



Printing press being readied for installation at Allegra Print in Helena. Photo by Archie Broadbent. On the cover: skilled welders are one example of the needs in the manufacturing workforce.

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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

he Bureau of Business and Economic Research at The University of Montana started an annual survey of Montana's largest manufacturers in 1999. Conducted each year during November, December, and January, the survey 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 eighth such survey, completed in January 2007. 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 222, were contacted for this year's survey. Eighty percent of the firms (178 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 the 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 the assembly of sophisticated high-technology equipment to small cottage industries.

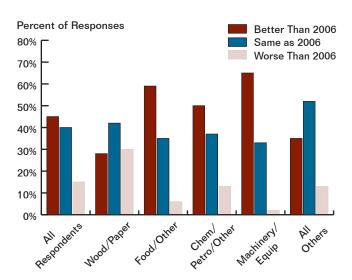


Figure 1
Overall Outlook for 2007

Overall, the state's manufacturing sector:

- produces over \$8 billion in output annually,
- directly employs approximately 27,400 workers earning over \$1.2 billion in annual labor income,
- includes over 2,000 entities such as factories, logging companies, and at-home cottage industries,
- pays high wages with employees averaging over \$48,000 per year (compared to an average \$33,200 per year for all Montana non-farm workers), and
- accounts for over 20 percent of Montana's economic base.

The Year 2006 in Review

The 2005-2006 survey indicated that Montana's manufacturers expected good conditions in 2006, with only 9 percent of respondents expecting conditions to worsen over 2005. Fifty-two percent of responding firms expected 2006 to improve over 2005, while 42 percent anticipated approximately the same conditions. The survey results presented here indicate that 2006 was indeed a good year, with the majority of responding firms experiencing increased production, sales, and profits.

For the third straight year, the majority of responding firms (59 percent) saw their production increase during 2006. Additionally, in keeping with the three-year trend, a relatively small portion (22 percent, up

from 19 percent) of respondents reported any curtailment of production or permanent elimination of production capacity (5 percent, down from 7 percent). Furthermore, sales were up for 62 percent, with 54 percent experiencing higher profits. With a comfortable increase over 2005, these percentages indicate that 2006 was relatively good year for the state's manufacturers, providing a third year of economic recovery following three years of decline.

One-third (33 percent) of responding firms hired more workers in 2006, while 48 percent maintained 2005 employment levels. Only 19 percent reduced the number of workers in 2006, a rate comparable to 2005. Over one-third (39 percent) of respondents released new product lines, and well over half (58 percent) reported making major capital expenditures in 2006. These percentages are slightly higher than 2005.

General Outlook for 2007

The state's manufacturers entered 2007 with a generally optimistic outlook. When asked about their outlook for 2007, 45 percent of responding firms expected it to be better than 2006, while 40 percent anticipated it to be the same, leaving only 15 percent who expected conditions to worsen. The most optimistic sector was machinery/equipment, where 65 percent of respondents expected improved conditions in 2007, followed by the food/other sector where 59 percent of respondents expected 2007 to be better than

Figure 2
Production Outlook for 2007

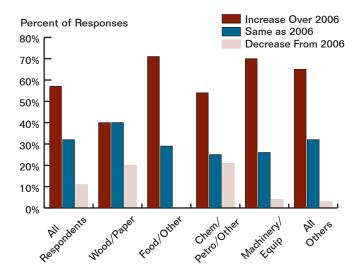


Figure 3
Sales Outlook for 2007

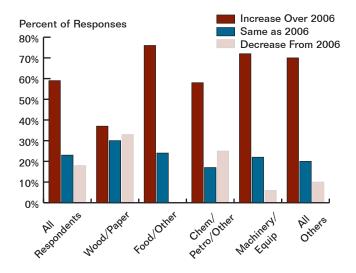
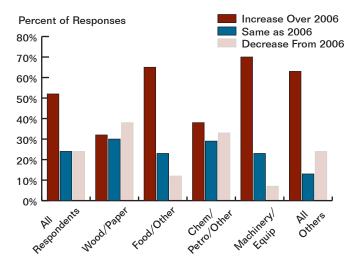


Figure 4
Profit Outlook for 2007



2006 (Figure 1). (See manufacturing categories on page 6.)

Well over half (57 and 58 percent, respectively) of respondents anticipated increases both in production and sales, with slightly fewer (51 percent) expecting higher profits in the coming year. Approximately half (52 percent) expected to make major capital expenditures in 2007, with the most optimistic sector being machinery/equipment (55 percent).

Montana's manufacturers are still cautious, however, with two-thirds (67 percent) anticipating the costs of inputs to increase over 2006 levels. Despite this, 46 percent expected product prices to either stay the same or go down in 2007, and 49 percent still expected to maintain current employment levels, with 14 percent foreseeing a decrease, up from 4 percent on last year's survey.

Outlook for Operations in 2006

Production

Fifty-seven percent of responding Montana manufacturers expected increased production levels for 2007, down slightly from 63 percent in 2006. Again, the most production increases were expected by firms in the food/other and machinery/equipment sectors, and in all others. At least 65 percent of respondents in these sectors expected increased production for 2007. Thirty-two percent of all respondents anticipated production to remain about the same in the coming year, while only 11 percent foresaw a production decrease for 2007. Both wood/paper and chemicals/petroleum/other saw about 20 percent expecting production declines (Figure 2).

Sales

In terms of sales, respondents to this year's survey were a bit less optimistic than last year's respondents. Fifty-nine percent, down from 65 percent last year, were anticipating 2007 sales to outpace those of 2006. In addition, the portion of respondents who expected declining sales was up to 18 percent, compared to 8 percent on last year's survey.

Again, the food/other sector were the most optimistic, with 76 percent expecting higher sales, and no respondents expecting lower sales.

Figure 5 **Outlook for Major Capital Expenditures in 2007**

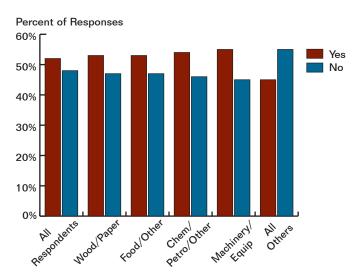
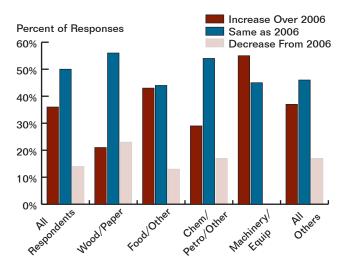


Figure 6 **Employment Outlook for 2007**



Other optimistic sectors include machinery/equipment and all others, with 72 and 70 percent, respectively, anticipating increased sales. The least optimistic was the wood/paper sector, with only 37 percent expecting increased sales and 33 percent anticipating a decline (Figure 3).

Profit

With 55 percent of responding firms experiencing increased profits in 2006, the outlook is optimistic, with 52 percent of respondents still anticipating increased profits for 2007. Twenty-four percent expected them to

remain the same, with 24 percent anticipating a profit decline, up from 8 percent last year. Respondents in the machinery/ equipment sector were the most optimistic. In terms of profits, 70 percent of them anticipated a better year in 2007. The least optimistic sector was wood/paper, where only 32 percent of respondents expected higher profits for 2007 (Figure 4).

Major Capital Expenditures

Intercontinental Truck Body, near Conrad, Mont., makes customerordered modifications to F350s for use as special towing units for the military.

Fifty-two percent of responding firms had plans for major capital expenditures in 2007. Respondents in the machinery/equipment sector reported the highest rate of intended investment at 55 percent, followed by the chemicals/petroleum/other sector, reporting a planned investment rate of 54 percent. The all others sector reported the lowest rate at 45 percent (Figure 5).

Employment

After increases in each of the last three years, the Manufacturers Survey indicates Montana manufacturing employment should continue to increase in 2007. Thirty-six percent of respondents to the 2006-2007



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 harvest and/or 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/Others

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/Others

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.

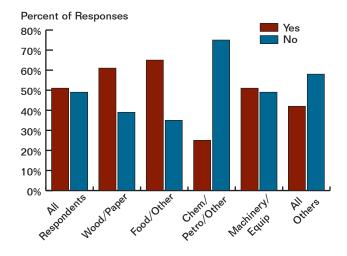
Machinery/Equipment

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.

Figure 7
Significant Worker Shortage in 2006?



survey expected to increase employment in 2007 while only 14 percent expected to reduce employment in 2007. The majority (55 percent) of respondents in the **machinery/equipment** sector expected to increase employment in the coming year, and none reported that they would reduce their workforce (Figure 6). The largest proportion of respondents in all other sectors anticipated employment levels to remain unchanged in 2007.

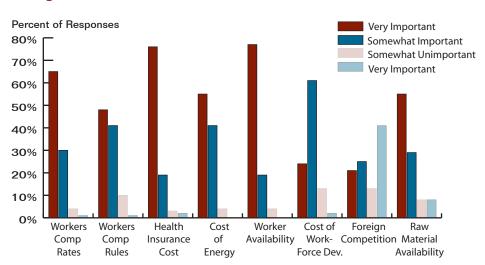
Worker Availability

This year's survey responses indicated that worker availability continues to be a growing problem. Over half (51 percent) of responding firms indicated they had experienced significant worker shortages at some point during 2006, up from 38 percent in 2005, 37 percent in 2004, and 22 percent in 2003. The problem was especially prevalent in the food/other and wood/paper sectors (65 and 61 percent, respectively), though all sectors reported some level of shortage (Figure 7).

Rating of 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 of these issues. The issue found most important by respondents was the availability of qualified workers, or the lack thereof. Seventy-

Figure 8
Rating of Business-Related Issues



seven percent of respondents indicated it as *very important* to their business, with an additional 19 percent indicating it as *somewhat important*. Only 4 percent indicated that worker availability was *somewhat unimportant* to their business, with no respondents marking it as very unimportant. Costs related to health insurance were viewed with nearly the same degree of importance by all sectors, with 76 percent rating them as *very important* and 19 percent as *somewhat important*.

Workers' compensation rates were very important to 65 percent of responding firms, while the cost of energy and raw material availability were both very important to 55 percent of respondents.

Workers' compensation rules were very important to 48 percent of respondents, while 24 percent of responding firms indicated that the

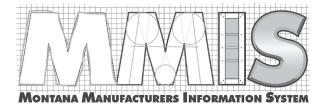
Mark Hoffman, owner of Crazy Mountain Motorsports in Clyde Park, with partially completed Crazy Mountain Xtreme (CMX) snow machines designed for mountain powder riding. cost of workforce development was *very important* to them. Further, foreign competition was *very important* to 21 percent of respondents, with a full 41 percent indicating that the latter was *unimportant* to them (Figure 8).



About the Montana Manufacturers Information System

Because of Montana's large size and sparse population, Montana 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 eliminate this situation by providing one place where detailed and up-to-date information about Montana manufacturers and service providers can be found. A second goal is to provide additional 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 located 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 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 those 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**

