

RESULTS FROM 2007-2008

Montana Manufacturers Survey

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Montana



Midwest Welding & Machine in Bozeman has roots in the community back to 1944. Photo by Deborah Nash, MMEC.

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This survey is conducted through the Montana Manufacturers Information System, a joint project of the Bureau of Business and Economic Research and Montana Business Connections.

The Bureau of Business and Economic Research at The University of Montana started an annual survey of Montana's largest manufacturers in 1999. The survey is conducted each year during November, December, and January, and queries manufacturers on a variety of business issues pertaining to both the year just completed and the outlook for the coming year.

The results shown here are from the 9th such survey, completed in January 2008. Montana's largest manufacturing facilities (as measured by the number of people employed), as well as smaller firms representative of their sectors, for a total of 215 manufacturers, were contacted for this year's survey. Eighty-one percent of the firms (175 total) responded.

The information collected through the manufacturers survey is featured in the Bureau's annual Montana Economic Outlook Seminar, where it is used in forecasting conditions for industry for the upcoming year. While partial information is published in the Outlook booklet and in BBER's Montana Business Quarterly, this publication provides a complete description and analysis of the survey results.

An Overview of Manufacturing in Montana

The manufacturing sector includes traditional heavy industries, as well as a broad array of lighter production activities, ranging from assembling sophisticated high-technology equipment to producing custom-made sporting goods. Overall, the state's manufacturing sector:

- produces more than \$9 billion in output annually;

- directly employs approximately 24,000 workers (including the self-employed) earning more than \$1.2 billion in annual labor income.¹
- includes over 3,000 entities such as factories, sawmills, oil refineries, and at-home cottage industries;
- pays high wages with employees averaging over \$37,000 per year (compared to an average \$30,000 per year for all Montana non-farm workers); and,
- accounts for over 20 percent of Montana's economic base.

The Year 2007 in Review

Montana's manufacturing industry had its fourth consecutive year of increased sales, employment, and

¹In previous years BBER estimates of manufacturing employment included about 2,500 workers in logging, which had historically been classified by the Office of Management and Budget as manufacturing under the Standard Industry Classification System, but are now classified as agriculture, forestry, and fishing.

worker earnings in 2007. The survey results, however, indicate that in 2007 Montana manufacturers performed slightly below 2006 levels, with half of responding firms experiencing increased production and sales and 45 percent experiencing higher profits.

The proportion of respondents that reported curtailments of production (25 percent) or permanent elimination of production capacity (14 percent) both increased in 2007 compared to 2006. Thirty percent of responding firms hired more workers in 2007, while 45 percent maintained 2006 employment levels, and 24 percent reduced the number of workers in 2007.

Nearly 40 percent of respondents released new product lines. The proportion of plants making major capital expenditures fell in 2007 relative to 2006 (53 percent versus 58 percent).



Automation at Granrud's Lefse Shack now allows one operator to roll dough on two machines simultaneously. Photo by Jim Haider.

Figure 1
Overall Outlook for 2008

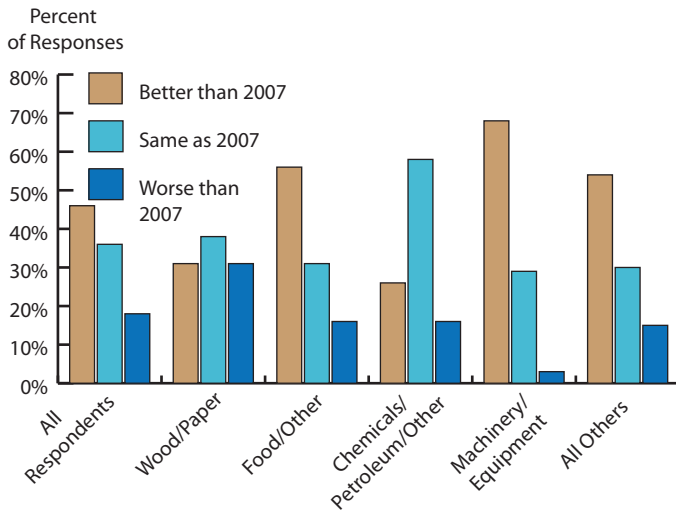
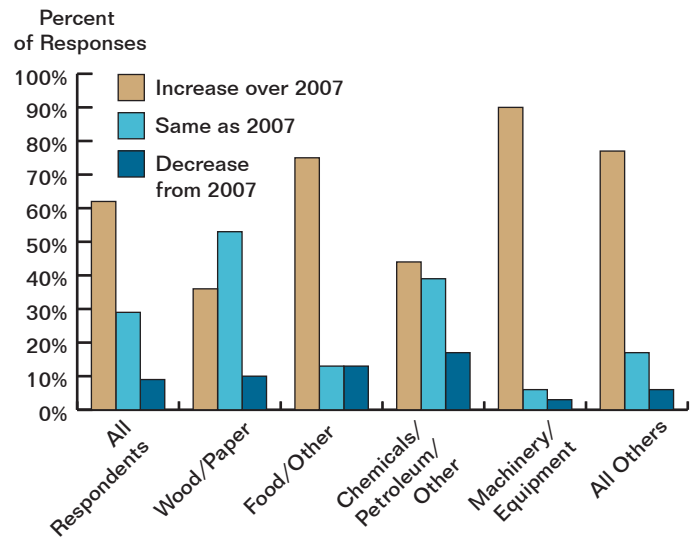


Figure 2
Sales Outlook for 2008



General Outlook for 2008

When asked about their outlook for 2008, 46 percent of responding firms expected it to be better than 2007, while 36 percent anticipated it to be the same, leaving 18 percent who expected conditions to worsen (Figure 1). The 2008 outlook was similar to the outlook for 2007 when 45 percent of responding firms expected it to be better than 2006. The most optimistic sector was **machinery/equipment**, where just less than 70 percent of respondents expected improved conditions in 2008. Over half of the manufacturers in the **food/ beverage** related manufacturers expected 2008 to be better than 2007. The least optimistic sector was

wood/paper products manufacturers, with 70 percent expecting 2008 to be no better or worse than 2007.

Sales, Production, Profits

Sixty-two percent of manufacturers anticipated 2008 sales would increase over 2007 (Figure 2), with 55 percent expecting increased production (Figure 3), and 52 percent anticipating increased profits for 2008 (Figure 4). In looking at sales, production, and profits, more than 80 percent of **machinery/equipment** manufacturers – the most optimistic sector – expected increases in all three. In contrast, the **wood/paper products manufacturers** were the least optimistic – less than 40 percent expected increases.

Figure 3
Production Outlook for 2008

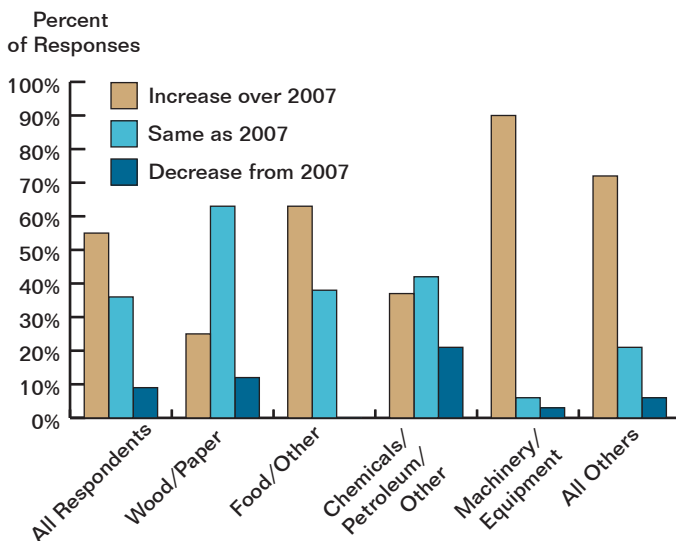
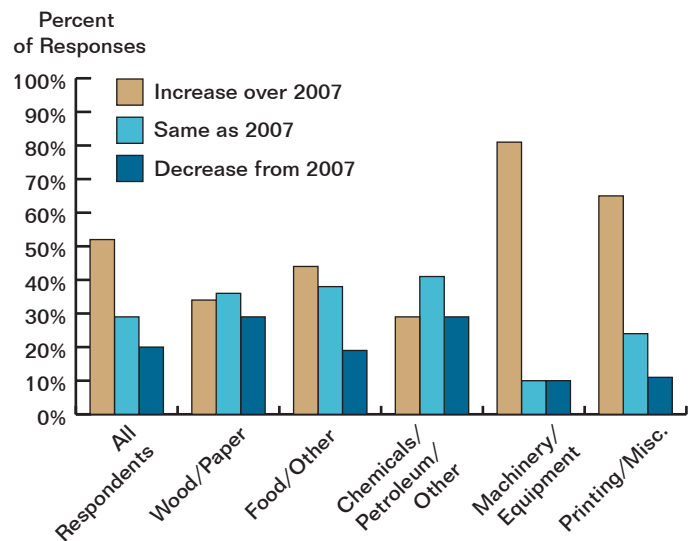


Figure 4
Profit Outlook for 2008



Manufacturing Categories

Although the manufacturing industry consists of hundreds of highly specific categories, for the purposes of this report, it has been divided into five segments:

Wood/Paper

Facilities that process timber into products like lumber, plywood, log homes, pulp and paper, and posts and poles, as well as facilities that further process primary wood products into products such as furniture, laminated beams, trusses, window and door frames, and wood carvings.

Chemicals/Petroleum/Refining

Includes a wide range of facilities, such as those manufacturing products by transforming organic and inorganic raw materials by a chemical process (chemical manufacturing) or by transforming mined or quarried nonmetallic minerals such as sand, gravel, stone, or clay (nonmetallic mineral product manufacturing), as well as facilities engaged in the transformation of crude petroleum and coal into usable products (petroleum and coal products manufacturing), and facilities engaged in smelting and

refining ferrous and nonferrous metals (primary metal manufacturing).

Food/Beverages

Facilities that manufacture food and beverages, including primary processors of Montana's crops and livestock, as well as those producing for retail sale. Examples include sugar beet plants, flour mills, bakeries, and dairies.

Machinery/Equipment

Facilities engaged in manufacturing machinery, equipment or instruments. Included here are industrial and commercial machinery, computer equipment, electrical equipment, transportation equipment, and fabricated metals.

All Others

Facilities engaged in mostly light manufacturing such as plastics products, sporting goods, games and toys, apparel, and jewelry, as well as those engaged in printing or performing services for the printing trade such as bookbinding.

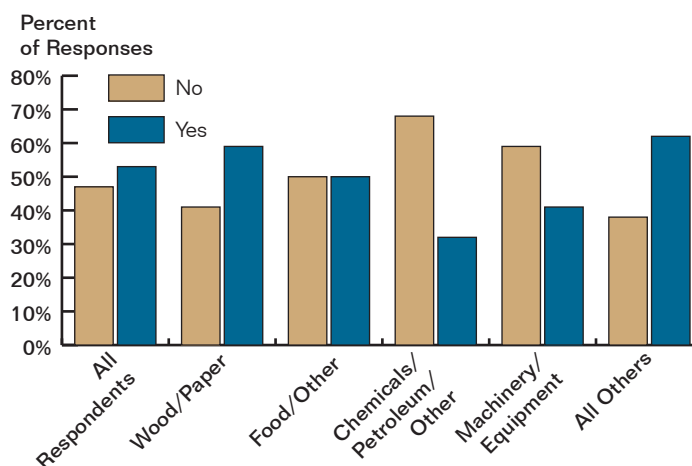
Planned Capital Expenditures

Forty-seven percent of respondent firms planned major capital investments in 2008; this is down slightly from the 55 percent that intended investments for 2007. The **chemicals/petroleum/refining** sector reported the highest rate of expected investment at 68 percent, followed by **machinery/equipment** at 59 percent (Figure 5).

Employment and Worker Availability

After increases in each of the last four years, the Manufacturers Survey indicates Montana manufacturing employment should continue to increase in 2008.

Figure 5
Outlook for Major Capital Expenditures in 2008





Flour dust collection system keeps workers safe at Granrud's Lefse Shack.



Selection of bits for tool changeout at Diversified Plastics.
Photo by Deborah Nash, MMEC.

Thirty-six percent of respondents to the 2007-2008 survey expected increases, while only 5 percent expected to reduce employment in 2008 with the **machinery/equipment** manufacturers the most optimistic (Figure 6). Worker availability continues as a major and growing problem for Montana manufacturers with 57 percent of responding firms indicating they had experienced significant worker shortages at some point during 2007. This is up somewhat from the 51 percent reporting shortages in 2006, 38 percent in 2005, 37 percent in 2004, and 22 percent in 2003 (Figure 7).

Business-Related Issues

Survey recipients were given a list of eight business-related issues and were asked to rate each in terms of its importance to their business. There was no specified time frame, indicating the general and enduring nature

Figure 6
Employment Outlook for 2008

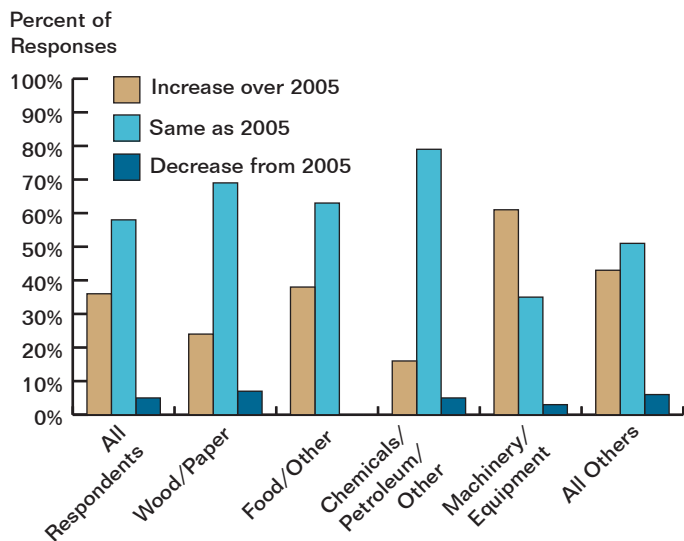
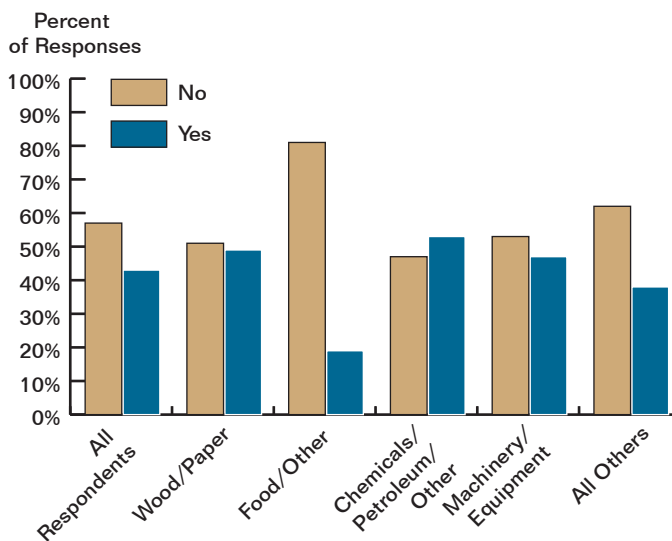


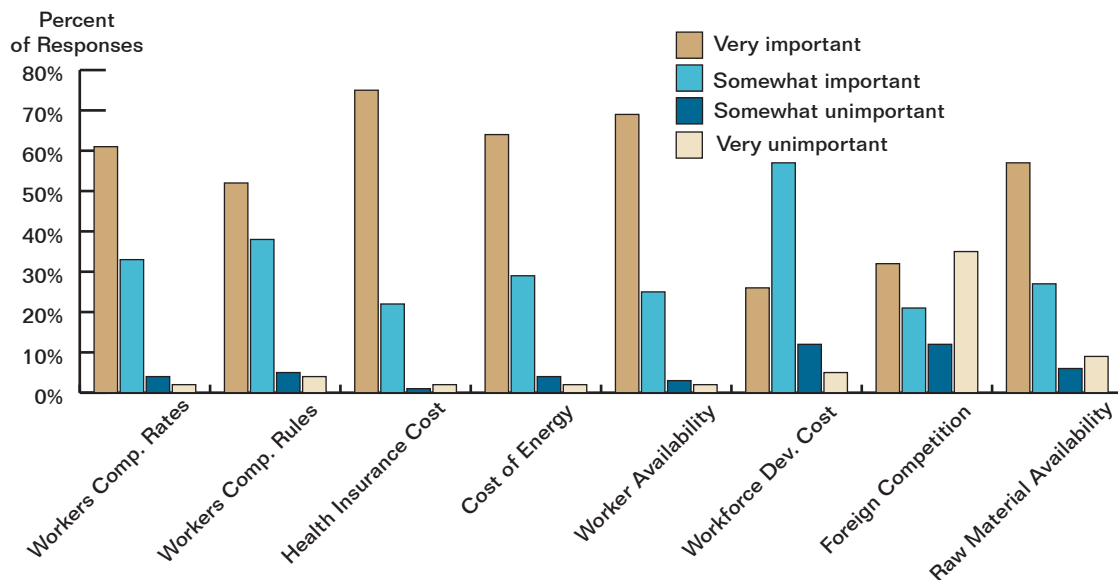
Figure 7
Significant Worker Shortage in 2008



of these issues. Even with dramatic increases in energy costs in 2007 two workforce related issues – health insurance cost (75 percent) and a shortage of qualified workers (69 percent) – were rated very important by more respondents than energy costs (64 percent).

Another work-force related issue, workers’ compensation rates, was very important to 60 percent of responding firms. Raw material availability was rated very important by 52 percent of respondent firms. Workers’ compensation rules were very important to 52 percent of respondents (Figure 8).

Figure 8
Rating of Business-Related Issues



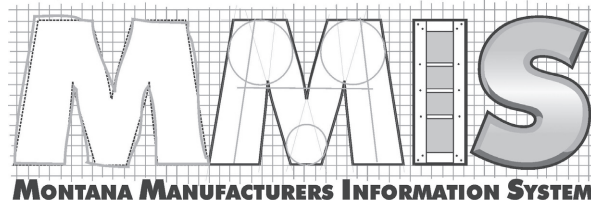
About the Montana Manufacturers Information System

Because of Montana's large geographic size and sparse population, manufacturers are often unaware of other manufacturers within the state, leading to missed business opportunities. The primary goal of the Montana Manufacturers Information System (MMIS) is to overcome these physical barriers by providing a single, central location where detailed and up-to-date information about Montana manufacturers and service providers can be found. A second goal is to provide additional global exposure to Montana manufacturers' products and capabilities. A third goal is to collect and report accurate information about manufacturing in Montana, helping people make informed decisions.

MMIS is housed at The University of Montana's Montana Business Connections and has been developed in cooperation with the Bureau of Business and Economic Research, Montana State University's Montana Manufacturing Extension Center, and the Montana Department of Commerce. The electronic information system allows for the inclusion of detailed information regarding products, processes, equipment, certifications, and licenses. MMIS currently contains data on over 1,200 facilities, and firms listed in the MMIS can enter the system through a password-protected program to update their profiles.

Visit our Web site for a directory of Montana manufacturers.

www.mmis.umt.edu



Worker loads capsules into automated filling machine. Photo courtesy of All American Pharmaceuticals.

