023, up from 16% in 2022. Significant worker shortages declined, with 32% of firms citing them compared to 44% the previous year. However, recruiting challenges remain a top concern, particularly in the nondurable sector.
- For 2024, 41% of manufacturers anticipate making major capital investments, with durable manufacturers showing increased optimism about long-term returns in automation and advanced manufacturing.
- Input costs remain a significant concern, with 53% of respondents expecting prices to rise further.
- Supply chain strategies continue to evolve. While 48% of manufacturers expect no major changes, others plan to de-risk by diversifying suppliers, and 10% aim to onshore or localize supply chains, particularly in the durable sector.

Montana's manufacturers face a blend of opportunities and challenges as they navigate evolving market conditions. Persistent concerns about workforce availability, input costs, and supply chain complexities remain top issues. However, the sector has demonstrated resilience, with firms leveraging federal and state initiatives to modernize operations and address labor shortages. As manufacturers look to 2024, their cautious optimism reflects a commitment to balancing growth opportunities with economic pressures.

### Evaluation of Montana Manufacturing Extension Center

The Montana Manufacturing Extension Center (MMEC) is a vital resource for Montana's manufacturing sector, dedicated to fostering economic growth by helping firms create and retain jobs, innovate, reduce costs, and improve profitability. MMEC's experienced staff provide onsite consultations to identify challenges, develop tailored solutions, and assist with implementation. As part of the National Institute of Standards and Technology's (NIST) Manufacturing Extension Partnership (MEP), MMEC's performance is rigorously evaluated through independent surveys of client outcomes.

Key Findings from the 2023 NIST Surveys include:

- 96% of Montana manufacturers were highly likely to recommend MMEC to others, highlighting the organization's exceptional client relationships and impactful services.
- 62% of Montana manufacturers relied solely on MMEC for business support services, reflecting the center's unique value to small- and medium-sized firms.

- Staff expertise remains the most important factor for firms using MMEC services (72.1%), while the organization's reputation for delivering measurable results continues to attract new clients. Firms citing reputation as a key factor rose from 18% in 2019 to 28% in 2023.
- Manufacturers identified workforce recruitment and retention, cost-reduction strategies, and identifying growth opportunities as top challenges. The rising emphasis on growth opportunities underscores the sector's evolving needs.
- MMEC helped create or retain 487 manufacturing jobs in 2023, generating approximately \$23.9 million in wages and \$1.18 million in Montana income tax revenue. With a 3.07 employment multiplier, MMEC-supported jobs created an additional 994 jobs statewide, contributing \$58.1 million in total wages.
- Return on Investment:
  - MMEC delivered a \$5.99 return for every dollar the state invested.
  - MMEC delivered a \$20.32 return for every dollar paid for MMEC services.