

THE NEW ICE AGE

Investing in a Competitive, Educated Workforce

by Sheila Stearns

“In the 21st century, the education and skills of the workforce will end up being the dominant competitive weapon.”

– Lester Thurow, Montana native and MIT economist.

Some Like It Hot

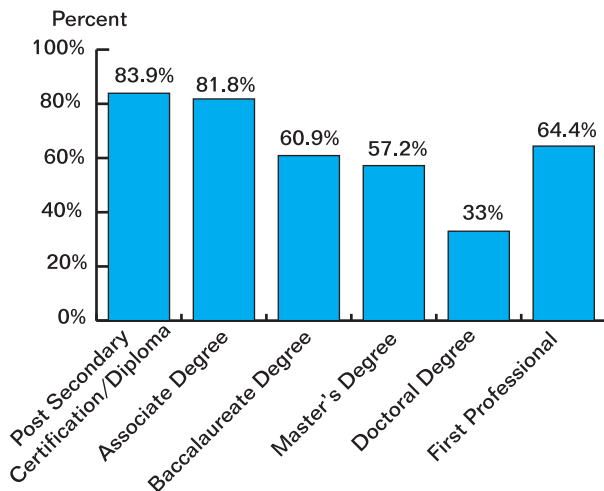
In 2006, Montana had the eighth highest GDP growth rate in the nation, the sixth highest nonfarm wage and salary growth rate, and the 11th highest growth rate in annual average wage per job. Even more good news is that Montana has a low unemployment rate – 3 percent in October of 2007. With a hot economy in Montana, the last thing we need is an ICE age, right? Wrong.

As Montana employers struggle to find workers qualified to meet specific labor demands and replace retiring baby boomers, it becomes clear that investing in a competitive, educated workforce is of critical importance. Montana’s investment strategy clearly has at least two prongs. First: attract

globally competitive businesses to employ our talented young people and keep them close to home. Second: retrain under-educated workers for new jobs or vacancies in old jobs. The Montana University System plays a key role in both strategies.

Montana’s universities work hard to respond to the demands of local labor markets. Often, the response involves public-private partnerships and the use of the system’s two-year degree providers. Examples include programs in heavy equipment at Miles City Community College, the nursing program at Educational Opportunities for Central Montana in Lewistown, and construction programs at several of our community colleges and colleges of technology. Each of these programs fills a critical labor force need in a tight labor

Figure 1
Percent of 2004-05 Montana University System Graduates Working in Montana During 2006



Source: Montana Department of Labor and Industry.

Table 1
2004-05 Graduates from Health Care Programs Who Were Employed in Montana During 2006

Major	Average Wage	Graduates in the Labor Force
Dental Hygiene	\$40,352	9
Health Administration	\$60,728	8
Medical Office Tech.	\$19,332	7
Medical Assisting	\$18,368	7
Pharmacy Tech.	\$20,924	9
Respiratory Therapy	\$35,709	13
Surgical Tech.	\$29,230	28
Radiologic Tech.	\$38,316	9
Registered Nurse	\$43,498	214
Practical Nurse	\$26,592	105
Pharmacy	\$85,031	28
Physical Therapy	\$45,214	8
Rehab Counseling	\$27,718	9

Note: Programs with five or fewer graduates in the labor force are not shown in order to preserve confidentiality.

Sources: Montana University System Data Warehouse; Montana Department of Labor and Industry.

market, benefiting both employers looking for workers and graduates who can land high-wage jobs and stay in the state. Figure 1 shows that the vast majority of two-year graduates are in Montana's labor force in the year following graduation. Table 1 shows the wages and labor force participation of recent graduates of health care programs, an area of significant need in the state's economy.

Little Town Blues

While Montana's overall economy is hot, the distribution of economic growth has been uneven across the state. As Governor Schweitzer often points out, job and population growth in the "boot economy," the urban areas stretching from Kalispell to Bozeman to Billings, has outpaced growth in many rural counties (Figure 2). Due to automation and structural economic changes, many of the traditional industries Montana's rural communities rely on now need fewer workers than in the past. Shrinking tax bases in rural areas make it difficult to pay professionals competitive wages. For example, it is rare for public school teachers in rural Montana to earn a starting salary above \$30,000. In order to pay competitive wages, rural areas must develop sustainable industry. Public-private partnerships such as the WIRED grant, which seeks to bring value-added opportunities to agriculture through the development of a bio-lubricant industry, might help boost the economy in rural areas.

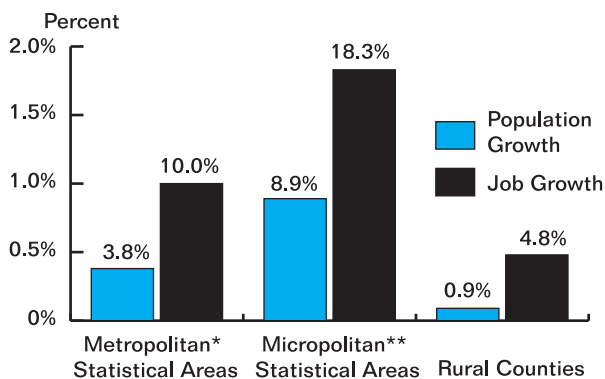
Teachers' salaries are just one example of the fact that Montana college graduates do not enjoy as large a financial return for their educations as do graduates in other states. Figures 3 and 4 map the difference in average wages among high school graduates, associate degree holders, and bachelor's degree holders. Montana is dead last in each measure, with a wage differential of only \$3,058 per year for associate degree holders and \$10,192 for bachelor's degree holders. We cannot expect Montanans to embrace higher education unless they can expect a reasonable return on their investment of time and tuition.

Technology, Research, and Innovation

Workforce development is increasingly recognized as a key to economic development. Making sure that all Montanans have access to the training they need has never been more critical. Another key way that the university system contributes to economic development is through technology transfer.

Ongoing research at Montana's campuses often translates into commercial ventures, patents, and licensing revenue (Table 3). Some of these ventures include MPA Technology (cancer treatment), Phillips Environmental (waste sanitation), LigoCyte Pharmaceuticals (vaccines), Montana Molecular

Figure 2
Growth in Population and Wage Salary Jobs



* Metropolitan Statistical Areas include: Billings, Great Falls, and Missoula.
 ** Micropolitan Statistical Areas include: Bozeman, Butte, Havre, Helena, and Kalispell.
 All other areas are considered rural.

Source: Census Bureau and Bureau of Labor Statistics.

Table 3
Technology Transfer Activities, Montana University System

	Total 2000-2005	Goal 2006-2010
Patents Issued	197	240
Total Active Licenses	150	180
Active Licenses, MT Companies	83	110
Percent of Licenses with		
MT Companies	55%	59%
License/Patent Revenues	\$527,484	\$1,900,000
Reimbursed Patent Costs		
from Licenses	\$731,595	\$2,000,000

Source: Montana University System Institutional Reports.

(cell biology research), Sustainable Systems (vegetable oils and biofuels), and Montana Microbial Products (plant disease treatment). RightNow Technologies and Sikorsky Helicopters chose to capitalize on Montana's quality of life and highly educated workforce. These businesses require a highly skilled workforce and pay employees high wages. University research is translating into job opportunities that allow more of Montana's brightest graduates to stay in the state.

The Boy Scout Principle: Be Prepared

Montana's foremost industrialist, Dennis Washington, has founded numerous companies employing 1,700 Montanans in

Figure 3
Difference in Annual Median Earnings Between Associate's Degree Holders and High School Graduates

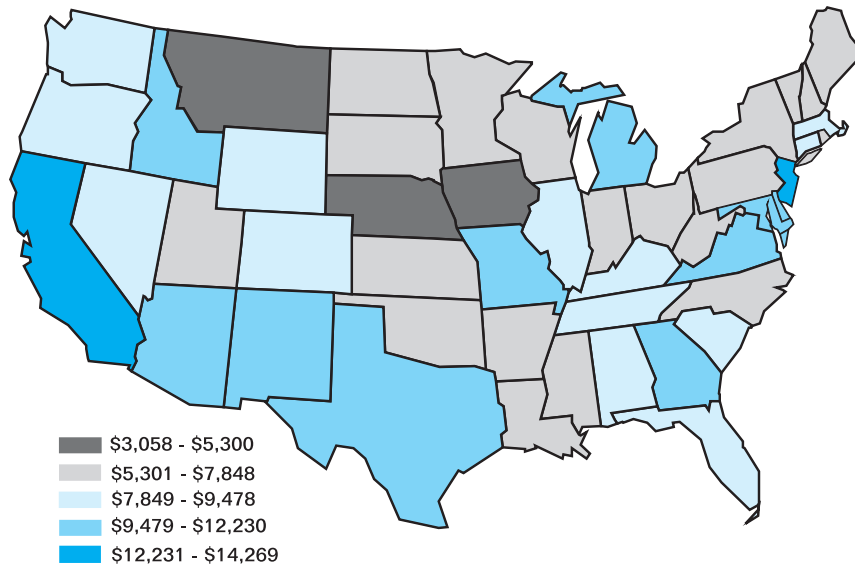
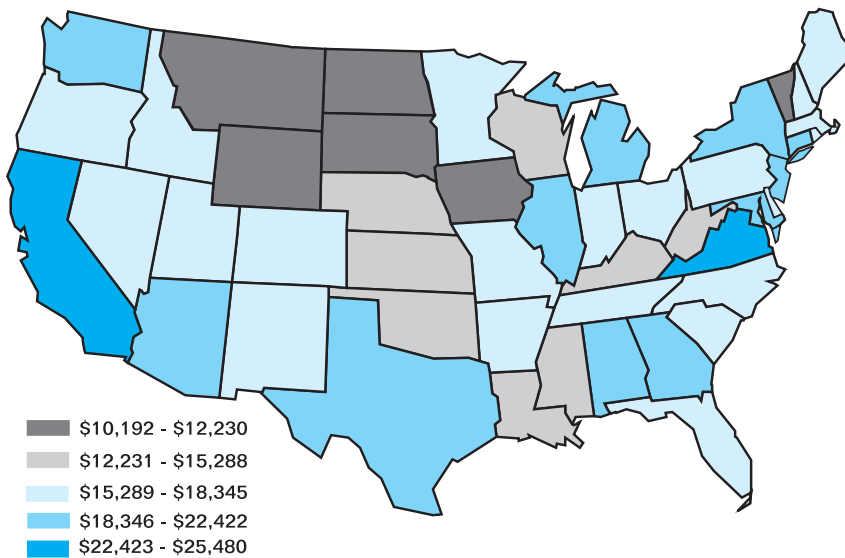


Figure 4
Difference in Annual Median Earnings Between Bachelor's Degree Holders and High School Graduates



Source: U.S. Census Bureau.

transportation, mining, heavy equipment, environmental construction, and aviation. Dennis and Phyllis Washington have made investment in education a hallmark of their company policy and philanthropy. Mr. Washington believes strongly that by reaching out to young people in their formative years, our society will see great benefit. He recently commented, "Every person will get a break at some point in life, but not everyone will recognize it or have the ability to use it. The best you can do is be prepared."

The state of Montana, just like individuals, can "be

prepared" for regional and international competition by investing in an educated workforce. Enterprising executives are reaching out to colleges and universities to create productive, successful educational partnerships. The surest way to increase workforce supply and to enhance Montana's hot economy is through the ICE age philosophy, repeating the cycle over and over: Invest, Compete, Educate.

Sheila Stearns is the Montana Commissioner of Higher Education.

One Shock, Two Shocks, Three Shocks. A Recession?

by Paul E. Polzin

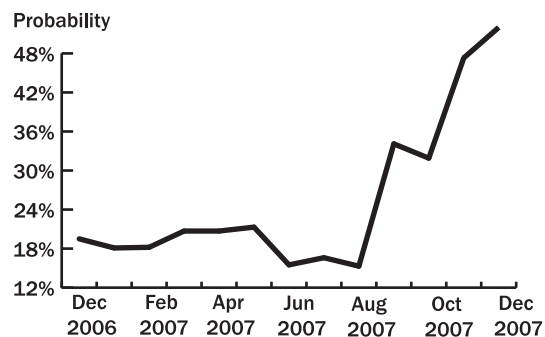
The U.S. economy teeters on the brink of recession. The jitters started with the bursting of the house price bubble, which meant consumers could no longer fund their consumption expenditures using their home appreciations. Then, the credit crunch (caused by mortgage defaults) limited new loans to only the least risky borrowers. Finally, continued high energy prices (with oil reaching \$100/barrel) may be the final straw. The latest odds are about a 50-50 chance that the economy will fall into a recession during the next six months.

Top 10 Economic Predictions for 2008

(Courtesy of Global Insight Inc.)

1. U.S. growth will be the weakest since 2002, and possibly since the last recession. Growth next year will be 1.9 percent, with a mounting risk it could be lower. Growth in 2002 was a meager 1.6 percent.
2. Most of the rest of the developed world will also decelerate. Europe will be hit by multiple headwinds, including the credit crunch, stronger currency, housing problems, and high oil prices. Japan will be similarly affected, except for the sub-prime fallout.
3. There will be no significant cooling in Asia (especially China) until late 2008.
4. Oil prices will ease but remain high. The supply/demand fundamentals suggest an oil price between \$75 and \$80 per barrel.
5. Core inflation will edge down. The U.S. economy is now operating well below potential. The unemployment rate should edge upward.
6. The Federal Reserve will keep cutting interest rates.

Figure 1
Probability that the United States Will Fall into Recession within Six Months



Source: Moody's Economy.com.

7. The housing sector will bottom out in mid-2008. The peak-to-trough drop in U.S. home prices (OHEA index) will be more than 10 percent.
8. The U.S. current-account deficit will continue to improve. The decelerating domestic economy and weakening value of the dollar are super-charging exports and dampening imports.
9. The U.S. dollar will reach a trough in 2008. The Euro will top out at \$1.55, and the Canadian dollar may have peaked already.
10. With U.S. growth barely noticeable through mid-2008, even a small shock could push the economy into a recession. Renewed \$100/barrel oil price is a likely candidate, but some other factors (such as international turbulence) could also occur.

Table 1
Economic Trends for the U.S. Economy, 2002-2011
Actual and Projected as of December 2007

	Actual			Projected						
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Real GDP (chained \$), percent change	1.6	2.5	3.6	3.1	2.9	2.2	1.9	2.9	2.9	2.9
Inflation (CPI-U), percent change	1.6	2.3	2.7	3.4	3.2	2.9	2.1	1.6	1.9	1.8
Interest Rates										
90-day T-bills, percent	1.6	1.0	1.4	3.1	4.7	4.4	3.1	3.8	4.6	4.6
Mortgage rates (30 years), percent	6.5	5.8	5.8	5.9	6.4	6.3	5.8	6.3	7.0	7.0
Housing starts, millions										
Housing starts, millions	1.71	1.85	1.95	2.07	1.80	1.35	1.04	1.31	1.54	1.72
Unemployment rate, percent										
Unemployment rate, percent	5.8	6.0	5.5	5.1	4.6	4.6	5.1	5.1	4.9	4.7
Oil, West Texas Intermediate (\$/barrel)										
Oil, West Texas Intermediate (\$/barrel)	26.11	31.12	41.47	56.56	66.12	72.13	75.67	74.33	74.02	73.42

Source: Global Insight Inc.

The Montana Economy Zooms Along

by Paul E. Polzin

Wheat selling at greater than \$8/bushel turbocharged the crops sector of Montana agriculture during late 2007. Montana's economic base is now firing on almost all cylinders, and the state is completing a record-breaking streak of four straight years of greater than 4 percent real growth. Looking to the future, annual growth of 4 percent is likely to continue into 2008 and maybe even beyond.

The state's strong economic performance is attributable to buoyant conditions in most basic industries:

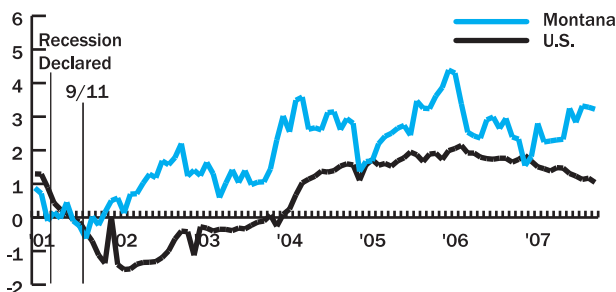
- The metal (especially copper) and energy-related sectors of mining have been mushrooming because of worldwide demand growth associated with China and other developing countries.
- Moderate (but persistent) 2 percent overall increases in nonresident travel, despite gas prices rise.

- Robust commercial and residential construction activity (especially in Gallatin and Flathead counties).
- Although it occurred earlier in the decade, right after Sept. 11, the federal government expanded as a result of homeland security (military and border-related) activity.
- The wood products industry is the one exception. There have been several mill closings as a result of a long-term decline in timber availability and numerous market-driven curtailments in 2006-07.
- The other manufacturing sectors (which include Montana's small but robust high-tech producers) continue to expand, counter to the national trend.

The major risks to the forecast are:

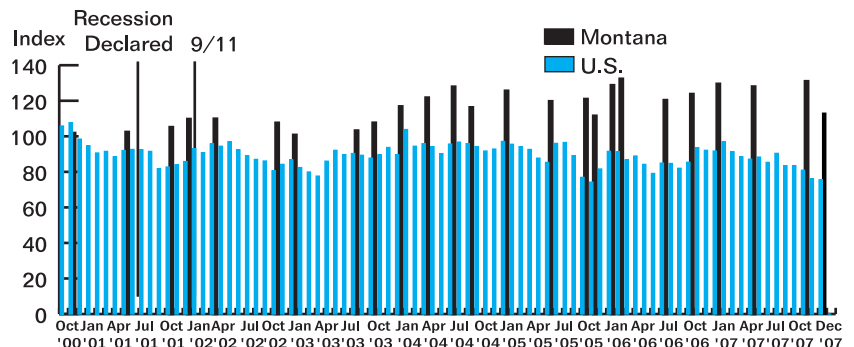
- 1) A worldwide bumper crop, which would quickly depress wheat prices.

Figure 1
Annual Percent Change in Nonfarm Wage and Salary Employment January 2001 to November 2007



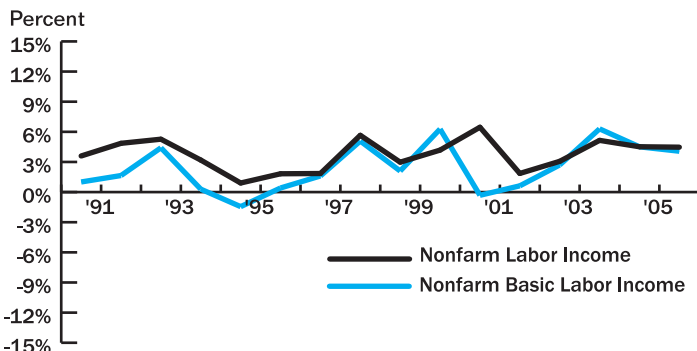
Source: Research and Analysis Bureau, Montana Department of Labor and Industry.

Figure 2
Index of Consumer Sentiment, U.S. and Montana, October 2000 to December 2007



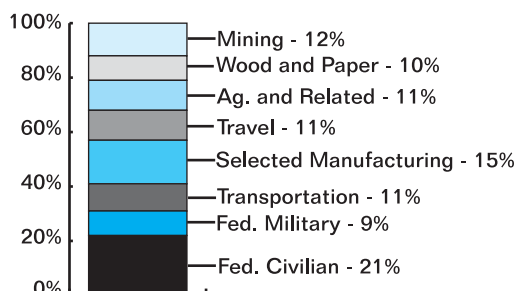
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; The University of Michigan.

Figure 3
Nonfarm Labor Income and Nonfarm Basic Labor Income, Montana, Percent Change, [in constant dollars]



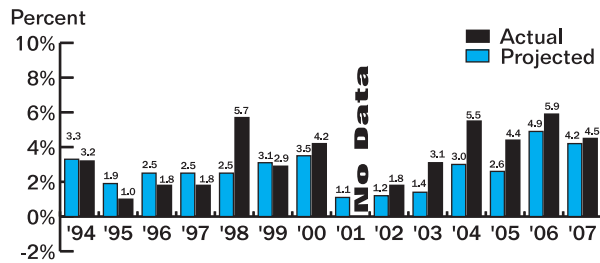
Source: Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 4
Labor Income in Basic Industries, Montana, 2005-2007 [percent of total]



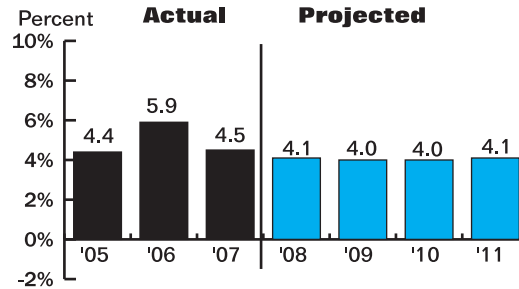
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 5
Actual and Projected Percent Change in Nonfarm Labor Income, Montana, 1994-2007



Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 6
Actual and Projected Change in Nonfarm Labor Income, Montana, 2005-2011



Source: Bureau of Business and Economic Research, The University of Montana-Missoula. Bureau of Economic Analysis, U.S. Department of Commerce.

- 2) The U.S. economy does go into recession, and the recession takes an unanticipated turn that impacts important Montana industries.
- 3) Terrorist attacks and/or geopolitical events (such as financial or political crisis) that could dampen fast growth in developing countries and slow the natural resource boom.
- 4) After bucking the national trend, Montana construction activity nosedives.

Table 1
Index of Single-Family Home Prices, Annual Percent Change

	Missoula County	Cascade County	Yellowstone County	MT	U.S.
2006Q3 - 2007Q3	5.8	6.5	9.1	7.7	1.8
2005Q3 - 2006Q3	10.6	13.3	6.2	13.0	7.5
2004Q3 - 2005Q3	10.6	7.1	10.6	12.5	12.4

Source: U.S. Office of Federal Housing Oversight.

Table 2
Population, Montana and Regions, 1990-2010

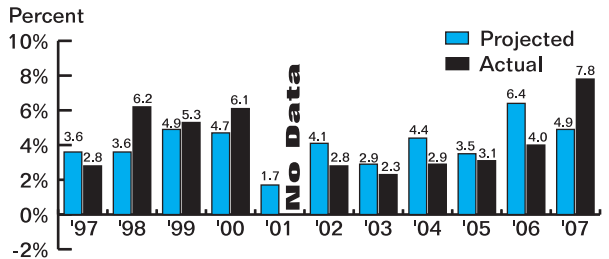
	Thousands of Persons				Average Annual Percent Change		
	Actual		Projected				
	1990	2000	2006	2010	1990-2000	2000-2006	2005-2010
Montana	800	902	945	980	1.2%	0.8%	0.9%
West	335	400	421	450	1.8%	0.9%	1.7%
Missoula	79	95	102	108	1.9%	1.2%	1.4%
Flathead	60	75	85	93	2.3%	2.1%	2.3%
Silver Bow	34	35	33	37	0.3%	-1.0%	2.9%
Lewis and Clark	48	56	59	61	1.5%	0.6%	0.8%
Ravalli	25	36	41	43	3.7%	2.2%	1.2%
Rest of West	89	103	101	108	1.5%	-0.3%	1.7%
North-Central	181	183	183	184	0.1%	0.0%	0.1%
Cascade	78	80	80	82	0.3%	0.0%	0.6%
Hill	18	17	16	17	-0.6%	-1.0%	1.5%
Fergus	12	12	12	13	0.0%	0.0%	2.0%
Rest of North-Central	73	74	75	72	0.1%	0.2%	-1.0%
Southeast	284	319	341	346	1.2%	1.1%	0.4%
Yellowstone	114	128	138	145	1.2%	1.3%	1.2%
Gallatin	51	68	81	88	2.9%	3.0%	2.1%
Richland	11	10	9	11	-0.9%	-1.7%	5.1%
Custer	12	12	11	12	0.0%	-1.4%	2.2%
Rest of Southeast	96	101	102	90	0.5%	0.2%	-3.1%

Sources: Bureau of the Census, U.S. Department of Commerce; Bureau of Business and Economic Research, The University of Montana-Missoula.

Missoula County

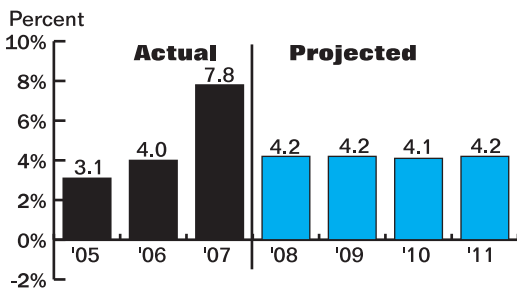
The Missoula area economy is the largest and most diverse in Western Montana. It continues as the dominant trade and service center in the region, but the opening of chain stores and other establishments in nearby communities has meant that retail trade is no longer a significant contributor to Missoula County's growth. Health care and business and professional services continue to grow and attract customers from surrounding rural regions. Missoula's rapid growth in 2007 was partially due to the opening of the new Direct TV call center. From 2001 to 2005, the largest contributors to Missoula's growth were The University of Montana and state government, nonresident travel (including conventions), the federal government, and health care. The shutdown of a major wood products facility in 2007 counterbalanced growth in other basic industries and may continue to have effects for the next year or so.

Figure 1
Actual and Projected Percent Change in Nonfarm Labor Income, Missoula County, 1997-2007



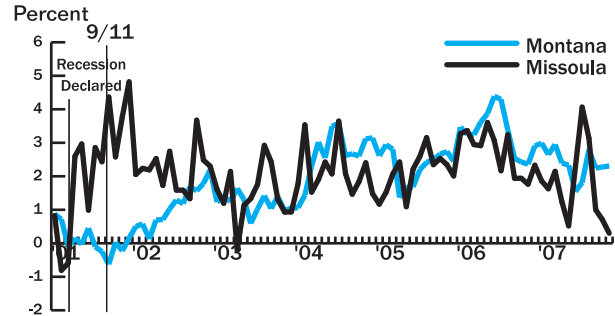
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 2
Actual and Projected Change in Nonfarm Labor Income, Missoula County, 2005-2011



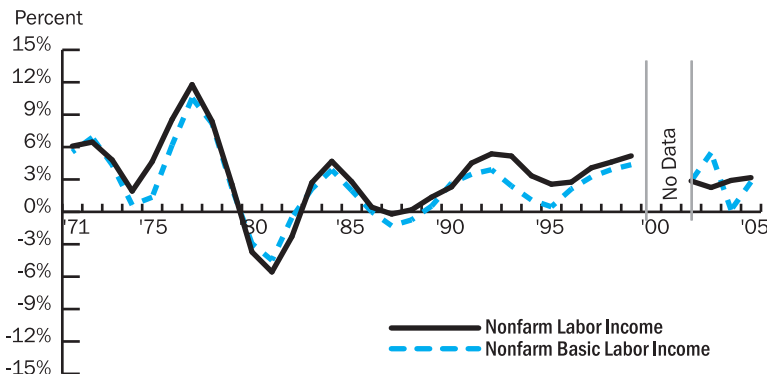
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 3
Annual Percent Change in Nonfarm Wage and Salary Employment January 2001 to November 2007



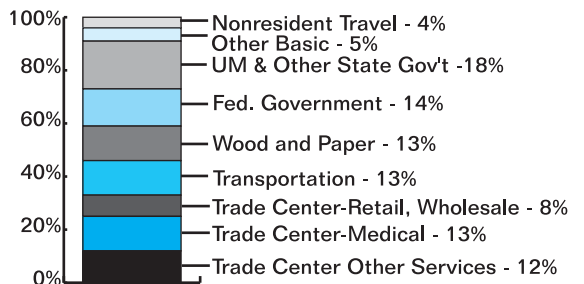
Source: Research and Analysis Bureau, Montana Department of Labor and Industry.

Figure 4
Nonfarm Labor Income and Nonfarm Basic Labor Income, Missoula County, Percent Change, [in constant dollars]



Note: 1971-1999 are three-year averages.
Source: Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 5
Labor Income in Basic Industries, Missoula County, 2005-2007 [percent of total]

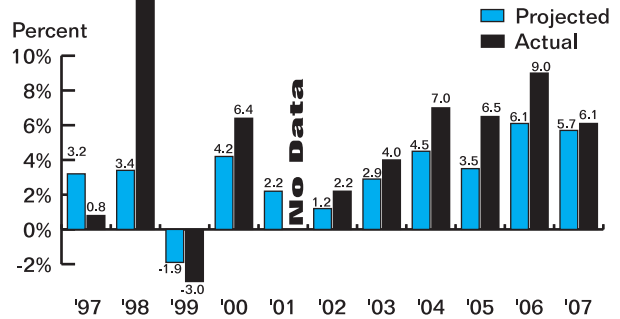


Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Flathead County

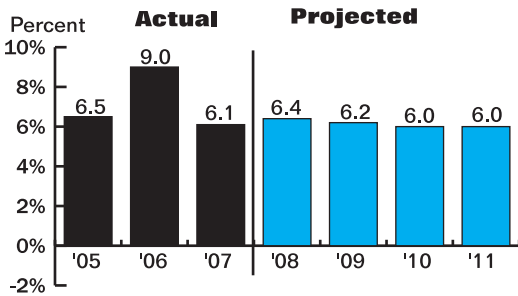
While among the fastest growing counties in Montana, Flathead County may be vulnerable to a quick slowdown if construction and real estate falter. Both of these sectors have expanded rapidly since 2001 and may have inflated the overall growth rates. Flathead County has a diverse economic base, including manufacturing (primary metals, wood products, and high-tech), transportation (railroads), nonresident travel, and the federal government (USDA Forest Service and the National Park Service). Growth in the trade center component of retail trade was one of the major contributors to increases in the economic base between 2001 and 2005. Other basic industries experiencing increases were nonresident travel and the federal government (perhaps related to homeland security). Manufacturing has almost recovered from the recession-related declines in the high-tech sector and the partial shut-down at the Columbia Falls Aluminum Company.

Figure 1
Actual and Projected Percent Change in Nonfarm Labor Income, Flathead County, 1997-2007



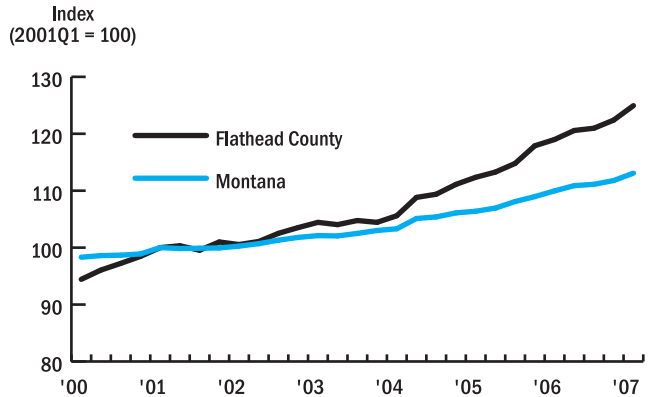
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 2
Actual and Projected Change in Nonfarm Labor Income, Flathead County, 2005-2011



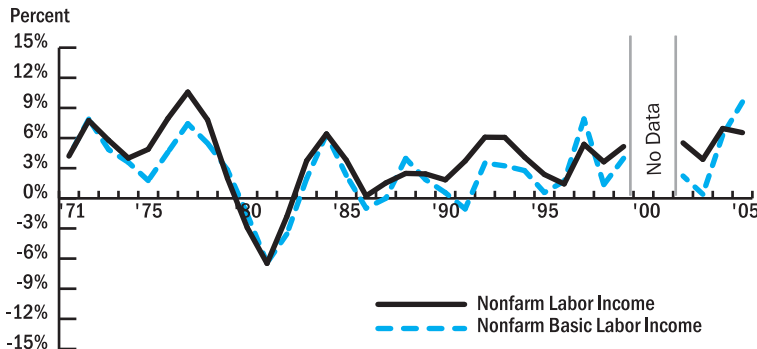
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 3
Nonfarm Wage and Salary Employment, Montana & Flathead County, 2001 Q1 to 2007 Q2



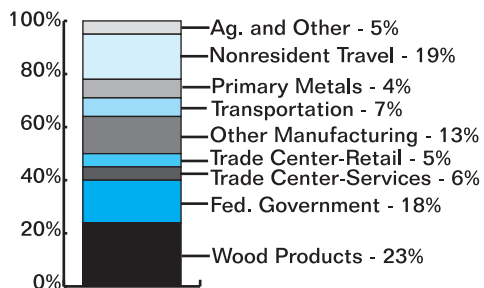
Note: Data seasonally adjusted by BBER. Source: U.S. Bureau of Labor Statistics.

Figure 4
Nonfarm Labor Income and Nonfarm Basic Labor Income, Flathead County, Percent Change, [in constant dollars]



Note: 1971-1999 are three-year averages. Source: Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 5
Labor Income in Basic Industries, Flathead County, 2005-2007 [percent of total]

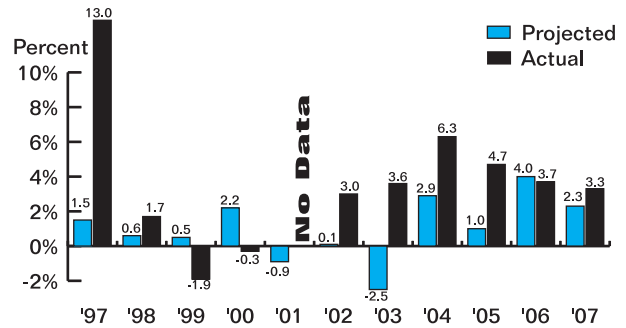


Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Silver Bow County

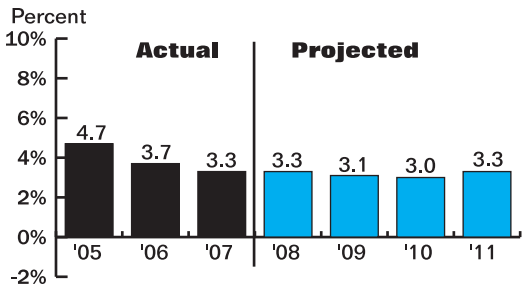
The worldwide energy/commodity boom is having direct impacts on the Butte-Silver Bow economy. The sizable increases in 2004, 2005, and 2006 reflect the direct and indirect impacts of the reopening of the Montana Resources Mine. Continued environmental cleanup activities (which are reported in the construction industry) and capacity of operation of the mine underlie the projections of 3.0 to 3.5 percent annual growth from 2008 to 2011. Both trade center components (retail and services) reported sizable growth from 2001 to 2005, reflecting Butte's continued development as a regional trade and service center.

Figure 1
Actual and Projected Percent Change in Nonfarm Labor Income, Silver Bow County, 1997-2007



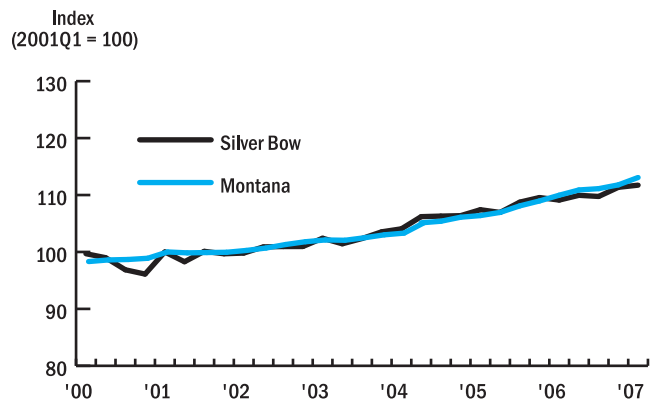
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 2
Actual and Projected Change in Nonfarm Labor Income, Silver Bow County, 2005-2011



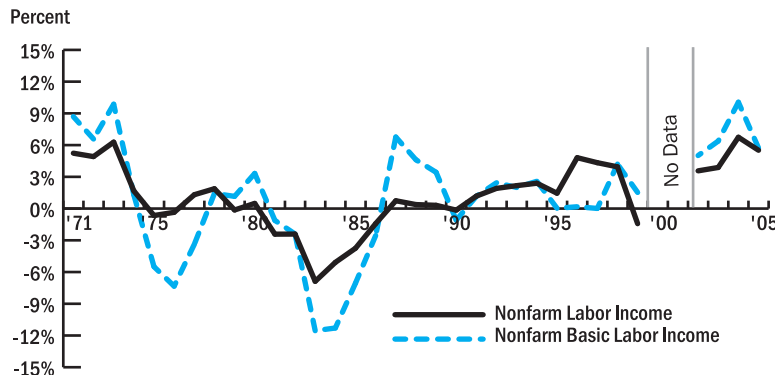
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

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Nonfarm Wage and Salary Employment, Montana & Silver Bow County, 2001 Q1 to 2007 Q2



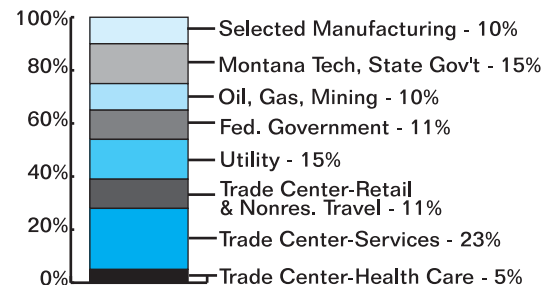
Note: Data seasonally adjusted by BBER. Source: U.S. Bureau of Labor Statistics.

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Nonfarm Labor Income and Nonfarm Basic Labor Income, Silver Bow County, Percent Change, [in constant dollars]



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Figure 5
Labor Income in Basic Industries, Silver Bow County, 2005-2007 [percent of total]

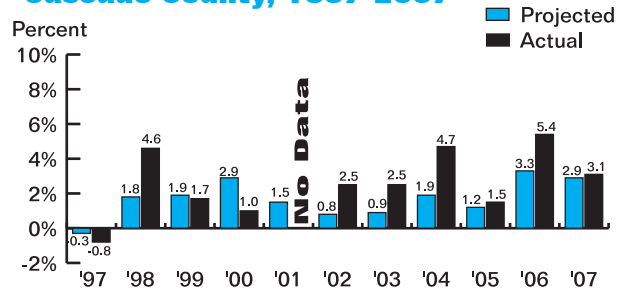


Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Cascade County

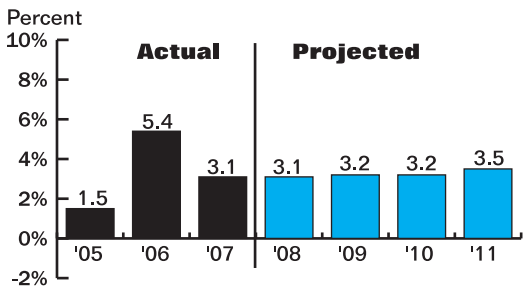
About two-thirds of the economic base in the Great Falls area is in three sectors: Malmstrom Air Force Base (including both civilian and military workers) and the trade center components of health care and financial services. All three experienced significant growth between 2001 and 2005. The increases at Malmstrom occurred between 2001 and 2004 and were associated with active duty and reserve personnel plus additional homeland security operations. The trade center component of health care grew steadily throughout the decade, reflecting Great Falls' role as the dominant medical center in North Central Montana. The recent growth and expansion of a regional brokerage firm probably accounts for a significant share of the increase in the trade center component of financial services.

Figure 1
Actual and Projected Percent Change in Nonfarm Labor Income, Cascade County, 1997-2007



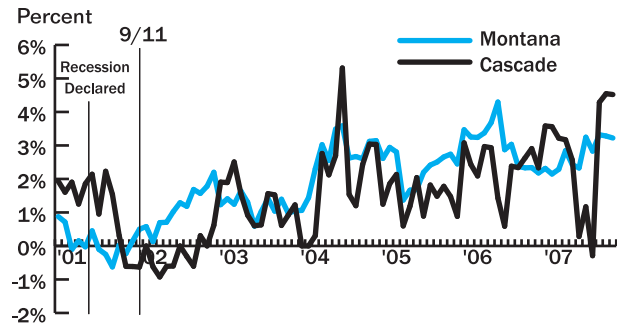
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 2
Actual and Projected Change in Nonfarm Labor Income, Cascade County, 2005-2011



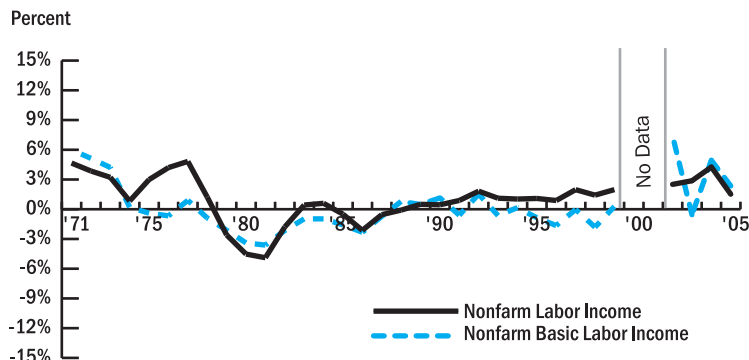
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 3
Annual Percent Change in Nonfarm Wage and Salary Employment January 2001 to November 2007



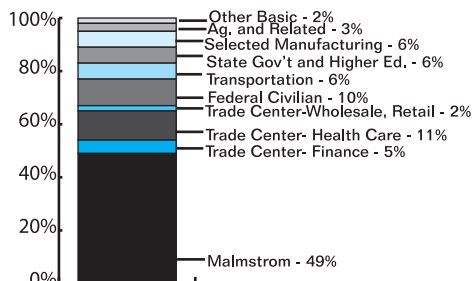
Source: Research and Analysis Bureau, Montana Department of Labor and Industry.

Figure 4
Nonfarm Labor Income and Nonfarm Basic Labor Income, Cascade County, Percent Change, [in constant dollars]



Note: 1971-1999 are three-year averages.
Source: Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 5
Labor Income in Basic Industries, Cascade County, 2005-2007 [percent of total]

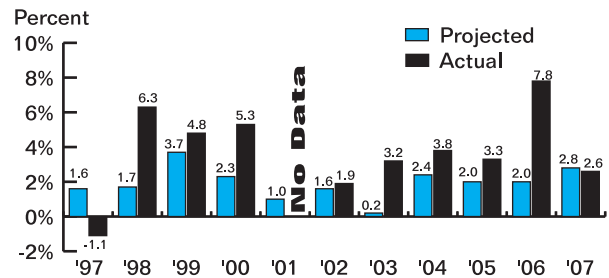


Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Lewis & Clark County

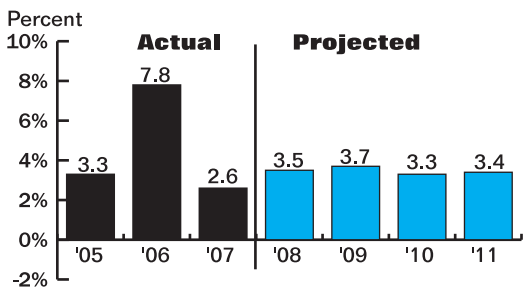
The state and federal governments together account for about two-thirds of the economic base in Lewis and Clark County. The Helena-area economy has posted slower overall growth than most of the other urban areas in the state during the last decade, reflecting generally slower growth in government. The greater than 7 percent increase in 2006 was due to the expiration of the state government pay freeze instituted by the 2003 Legislature (2006 was the first full year after the freeze expired). Among the non-government basic industries, the largest increases were in manufacturing (including a chemical plant), insurance (the largest health insurance company in the state), and nonresident travel.

Figure 1
Actual and Projected Percent Change in Nonfarm Labor Income, Lewis & Clark County, 1997-2007



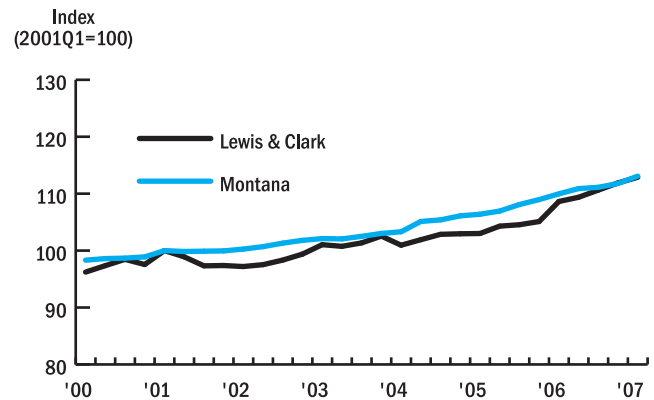
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 2
Actual and Projected Change in Nonfarm Labor Income, Lewis & Clark County, 2005-2011



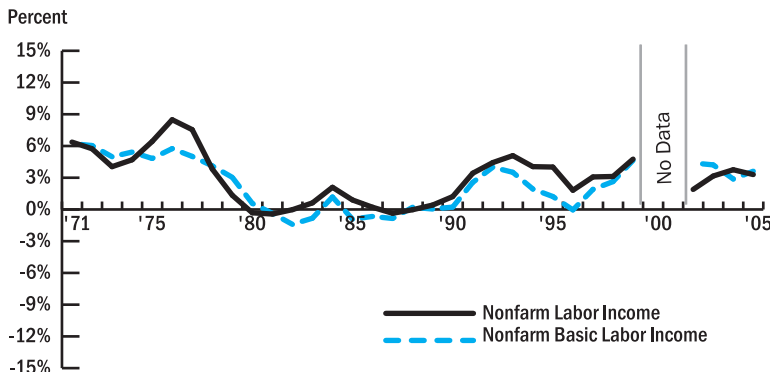
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 3
Nonfarm Wage and Salary Employment, Montana & Lewis & Clark County, 2001 Q1 to 2007 Q2



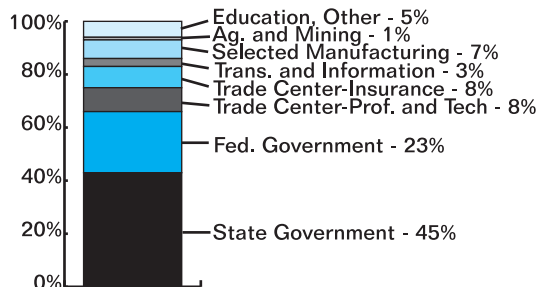
Note: Data seasonally adjusted by BBER. Source: U.S. Bureau of Labor Statistics.

Figure 4
Nonfarm Labor Income and Nonfarm Basic Labor Income, Lewis & Clark County, Percent Change, [in constant dollars]



Note: 1971-1999 are three-year averages. Source: Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 5
Labor Income in Basic Industries, Lewis & Clark County, 2005-2007 [percent of total]

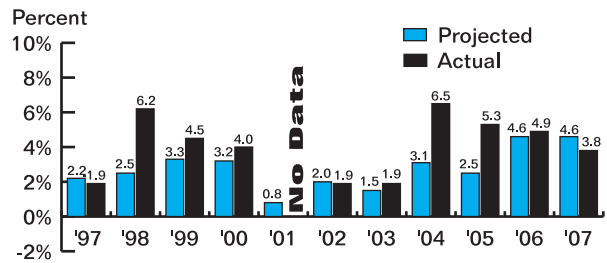


Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Yellowstone County

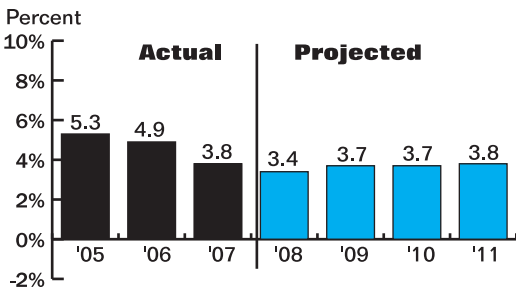
Billings is the largest trade and service center in Montana. It is also in the center of Montana's natural resources boom. Energy-related activities have both direct and indirect impacts on the local economy. The oil field exploration workers locate in rural areas near the drilling sites. But Yellowstone County also experiences direct impacts because energy-related headquarters and management personal locate in and near Billings. From 2001 to 2005, the oil refineries expanded their capacities to accommodate new sources of crude oil. Establishments in Bozeman and Miles City continue to provide stiff competition to Billings retailers and wholesalers. Between 2001 and 2005, growth in health care almost matched those in oil exploration and refining, bolstering Billings' role as a regional medical center. The rapid growth in 2004 and 2005 represents the initial impacts of the energy/resources boom.

Figure 1
Actual and Projected Percent Change in Nonfarm Labor Income, Yellowstone County, 1997-2007



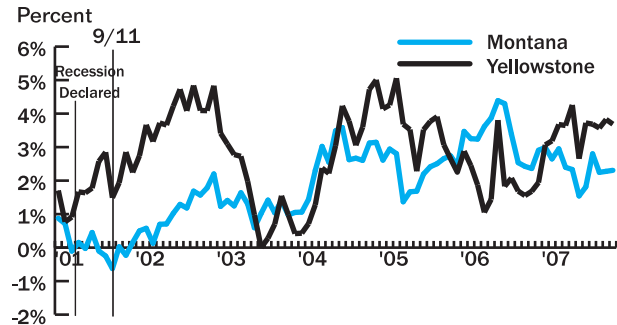
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 2
Actual and Projected Change in Nonfarm Labor Income, Yellowstone County, 2005-2011



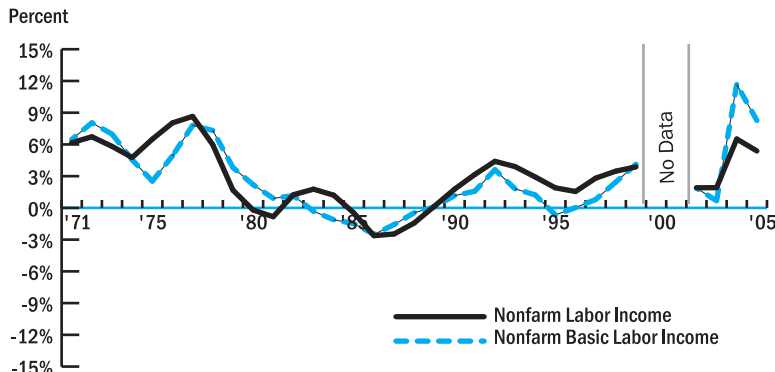
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 3
Annual Percent Change in Nonfarm Wage and Salary Employment January 2001 to November 2007



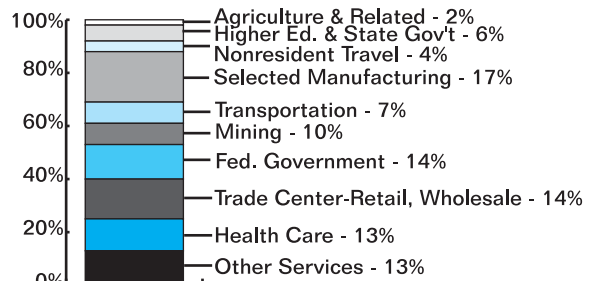
Source: Research and Analysis Bureau, Montana Department of Labor and Industry.

Figure 4
Nonfarm Labor Income and Nonfarm Basic Labor Income, Yellowstone County, Percent Change, [in constant dollars]



Note: 1971-1999 are three-year averages.
Source: Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 5
Labor Income in Basic Industries, Yellowstone County, 2005-2007 [percent of total]

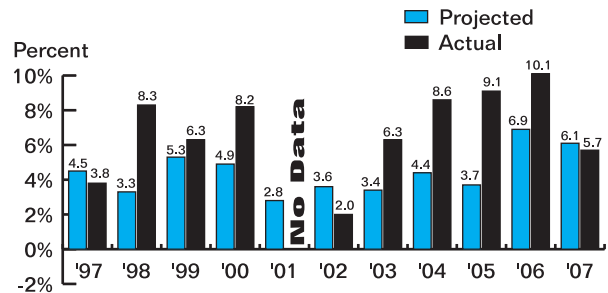


Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Gallatin County

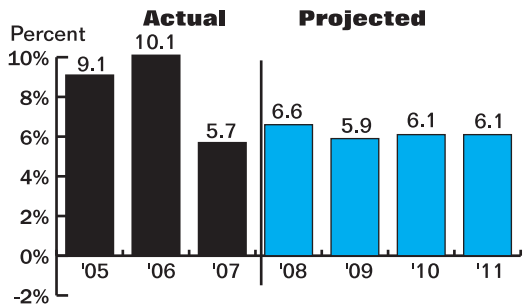
Gallatin County has consistently reported the fastest growth of Montana's major counties over the last decade, but it could decelerate rapidly if construction and real estate go into freefall. The strong local growth in both industries may have inflated the reported county growth rates since 2001. Both construction and real estate in Gallatin County have continued strong despite nationwide slowdowns. Bozeman's economy is based on strong fundamentals with diverse components that almost all experienced significant recent growth. Gallatin County is home to much of the state's high-tech industry, and it has more than recovered from the 2001 recession. From 2001 to 2005, the largest contributors to the county's growth were Montana State University (mostly research) and state government. Unlike the state's largest counties, all trade center components (especially retail trade) continue to grow in Gallatin County. Nonresident travel and the federal government also experienced significant growth.

Figure 1
Actual and Projected Percent Change in Nonfarm Labor Income, Gallatin County, 1997-2007



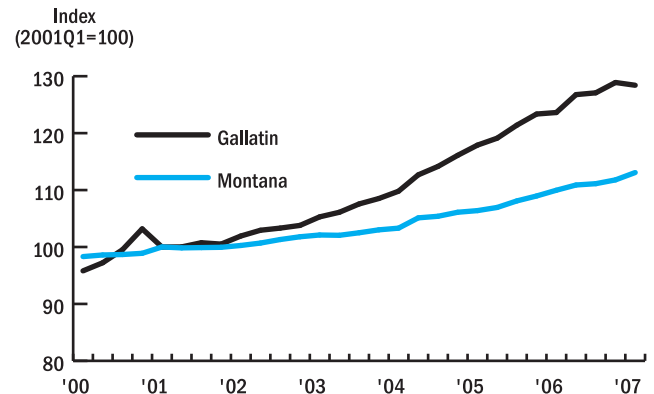
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 2
Actual and Projected Change in Nonfarm Labor Income, Gallatin County, 2005-2011



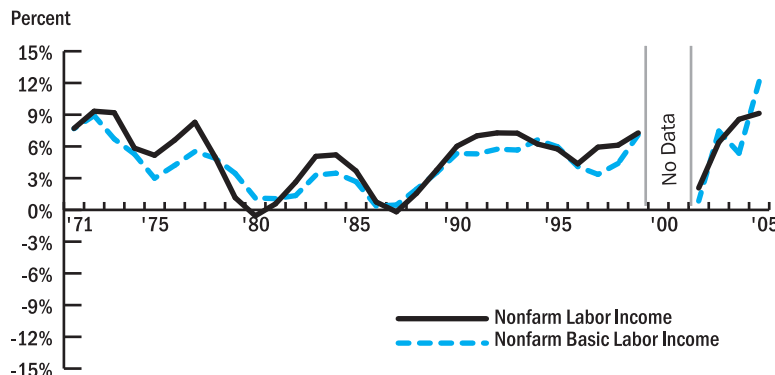
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 3
Nonfarm Wage and Salary Employment, Montana & Gallatin County, 2001 Q1 to 2007 Q2



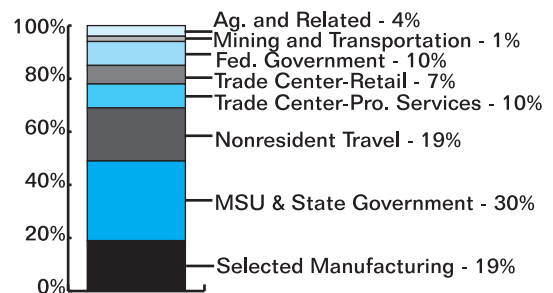
Note: Data seasonally adjusted by BBER. Source: U.S. Bureau of Labor Statistics.

Figure 4
Nonfarm Labor Income and Nonfarm Basic Labor Income, Gallatin County, Percent Change, [in constant dollars]



Note: 1971-1999 are three-year averages. Source: Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 5
Labor Income in Basic Industries, Gallatin County, 2005-2007 [percent of total]

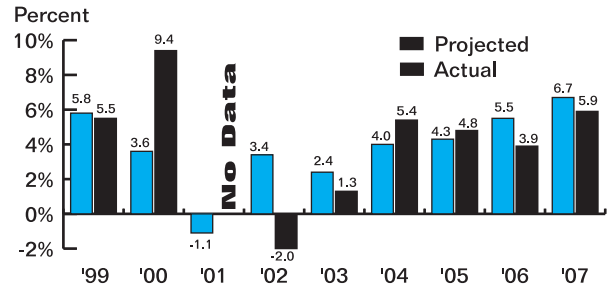


Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Ravalli County

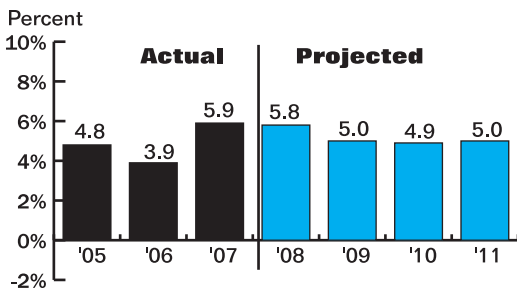
Ravalli County is unique because the largest component of its economic base is the commuters who work in Missoula. The northern portion of the county is now part of the Missoula economy, and many people now live in Ravalli County but commute to jobs across the county line. Ravalli County's growth rate has decelerated significantly since the 1990s. Migration has also slowed because the prime home sites in the northern portion of the county are now occupied, and new residents face ever-increasing travel time and congestion on Highway 93. These issues have slowed the flow of people seeking the suburban lifestyle. Continued highway and commercial construction will boost growth in 2008. Hamilton is evolving into a second order regional trade center.

Figure 1
Actual and Projected Percent Change in Nonfarm Labor Income, Ravalli County, 1999-2007



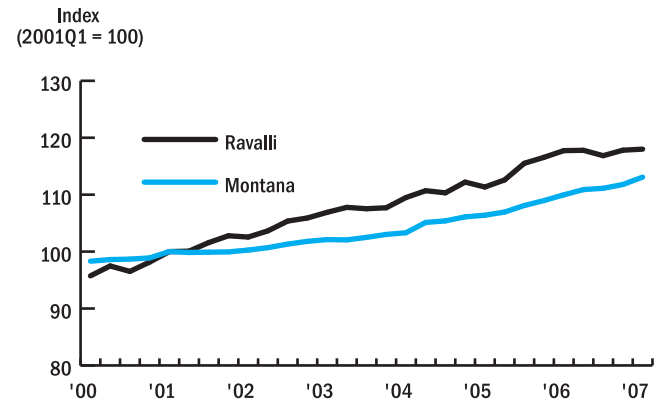
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 2
Actual and Projected Change in Nonfarm Labor Income, Ravalli County, 2005-2011



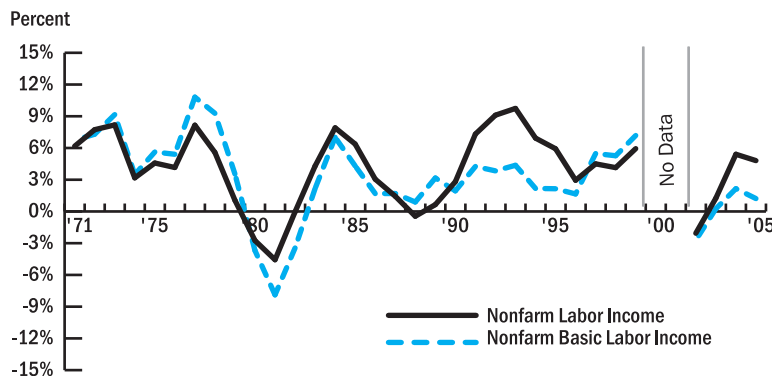
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 3
Nonfarm Wage and Salary Employment, Montana & Ravalli County, 2001 Q1 to 2007 Q2



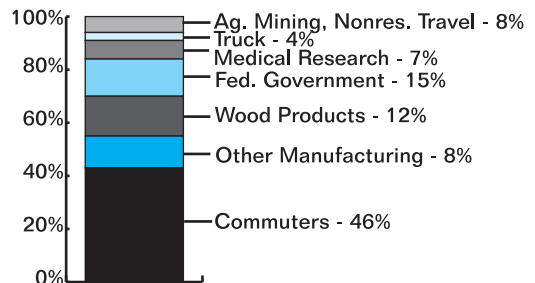
Note: Data seasonally adjusted by BBER. Source: U.S. Bureau of Labor Statistics.

Figure 4
Nonfarm Labor Income and Nonfarm Basic Labor Income, Ravalli County, Percent Change, [in constant dollars]



Note: 1971-1999 are three-year averages. Source: Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 5
Labor Income in Basic Industries, Ravalli County, 2005-2007 [percent of total]

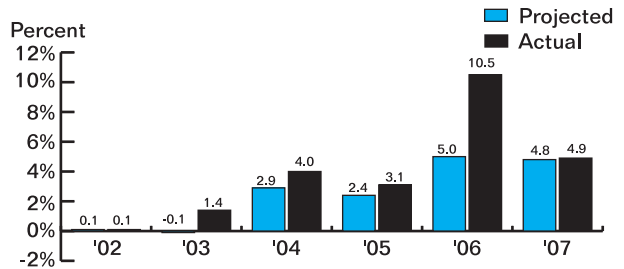


Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Fergus County

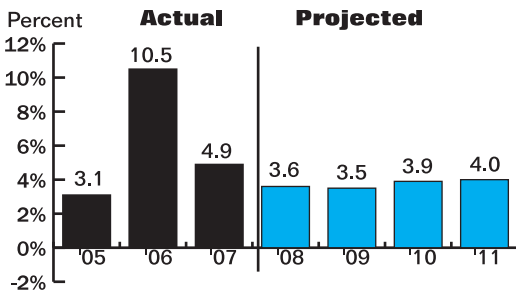
Agriculture (and closely linked activities), manufacturing, and the federal government combine to account for approximately 78 percent of the economic base in Fergus County. All three of these basic industries contributed to the faster growth since 2000. For a small Montana county, manufacturing is large and diverse, with firms producing for regional and national markets. The peak growth in 2006 appears to be associated with a construction project. The trends in world grain prices will be a major determinant of future agricultural conditions in Fergus County.

Figure 1
Actual and Projected Percent Change in Nonfarm Labor Income, Fergus County, 1997-2007



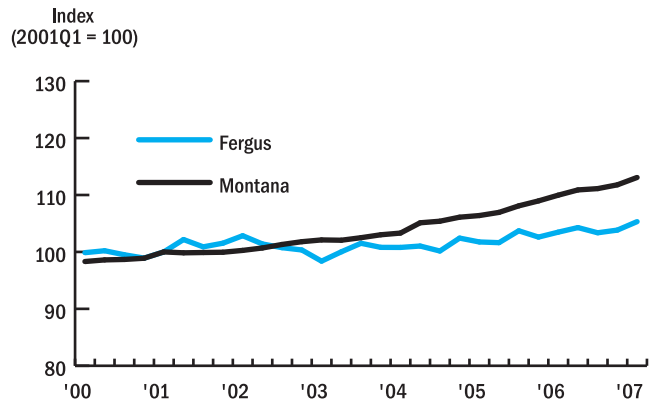
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 2
Actual and Projected Change in Nonfarm Labor Income, Fergus County, 2005-2011



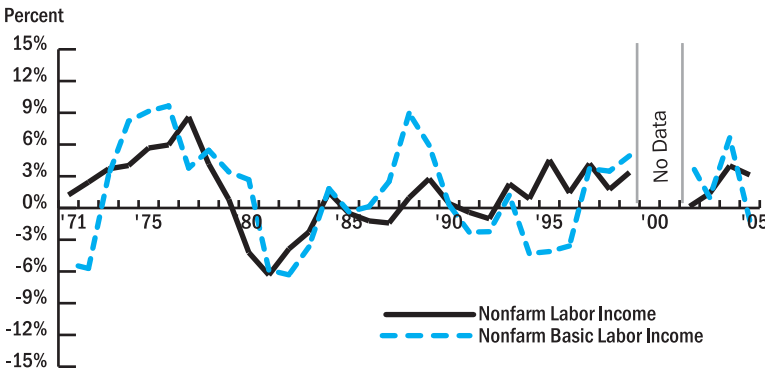
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 3
Nonfarm Wage and Salary Employment, Montana & Fergus County, 2001 Q1 to 2007 Q2



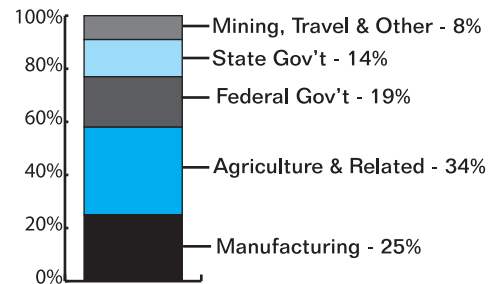
Note: Data seasonally adjusted by BBER. Source: U.S. Bureau of Labor Statistics.

Figure 4
Nonfarm Labor Income and Nonfarm Basic Labor Income, Fergus County, Percent Change, [in constant dollars]



Note: 1971-1999 are three-year averages. Source: Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 5
Labor Income in Basic Industries, Fergus County, 2005-2007 [percent of total]



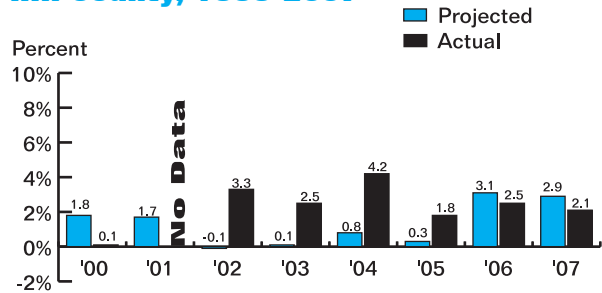
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Hill County

Hill County's economic base is dominated by railroads and agriculture (and closely linked activities). Taken together, these two industries account for approximately 57 percent of basic labor income. Improved conditions in several basic industries have led to faster overall economic growth in Hill County since 2000. The greatest improvements were in agriculture (and related activities), oil and gas exploration, and the federal government (mostly national security related). Construction projects boosted growth in 2004 and 2006. Worldwide conditions affecting energy and food prices will be the major determinant of future trends in agriculture and oil and gas exploration. □

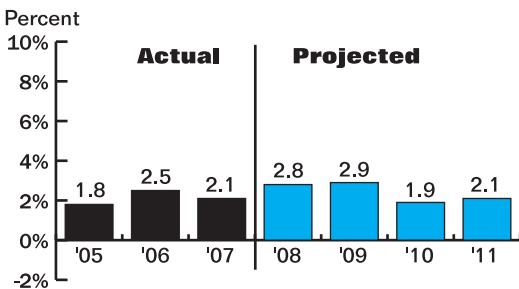
Paul E. Polzin is director of The University of Montana Bureau of Business and Economic Research.

Figure 1
Actual and Projected Percent Change in Nonfarm Labor Income, Hill County, 1999-2007



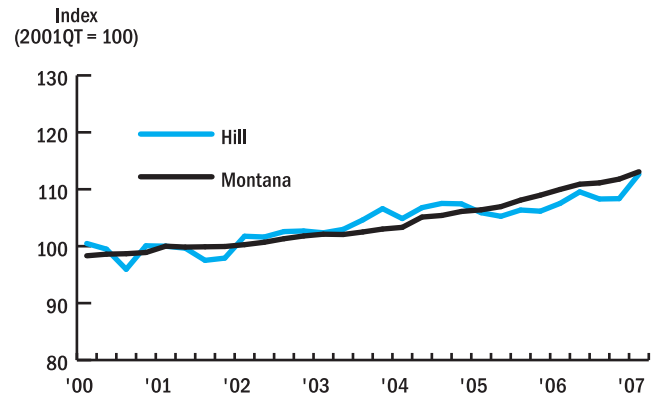
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 2
Actual and Projected Change in Nonfarm Labor Income, Hill County, 2005-2011



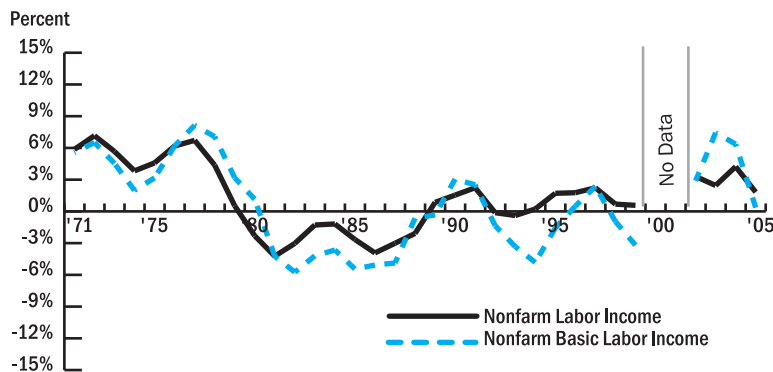
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 3
Nonfarm Wage and Salary Employment, Montana & Hill County, 2001 Q1 to 2007 Q2



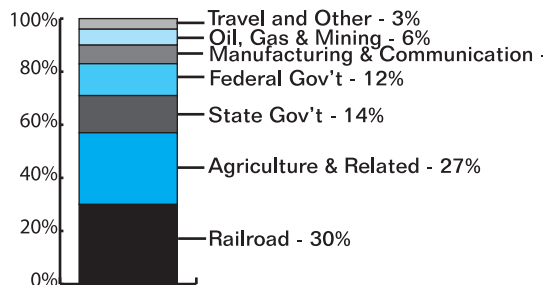
Note: Data seasonally adjusted by BBER. Source: U.S. Bureau of Labor Statistics.

Figure 4
Nonfarm Labor Income and Nonfarm Basic Labor Income, Hill County, Percent Change, [in constant dollars]



Note: 1971-1999 are three-year averages. Source: Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 5
Labor Income in Basic Industries, Hill County, 2005-2007 [percent of total]

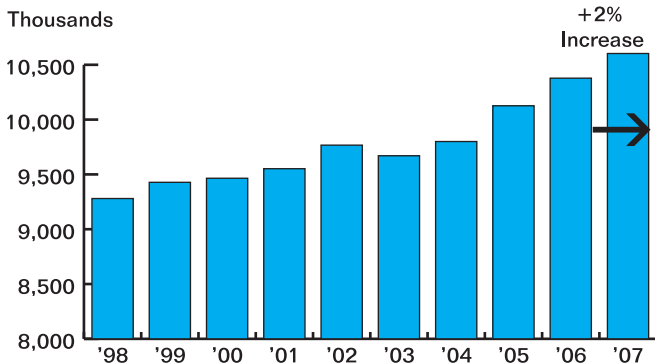


Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Outlook and Trends 2008: Montana Travel and Recreation

by Norma P. Nickerson and Melissa Dubois

Figure 1
Montana Nonresident Visitor Trends
[Preliminary]



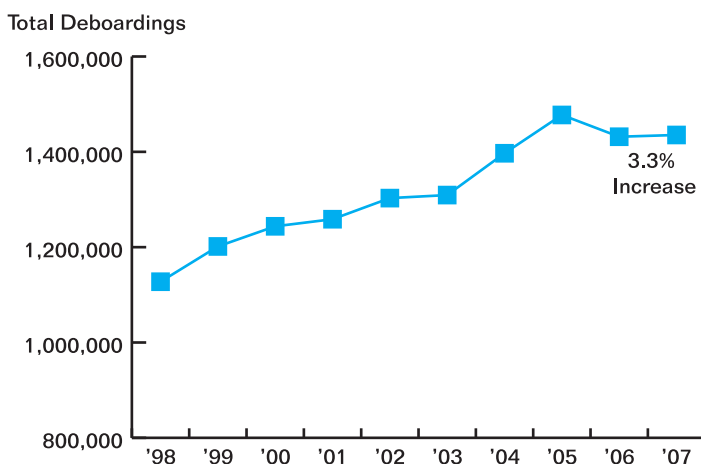
Source: Institute for Tourism and Recreation Research, The University of Montana-Missoula.

Trends in Review

Montana's nonresident visitor numbers continue to grow at a steady rate (Figure 1). With few exceptions, the 10-year visitation trend has been growing about 2 percent per year, with 2007 showing a preliminary 2 percent increase as well. Even when crude oil prices closed in on the \$100/barrel mark in 2007, Americans were still traveling. Montana airports experienced a 3.3 percent increase in 2007, recovering from the changes in plane capacity by bringing in more planes and more direct flights from additional airports (e.g. Detroit, Chicago, Las Vegas, San Francisco, Portland). In 2007, the Bozeman and Billings airports had the highest increase in the number of deboardings – 6.3 percent and 6.2 percent respectively (Figure 2 and Table 1).

It is not just Americans who are traveling. Preliminary estimates show a 4 percent increase of Canadians to the United States and a 7 percent increase from overseas, according to the Office of Travel and Tourism, U.S. Department of Commerce (Cook, 2007). The increased value of the Euro

Figure 2
Montana Air Traffic, 1998-2007



Source: Montana Aeronautics Division.

Table 1
Percent Change in Airport
Deboardings by City

	% Change from 2006
Statewide	3.3%
Billings	6.3%
Bozeman	6.2%
Butte	-2.0%
Great Falls	2.0%
Helena	-4.3%
Kalispell	-0.7%
Missoula	2.4%
West Yellowstone	0.3%

Source: Montana Aeronautics Division and ITRR.

and Canadian dollar relative to the U.S. dollar has contributed to this influx of international travel to the United States. Montana's Canadian border bodes well for shoppers and recreationists from the north visiting our state.

Visitation to Yellowstone and Glacier National Parks indicate banner years for both parks (Figure 3). Glacier Park's visitation exceeded 2.083 million visits in 2007, the highest in 13 years. Yellowstone National Park's visitation increased nearly 10 percent in 2007 to 3.151 million visitors, surpassing the previous record set in 1992. Along with the large increase in park visitation, the number of rooms sold in Montana's motel industry increased 4.2 percent from 2006, an even higher increase than the mountain states, which only showed a 1.0 percent increase (Figure 4). On the down side, Montana's ski area visits decreased 9 percent in the 2006-07 ski season, but that was following a banner year in 2005-06 where more skier visits were recorded than any other year (Figure 5).

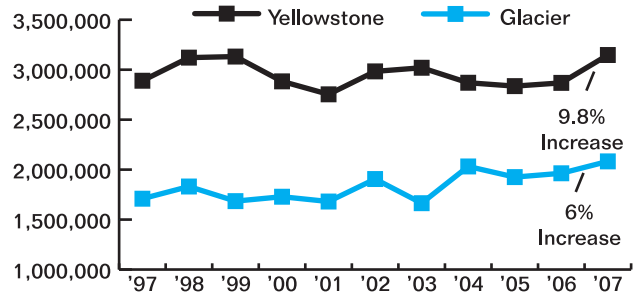
Trends to Watch

Economically, the travel industry is a difficult one to track. The North American Industrial Classification System (NAICS) has two categories to help identify the travel industry and yet those include contributions by locals as well as travelers. The categories include: accommodations and food service; arts; entertainment; and recreation. Due to the lack of specific travel-related information, the Institute for Tourism and Recreation (ITRR) completes research projects to further understand portions of the travel industry. Outfitters, agritourism, and arts and culture are three economic contributors highlighted here. All three of these sub-industries to Montana's tourism industry employ and support Montanans who choose to live and work in the state.

Until now, the number of outfitters in Montana was unknown. ITRR research found that in 2005 there were 998 outfitters in Montana who employed 6,100 guides and other staff. The direct impact of Montana's outfitting industry was \$110 million in 2006 with a total economic impact of over \$167 million to the state (Table 2) (Nickerson, Oschell, Rademaker & Dvorak, 2007).

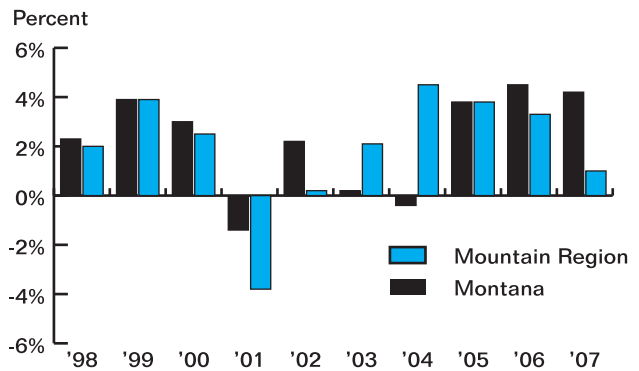
Agritourism, another growth industry in Montana, allows farmers and ranchers a way to supplement their income. In ten years (1996-2006), Montana has seen a 119 percent increase in the number of farms and ranches offering recreation or tourism. In 1996 there were 1,100 farms and ranches (4 percent of total farms/ranches) receiving some income from recreation on their land (Black & Nickerson, 1997). By 2006, 9 percent of all farms and ranches (2,418) had some recreation income (Rademaker, Nickerson, & Grau 2007). Most of the increase came from the inclusion of more

**Figure 3
National Park Recreation Visits, 1998-2007**



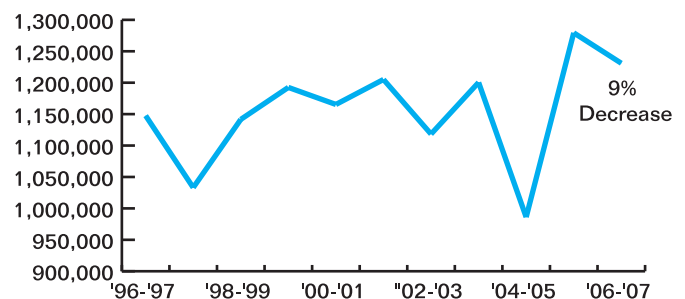
Source: National Park Service.

**Figure 4
Percent Change in Rooms Sold, 1998-2007**



Source: Smith Travel Research.

**Figure 5
Montana Ski Area Visits
1996-2007**



Source: USDA Forest Service: Big Sky Resort; Moonlight Basin; Great Divide Ski Area.

Table 2
Economic Impact of Montana's
Outfitting Industry

Impacts	Direct	Combined
All Guided Trips		
Industry output	\$110,438,000	\$167,633,000
Employment (# jobs)	1,956	2,590
Employee income	\$37,435,000	\$51,435,000
Proprietors' income	\$4,035,000	\$7,417,000
State & local taxes	\$8,471,000	\$11,635,000
Industry output subsets of above		
Guided hunting trips	\$43,694,000	\$66,745,000
Guiding fishing trips	\$34,221,000	\$51,649,000
All other guided trips	\$32,298,000	\$48,907,000
Economic Impact based on visitors ONLY in Montana because of their guided trips (28% of all trips but 50% of total impact)		
Industry output	\$54,638,000	\$83,153,000

Source: Institute for Tourism and Recreation Research, The University of Montana-Missoula.

Table 3
Farm and Ranch Recreation Comparison

	Number of farms and ranches		
	1996	2006	% Change
Working farm & ranch vacations	55	98	78%
Bed and breakfast	44	38	-14%
Farm & ranch tours	11	38	245%
Fee for hunting & fishing	418	748	79%
Guiding & outfitting	231	470	103%
Block management (FWP), horse rental & rides, lodging*	209	1309	526%

*Note: 2006 block management showed 983 participating ranches and farms; lodging 227; horse rental & rides 99.

Source: Institute for Tourism and Recreation Research, The University of Montana-Missoula.

participation in Montana's block management program managed by Fish, Wildlife and Parks. Increases were also seen in fee hunting and fishing, cabin rentals, farm tours, dude and working ranches, and trail rides (Table 3).

Finally, arts and culture is an important segment of Montana's nonresident travel industry. A research study conducted in Bozeman and Livingston found that 37 percent of visitors to the area chose arts and culture as one reason for visiting. Of these cultural visitors, 66 percent plan some of their cultural activities before leaving home. Cultural art visitors typically spend more money on arts, crafts, and Montana-made products than other visitors to the area (Table 4) (Nickerson, Snepenger, & Snepenger 2007).

Upcoming Trends: Tourism and Climate Change Attitudes

At the personal business level, climate change will increasingly wreak havoc with ski areas as snow elevations climb upward and snow amounts become even more unpredictable. River and lake levels will decrease earlier in the season, reducing fishing and boating opportunities. Hunting seasons may have to change (as evident by the two-week extension in 2007) because animals are still too high in the backcountry. When skiing, hunting, fishing, and water sports change, the ripple affect to lodging, food and beverage, retail, and other typical tourist expenditures will be noticed.

In a November ITRR survey, 153 tourism business owners responded to the outlook survey which included questions regarding climate change (Table 5). Sixty-seven percent of the respondents indicated they were somewhat or very concerned about the effects of climate change. When asked what their business will do in response to climate change in the next 12 months, Montana tourism business owners are most likely to use energy efficient light bulbs but least likely to encourage employees to take alternative transportation to work.

Outlook for 2008

According to the Travel Industry of America (Cook, 2007), the United States should expect only a 0.4 percent increase in domestic leisure person-trips in 2008 with a slightly higher increase in domestic business person-trips of 2.0 percent. International visitors to the United States are expected to increase nearly 4 percent in 2008.

In response to the ITRR outlook survey, 55 percent of the tourism business owners expect an increase in 2008, 34 percent expect things to remain the same, and 10 percent expect a decrease. Based on current snow conditions, the strength of the Canadian dollar, and the likelihood for Americans to travel in the United States where their dollar is not deflated, Montana will likely experience a 2 to 3 percent increase in nonresident travel in 2008. □

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Table 4
Percent Spending by Cultural Visitors and Other Visitors

Cultural/art visitors (N=223)	
Handmade or fine craft	71%
Special event/festival	64%
Museum	62%
Traditional art or craft	54%
Book by MT author or about MT	45%
Outdoor recreation goods/clothing	48%
Native American art/craft	35%
All other visitors (N=393)	
Outdoor recreation goods/clothing	63%
Handmade or fine craft	61%
Guided trip	44%
Museum	42%
Special event/festival	40%
Book by MT author or about MT	37%

Source: Institute for Tourism and Recreation Research: The University of Montana-Missoula.

Table 5
Tourism Business Response to Climate Change Questions

What are your feelings regarding the effects of climate change? (N=153)						
Very Concerned	Somewhat Concerned	Neither Concerned or Unconcerned	Somewhat Unconcerned	Very Unconcerned	Mean*	
32%	36%	18%	5%	10%	2.25	
In the next 12 months, how often will your business or organization do the following:						
	Never	Sometimes	50% of the time	Most of the time	Always	Mean**
Use energy efficient light bulbs	4%	22%	15%	41%	18%	3.47
Recycle aluminum, cardboard, glass, plastic, etc.	14%	25%	10%	29%	23%	3.21
Purchase locally made or grown supplies	6%	33%	18%	36%	7%	3.05
Reduce water consumption	11%	32%	16%	26%	14%	3.01
Reduce number of business trips	12%	41%	9%	22%	16%	2.91
Seek eco-friendly suppliers	17%	33%	11%	26%	13%	2.85
Encourage employees to car pool, bus, walk	40%	17%	6%	21%	17%	2.58

*Scale: 1=Very concerned to 5=Very unconcerned

**Scale: 2=Never to 5=Always

Source: Institute for Tourism and Recreation Research, The University of Montana-Missoula.

Challenges Ahead for Health Care Finance

by Patrick M. Barkey

For a decade and a half, the health care industry has seemed to be an exception to almost every economic trend. As the economy went into recession in 2001, health care kept growing. As labor shortages eased and business investment flattened out during the tech bust earlier this decade, just the opposite happened in health care – critical shortages for skilled workers grew more acute and money poured into new equipment and development of drugs. And as rapid technological advancements lowered prices of everything from big-screen televisions to computers to cell phones, and inflation concerns everywhere began to ease, new health technologies – everything from digital imaging to high-tech artificial limbs and joints – seemed to make everything more expensive. In yet another contrast with the rest of the economy, the concern for health care spending is its continued rapid growth, not fears of a downturn.

The Big Picture

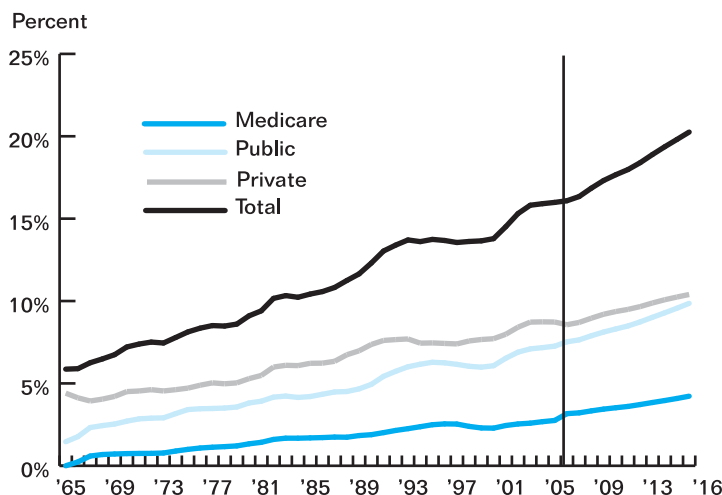
Concern for how we pay for health care has become much more acute with each passing year. Since 1965, when the Medicare program was first born, the share of the U.S.

economy devoted to health care has grown from under 6 percent to almost 16 percent in 2005, the most recent year with data available. As shown in Figure 1, roughly half of spending today comes from publicly-financed programs. The graph also shows that there is nothing unreasonable about official forecasts that call for that spending to exceed 20 percent of the economy by 2016.

That growing share is coming at the expense of other economic activities. It is also putting enormous pressure on budgets of all kinds – not just families, but increasingly businesses and even governments.

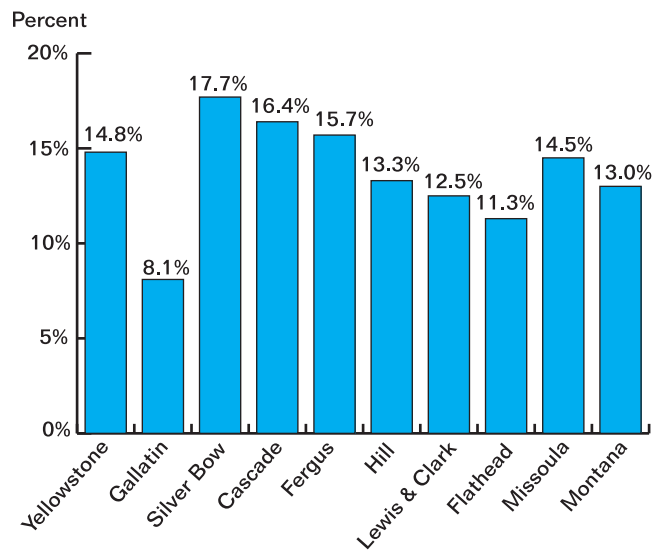
Individuals, governments, businesses, and charitable organizations collectively spent \$4.7 billion in Montana on health care services in 2004 – for everything from delivering babies to nursing home care. Thirteen out of every 100 Montanans on payrolls worked for the health care industry in 2006, more than any other major industry except retail trade, as shown in Figure 2. The \$1.87 billion those workers earned in wages and salaries were the highest of any industry in the state. More often than not, the local hospital tops the list of large employers in communities across the state.

Figure 1
Health Care Spending & Gross State Product, Montana, 1980-2006
Index: 1998=100



Source: Bureau of Economic Analysis and Centers for Medicare and Medicaid Services, U.S. Department of Health and Human Services.

Figure 2
Health Care Employment as a Percentage of Total Employment, Selected Montana Counties, 2006



Source: U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages data.

The profile of spending growth in Montana differs somewhat from the pattern of growth experienced nationally, as seen in Figure 3. Most notably, expenditures made in Montana on doctors' services as well as other professional services grew substantially faster than average between 1999 and 2004, in contrast to the national trends. This may reflect Montana's larger than average Medicare population. On the other hand, the blistering 81 percent growth in expenditures on drugs was much less marked in our state, which saw a milder 54 percent growth in the first half of this decade.

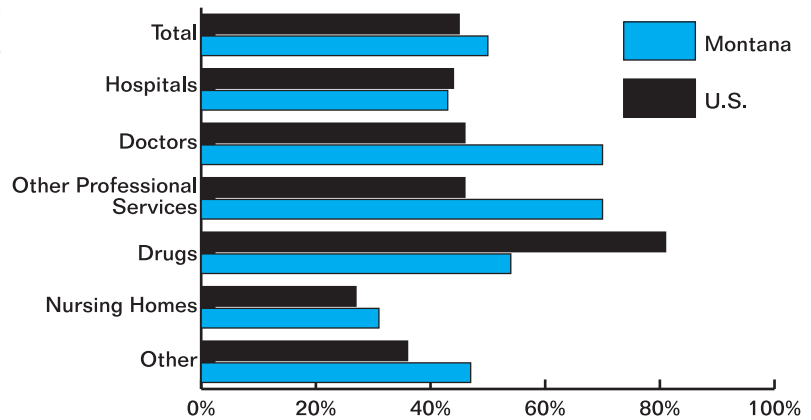
Is Higher Health Care Spending So Bad?

When you step away from the situation, it's really not remarkable that health care spending is growing faster than the rest of the economy. In fact, it's perfectly sensible.

Because of lower birth rates and increasing life expectancies, the proportion of older adults in the population is growing. And health care expenditures are usually higher among older Americans. Then there are the incredible advances in medical science that have given us a smorgasbord of drugs and procedures that extend and improve quality of life. We're getting artificial knees, life-sustaining drugs, and organ transplants that were never possible before. Finally, we're collectively a country that is richer today than ever. And all of the evidence says that as income goes up, so does health care spending.

The question is whether we are getting what we pay for. International rankings of most basic health care outcomes

Figure 3
Percent Growth in Health Care Spending by Type, 1999-2004



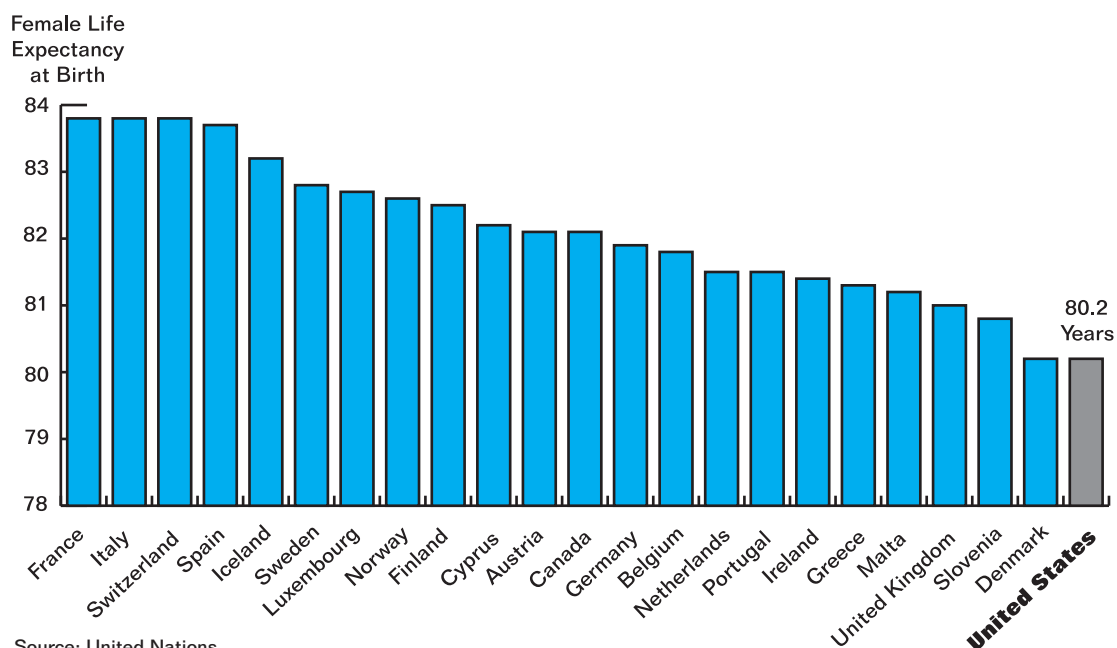
Source: Centers for Medicare and Medicaid Services, U.S. Department of Health and Human Services.

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give the United States quite mediocre marks when compared to peer countries. For example, the U.S. lags behind 22 other countries in life expectancy of females born in 2003, as shown in Figure 4. Women born in that year in France, the leading nation, can expect to live more than 3.5 years longer than American women born the same year. Outcomes for many other basic measures of health outcomes show similarly disappointing results.

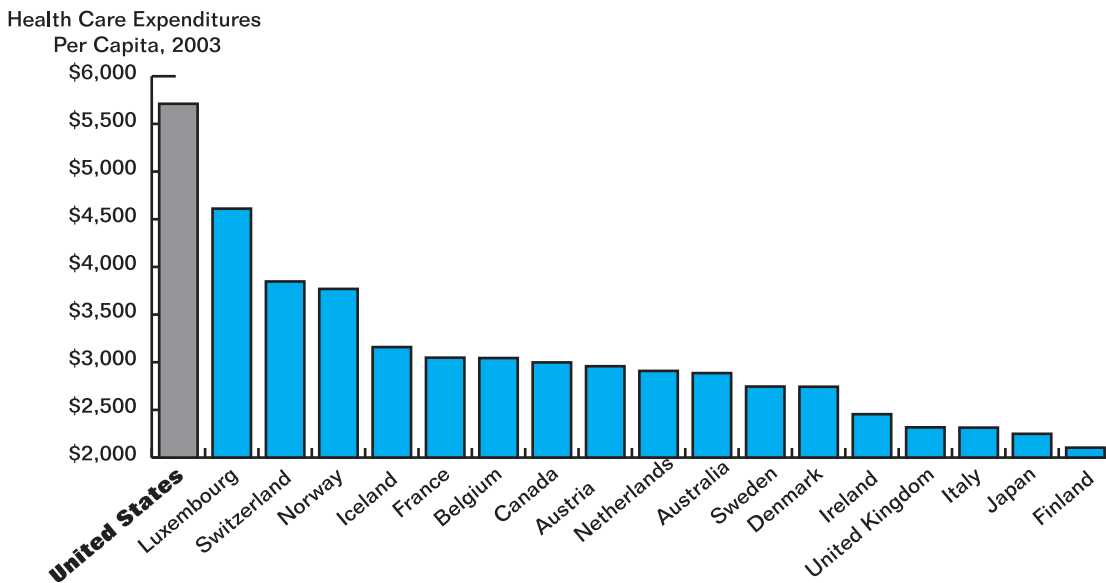
But when it comes to ranking spending on health care, the

Figure 4
Female Life Expectancy at Birth, 2003, by Country



Source: United Nations.

Figure 5
Per Capita Health Care Spending by Country



Note: All dollars in 2003 U.S. \$, Purchasing Power Parity adjusted.
 Source: Organization for Economic Cooperation and Development.

United States springs to the top of the pack. Data compiled in 2003 by the Organization for Economic Cooperation and Development (OECD) showed that U.S. per capita health care spending was twice the average of other OECD countries, when the latter are converted to purchasing power in U.S. dollars. The \$5,711 spent per head in this country in 2003 was 23 percent higher than spending in tiny Luxembourg, the second highest spender, as shown in Figure 5.

These and other international comparisons have motivated calls for a complete overhaul of this country's health care system of finance, often toward a model that more closely resembles those found in these lower-spending countries. Whether one agrees with that prescription for reform or not, it is clear from these data that there is considerable room for improvement in the effectiveness of the dollars we spend today.

Why Health Care Dances to Its Own Drummer

The health care industry interacts with every business in Montana – not to mention households and governments. Yet its business model is like no other. Its transactions are dominated by third party payer systems, where government agencies or private insurance administrators intercede between producer and consumer to negotiate terms and make payment. The cross-subsidization of activities and segmentation of customers, where high margin services offset losses in others, or full price customers compensate for those who pay less than cost, is common. And the impact of the federal government, through the tax code, regulatory agencies, and the administration of the giant Medicare program, is substantial.

Any attempt to categorize the spectrum of proposals for cost control in health care is bound to be simplistic. However, a case can be made for putting them into one of two piles

– bureaucratic and market-oriented. Bureaucratic controls already exist in the administration of Medicare, which frequently sets the benchmark other third party payers follow. Its record in controlling costs in recent years is decidedly mixed.

Economists have long called for injecting more market competition into health care services, yet those efforts have failed to gain much traction. The savings brought on by consumerism – shopping for the best price and performing an individual evaluation of whether a given product or service is worth the costs – have largely been unrealized in health care because third-party payers blur the incentive for individuals to inform themselves. Proposals to require price disclosure by hospitals are just getting off the ground.

The Challenge to Contain Cost Growth

Nearly 52 percent of Montanans were covered by some form of employer-provided group health insurance in 2005. Those plans continued to show the strain of rising utilization rates and higher prices for health care services and drugs. Nationally, premium growth for group plans slowed to 7.7 percent in 2006, as shown in Figure 6. Although this was the third straight year in which the growth rate declined, it has remained substantially above the overall inflation rate since the late 1990s.

This cost growth employers are facing has produced unsurprising, though also unwelcome, outcomes. Not only has the proportion of the workforce covered by employer-sponsored group insurance tracked steadily downward, but there is research evidence that high premium growth has resulted in lower wage growth even for those fortunate enough to retain this treasured benefit. And, of course, the share of costs pushed toward employees, in the form of higher co-pays and deductibles, has risen as well.

National data suggest that in terms of premium growth, self-insured plans have performed slightly better than average. Both types of plans have managed to slow premium growth by pushing costs to their employees and families in the form of higher deductibles, higher co-pays, and by freezing maximum lifetime benefits. When coupled with the skyrocketing costs of care for some medical conditions, freezing benefits effectively increases the exposure of individuals to catastrophic health outcomes that insurance is supposed to mitigate.

So-called consumer driven health plans – with high deductibles and tax-favored health savings accounts – have failed to gain much of a foothold in the Montana market, accounting for less than 3 percent of enrollees. Managed care delivered through Preferred Provider Organizations (PPOs) has grown rapidly to dominate group insurance plans.

The Challenge of Covering the Uninsured

The challenges of controlling spending growth and getting more bang for the buck in health care, as daunting as they seem, are not the only problems to be solved in health care finance. We also face the growing issue of providing adequate health care to those who have only limited means to pay for it.

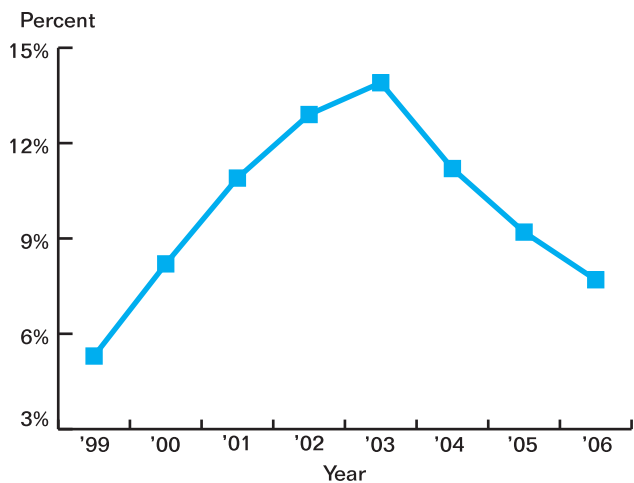
Montana is in the lower tier of states in ranking the proportion of residents covered by health insurance. In 2003, the BBER estimated that 170,000 Montanans – 22 percent of the population – were not covered by private insurance, either through their employers or through individual policies, or by government programs such as Medicare, Medicaid, or SCHIP. Two-thirds of the more than 170,000 uninsured were adults, 86 percent were white, and 92 percent had at least a high school education.

The fact that Montana's economy is dominated by smaller firms is a significant part of the explanation for this unfortunate outcome. The 2003 survey found that 60 percent of the uninsured were either self-employed or worked for a company with fewer than 10 employees. The results of a 2006 BBER survey of Montana employers confirms that smaller companies are much less likely to offer health insurance to their employees, with only 40 percent of those with five or fewer workers offering such plans.

The Challenge in Financing Health Entitlement Spending

The enormous expense of the commitments we have already made to fund health care, retirement, and other entitlements at the national level in the coming decades is rarely mentioned in the current policy debate. Budget rules which require Congress to consider fiscal impact only out to a ten year horizon are one reason why. Yet the work of the U.S.

Figure 6
Percent Growth in Health Insurance Premiums,
United States 1999-2006



Source: Kaiser/HRET Survey of Employer Sponsored Health Benefits.

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Comptroller General has shown that the projected increases in just two programs – Medicare and Medicaid – by the year 2030 will require taxes to increase to unprecedented levels if nothing is done to cut back on spending commitments. Sound management of these programs, to say nothing of intergenerational equity, requires changes sooner, rather than later.

Conclusion

Reining in health care spending, while also improving access to care for those who cannot financially or physically access it, is a tall order for any contemplated set of policy reforms to fill. Yet evidence suggests headway can be made. Our country's high spending on health care has not produced better measurable health outcomes, such as life expectancy and mortality, than other industrialized countries that spend far less. Similarly, studies of Medicare spending around the country show that hospitals that spend two or three times as much as the average during a patient's last two years of life produce little measurable improvement in terms of longer lives or patient satisfaction.

This underscores two distinct, often competing, challenges for health care policy. One is to remove cost as a barrier to receiving necessary care. The second is to increase the efficiency and efficacy of care – to bring cost growth under control. How we do both – and we must do both – is the daunting assignment ahead for our leaders to take on. □

Patrick M. Barkey is the Bureau's director of health care industry research.

Outlook for Montana Agriculture

by George Haynes

General Financial Overview

Montana's agricultural sector had an exceptional year, producing an estimated \$2.6 to \$2.9 billion of sales in 2007, while generating an estimated \$750-800 million in net farm income. Nationally, farm household income for 2007, which includes off-farm income, is projected to increase by 8 percent, substantially above the 2001-2006 average. The 2008 Montana agricultural outlook for both crops and livestock is promising with relatively strong prices. However, a tight labor market exists for agricultural workers in Montana, and prices for energy-based inputs, such as fuel and fertilizer, are likely to remain relatively high.

Grain/Wheat Outlook

World and U.S. average grain prices increased by over 35 percent the past year (Vocke and Allen, 2007). Better planting conditions and more moderate weather patterns during the summer contributed to a slight increase in world wheat production. World wheat production increased by 1.6 percent, while U.S. wheat production increased by over 14 percent from 2006 to 2007 (Table 1). Montana's shares of the world and U.S. wheat markets have remained relatively constant at around 0.7 percent (world) and 7 percent (U.S.). The futures market for wheat suggests that wheat prices will be strong in 2008.

Montana wheat production fell by about 2 percent from 153.1 million bushels in 2006 to 149.8 million bushels in 2007 (National Agricultural Statistics Service for Montana, 2007). Forecasters were optimistic about the Montana wheat crop in early July, with the spring grain progress being well ahead of 2006. However, a hot and dry July and August stressed the winter and spring wheat crops. More acres were planted to winter wheat in 2006/2007; however, winter wheat production was about the same as the year before. Spring wheat production declined by 13 percent from 2006 because of fewer planted acres and a 3 bushel per acre decline in average yield. Other grain crops (durum, barley and oats) realized substantial increases in production and stronger prices.

The major factors likely to affect the 2008 wheat markets include low carry-over stocks, production problems faced by major exporters, high export demand, winter and spring wheat plantings, and bio-fuels production. World wheat stocks are projected to be about 110 million tons, their lowest level in the past 30 years. Delayed planting and hot summer weather in Canada, wet weather at harvest time in the EU and continuing droughts in Australia, Ukraine, and Russia have

Table 1
World, U.S., and Montana Wheat Production

Geographic Area	2005	2006	2007
	<i>(millions of bushels)</i>		
World	22,741.4	21,811.4	22,167.5
United States	2,104.7	1,812.2	2,066.8
U.S. share of world market, percent	9.3	8.3	9.3
Montana	192.5	153.1	149.8
Montana share of world market, percent	0.8	0.7	0.7
Montana share of U.S. market, percent	9.1	8.4	7.2
Prices of all wheat, \$/bushel (10/2007)	3.63	4.54	6.23

Source: World Agricultural Supply and Demand Estimates (WASDE-440, 11/9/2007) and National Agricultural Statistics Service, Montana.

Table 2
U.S. and Montana Beef Production

Geographic Area	(1,000 tons - carcass weight equivalent)		
United States	20,724.2	21,051.2	na
Montana share of world market,	477.9	459.3	na
percent	2.3	2.2	na
Prices received, calves, \$/hundred weight.	138.0	131.0	126.0

Source: National Agricultural Statistics Service, Montana.

put upward pressure on prices. Wheat exports are expected to rise because of less foreign competition and a weak U.S. dollar (Collins, 2007). Substantially higher wheat futures market prices will likely pull more acreage into wheat production in 2008. In fact, the U.S. Department of Agriculture is forecasting an increase of 5 to 7 percent in total U.S. wheat acreage (Collins, 2007). In addition, plantings have increased in the European Union, which will likely cause substantially downward pressure on wheat prices.

The other major factor affecting most field crop and livestock markets is the demand for corn for ethanol production. Market forecasters suggest that corn acreage will actually fall in 2008 as prices and returns for competing crops, such as wheat, have improved relative to corn in the past few months (Collins, 2007). The increased demand for corn for producing ethanol has increased the price of corn from \$2 per bushel in 2005 to just under \$4 per bushel in the fall of 2007. While ethanol production is unlikely to occur in Montana, other bio-fuels may be produced in the state utilizing oil seed crops, such as canola, safflower, camelina or others. Higher corn prices have increased feed prices for cattle, putting downward pressure on stocker and feeder cattle markets.

Table 3
Montana Agricultural Employment and Wage Statistics, 2000-2006

Category	2000	2002	2004	2006
Employment	1,950	2,160	2,480	2,560
Mean wages per hour	\$12.42	\$13.69	\$13.06	\$13.43
Mean annual salary	\$25,830	\$28,460	\$27,170	\$27,930

Source: Bureau of Economic Analysis, United States Department of Labor, State Occupational Employment and Wage Estimates, 2000, 2002, 2004, and 2006.

Cattle Outlook

U.S. commercial beef production has been relatively stable since 2005 (Table 2). Beef prices in 2007 have been influenced by higher feed grain prices, deteriorating pasture conditions, import and export demand, and domestic consumption. Higher feed grain prices have been driven by the sharp increase in the price of corn, which is expected to continue through 2008. Once again, hot, dry weather in parts of Montana and the United States has contributed to lower quality pasture conditions.

U.S. cattle imports have increased by nearly 11 percent over the same period last year, primarily through increased imports from Canada (Collins, 2007). Increase feed costs in Canada have prompted some Canadian livestock operations to export feeder cattle, rather than feed them domestically. The new U.S. Minimum Risk Region Policy, which allows age-verified Canadian cattle over 30 months of age born after March 1, 1999 to cross the border into the United States, is likely to further increase the number of cattle imported from Canada. Some increase in U.S. imports of Canadian feeder cattle may be offset by reduced imports of Canadian-fed beef because of high feed costs in Canada, a strong Canadian dollar, and labor concerns in the meat packing industry in Western Canada (Haley, 2007). These additional Canadian imports are likely to be offset by fewer cattle imported from Uruguay.

In contrast, beef and cattle imports from Mexico have declined as producers have kept their cattle on grass somewhat longer to utilize good grazing conditions in Mexico. Mexican producers are expected to take advantage of better grazing conditions to increase their herd size and decrease the exportation of cattle to the U.S. in 2008 (Haley, 2007).

Prior to the 2003 discovery of BSE cattle in the United States, the United States typically exported about 10 percent of its total beef production. In 2007, beef exports are expected to top 1.9 billion pounds, but this is only about 75 percent of 2003 total beef exports (Collins, 2007). Increased exports to Canada and Japan have offset declines in exports to Mexico and the suspension of beef trade with South Korea, a market that will not open until new import protocols are negotiated.

Growth in the U.S. beef consumption is predicted to be slow over the next few years as the U.S. economy's growth

rate slows and, as a result, consumers will watch their food budgets more carefully. In addition, beef is expected to face continued competition from pork and chicken. Pork and chicken supplies are expected to increase by between 2 and 3 percent next year (Hurt, 2007).

Montana's beef production declined by about 4 percent from 2005 to 2006, with Montana's share of the U.S. beef market remaining around 2.0 to 2.5 percent (Table 2). Futures prices for the cattle market suggest that feeder and fat cattle prices will be strong in 2008 with prices somewhat higher than the fall of 2007. Continuing drought conditions in parts of the United States (and Montana) have not allowed cattle herds to be rebuilt, hence prices have remained strong. Montana cow-calf producers are likely to realize somewhat higher prices in the fall of 2008.

Agricultural Workforce

In July 2007, 1.2 million farm workers in the United States earned an average wage of just over \$10 per hour (Collins, 2007). Agricultural producers are concerned about the current and likely future shortages of farm workers because of the high percentage of farm workers who lack legal authorization to work in the country (Collins, 2007). The Department of Labor and Industry reports that in 2006 Montana agricultural producers hired over 2,500 workers and paid them about \$13.40 per hour. Given Montana's low unemployment rate, current shortages of agricultural workers are likely to persist in the state.

2007 Farm Bill

While the structure of the 2007 Farm Bill still has not been determined, many of the existing farm programs are expected to continue through 2013, although it appears that a new optional Average Crop Revenue program may become available for producers of program crops, such as wheat, barley, and oats. Stay tuned! □

George Haynes is a professor in the Department of Agricultural Economics and Economics at Montana State University-Bozeman.

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Montana's Manufacturing Industry

by Charles E. Keegan III and Jason Brandt

Montana's manufacturing industry had its fourth consecutive year of increased sales, employment, and worker earnings in 2007. Montana manufacturers had sales of approximately \$8 billion in 2007 measured as products left their plants. The state's manufacturers generated over 24,000 jobs (including the self-employed) and workers earned approximately \$1.2 billion in labor income. The manufacturing sectors accounted for over 20 percent of Montana's economic base.

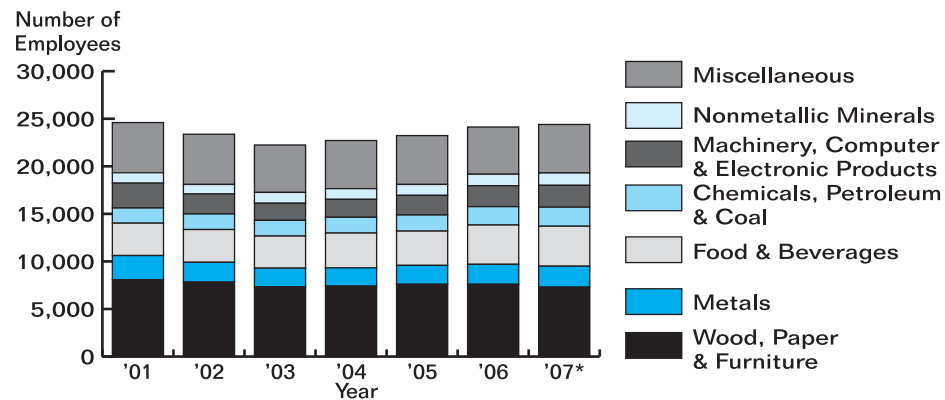
Manufacturing employment has shown steady increases in the past four years of more than 10 percent, and workers' earnings rose commensurately (Figures 1 and 2). This is in contrast to the 2001 – 2003 period when manufacturing activity in Montana declined due to weak U.S. and global economic conditions, limited raw material availability, the high-tech

burst, and increased energy costs. The continued improved conditions in 2007 were found in most components of Montana manufacturing. Fifty percent of surveyed Montana manufacturing firms¹ reported increased profits, sales, and production in 2007, with the only major decline in 2007 in the state's wood products industry.

A key factor leading to increased manufacturing activity in 2007 was the strong global economy, which spurred demand even as growth rates in the U.S. economy slowed. Global demand led to continued high prices for a number of base commodities (petroleum and metals) as well as more specialized,

¹We surveyed 215 Montana manufacturers employing 20 or more people and selected other firms, of which 80 percent responded.

Figure 1
Montana Manufacturing Employment, 2001-2007



*Estimate
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Table 1
Employment and Labor Income in Montana's
Manufacturing Sectors, 2001 and 2007

Manufacturing Sector	Labor Income		Employment	
	[thousands 2005\$]		2001	2007*
	2001	2007*	2001	2007*
Wood, Paper & Furniture	\$338	\$320	8,074	7,300
Metals	\$119	\$123	2,546	2,200
Food & Beverages	\$117	\$147	3,400	4,200
Chemicals, Petroleum & Coal	\$194	\$253	1,598	2,000
Machinery, Computer & Electronic Products	\$112	\$108	2,610	2,300
Printing, Nonmetallic Minerals	\$45	\$54	1,094	1,300
Miscellaneous	\$154	\$201	4,681	5,100
TOTAL	\$1,080	\$1,207	24,003	24,400

*Estimate.

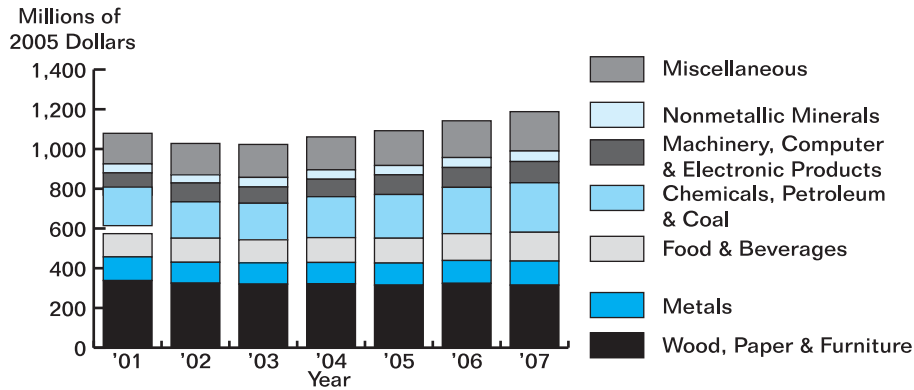
Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Table 2
Manufacturing Employment and Labor Income
Among Montana Counties, 2005

County	2005	Percent of	2005	Percent of
Percent of	Manufacturing	State's	Manufacturing	State's
Total	Employment	Manufacturing	Labor Income	Manufacturing
		Employment	[thousands	Labor Income
			2005\$]	
Yellowstone	3,847	17%	\$272,651	24%
Flathead	3,657	16%	\$167,037	15%
Missoula	3,124	13%	\$151,065	13%
Gallatin	2,645	11%	\$147,016	13%
Ravalli	1,327	6%	\$47,651	4%
Lake	955	4%	\$29,925	3%
Cascade	947	4%	\$46,699	4%
Lewis & Clark	902	4%	\$50,843	5%
Silver Bow	601	3%	\$35,496	3%
Park	481	2%	\$17,317	2%
Remaining 46 Counties	4,758	20%	\$159,961	14%
Montana	23,244	100%	\$1,125,661	100%

Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 2
Labor Income in Montana Manufacturing Industries,
2001-2007



*Estimate
 Sources: Bureau of Business and Economic Research, The University of Montana-Missoula;
 Bureau of Economic Analysis, U.S. Department of Commerce.

refined, and high-tech products. High commodity prices were a positive factor for some producers, but for other Montana manufacturers high prices for commodities drove up operating costs. Montana manufacturers benefited as sectors such as construction, agriculture, and mining showed continued strength in Montana and adjacent states. The weaker U.S. dollar helped Montana companies export and made imported products less competitive in the U.S. market.

Outlook: 2008 and Beyond

The U.S. economy is projected to slow in 2008, and further declines in the U.S. housing industry, tightening credit availability, and high oil prices all present risks to Montana manufacturers. However, while increases in global economic activity may slow slightly in 2008, continued strong economic performances, especially in China, India, and Russia, could help sustain demand for many Montana products.

The Montana manufacturers who responded to our annual

survey are guarded but optimistic about the upcoming year; 47 percent foresee improved conditions for 2008, and 36 percent think 2008 will turn out about the same as 2007. Only 14 percent expect worsening conditions. Over half of manufacturing respondents expect to keep their workforce at the same level in 2008, while nearly 40 percent foresee an increase.

When manufacturers were asked to rate a list of issues in terms of general importance to their business, 75 percent of respondents rated health insurance costs as very important, followed by the availability of qualified workers (67 percent) and workers' compensation rates (64 percent). Energy costs and raw material availability and cost were very important to over half of the respondents. □

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Montana's Forest Products Industry

Current Conditions and 2008 Forecast

by Todd A. Morgan, Charles E. Keegan III, and Jason Brandt

Operating Conditions

A second weak year in the U.S. housing industry continued to negatively impact Montana's wood products industry during 2007. U.S. housing starts peaked in 2005. By the end of 2007, housing starts were down about a third from that peak and at their lowest levels in the past 10 years. Meanwhile, the inventory of unsold homes, number of foreclosures, and interest rates on mortgages increased. In response to the national housing decline, lumber prices fell about 30 percent from 2005 to 2007 (Figure 1). The second half of 2007 was especially rough for Montana wood products facilities, with the July closure of the Stimson plywood facility in Bonner, Pyramid Mountain's August shutdown during the Jocko Lakes fire, and curtailments at other mills because of weak markets and log shortages related to summer fires and ongoing reductions in timber harvests.

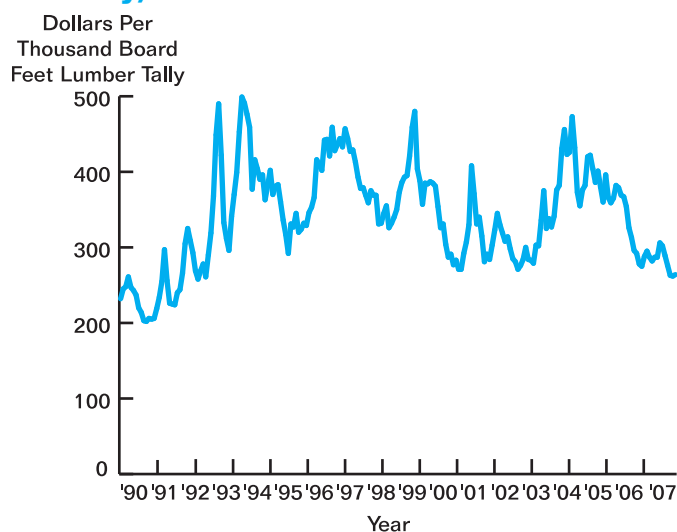
Montana's timber harvest volume during 2007 was about 516 million board feet, down about 17 percent from 2006, and the lowest timber harvest since 1952—the last time statewide harvest was below 600 million board feet (Figure

2). Private land harvest, including industry and non-industrial private lands, was about 22 percent below 2006. The harvest from national forests was down about 12 percent (Figure 3), approaching the six-decade low of 87 million board feet not seen since 1946. Harvest from other owners, including tribal, state, and Bureau of Land Management lands, was about 8 percent higher than 2006.

2007 Sales, Employment, and Production

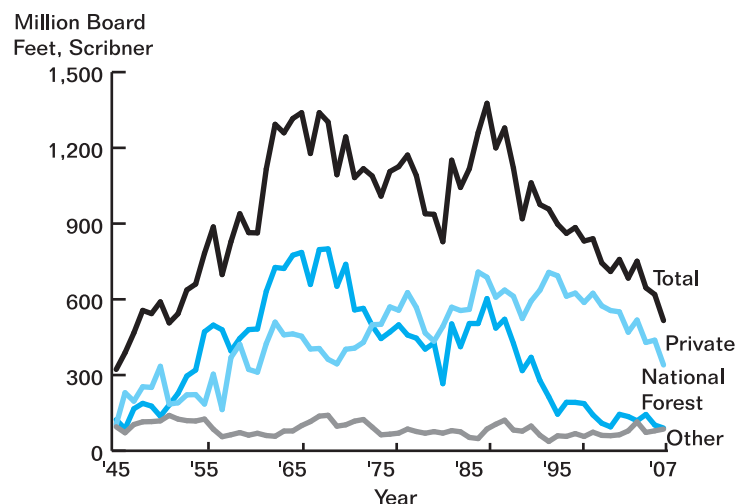
Total sales value of Montana's primary wood and paper products in 2007 decreased by about \$90 million (fob the producing mill) from 2006 sales, and were about \$162 million lower than 2005 sales (Figure 4). Wood products employment during 2007 was about 9,700 workers, down by 600 workers from a revised 2006 estimate of 10,300 workers. Lumber production in Montana during 2007 was about 805 million board feet, down approximately 13 percent from 2006, and 20 percent from 2005 (Figure 5).

Figure 1
Nationwide Composite Lumber Prices
Monthly, 1990-2007



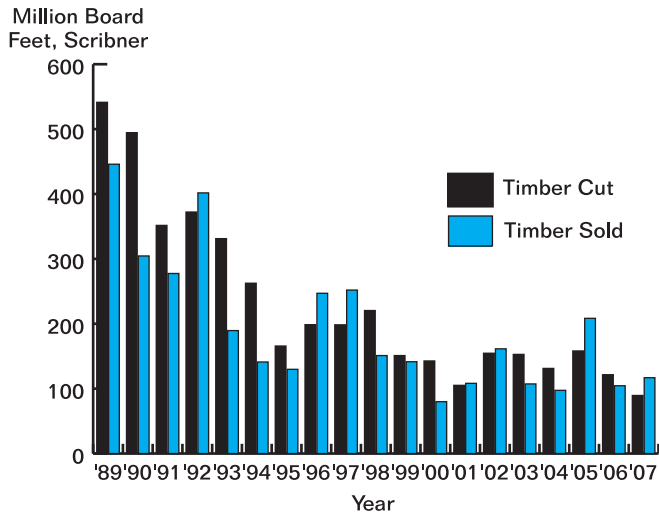
Source: Random Lengths Publications.

Figure 2
Montana Timber Harvested by Ownership,
1945-2007



Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; USDA Forest Service Region One, Missoula, Montana.

Figure 3
Montana National Forest Timber
Cut and Sold Volumes, 1989-2007



Source: USDA Forest Service Region One, Missoula, Montana.

The Bureau's survey of Montana wood products industry executives indicated that 2007 was somewhat worse than expected. In late 2006, 30 percent expected 2007 conditions to be worse than 2006. About 60 percent of executives indicated that 2007 production sales, and profits had decreased from

2006, while less than 25 percent indicated 2007 was about the same.

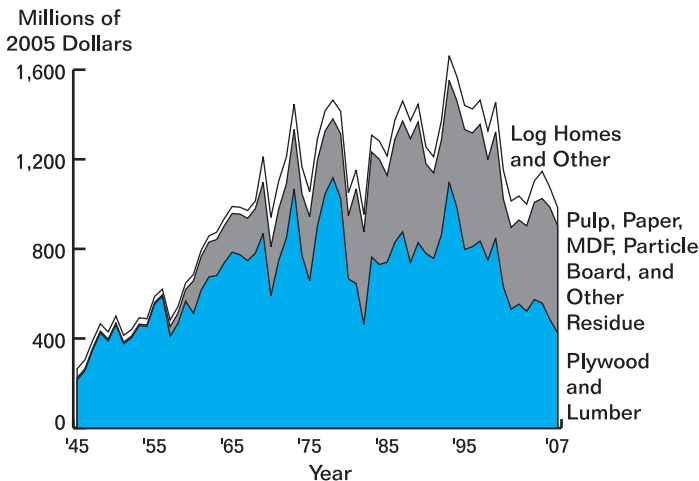
Outlook for 2008

Most of Montana's wood products industry executives are not optimistic about 2008. Roughly one-half of executives anticipate that production, prices for their products, and sales will be about the same in 2008 as 2007, and more than two-thirds expect 2008 to be the same or worse than 2007. Nearly 60 percent expect the cost of inputs to be higher in 2008, and 63 percent indicated that raw material availability is very important to their business. High fuel costs, general market conditions, and skilled labor availability were also indicated as major concerns for Montana's wood products industry.

Weak markets and mill curtailments are expected into 2009, with housing starts for 2008 expected to be lower than 2007 levels. If markets were to unexpectedly rebound in 2008, the ability of Montana mills to respond will depend heavily on timber availability. Forest landowners, particularly the national forests, would need to increase timber harvests, conduct much-needed fuel reduction and restoration treatments, and salvage timber from areas burned in 2007 in order for timber availability to increase appreciably. □

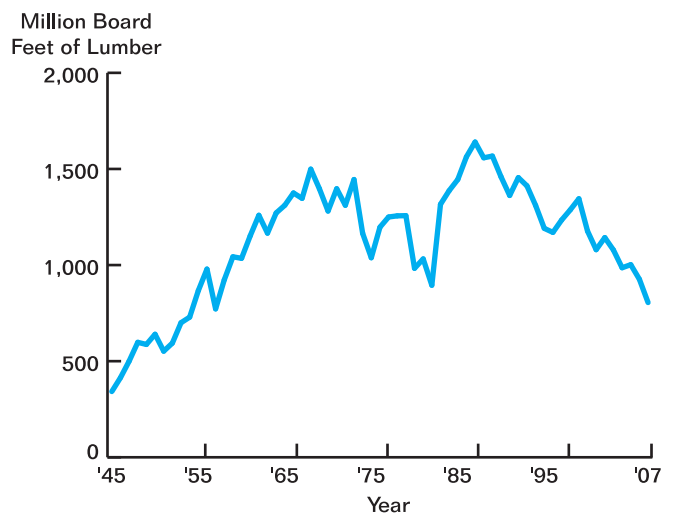
Todd A. Morgan is director of BBER's forest industry research, Charles E. Keegan is a BBER research professor, and Jason Brandt is BBER's assistant director of forest industry research.

Figure 4
Sales Value of Montana's Wood and Paper
Products, 1945-2007



Sources: American Plywood Association; Bureau of Business and Economic Research, The University of Montana-Missoula; Western Wood Products Association.

Figure 5
Montana Lumber Production, 1945-2007



Sources: Western Wood Products Association; Bureau of Business and Economic Research, The University of Montana-Missoula.