2015 Seminar Program

7:45 – 8:00	**Coffee and Registration**
8:00 – 8:15	**Introductions** Patrick Barkey Director, BBER
8:15 – 8:45	**U.S. and Montana Outlooks** Patrick Barkey Director, BBER
8:45 – 9:05	**Local Outlook** Paul Polzin Director Emeritus, BBER
9:05 – 9:25	**Health Care** Bryce Ward Director, Health Care Research
9:25 – 9:35	**Coffee Break**
9:35 – 9:55	**Nonresident Travel** Norma P. Nickerson & Megan Schultz, Director & Program Manager, Institute for Tourism and Recreation Research
9:55 – 10:15	**Agriculture** George Haynes Professor and Extension Specialist, MSU
10:15 – 10:35	**Manufacturing and Forest Products** Todd Morgan Director, Forest Products & Manufacturing
10:35 – 10:45	**Coffee Break**
10:45 – 11:05	**Housing** Sue Larew & Paul Olson Retail Delivery Manager & Home Loans Manager First Interstate Bank
11:05 – 11:25	**Energy** Terry Johnson Director of Natural Resource & Energy Development
11:25 – 11:40	**Local Expert Report**
11:40 – 11:50	**Wrap-up and Summary** Patrick Barkey Director, BBER
11:50 – Noon	**Break**
Noon – 12:50	**Introduction of Keynote** Bob Rowe, CEO, NorthWestern Energy **Luncheon Keynote** Bill Whitsitt, Executive in Residence and Visiting Professor, UM School of Business Administration
12:50	**Closing Remarks**

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Cover design by Gwen Landquist

Outlook 2015

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1975-2015

Letter from Bob Rowe, President and CEO, NorthWestern Energy

We at NorthWestern are proud to partner with the Bureau of Business and Economic Research to travel Montana each year to see and discuss the exciting things that are happening across Big Sky Country. As Montana's largest provider of essential infrastructure and service, we are honored to help support so much of the progress that is taking place across this wonderful state.

It's more an evolution than a revolution, but the times they are a-changin' at NorthWestern Energy.

The big news is our recently completed purchase of 12 Montana hydroelectric facilities. This launches a fresh chapter in Montana's energy history. The electricity will provide our customers with a clean, stably priced means of lighting homes and businesses for decades to come.

The dams reshape our energy portfolio. Now, more than 50 percent of the electricity that serves our Montana customers is generated by water or wind. By replacing market purchases (which are mainly from coal) the dams reduce the carbon-intensity of the electricity that serves our customers by more than 40 percent. As a result, our Montana generation portfolio is now already well below the 2030 carbon levels proposed for all of the state by the EPA's Clean Power Plan. Most importantly, the dams are now dedicated to serve our customers, at prices based on the cost of production. As the plants are depreciated and the "net book value" goes down, the cost to customers will go down as well.

Although NorthWestern owns less than 9 percent of the coal generation in Montana, coal remains a significant part of our generation lineup. NorthWestern owns 30 percent of Colstrip Unit 4, which provides both base-load power and essential mass and stability on the electric transmission system. At the same time, NorthWestern is by far Montana's leader in renewable energy. Our Spion Kop wind project in central Montana, coupled with a long-term contract with the Judith Gap wind farm and agreements to buy power from more than a dozen small wind producers across the state, make the company a leader in wind energy in Big Sky Country. NorthWestern exceeds Montana Renewable Portfolio Standard, even without factoring in the clean hydroelectricity produced by our dams. And, NorthWestern is responsible for about 80 percent of the energy efficiency that has been obtained in Montana.

NorthWestern customers, through the Universal Systems Benefit charges on monthly bills, have provided grants to offset the cost of more than 1,000 small-scale solar and wind energy projects, benefiting individuals, schools, fire departments, local government, and others. The USB fund has also provided training for many of the business owners who sell solar and other renewable energy equipment.

Nothing matters more to customer service and safety than the electric and gas transmission and distribution systems that deliver energy to our customers. NorthWestern is in the midst of significant proactive upgrades to its electric and natural gas distribution systems across the state. Through a seven-year, $385 million program that began in 2011, we've inspected and replaced power poles, upgraded facilities, trimmed trees, replaced natural gas lines, and invested in technology that will allow us to reliably and efficiently deliver energy to customers.

NorthWestern has people and facilities across much of the state. Our 1,300 Montana employees work and live in more than 50 communities. We are also state's largest taxpayer, paying about $100 million in property taxes each year.

We are indeed working hard to deliver a bright future, in these times that are a-changin.'

Robert C Rowe

The New American Energy Revolution

Reshaping Montana

BILL WHITSITT
Executive in Residence, Bureau of Business and Economic Research

The new American energy revolution is here.

As with any revolution, it has shaken our assumptions. About our future economy. About our environment. About our national security. And about energy costs for our citizens. In short, it is already causing all Americans – and Montanans – to think differently about energy in our futures.

Consider that more than a few Montanans remember the 1970s with its Arab oil embargos, gasoline lines, and pervasive belief that we were literally running out of energy. Or later periods when gasoline prices were not only high, but were expected to go ever higher.

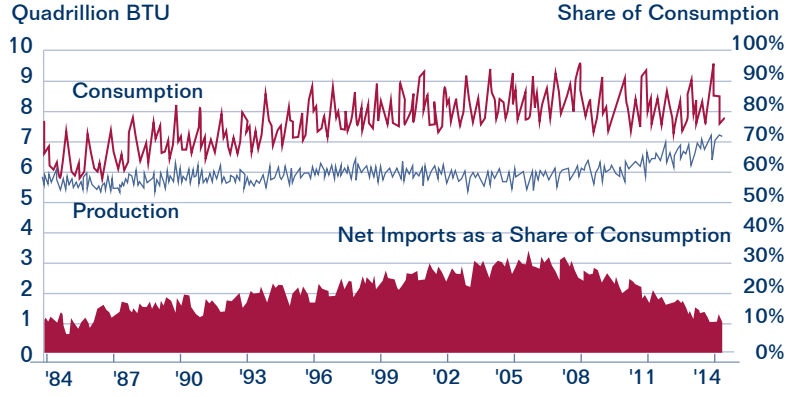
Then consider that today we in the U.S. produce some 84 percent of our primary energy supplies domestically, according to the U.S. Energy Information Administration (EIA).

Even in the most persistently problematic import area – oil – data from EIA show that our production is the highest it has been in decades. And this has contributed to our energy imports as a share of energy consumption being the lowest in 29 years (Figure 1).

Strikingly, the concept of energy independence, something viewed as more of a pipedream of presidents than a realistic goal, seems within reach.

At the same time, EIA data show that energy use per person in the U.S. has been declining (Figure 2). And consumer spending on energy as a share of disposable income continues to fall.

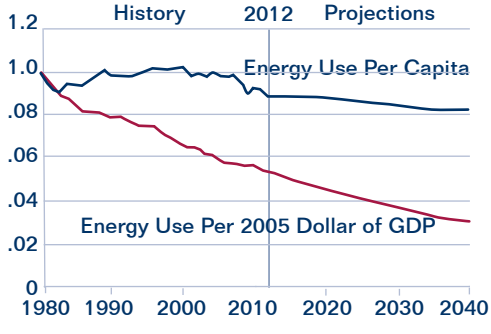
Figure 1
Monthly U.S. Energy Production and Consumption and Net Imports as a Share of Consumption, 1984-2014



Source: U.S. Energy Information Administration.

Driven most significantly by lower gasoline prices and increasing automobile efficiency, and by changes in home heating fuels, consumer energy spending today is a lower percentage of disposable income than the average going all the way back to 1960 (Figure 3).

Figure 2
Energy Use Per Capita and Per Dollar of GDP in the Reference Case, 1980-2040 Index 1980=1

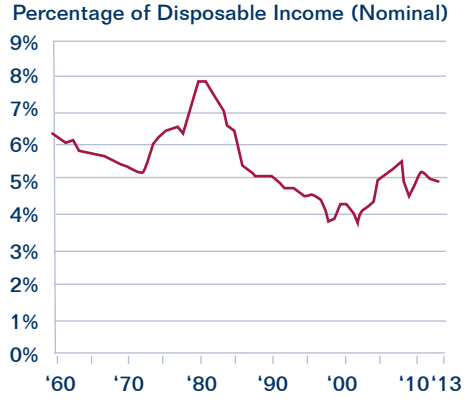


Source: U.S. Energy Information Administration.

Technology and Innovation are Creating a Revolution

So, what is at the core of this revolution? Technology. Innovation. The economics that technology and innovation improve as entrepreneurs invest, sometimes fail, and invest again. And the new practices they spawn that can lead to economic,

Figure 3
Consumer Energy Expenditures' Share of Disposable Income 1960-2013



Source: U.S. Energy Information Administration.

environmental, and other benefits for consumers, taxpayers, and society at large. In Montana we have a unique ability to watch and participate in the revolution across a wide range of sectors.

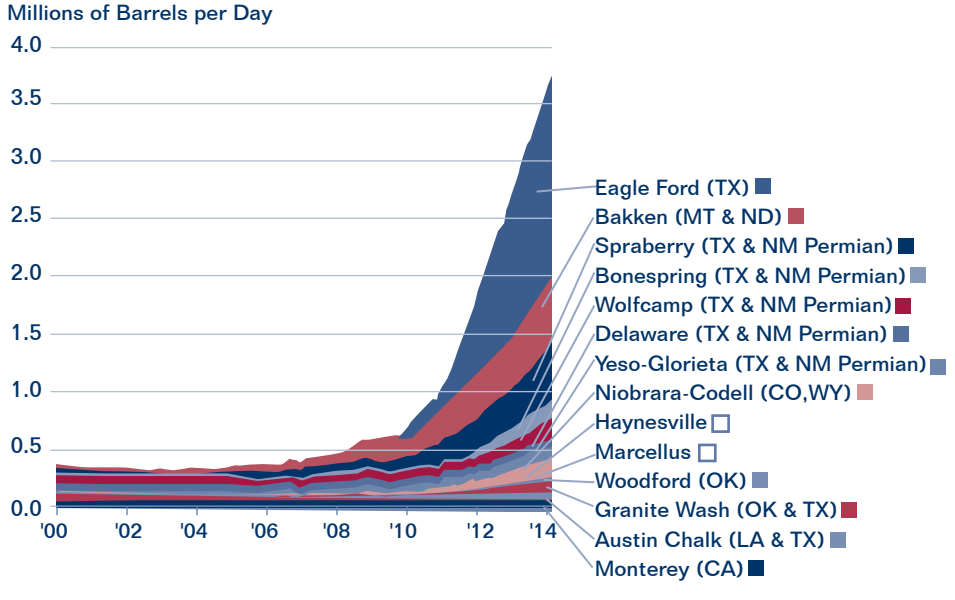
Most dramatic, although by no means the only, among sectors contributing to our new energy outlook is that of oil and natural gas.

The technology development and innovation in this sector have been astounding. Advances in high-tech geoscience have led to the ability to better "see" underground strata with seismic data, to assess the likelihood of finding hydrocarbons in identified geologic formations, and through nanoscience, understand how oil and gas move through the pores of "tight" source rocks more dense than concrete. It is these source rocks in which oil and gas had been created over hundreds of millions of years, migrating to geologic "traps" that became the target of oil and gas explorers. But the early-2000s' wedding of two well-known technologies – horizontal drilling and hydraulic fracturing – allowed economic production for the first time directly from those source rocks. Ongoing progress in reservoir characterization to understand how to most effectively and efficiently produce known oil and gas resources, and ongoing drilling and completion efficiency gains, are opening more oil and gas resource areas to economic production. These gains will help maintain economic production through market price fluctuations.

The success of the Bakken play in North Dakota and the eastern part of our state is a direct result of these advances. Bakken oil production growth – among the most important of the nation's tight oil plays – is shown in the second from the top band in Figure 4. It is this very recent U.S. oil production growth, following the earlier and every-bit-as dramatic natural gas production growth, that has most led to our new national energy outlook – but that outlook is underpinned by our large U.S. and Montana coal resources, significant improvements in development and use of alternative energy forms, and improvements in energy efficiency and conservation.

Let's take a quick look at a few key points in each of these areas from a Montana perspective.

Figure 4
U.S. Tight Oil Production, Selected Plays



Source: U.S. Energy Information Administration derived from state administrative data collected by Drillinginfo Inc. Data are through September 2014 and represent EIA's official tight-oil estimates, but are not survey data.

Benefits and Challenges of the Oil Boom

Montana is clearly seeing benefits and some challenges from oil development, and both are leading to new thinking. Economic activity in Eastern Montana related to the Bakken has arrested population declines in some counties, has provided new jobs, and has increased wage rates in even the traditionally lowest-paid labor categories. On the high-tech side, Montana Tech in Butte is a leading source of new petroleum, mining, environmental, and other engineers for industry nationwide, with graduates receiving some of the highest starting salaries.

Folks like Larry Ashcraft, a retired airline pilot in the Flathead Valley, have been bitten by the entrepreneurial bug. Larry started the Osprey Trucking Company in Sidney to haul fresh water that is critical to hydraulic fracturing sites. The water is mixed with sand and additives and carried into the ground to release oil and natural gas. The Osprey Trucking business became very valuable and was purchased by a larger company.

In 2013, economists estimated that there were more than 12,500 oil and gas industry-related jobs in Montana, including those in exploration and production and those like Larry's that support it, as well as those in refining, distribution, and marketing of petroleum products. An American Petroleum Institute/PWC study estimates that direct, indirect, and "induced" employment (that is, supported by income from the first two categories) may mean that some 43,000 jobs and 10 percent of Montana's economy are supported by oil and gas.

Challenges of the Bakken boom are also clear. Housing availability and costs, police and other service demands, and road maintenance are examples. The impacts that have been seen in Eastern Montana can come during early, intense-activity phases of an oil and gas play or project cycle, with effects sometimes felt before more stable production phases and related tax flows. And, although production taxes are estimated in 2013 as having been around $226 million, there is a timing gap between activity and revenues. It takes a while to address effects in particular counties or communities, and might call for new thinking with respect to planning, cooperation, and voluntary action among companies and officials who may be able to provide resources to address interim needs.

Even the American Petroleum Institute, the leading oil and gas standards-setting body in the world, has added community engagement to its suite of operational and environmental standards and best practices for the oil and gas industry.

Osprey Trucking Company

Environmental Issues

Also on the environmental front, as states have primary oil and gas regulatory responsibility, they have stepped forward dramatically to take their places in the revolution. States including Montana and others across the nation, have created the States First initiative of the Interstate Oil and Gas Compact Commission and Ground Water Protection Council to continuously improve and share their own best practices for regulations, enforcement capability, and resources, and addressing of public concerns. They have adopted a national Web-based FracFocus registry (www.FracFocus.org) for tracking what fluids, sand, and additives go into wells that have hydraulic fracture treatments. Begun for voluntary postings — with more than 700 companies having made 85,000+ disclosures — FracFocus is now used for required information posting by Montana and a number of other states. As new issues and concerns arise, states have on-the-ground responsibility and expertise to focus on them.

In addition to following industry standards and evolving rules and regulations, companies are initiating innovative practices that better protect the environment while increasing conservation and efficiency. Where and when possible, more water re-use and recycling reduces both water demand itself and the need to transport it. Likewise, multiple wells drilled from the same locations can reduce surface effects and increase drilling efficiency. Even small things can make sense and matter, like installing new technology valves and using new operating practices that have helped reduce production-related methane emissions by 40 percent since 2006.

Coal

In addition to being the source of half of Montana's electricity generation, coal continues to be the dominant form of energy produced in Montana, with the state's having one

quarter of the nation's recoverable reserves. Here technology and innovation have allowed efficient and more environmentally friendly production and use, contributing an estimated $30,000 in state revenue for every trainload of coal shipped to users or export terminals outside Montana. Today's reclamation standards for Eastern Montana's surface mines were not even imagined when federal and Montana regulation was ramped up in the early 70s. With increased concerns about carbon emissions from coal and other fossil fuels, the Montana State University-directed Big Sky Carbon Sequestration Partnership has drilled its first well in the Kevin Dome in Northern Montana as part of its research project to obtain and re-inject CO2 into the earth to study geologic and geochemical factors affecting its long-term storage. This, along with use of CO2 for enhanced oil recovery already underway in the state, is an exciting and key subject if Montana coal is to fulfill its future potential in meeting energy needs.

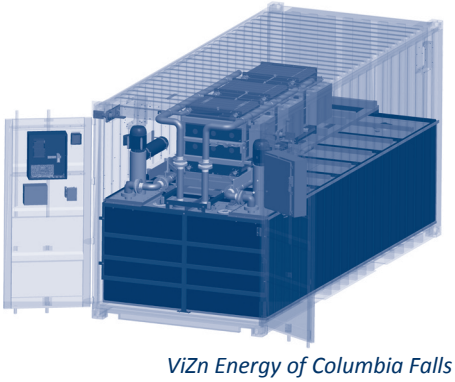
Renewables

Renewables also provide growing components of our energy revolution. The EIA projects that by 2040 renewable contributions to our nations' electricity-generating capacity will have grown 24 percent (second only to the 73 percent growth in gas-fired generation). In Montana, more than 40 percent of our electricity is generated by hydropower facilities. But Montana also saw an increase in wind generation capacity of 32 percent in 2013 alone, according to EIA. Today 6 percent of the state's electricity is generated by wind turbines.

F.H. Stoltze Land & Lumber Co.

Other renewable energy projects, from algae-to-methane to wood bark/sawdust/shavings-to-heat-and-power ones are underway. Projects like F.H. Stoltze Land & Lumber's cogeneration one, providing process steam and heat as well as an average of 60,000 kilowatts of power daily to the commercial electricity grid, are moving Montana toward meeting its 15 percent 2015 Renewable Energy Resources Standard.

And the technology work continues. ViZn Energy of Columbia Falls, for example, is developing new large-capacity, scalable batteries that will be critical as distributed energy projects and micro-grids become more a part of our future. They, and utilities, all need to be better able to balance supply and demand with increased reliance on intermittent wind and solar power.



ViZn Energy of Columbia Falls

Efficiency and Conservation

Efficiency and conservation improvements continue their steady contributions as well to the optimistic energy future all of us can appreciate. As we saw at the beginning of this article, consumers nationwide are benefiting today by using less – and less expensive – energy. In Montana, the Department of Environmental Quality estimates that energy efficiency gains in the electricity sector, for example, have averaged some 3.5 percent annually in recent years.

Finally, a few words about what may be some of the most exciting Montana engagement with the new energy revolution: the contributions we're making in the leading edges of new thinking and new action. I've mentioned just a few examples of what our Montana universities are doing to help us understand and lead in this new energy world. But there is much more that could be explained. Like the Montana Tech/UM/MSU joint Ph.D. program in materials for energy storage, conversion, and conservation that could lead to a graduate developing the next generation of wind turbine blades, or corrosion-resistant pipe for transporting and disposing of toxic wastes. Or the community colleges that are preparing their students to be the next energy employees in a broad range of fields.

All this should inspire not only optimism about our energy future and how it is reshaping Montana and the ways we think about energy. It should also reaffirm the excitement we see and feel everyday about our state's ability to lead in this important and dynamic arena. 15

U.S. Economic Outlook

The U.S. Economy Shines on the Global Stage

PATRICK M. BARKEY
Director, Bureau of Business and Economic Research

During the late 1980s the high-flying Japanese were buying so many American companies and choice pieces of real estate that we wondered if they'd eventually own everything. And when the housing bubble first burst in 2007, the Germans were feeling smug because they were sure their stolid banking system would never permit anything like the meltdown happening here.

But in 2015 those countries and many others will be looking with envy at the American economy. Because as things are shaping up, we may be the only growth game in town. U.S. job growth trends are accelerating, and even if quarterly growth ebbs and flows, it looks like the national economy is moving into a higher gear.

That will mark quite a change – in economic policy as well as economic performance. We can expect to see interest rates finally start moving up while unemployment rates continue to come down. Even if growth isn't perfectly balanced and income inequality tilts the table a bit more than we'd like, a self-reinforcing cycle of income growth and consumer spending is starting to emerge.

Here are the top 10 predictions for the U.S. and global economies, courtesy of forecasting firm IHS.

1. U.S. growth will solidify in the 2.5 percent to 3 percent range, driven notably by steady increases in domestic consumer spending – which accounts for 70 percent of GDP.
2. The Eurozone countries will continue to experience very sluggish growth in the 0.8 percent to 1.2 percent range, with elevated unemployment rates and concern over price deflation. Growth will be supported by lower oil prices as well as a weaker Euro. The big exception is the United Kingdom, which should see growth rates in the same range as U.S. growth.
3. The Japanese economy will push back into the positive growth range after experiencing its fourth recession during the last six years at the end of 2014. Lower oil prices and a continuation of very aggressive central bank policies will help Japan eke out growth despite extraordinarily fragile consumer spending.
4. Chinese growth will continue to cool in 2015, although its growth will still pace most of the developing world, thanks to another round of banking stimulus.
5. The other important emerging economies will have a more mixed performance, with Russia and Brazil likely to see continued declines while others areas such as eastern Europe and Latin America grow faster than last year.
6. Commodity prices will continue to fall due to weak global demand and supply growth.
7. Inflation will remain a non-issue, with deflation rising as a threat, especially in Europe.
8. Central banks in the U.S., Canada, and the United Kingdom will begin to raise rates, perhaps more slowly than in other recovery cycles. Chinese, European, and Japanese central banks may go the other direction and attempt more stimulus.
9. The U.S. dollar is expected to strengthen against most currencies in response to divergent growth rates.
10. Risks to the forecast are more balanced, with the prospect of much lower oil prices given greater weight. 15

Table 1
Actual and Forecasted Values for Key U.S. Economic Variables

	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2013	2014	2015	2016	2017
Real GDP (Percent Change)	5.0	2.6	3.1	2.5	2.2	2.4	3.1	2.7	2.7
Federal Funds Rate (Percent)	0.09	0.10	0.14	0.28	0.11	0.09	0.44	1.56	3.33
Ten-Year Treasury Yield (Percent)	2.50	2.28	2.33	2.57	2.35	2.54	2.68	3.59	4.21
Brent Crude Oil Price (Dollars/ Barrel)	103.7	78.03	60.0	59.0	108.7	99.9	63.9	75.0	84.0
Consumer Price Index (Percent Change Year- to-Year)	1.1	-1.2	-3.0	1.4	1.5	1.6	0.1	2.3	2.4
Housing Starts (Millions)	1.030	1.037	1.085	1.149	0.930	0.994	1.163	1.349	1.497
Consumer Sentiment (Univ. of Michigan)	83.0	89.8	90.5	91.0	79.2	84.1	91.2	90.5	89.3
Unemployment Rate (Percent)	6.1	5.8	5.7	5.6	7.4	6.2	5.5	5.3	5.2

* Forecasts as of Jan. 2015.

Source: IHS, Inc.

Montana Economic Outlook

More Balanced, But Slower Growth Ahead

PATRICK M. BARKEY
Director, Bureau of Business and Economic Research

Montana Profile	
Total Population, 2014	1,023,000
Percent Change in Population, 2010-2014	3.4%
Median Age, 2013	39.9
Percent 65 or Older, 2013	15.3%
Percent of Population with Bachelor's Degree or Higher, 2013	28.7%
Median Household Income, 2013	46,230
Percent of Population without Health Insurance Coverage, 2013	17.4%
Unemployment Rate, November 2014	4.2%
Lived in a Different House in 2013	16.0%

Sources: American Community Survey, U.S. Census Bureau; Research and Analysis Bureau, Montana Department of Labor and Industry.

For the past five years, we've witnessed something of an economic miracle in the eastern third of our state. Even more so in the western third of North Dakota. Towns and communities that were once depopulating and shrinking to the point where their schools and basic institutions were threatened have come roaring back, thanks to the Bakken oil boom. And for the first time in living memory, the rural portions of Montana – particularly in the east – were growing faster collectively than any of the urban areas.

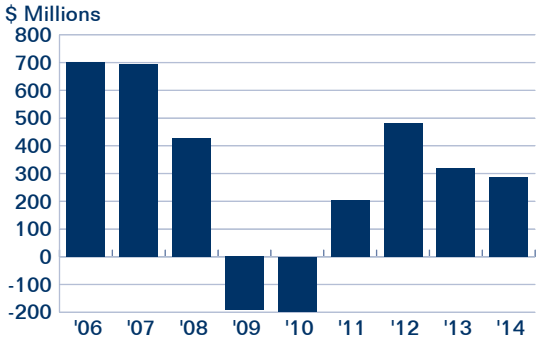
That was beginning to change even before the crude oil price swoon hit global markets in the fall of 2014. Cost control in the Bakken was already bringing down oil activity measures such as counts of drilling rigs, while the drivers of growth in the more populous western parts of the state were getting healthier. Taken together, these forces were already bringing growth rates around the state into closer balance.

The sudden tumble in crude oil prices that began in earnest last September kicks this process into high gear. Lower energy costs can breathe life into consumer spending and confidence, while they are certain to curtail exploration and development. It all adds up to a short-term outlook for the Montana economy that has more balanced, but possibly slower, economic growth.

Montana's Recent Economic Performance

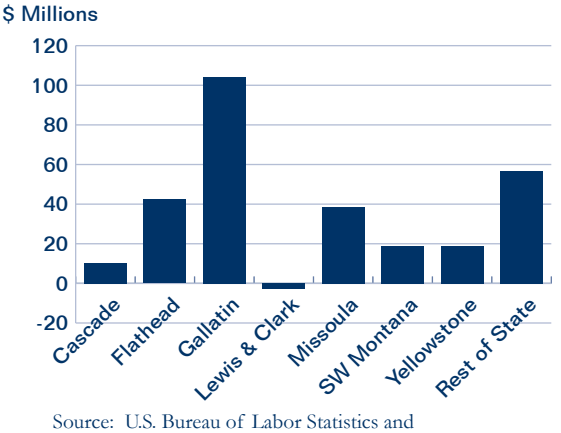
The pattern and the strength of economic growth continued to evolve in Montana in 2014. The data that are available on wages and salaries paid to workers show an increase of $287.5 million in fiscal year 2014 on an inflation-corrected basis, compared to the previous fiscal year. Thanks mainly to a slowdown in some of the oil-related construction and capital spending, wage growth has slowed substantially, as shown in Figure 1. The most recent data put current wage growth at about 40 percent of the peak growth the state economy

Figure 1
Growth in Montana Real Wages and Salaries, FY 2006-2014, Millions of Real Dollars



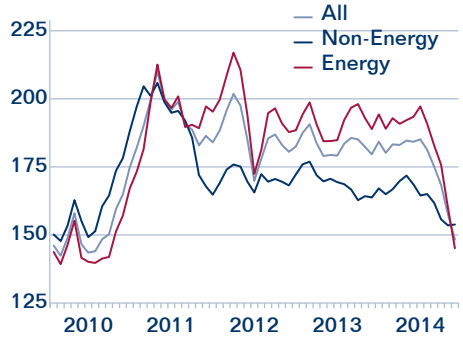
Source: U.S. Bureau of Labor Statistics and Bureau of Economic Analysis.

Figure 2
Growth in Real Wages and Salaries, FY 2014, Millions of Real Dollars



Source: U.S. Bureau of Labor Statistics and Bureau of Economic Analysis.

Figure 3
Commodity Price Indices 2010-2014 (2005=100)



Source: International Monetary Fund.

experienced before the recession began.

The distribution of growth across industries has changed as well. Two years ago, substantial growth in construction and mining industries helped offset sluggish or even negative growth in other industries. Economic growth in Montana is now much more widespread across the major industries, with health care, professional business services, and retail trade posting the biggest gains in inflation-corrected wages. A more durable trend has been the continued decline in government payrolls, which contracted for the fourth consecutive year.

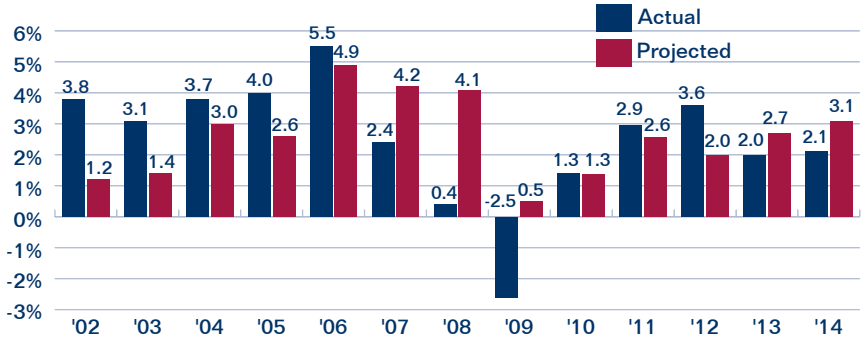
The data do not yet reflect the steep declines in oil prices, which are still occurring as these words are written. But even at the year's mid-point, when benchmark crude oil prices were at or near $100 per barrel, a slowdown in Montana and North Dakota's energy boom in 2014 was apparent. Mining earnings, which include oil production workers, were lower in fiscal year 2014 than the previous year, and thanks to the completion of the large projects at the Billings refineries in 2013, construction payrolls in Billings were down by $37 million last year as well.

Rethinking Montana's Economic Drivers

By a fairly large margin, the Gallatin County economy was the best performer across the state in 2014 (Figure 2). Its increase of $104.3 million in inflation-corrected wages and salaries in fiscal year 2014 accounted for almost 35 percent of growth in the entire state. Much of that growth came from sources well documented in previous BBER forecasts – manufacturing, Montana State University, as well as nonresident spending. But the evolving technology and information-related industry growth in Bozeman calls into question whether existing industry definitions adequately capture growth drivers in Bozeman and elsewhere.

The economy always presents challenges to our methods of keeping score. Companies such as Oracle, Edulog, or Montana Molecular, not to mention the hundreds of smaller knowledge-based and other consulting firms, stretch the limits of current industry classifications. Their growth is certainly reflected in our bottom-line data, but the diverse sources of that growth can be missed with current forecasting tools. Certainly the innovation and technology economy has been thriving in the national economy, and we want to be sure to capture its importance across our state.

Figure 4
Actual and Projected Change in Nonfarm Earnings, Montana, 2002-2014



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

The Blueprint for Growth in 2015

Montana's economy begins the second half of the decade with important pieces of the economy facing different prospects. Dominating the headlines is the uncertainty ahead for the oil industry, with the deep plunge in oil prices certain to cause the slowdown or cancellation of drilling and exploration activity (Figure 3). Less noticed have been some important changes in other key economic drivers for our state. These include:

- **Federal government spending.** The short-lived period of federal

government spending discipline and deficit reduction appears to be coming to an end. We look for stable or growing federal spending, ending a period of decline.

- **Nonresident spending.** Even before the decline in retail gasoline prices, evidence of gains in Montana's tourist industries was plentiful. With the national economy beginning a mutually reinforcing cycle of job growth and spending growth, the prospects of continued gains in spending by domestic visitors continue to improve.
- **Metal mining.** The commodity boom is over and most metals prices have been in retreat over the last three years. Thus far those declines have been measured and orderly, and some new projects in Montana remain under active consideration. But the sector is unlikely to contribute to growth in 2015.
- **Agriculture.** Montana's farmers and ranchers continue to do business in an outstandingly favorable price environment. We expect that environment to deteriorate as supply adjustments take place and a slowdown in the growth of global demand.

The prospects for growth in Montana's manufacturing industries are harder to specify. Certainly Montana's surviving wood products manufacturers have greatly benefited from the home building industry's revival from its near-death experience of the last recession. But the disappointing pace of that revival, as well as the continuing issue of timber availability, has limited those gains. Montana's other manufacturers have enjoyed some success, with tech-related products faring best and defense-related activities the worst.

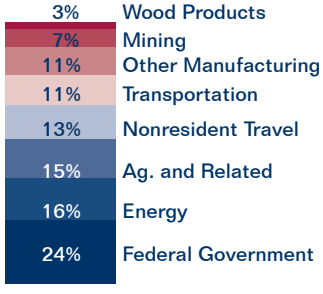
A Different Kind of Outlook

But by far the biggest change to the 2015 outlook comes from the seismic shift underway in oil prices. Not since the onset of the recession of 2008-09 has there been as swift of a price decline. And unlike that episode, when rapid growth in energy demand from emerging economies quickly sent prices back upward, no quick recovery from the current price plunge is foreseen. We may wait a few years to see crude oil prices top $100 per barrel again.

That certainly challenges Bakken oil producers, especially at a time when many were already cutting back new spending to concentrate on debt service. It will also challenge state government, which has become accustomed to the revenues based on the value of oil shipments. The new forecast calls for a sizable decline in investment and drilling activity over the next two years. On the other hand, what some are calling the "gasoline price rebate" promises to boost both consumer confidence and spending, and could give the U.S. economy the extra push to support a sustained period of stronger growth.

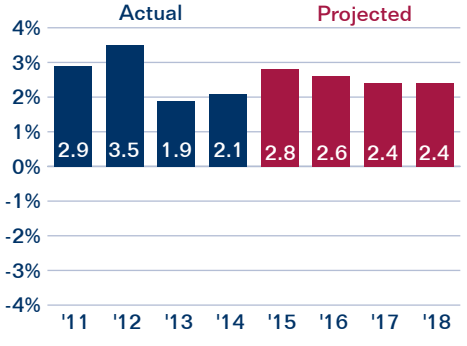
In Montana, this translates into a projection that is more regionally balanced. Western Montana's urban areas, particularly Bozeman, will pace statewide growth in 2015. But with booming oil development putting on the brakes, overall statewide growth will be slower than we forecast last year. 15

Figure 5
Earnings in Basic Industries, Montana, 2012-2014, Percent of Total



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

Figure 6
Actual and Projected Change in Nonfarm Earnings, Montana, 2011-2018



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

Silver Bow-Deer Lodge & SW MT Economy

Economic Transformation and Traditional Industries

Paul E. Polzin
Director Emeritus, Bureau of Business and Economic Research

Butte-Silver Bow County Profile	
Total Population, 2014	34,700
Percent Change in Population, 2010-2014	1.3%
Median Age, 2013	41.6
Percent 65 or Older, 2013	16.3%
Percent of Population with Bachelor's Degree or Higher, 2013	22.2%
Median Household Income, 2013	38,659
Percent of Population without Health Insurance Coverage, 2013	16.4%
Unemployment Rate, November 2014	4.7%
Lived in a Different House in 2013	19.2%

Sources: American Community Survey, U.S. Census Bureau; Research and Analysis Bureau, Montana Department of Labor and Industry.

Butte-Anaconda serves as a regional center for Southwestern Montana. Almost a quarter of its economic base is derived from trade center activities. They include people coming to town for retail shopping and obtaining health care services. There are also several professional service and management firms serving clients in surrounding rural areas.

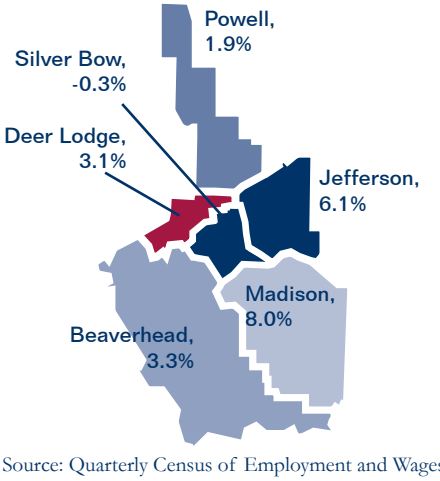
Mining continues as a major industry throughout Southwestern Montana. The Montana Resources mine accounts for more than a quarter the economic base in Butte-Anaconda. The Golden Sunlight mine is located near Whitehall. A talc mine is near Dillon. Finally, a number of small- and medium-size gold and nonmetallic mines are scattered throughout Madison County.

Southwestern Montana was the most economically developed area when Montana became a state, and many of the state government facilities are located there. There are many colorful (and perhaps apocryphal) stories about how the locations were chosen. Even so, these state facilities provide welcome jobs in rural areas and small towns. These include:

- Montana Tech in Butte (500 jobs)
- Warm Springs State Hospital near Anaconda (500 jobs)
- Montana State Prison in Deer Lodge (700 jobs)
- University of Montana – Western in Dillon (260 jobs)
- Montana Developmental Center in Boulder (290 jobs).

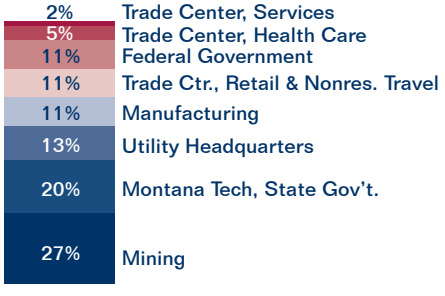
The forecasts call for 2.2 percent to 2.5 percent overall growth in the five counties of Southwestern Montana. This projection may be too optimistic if commodity prices continue downward and one or more of the mines in the area are impacted. 15

Figure 1
Growth in Real Wage Disbursements, FY 2013-2014



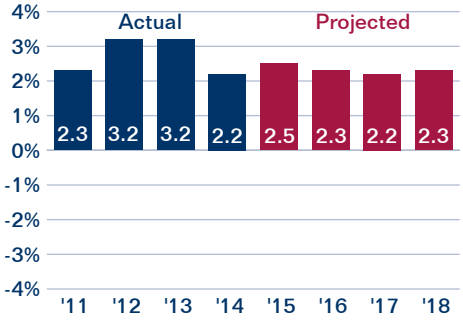
Source: Quarterly Census of Employment and Wages.

Figure 1
Earnings in Basic Industries, Silver Bow-Deer Lodge Counties, 2012-2014
Percent of Total



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

Figure 2
Actual and Projected Change in Nonfarm Earnings, Silver Bow- Deer Lodge Counties, 2011-2018



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

Cascade County

Good News Verified in Latest Preliminary Data

Paul E. Polzin
Director Emeritus, Bureau of Business and Economic Research

Cascade County Profile	
Total Population, 2014	82,300
Percent Change in Population, 2010-2014	1.2%
Median Age, 2013	38.8
Percent 65 or Older, 2013	15.9%
Percent of Population with Bachelor's Degree or Higher, 2013	24.6%
Median Household Income, 2013	44,963
Percent of Population without Health Insurance Coverage, 2013	14.4%
Unemployment Rate, November 2014	3.8%
Lived in a Different House in 2013	17.3%

Sources: American Community Survey, U.S. Census Bureau; Research and Analysis Bureau, Montana Department of Labor and Industry.

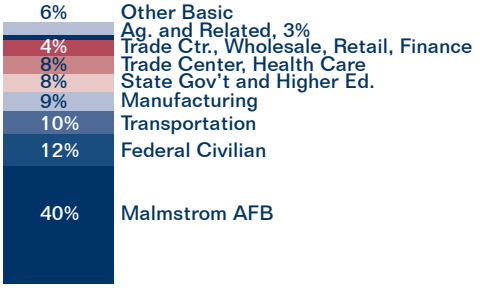
Cascade County is a classic example of why historic data, however accurate, may not be a reliable indicator of what is happening now. Specifically, the latest annual data released by the U.S. Bureau of Economic Analysis do not reflect the new indirect energy-related manufacturing activity that only started to show up late in 2013.

First, the historic data released by the U.S. Bureau of Economic Analysis. These figures show that the Great Falls' area economy was relatively unaffected by the Great Recession, mostly due to its dependence on the noncyclical military at Malmstrom Air Force Base. From 2011 to 2013 the economy was roughly stable, mostly due to a very slow recovery in construction and consolidations in the banking and finance industry.

The U.S. Bureau of Labor Statistics publishes another data series that is more current and quarterly, rather than annual, but is not as detailed as the Bureau of Economic Analysis's figures. Beginning in the third quarter of 2013 and continuing through the second quarter of 2014, total manufacturing employment increased by about 100 to 200 workers. A rough back-of-the-envelope calculation suggests that average annual wages are about $35,000 per year. Detailed data is not available yet, but these figures correspond almost exactly to the announced plans of ADF and Loehnbro. ADF is a Canadian company producing oil production modules for customers in the oil sands of Alberta, and Loehnbro is a pipe-welding company serving the Bakken oil fields on the Montana/North Dakota line. In addition, BE Aerospace, a manufacturer of aircraft passenger cabin interior products with a location in Great Falls, continues to add employees.

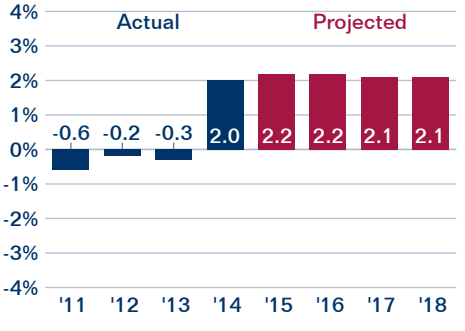
The forecast calls for about 2.2 percent average growth from 2015 to 2018. This is faster than the last five to seven years, but Cascade County is projected to grow slightly below the statewide average. The headwinds associated with dependence on the federal government continue to be the primary cause. 15

Figure 1
Earnings in Basic Industries, Cascade County, 2012-2014, Percent of Total



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

Figure 2
Actual and Projected Change in Nonfarm Earnings, Cascade County, 2011-2018



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

Flathead County

Good News in the Latest Data

Paul E. Polzin
Director Emeritus, Bureau of Business and Economic Research

Flathead County Profile	
Total Population, 2014	94,900
Percent Change in Population, 2010-2014	4.3%
Median Age, 2013	41.7
Percent 65 or Older, 2013	15.0%
Percent of Population with Bachelor's Degree or Higher, 2013	28.4%
Median Household Income, 2013	46,581
Percent of Population without Health Insurance Coverage, 2013	19.7%
Unemployment Rate, November 2014	5.8%
Lived in a Different House in 2013	9.8%

Sources: American Community Survey, U.S. Census Bureau; Research and Analysis Bureau, Montana Department of Labor and Industry.

The most recent federal data report accelerating growth in the Flathead economy. After a crippling decline during the Great Recession, the Flathead County economy posted an increase of 2.4 percent in 2011, about 3 percent in 2012, and a stunning 4.2 percent in 2013. The most recent figures suggest this rapid growth may have moderated in 2014.

The construction industry looks like it is on the mend. The Great Recession was particularly hard on Flathead construction, with its heavy reliance on second home and recreational building. But it posted two solid years of growth in 2012 and 2013, and the 2013 figure was double digits. It is especially noteworthy that Flathead County is one of the very few areas in the state where building construction has led the way. In addition, the number of home sales (but not prices) is approaching pre-recession levels.

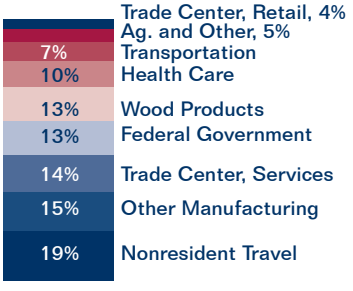
Manufacturing is strong. The high-tech sector suffered only a slight hiccup during the recession year 2008. The wood products industry is slowly recovering as the U. S. economy grows, but it is nowhere near its levels of a decade ago. And there is a new industry on the block: small arms and ammunition manufacturing. It has added almost 300 workers during the last three years.

Kalispell continues to evolve into a regional center. There has been significant growth in financial activities and other business services which serve the entire region. Health care continues strong. There is some evidence that Canadians are crossing the border for elective procedures.

Nonresident travel is now the largest basic industry in the Flathead economy, although there are three or four other industries that are close behind.

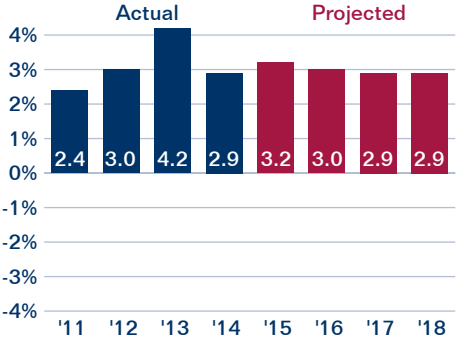
The forecasts are for growth to average about 3 percent per year from 2015 to 2018. These projections incorporate continued growth in nonresident travel, the wood products industry, and the armaments industry. In addition, construction is expected to continue its recovery.

Figure 1
Earnings in Basic Industries, Flathead County, 2012-2014
Percent of Total



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

Figure 2
Actual and Projected Change in Nonfarm Earnings, Flathead County, 2011-2018



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

Gallatin County

Montana's Economic Growth Leader

Paul E. Polzin
Director Emeritus, Bureau of Business and Economic Research

Gallatin County Profile	
Total Population, 2014	97,200
Percent Change in Population, 2010-2014	8.6%
Median Age, 2013	32.8
Percent 65 or Older, 2013	9.9%
Percent of Population with Bachelor's Degree or Higher, 2013	46.0%
Median Household Income, 2013	52,833
Percent of Population without Health Insurance Coverage, 2013	13.8%
Unemployment Rate, November 2014	3.7%
Lived in a Different House in 2013	24.3%

Sources: American Community Survey, U.S. Census Bureau; Research and Analysis Bureau, Montana Department of Labor and Industry.

The Gallatin County economy has been on an economic roller coaster since the onset of the Great Recession in 2008. The Bozeman-area economy experienced a significant contraction early in the recession. But the economy began to turn around in 2010 and has continued upward ever since. In fact, Gallatin County is one of only two major urban areas in the state (the other being Yellowstone County) to significantly exceed the statewide growth rates during the recovery phase of this business cycle.

The favorable growth trends in Gallatin County can be attributed to both short-run and long-run factors. The short-run economic boosts to the economy include:

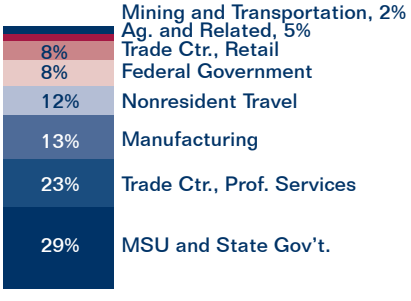
- A robust recovery in the construction industry. There was double-digit growth in all sectors of construction during 2013, following significant growth in 2012. Detailed data are not yet available, but the Big Sky area may account for much of these increases.
- The hard hit nonresident travel industry also had strong years in 2012 and 2013.
- The sale of RightNow Technologies to Oracle created a one-time boost because the U.S. Bureau of Labor Statistics counted the stock options of employees as wages and salaries in 2011 and 2012.

Over the longer run, positive trends in Gallatin County's high-tech sector and the transition of Bozeman into a regional trade and service center suggest continued growth. The high-tech sector includes both manufacturing and software. RightNow Technologies was classified in professional services.

Montana State University continues as the largest component of Gallatin County's economic base, accounting for about 30 percent of the total. The long-term growth in enrollment at MSU suggests there are probably additional positive influences on the local economy that are not reflected in the earnings data. The RightNow sale distorts the recent growth rate trends.

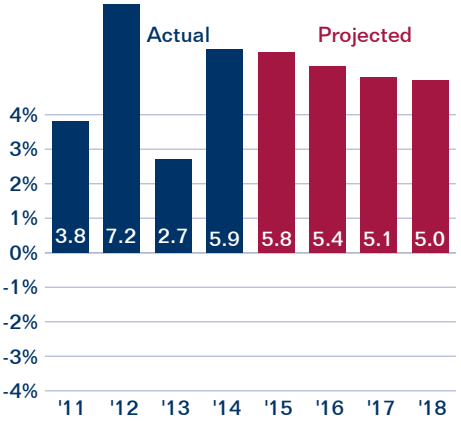
Gallatin County is projected to grow 5 percent per year or greater from 2015 to 2018, the fastest of all the urban areas in the state. This optimistic forecast incorporates continued expansion of the high-tech sector (both manufacturing and software), growth in nonresident travel, and a significant revival in construction. 15

Figure 1
Earnings in Basic Industries, Gallatin County, 2012-2014, Percent of Total



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

Figure 2
Actual and Projected Change in Nonfarm Earnings, Gallatin County, 2011-2018



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

Lewis and Clark County Outlook

A New Source of Growth

Paul E. Polzin
Director Emeritus, Bureau of Business and Economic Research

Lewis & Clark County Profile	
Total Population, 2014	65,800
Percent Change in Population, 2010-2014	3.8%
Median Age, 2013	40.8
Percent 65 or Older, 2013	14.3%
Percent of Population with Bachelor's Degree or Higher, 2013	37.5%
Median Household Income, 2013	56,243
Percent of Population without Health Insurance Coverage, 2013	10.5%
Unemployment Rate, November 2014	3.3%
Lived in a Different House in 2013	16.0%

Sources: American Community Survey, U.S. Census Bureau; Research and Analysis Bureau, Montana Department of Labor and Industry.

The Helena economy has traditionally been non-cyclic because of its dependence of state and federal government. The data corresponding to the Great Recession certainly confirm this notion. Lewis and Clark County was one of the very few urban areas in Montana which did not have at least one year of decline during the last decade.

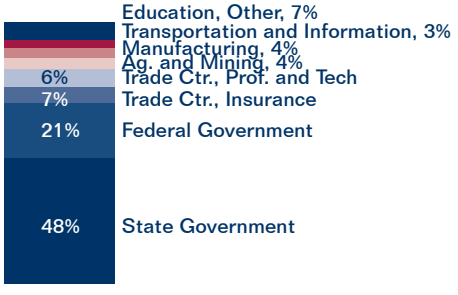
This stability is illustrated by the data for state government and the federal government, the No. 1 and No. 2 basic industries. Our indicator of industry performance (inflation-adjusted earnings of workers) for state government in 2013 was almost identical (within 0. 5 percent) to its value in 2008. Similarly, the corresponding value for the federal government in 2013 was only 1 percent lower than in 2008.

The real bright spot in the Lewis and Clark County economy has been the expansion of the Boeing Company, which is located near the airport. Technically, this facility is categorized in "Other Transportation Equipment," which is part of manufacturing. Beginning in 2010, there has been significant growth, and this industry is now three times larger than just a few years ago. On the negative side, mining is facing a difficult future because of worldwide commodity price trends. The Drumlummon mine near Marysville mine laid-off most of its workers in mid-2013 due to the dropping price of gold.

The Helena-area economy experienced slow growth in 2013 and 2014. The forecasts are that growth will be about 1.8 percent to 2.3 percent per year from 2015 to 2018, which is below the statewide average. Since state and federal governments account for almost 70 percent of Lewis and Clark County's economic base, the reason for the slow growth is not hard to find. 15

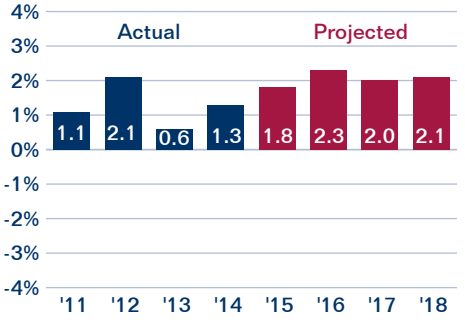
"The real bright spot in the Lewis and Clark County economy has been the expansion of the Boeing Company, which is located near the airport."

Figure 1
Earnings in Basic Industries, Lewis & Clark County, 2012-2014, Percent of Total



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

Figure 2
Actual and Projected Change in Nonfarm Earnings, Lewis & Clark County, 2012-2018



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

Missoula County

Slowly Clawing Upward

Paul E. Polzin
Director Emeritus, Bureau of Business and Economic Research

Missoula County Profile	
Total Population, 2014	112,600
Percent Change in Population, 2010-2014	3.0%
Median Age, 2013	34.3
Percent 65 or Older, 2013	12.0%
Percent of Population with Bachelor's Degree or Higher, 2013	39.1%
Median Household Income, 2013	46,117
Percent of Population without Health Insurance Coverage, 2013	17.2%
Unemployment Rate, November 2014	3.7%
Lived in a Different House in 2013	21.4%

Sources: American Community Survey, U.S. Census Bureau; Research and Analysis Bureau, Montana Department of Labor and Industry.

Economic growth in Missoula's economy has been frustratingly slow. After three straight years of decline during the Great Recession, the Missoula economy turned upward in 2011. But the growth rates have been have been anemic. The Missoula economy expanded about 1.5 percent per year in 2012 and 2013, as compared to 3 percent to 4 percent annual growth before the recession.

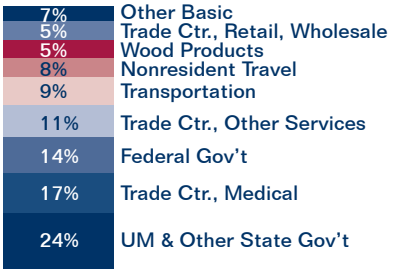
There are three main reasons for the slow growth:

1. The construction industry has not rebounded. Although Missoula did not experience the construction boom and bust seen elsewhere, building activity has barely budged from recession lows. The very preliminary data suggest a slight uptick during the first half of 2014.
2. The wood and paper products industry is much smaller. As recently as 2006, the wood and paper products industry accounted for about 13 percent of Missoula's economic base. It now represents roughly 5 percent. The wood products industry has rebounded as the U. S. economy resumed growth, but it is still just a shell of its former self.
3. Missoula's changing role as a trade center. Competition from places like Hamilton and Kalispell means that residents may be less likely to drive to Missoula and shop. Missoula continues to attract professional and business service firms that serve the region.

The Missoula Economic Partnership reported that it created about 750 new jobs during the last three years in basic industries such as computer-based technologies, manufacturing, and health services. Recent economic trends may have been even less favorable without these jobs.

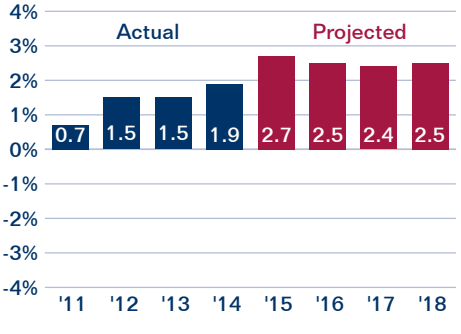
The forecasts call for 2.4 percent to 2.7 percent growth from 2015 to 2018. This is a significant improvement from the past performance. There are retail additions on Missoula's south side, which should improve the city's role as a trade center. Continued growth as a regional center for professional services and further manufacturing jobs are likely to materialize. The most important factor is recovery in the construction industry. There are a sizable number of public and commercial projects slated. But there also needs to be recoveries in the building and remodeling markets. 15

Figure 1
Earnings in Basic Industries, Missoula County, 2012-2014, Percent of Total



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

Figure 2
Actual and Projected Change in Nonfarm Earnings, Missoula County, 2011-2018



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

Ravalli County

Housing Construction Continues to Lag

James T. Sylvester, Senior Economist
Bureau of Business, and Economic Research

Ravalli County Profile	
Total Population, 2014	41,000
Percent Change in Population, 2010-2014	2.0%
Median Age, 2013	46.4
Percent 65 or Older, 2013	20.1%
Percent of Population with Bachelor's Degree or Higher, 2013	24.5%
Median Household Income, 2013	38,688
Percent of Population without Health Insurance Coverage, 2013	19.2%
Unemployment Rate, November 2014	5.7%
Lived in a Different House in 2013	14.8%

Sources: American Community Survey, U.S. Census Bureau; Research and Analysis Bureau, Montana Department of Labor and Industry.

Recent economic statistics demonstrate Ravalli County's economy is slowly emerging from the downturn experienced in the Great Recession.

Income of Ravalli County residents working in other counties is the largest source of income. The rate of growth in this income stream slowed in the past few years as the housing price difference with Missoula closed. Fuel prices also influence commuting between the two counties – lower fuel prices may increase commuting.

Housing construction, a mainstay of the Ravalli economy, continues to lag, with employment levels still half of what they were in 2007. Construction employment is forecast to remain well below 2007 levels for the foreseeable future.

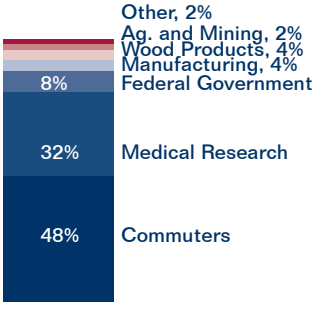
Metal manufacturing, including small arms manufacturing, continues to expand. Wood products manufacturing depends on national housing markets. Wood supply is an ongoing concern, but the market for log homes dominates the Ravalli County wood products.

Glaxo-Smith-Kline, a major pharmaceutical company, and the U.S. Centers for Disease Control's Rocky Mountain Lab, employ medical researchers with average annual incomes double the county average of $25,000. Both also employ support personnel stabilizing the local labor market.

Nonfarm earnings are forecast to increase about 2.8 percent per year through 2018. 15

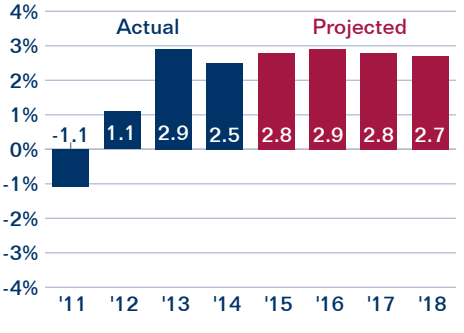
"Metal manufacturing, including small arms manufacturing, continues to expand."

Figure 1
Earnings in Basic Industries, Ravalli County, 2012-2014, Percent of Total



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

Figure 2
Actual and Projected Change in Nonfarm Earnings, Ravalli County, 2011-2018



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

Yellowstone County

Energy Impacts Continue

Paul E. Polzin
Director Emeritus, Bureau of Business and Economic Research

Yellowstone County Profile	
Total Population, 2014	155,500
Percent Change in Population, 2010-2014	5.1%
Median Age, 2013	38.3
Percent 65 or Older, 2013	14.4%
Percent of Population with Bachelor's Degree or Higher, 2013	28.7%
Median Household Income, 2013	51,342
Percent of Population without Health Insurance Coverage, 2013	15.6%
Unemployment Rate, November 2014	3.1%
Lived in a Different House in 2013	17.0%

Sources: American Community Survey, U.S. Census Bureau; Research and Analysis Bureau, Montana Department of Labor and Industry.

The Yellowstone County economy continues to benefit from the indirect impacts of the Bakken oil field developments on the Montana-North Dakota line. Even though Billings is more than 300 miles and five hours driving time from the epicenter of the drilling activity in Williston, North Dakota, it is an attractive location for the indirect and service activities associated with the oil boom. A number of North Dakota cities are closer to Williston, but at best they have roughly half of the population of Yellowstone County. This means that industries such as finance, wholesale trade, and professional services are probably much larger and have more depth and resources in Billings than in the North Dakota cities.

Since 2010, some of the fastest growth has been in the Billings' industries that serve rural areas, including professional and technical services, wholesale trade, and finance and insurance. The mining industry also increased significantly. Because there are few mines or oil wells in Yellowstone County, this growth probably represents the support positions and central office functions serving the activities in rural areas.

Not everything is rosy in Yellowstone County. If the EPA declares the sulfur dioxide levels to be in nonattainment status, air pollution abatement costs could be high in some of Billings' older manufacturing plants. Also, if the current drop in oil prices continues and the Bakken cools, the impacts would reach Billings as well.

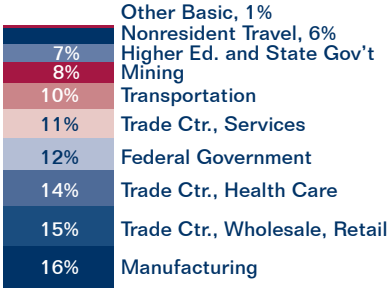
Yellowstone County posted approximately 4 percent growth in both 2011 and 2012. These figures rank among the highest for a major city in Montana. Growth decelerated to roughly 1. 3 percent in 2013, perhaps due to a change in data definitions.

Overall growth is expected to be between 2.4 percent and 2.8 percent per year from 2015 to 2018, and it takes into consideration an economic slowdown in the Bakken oil and gas fields resulting from lower oil prices. These forecasts incorporate the proposed upgrade of the refinery in Laurel but may be too optimistic if the negative Bakken impacts are greater than anticipated. 15

Table 1
Travel to Williston and Population of Selected Counties

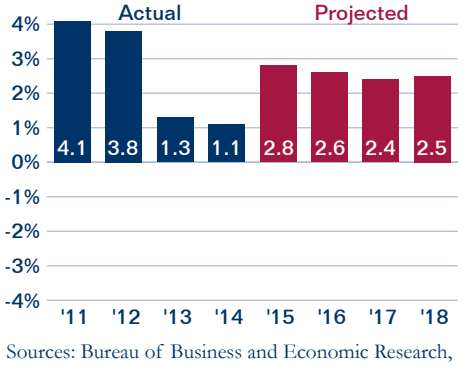
Origin	Travel		2013
	Time	Miles	Population
Yellowstone County, MT (Billings)	5. 3 hr	326	154,200
Burleigh County, ND (Bismarck)	2. 5 hr	218	88,500
Stark County, ND (Dickinson)	2. 4 hr	168	29,200
Ward County, ND (Minot)	2. 2 hr	125	67,900

Figure 1
Earnings in Basic Industries, Yellowstone County, 2012-2014, Percent of Total



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

Figure 2
Actual and Projected Change in Nonfarm Earnings, Yellowstone County, 2011-2018



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

Health Care

A System in Transition

Bryce Ward, Health Care Industry Director
Bureau of Business and Economic Research

There is a lot going on in health care markets these days. Health care is changing, and it can be difficult to keep track of all the changes. Below are three key headlines from the past year, plus two things that may shape health care in Montana over the next few years.

Uninsured Rates Decline

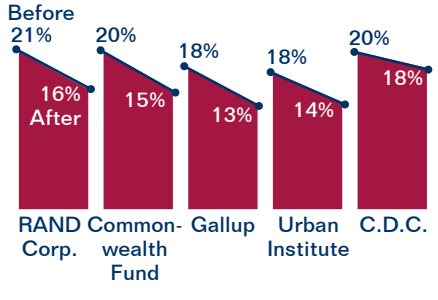
The Affordable Care Act (ACA) is perhaps best characterized as the "Access to Insurance Act." One year after the ACA's main access provisions went in to effect, more people have health insurance. The number of adults aged 18-64 without health insurance declined by approximately 10 million through the first three quarters of 2014. This represents a decline in the uninsured rate of slightly more than 5 percentage points.

Two studies have examined the change in the uninsured rate in Montana. These studies, however, do not present a consistent picture of the change. Gallup released an estimate for Montanans over age 18 that covered the first six months of 2014. This estimate showed that the percentage of Montanans without insurance declined from 20.7 percent to 17.9 percent. This estimate suggests that 22,000 Montanans gained insurance through the first half of the 2014. A different analysis conducted by Enroll America and Civis Analytics focused on people aged 18-64 and covered the first nine months of the year. This analysis found that the percentage of Montanans without insurance declined from nearly 20 percent to 13 percent. This estimate suggests that approximately 40,000 Montanans obtained insurance in the first nine months of 2014. The disparity between these analyses reflects differences in the population and time period examined. The disparity may also reflect that, as a small state, the sample sizes for Montana are small and its estimates have a larger margin of error.

Studies suggest that Montana would have experienced an even larger decline had it expanded Medicaid. In general, states that expanded Medicaid saw larger declines in the number of uninsured. According to Gallup, states that expanded Medicaid experienced a 6.4 percentage point decline in the uninsured rate through the first three quarters of 2014. States that did not expand Medicaid experienced only a 4.3 percentage point decline in the uninsured rate through the first three quarters of 2014. Estimates suggest that expanding Medicaid would have reduced Montana's uninsured rate by 3 percentage points.

The uninsured rate is expected to continue to fall over the next few years. The Congressional Budget Office projects the uninsured rate will fall by 3 percentage points in 2015 and 2 percentage points in 2016.

Figure 1
Key Surveys Showing the Decline of Uninsured Americans



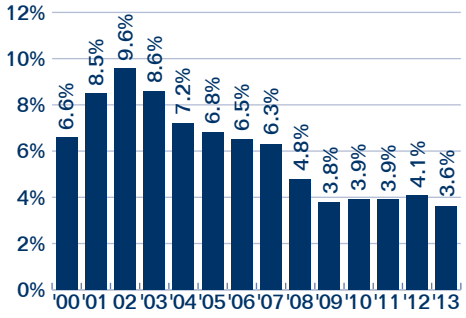
Sources: Commonwealth Fund's Affordable Care Act Tracking Survey; RAND Health Reform Opinion Study; Urban Institute Health Reform Monitoring Survey; Gallup-Healthways Well-Being Index; Centers for Disease Control and Prevention's National Health Interview Survey.

Health Care Cost Slowdown Continues

While health care in the U.S. remains expensive, in recent years health care cost growth has stalled. In 2013, U.S. health care spending grew by 3.6 percent, the smallest increase since 1960. This means that for five years in a row, the U.S. has experienced low health care spending growth.

Consistent with the decline in total spending, health insurance premiums grew at a slow pace. The Kaiser Family Foundation reported that employer health insurance premiums grew by only 3 percent in 2014. Similarly, price growth in the health insurance exchanges was low. A Montanan willing to switch from the cheapest Silver Health Plan in 2014 to the cheapest Silver Health Plan in 2015 would have seen their premiums *fall* by 1.8 percent to 8.1 percent.

Figure 2
Annual Percent Change in U.S. Health Expenditures, 2000-2013



Source: CMS.gov, Centers for Medicare and Medicaid Services.

Economists continue to debate the reasons for the slowdown and whether it will persist; however, even a temporary slowdown in health care spending growth can have important effects. For instance, the Congressional Budget Office now projects that total federal health care spending over the period 2011-2021 will be $900 billion less than it projected in March 2011.

The Search for Greater Efficiency Continues

Health care markets are changing beyond the expansion in coverage. The ACA includes many smaller items that are designed to help figure out how to improve health care quality and reduce costs. Even outside of the ACA, researchers continue to investigate promising ways to improve the efficiency of the health care system. The changes underway have the potential to change the operation of health care in several important ways.

There are two main ways to improve efficiency:

(1) Pay less for care (i.e., lower prices by reducing the cost of proving care and increasing competition)

(2) Obtain better care (i.e., eliminate unnecessary or low-value care, manage high-cost patients more efficiently, eliminate medical injuries).

Programs that address each of these are currently underway, but we will not know their effectiveness for some time. However, in 2014, some promising results were unveiled.

For instance, Blue Cross Blue Shield recently conducted an experiment where it made MRI prices available to consumers in some markets, but not in others. Economists have long believed that the lack of price transparency impeded competition and efficiency in health care markets, but empirical evidence that demonstrated that greater price transparency would reduce prices was scarce.

The Blue Cross study found that the average price of an MRI in the markets with price transparency fell by $95 over a two-year period, while the average price of an MRI increased by $124 in markets without price transparency. While this study has limitations, it suggests that greater price transparency can induce competition and lower prices at least in the market for MRIs.

Another effort to improve health care efficiency has involved tying payment to quality. For instance, the federal government now penalizes hospitals with high readmission or medical error rates, and 40 percent of private plans tie payments to various quality indicators. As a result, medical errors and readmission rates have fallen. Since 2010, hospital acquired conditions (i.e., people who got sick or injured while in a hospital) have declined 17 percent. As a result, there have been 1.3 million fewer harmful incidents and 50,000 fewer patient deaths. Similarly, hospital readmission rates have fallen by over 5 percent.

Things to Watch in 2015

In 2015, two of the biggest changes that could affect health care in Montana are Medicaid expansion and King v. Burwell (the Supreme Court case that will decide whether individuals in states without a state-based exchange are eligible for health insurance subsidies). The effects of each of these on Montana's economy are similar.

Without Medicaid expansion or health insurance subsidies, Montanans will pay the taxes imposed for expanded health coverage, but will not enjoy the benefits. Fewer Montanans will have health insurance, the uninsured will consume less health care, and more care will remain uncompensated. Estimates suggest that, in 2016, more than 36,000 Montanans who would otherwise be insured will be uninsured if the state does not expand Medicaid. As a result, over $200 million that federal government would provide to Montana to expand Medicaid would remain in the Washington, D.C.

Similarly, if the Supreme Court says that individuals who obtain health care through the Federal Exchange are not eligible for subsidies and Montana does not establish its own exchange, the Urban Institute estimates that 60,000 Montanans will lose subsidies worth nearly $265 million in 2016. Increasing the number of uninsured by nearly 100,000 people and removing approximately $500 million from Montana's health care system would have significant impacts on Montana's health care industry. 15

Tourism & Recreation Trends & Outlook

Montana's Varied Traveler: A Look into Quarterly Differences

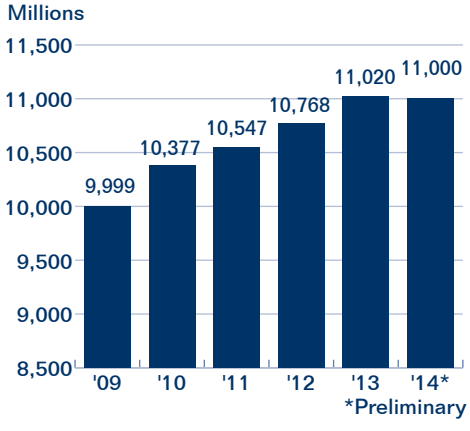
Norma P. Nickerson, Director, and Megan Schultz, Program Manager & Research Associate
Institute for Tourism and Recreation Research

Travel and tourism grew 5 percent worldwide in 2014 (through August) and continues to show strength. In the United States, international arrivals are up 8 percent (through August) while domestic travel within the U.S. is predicted to show 2 percent growth over 2013. Preliminary estimates for Montana suggest the number of individuals to visit the state stayed about the same as in 2013 (Figure 1), but the number of groups coming to Montana increased 1 percent in 2014. Sixty-eight percent of tourism business owners in Montana indicated an increase in guests over 2013, and only 10 percent saw a decline (Figure 2).

Within the travel sector, the airline industry continues to reinvent itself. The four major U.S. carriers that have 87 percent of domestic capacity are planning to reduce the number of smaller, regional jets and replace them with larger jets flying less frequently to destinations. This trend encourages low-cost regional carriers to enter these markets, and it remains to be seen how this will impact Montana. For Montana, airline travel in 2014 showed an increase in every city, with only Helena remaining flat (Figure 3). The continual trend of the Bozeman Yellowstone International Airport outpacing Billings remains in 2014. Bozeman, with its population growth and nearby attractions (Yellowstone and ski resorts), should remain Montana's busiest airport for visitation in the state.

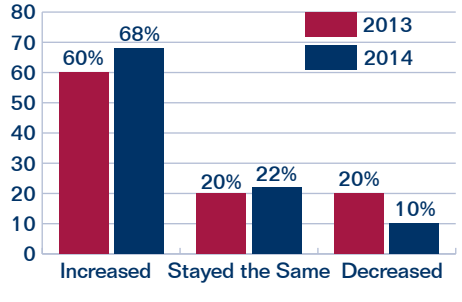
Consumers of the lodging industry are showing some interesting changes as well. More and more, travelers are opting to spend nights in homes and reserving their accommodations through Vacation Rental by Owner (VRBO) or Airbnb. Travelers can rent a room in a person's house (usually through Airbnb) or an entire house or vacation rental (usually through VRBO). There are over 1,650 known vacation rental properties in Montana, with the majority located near the two national parks and the ski resorts. What is a concern for the travel industry is the number of rentals not licensed to do so, which, in turn, reduces tax collections within the industry. Some counties, such as Park County, are already trying to implement policies to discourage illicit rentals. However, while home rental

Figure 1
Nonresident Visitation to Montana, 2009-2014



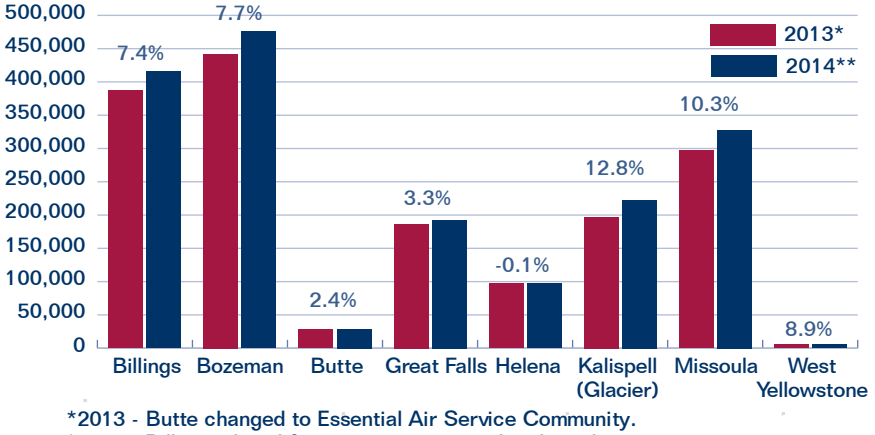
Source: Institute for Tourism and Recreation Research, University of Montana.

Figure 2
Tourism Business Owners Customer Percent Change, 2013-2014



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

Figure 3
Airport Deboardings, by City, Change 2013-14*



*2013 - Butte changed to Essential Air Service Community.
*2013 - Billings closed for 6 consecutive weekends in the summer.
**Projected

Source: Montana Aeronautics Division.

is increasing it does not appear to be affecting Montana's hotel/motel industry. Rooms sold in hotel/motels in Montana for 2014 were up nearly 6 percent through October compared to 2013.

Another indication of a good tourism year is the 2014 banner visitation in Montana's two large national parks. Glacier National Park experienced an all-time record number of visitors – more than 2.3 million – while Yellowstone National Park was close to its all-time high, with approximately 3.5 million visitors (Figure 4). Finally, skier visits for the 2013-2014 season saw a 6.5 percent increase over the previous season.

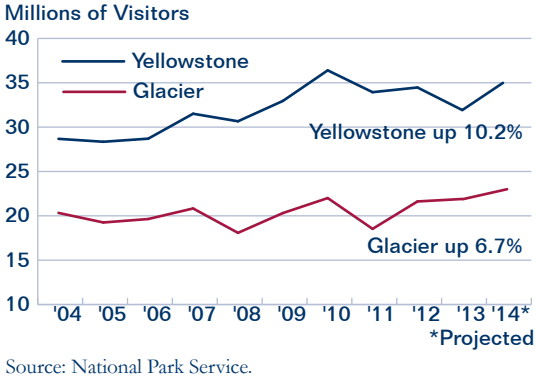
A Look at Montana's Quarterly Travel Differences

The travel industry, in most destinations, is quite seasonal, and Montana is no different. An analysis of quarterly data of Montana's nonresident visitors provides an interesting view into the seasonal aspect of travel. First of all, notable differences in number of visitors by quarter show that 47 percent of all nonresidents spend time in Montana during the third quarter and represent 49 percent of all nonresident spending in the state (Figure 5). Interestingly, the highest daily spending occurs during fourth quarter – probably holiday spending.

While vacation historically has the highest overall primary purpose of taking a trip to Montana (33 percent of all purposes in 2013), passing through as the main reason nonresidents are in the state is close behind (31 percent). In analyzing the quarterly reasons for visiting Montana, vacationers are highest in only Q2 (34 percent) and Q3 (50 percent), with passing through the state the main purpose in the other two quarters (Figure 6). While Montana is a desired vacation destination, it is also directly in the path of those going elsewhere.

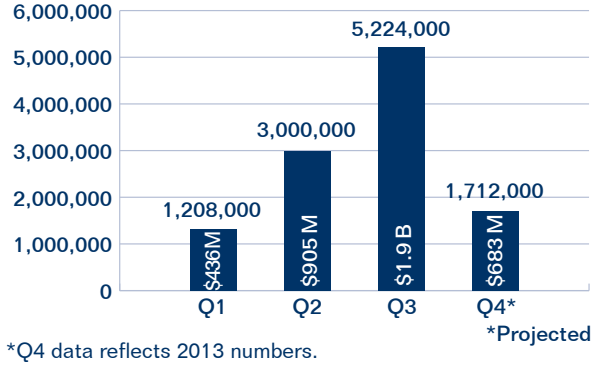
The number of repeat visitors and

Figure 4
Yellowstone and Glacier National Park Visits, 2004-2014



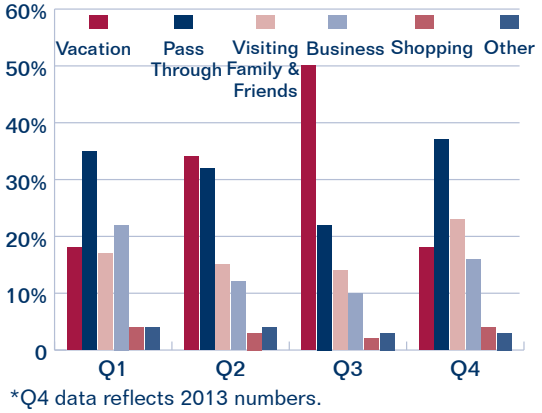
Source: National Park Service.

Figure 5
2014 Quarterly Nonresident Visitation and Spending*



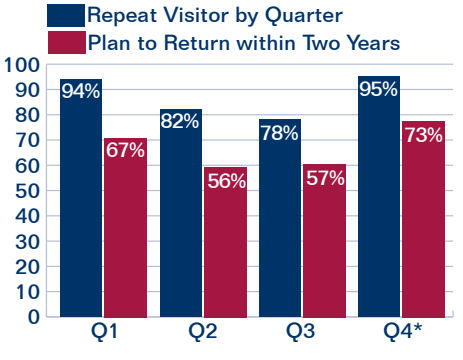
*Q4 data reflects 2013 numbers.
Source: Institute for Tourism and Recreation Research, University of Montana.

Figure 6
2014 Primary Purpose of Trip by Quarter*



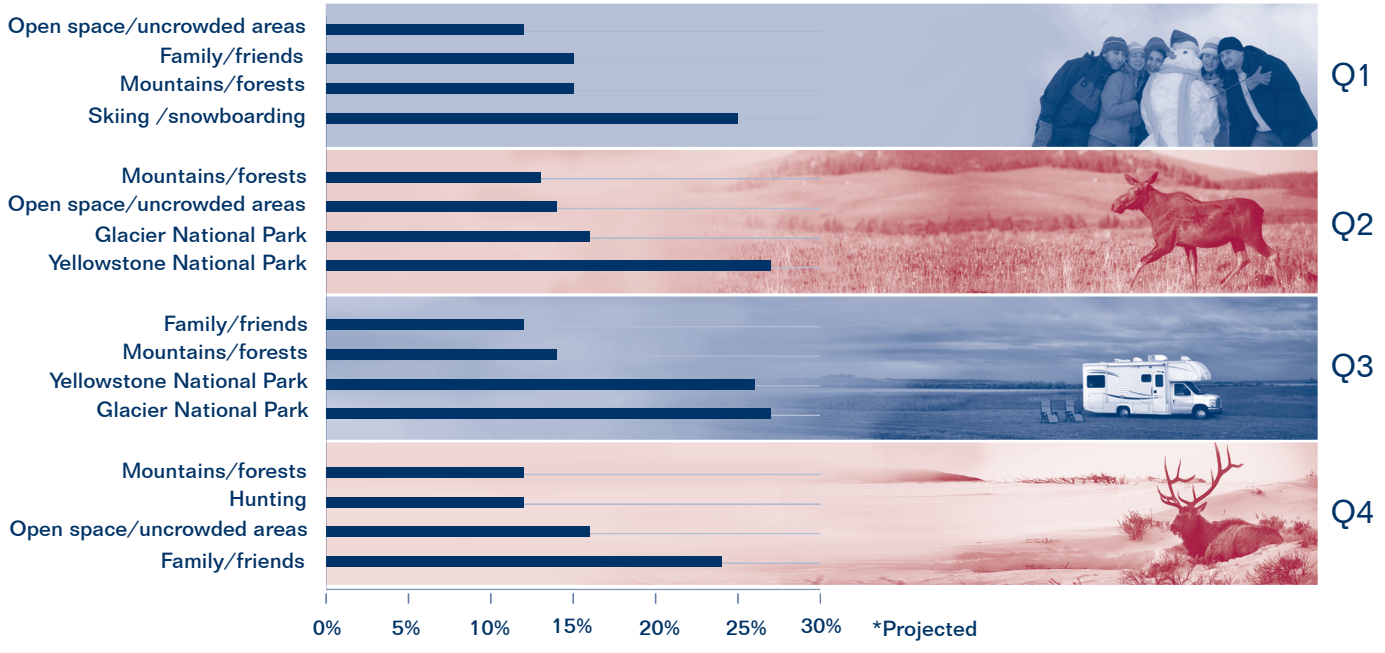
*Q4 data reflects 2013 numbers.
Source: Institute for Tourism and Recreation Research, University of Montana.

Figure 7
2014 Repeat Visitors to Montana*



*Q4 data reflects 2013 numbers.
Source: Institute for Tourism and Recreation Research, University of Montana.

Figure 8
Top Four Primary Attractions by Quarter, 2014*



*Q4 data reflects 2013 numbers.

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

the intent to return to Montana by quarter (Figure 7) varies between quarters. The highest percent of repeat visitors occurs in Q1 and Q2, with 67 to 73 percent of all visitors returning to Montana. Similarly, 94 percent to 95 percent of all visitors in Q1 and Q2 intend to return to Montana within two years, while 78 percent of Q3 visitors will return in two years. Quarters 1 and 2 are winter months so the high percent of repeat visitors and intent to repeat is not a surprise. In fact, residency of visitors during Q1 and Q2 primarily come from other snowbound areas: Idaho, Washington, Alberta, Wyoming, and North Dakota.

Primary attractions to Montana for vacationers also show differences by quarter (Figure 8). Mountains and forests as the primary attractor was the only attraction that appeared in the top four attractions by nonresidents in each quarter (12 percent to 14 percent). Skiing/ snowboarding was the highest attraction in Q1, Yellowstone and Glacier were the highest attractions in Q2 & Q3, while hunting and mountains and forests were highest in Q4.

Other quarterly visitation differences show that other than Yellowstone and Glacier being the top sites visited, soaking in hot springs in quarters 1 and 4 are popular activities, and more visitors travel alone in quarters 1 and 4 than in the other two quarters.

2015 Expectations

Indicators of a promising 2015 in the U.S. include: 1) household spending gaining momentum due to lower unemployment; 2) U.S. households shedding their debt (more discretionary income); 3) U.S. dollar getting stronger; 4) U.S. travel sector out-performing all projections; 5) hotel occupancy surpassing 2007 numbers; 6) intention to travel increasing; and, 7) a return of face-to-face business meetings, boding well for the convention and business sector.

The U.S. Travel Association predicts a 2 percent growth in domestic travel for 2015, while international travel to the U.S. is expected to have steady growth. Montana should experience a 2 percent visitation growth as well. In 2015, nonresident visitor spending should increase anywhere from 2 percent to 5 percent, amounting to more than $3.6 billion and producing an economic impact to Montana of more than $4.4 billion. [15]

Montana Agriculture in 2014

A Changing Business Climate

George Haynes, Professor and Extension Specialist
Department of Agricultural Economics and Economics, Montana State University

Montana farmers and ranchers have felt the impacts of two years of massive corn crops in the Midwest, untimely rains in mid-August, and a continuing decline in cattle numbers in 2014. The corn crops in 2013 and 2014 have driven all grain prices lower, with wheat and barley prices down 14 percent from one year ago. The rains caused substantial damage to the quality of grain. Even though grain production was above average, the quality damage will lower the price received for the sprouted and other damaged grain. While crop producers have struggled with lower prices and grain quality issues, cattle producers experienced near record calf prices, up more than 30 percent from year ago, and generally good pasture and haying conditions.

The U.S. agricultural sector had another profitable year in 2014. Although U.S. net farm income is expected to decline by over 23 percent from last year, it was a record year for net farm income. Even with this substantial decline, 2014 net farm income is forecast to be the sixth highest ever. Farm wealth is expected to increase by over 2 percent, with higher valued farm assets. Farmland cash markets have continued to see gains related to above average crop and livestock prices in 2014, but increases in farmland prices are expected to moderate substantially this year. U.S. farmland values increased by 8.1 percent from 2013 to 2014, while Montana farmland values increased at a somewhat higher rate, 8.9 percent.

Montana cash receipts and government payments were over $4.1 billion in 2014, or about 3.5 percent higher than one year ago. The livestock sector has contributed more than the crop sector to cash receipts and government payment in seven of the last 10 years; however, this year's high livestock prices enabled the livestock sector (48 percent) to make a larger contribution than the crop sector (46 percent) with the remainder being government payments (Figure 1).

The farm debt-to-asset ratio has declined steadily since 2008; however, it is expected to increase slightly to 11 percent in 2014. The U.S. and Montana farm and ranch balance sheets remain very healthy in 2014.

Outlook for Grain, Hay, and Pulse Crops

U.S. and Worldwide

The most important events in U.S. crop agriculture were the record corn crop and drought conditions in California. Higher than average corn stocks remaining from a near record harvest in 2013 were augmented with a massive corn crop in 2014 of more than 14 billion bushels. As a result of another exceptional production year, corn prices declined by 21 percent from over the past year. While a bumper corn crop was produced in the Midwest, severe drought conditions persisted in California. These drought conditions impacted Montana hay and cattle producers as high quality hay was shipped to California and drought-stressed calves were shipped to Montana feedlots.

Even though corn is not a major commodity grown in Montana, it profoundly influences our grain and cattle markets. Wheat and barley prices are highly correlated with corn prices, and the downward trend in corn prices has been accompanied by wheat and barley prices declining by more than 14 percent. Over the past few years, legislation such as the renewal fuel standards has increased the demand for corn, and farmers have substituted corn for other spring grain in the upper Midwest, and even in Montana.

Wheat prices declined from $6.87 in 2013 to $5.90 per bushel in 2014. In the past two years, wheat prices have declined by nearly 25 percent, largely because of above average growing conditions worldwide. World wheat production increased slightly, while U.S. wheat production decreased by 5 percent. The U.S. produced about 8 percent of global wheat production in 2014. Modest increases in production in Europe (4 percent increase) and Former Soviet Union countries (8 percent increase) were offset by production declines in Canada (over 25 percent decline) and U.S. (5 percent decline). Worldwide ending wheat stocks are expected to increase by 3.8 percent this year.

The international market for the wheat is an important consideration for Montana producers because the U.S. exports about 10 times more wheat than it imports. U.S wheat exports are expected to decrease over 20 percent from last year, to less than 930 million bushels this year, with increased competition from the

European Union. On the other side of the equation, U.S. wheat imports are expected to remain the same as 2013, about 170 million metric tons. U.S. wheat stocks at the end of the year are expected to increase slightly from 590 million bushels in 2013 to 654 million bushels in 2014.

Montana

The Montana crop year was disrupted by untimely moisture in mid-August, causing serious problems for grain and hay producers throughout the state. While crop and hay yields remained above average, the quality of the grain was reduced by sprouting grain and moldy hay. Some malt barley and wheat producers were faced with prospect of selling their grain for substantially less than they expected earlier in the year because of the quality damage.

The drought monitor showed excess moisture throughout Montana during the growing season, which contributed to an excellent production year. Wheat production increased to 209 million bushels, or over 2.5 percent, in 2014. At harvest, winter wheat production was up by 12 percent because of more planted acres. Spring wheat production decreased by 1 percent because of fewer planted acres and slightly lower average yields. Barley production was unchanged from last year. Grain prices declined by 14 percent from last year, but are expected to be above long-run historical averages in 2015.

Plentiful supplies of alfalfa and other hay has put downward pressure on prices in the Montana. Even with higher hay production in 2014, hay prices have remained strong with premium alfalfa selling for $180 or more per ton and good grass hay selling for $130 or more per ton. While there has been a good export demand for Montana hay, most of the interest this fall has been from in-state buyers, especially buyers from northern Montana hampered by dry conditions early in the crop year and flooding late in the summer.

Pulse crops continue to be the most rapidly growing field crop in Montana. Over the past 10 years dry edible pea and lentils acreage increased from less than 100,000 acres in 2003 to over 500,000 acres in 2013. Since 2011, pulse crop production from lentils and dry edible peas increased twofold, from 504 million pounds to over 1 billion pounds in 2014.

Futures prices for spring and winter wheat are above historical averages for September 2015 (above $6.30 for spring and winter wheat). These relatively strong prices are the result of a strengthening world economies and strong demand for high protein wheat.

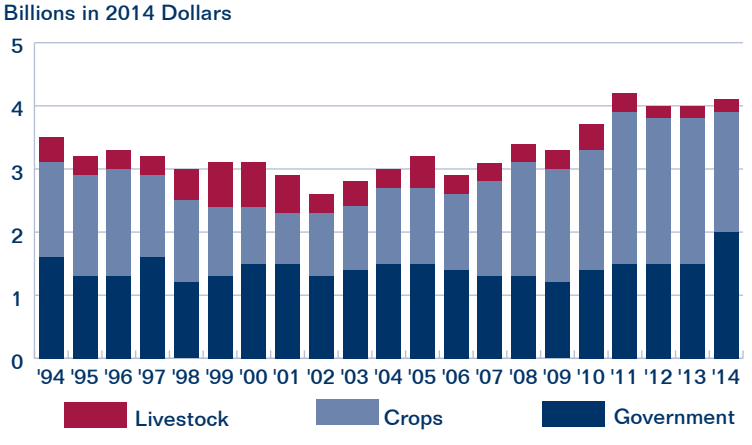
Cattle Outlook

U.S. and Worldwide

World beef production increased slightly to 59 million metric tons in 2013; although world cattle numbers continued to decline, reaching less than 1 billion head. The U.S. cattle inventory continues to trend downward, with total inventory declining by about 2 percent to less than 88 million head; although, U.S. beef production has remained steady at about 11 billion metric tons in 2013. The amount of beef produced per cow was below 475 pounds per cow in the 1970s, but has risen above 700 pounds per cow in the 2000s. This increase in production efficiency is the result of better genetics and animal health and improved technologies; and, these changes have offset the declining supply of cattle. Lower cattle numbers have been accompanied by near record cattle prices.

Calf prices have spiked three times since WWII, in 1951, 1973, and 1979. All of these years were years of low cattle numbers, herd liquidations, and the start of herd expansion, which are all factors we see today. In 1951, the Korean War started, with food security issues driving food prices higher. In 1973, a grain export deal was struck with Russia as the world production of food and feed grain production declined and OPEC quadrupled the price of oil. In 1979, cattle inventories had declined 15 percent since 1975,

Figure 1
Montana Cash Receipts and Government Payments, 1994-2014



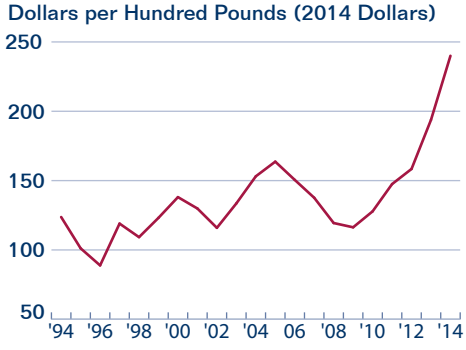
Source: National Agricultural Statistics Service, Montana.

and OPEC doubled the price of oil. In each of the previous years of very high calf prices, calf prices fell by 40 percent or more over the following three years. In 2014, cattle numbers are low, and news of herd liquidations continues. The most important question is: Will herd expansion begin in 2015?

There are many reasons that the supply of cattle has declined and that herd expansion may be very slow. Drought conditions in the southwestern U.S., higher feed costs, lack of grazing land, and higher labor costs were the primary reasons for the herd decline. Herd expansion is likely to proceed slowly because crop prices have been relatively high, which has given farmers an incentive to raise more grain and fewer cattle. In addition, subsidized crop insurance has given producers more risk protection and reduced the need for diversifying income by raising cattle, and raising cattle is more labor intensive and physically demanding than crop farming. All of these factors will be important in determining whether domestic cattle supplies continue to decline. U.S. cattle imports have increased by 14 percent through the first three quarters, with higher shipments from Canada and Mexico. In addition, U.S. dressed beef imports were up 23 percent, with increased shipments from Australia, Canada, New Zealand, and Mexico.

Mandatory Country of Origin Labeling (MCOOL) has become a major beef importation issue, especially for beef imported from Canada and Mexico. Both Canada and Mexico argue that they would be adversely impacted by MCOOL provisions. However, recent studies have suggested that U.S. consumers are less concerned about the origin of meat products and more concerned about price, safety, taste, and nutrition.

Figure 2
Calf Prices, 1994-2014



Source: National Agricultural Statistics Service, Montana.

On the demand side, the beef market is promising, with domestic and international demand strengthening. Exports have increased by 1 percent since last year, with the most robust export markets being Japan, Mexico, Hong Kong, and Canada. Increases in per capita income and population growth have been the major contributors to increased foreign demand. Despite declining U.S. beef production this past year, U.S. beef exports were marginally higher.

Montana

Amid a continuing decline in cattle numbers in the U.S. the Montana cattle herd increased slightly in 2014. While drought conditions persisted in California, Montana producers had very good pasture and hay conditions and faced near record-breaking prices in 2014. Calf prices increased by over 30 percent from last year (Figure 2), with analysts optimistic about calf prices through 2017. Feeder cattle futures prices for October 2015 are above $2.25 per pound. If demand is not impacted by disease, lower income, or trade restrictions, then cattle prices will likely remain strong in 2015.

Grocery Bill

High crop and livestock prices have focused attention on food-price inflation again in 2015. Through the end of October, at-home and away-from-home food expenditures have increased by over 3.2 percent from 2013. Food prices are expected to increase by 2 to 3 percent next year, with meat prices realizing the largest percentage increase of over 7 percent. The ongoing drought in California could have substantially large price effects on fruits, vegetables, and dairy prices.

2015 and Beyond

The agricultural sector has had six years of very good news for the Montana economy. Lower crop prices and untimely rains have been offset by high livestock prices and favorable pasture and haying conditions for ranchers in 2014. Futures prices for the fall of 2015 suggest that crop and livestock prices should be above long-run historical averages. Crop producers will enter 2015 with relatively high inventories of all the major grains and a new farm bill. And Montana producers remain optimistic about the demand for high protein wheat and high quality barley. Livestock producers enter 2015 with high price expectations based on low supplies of cattle and stable domestic and international demand. Assuming no major demand or supply disruptions, Montana producer balance sheets should remain healthy in 2015.

Montana's Manufacturing Industry

Better Conditions on Tap

Todd A. Morgan, Colin B. Sorenson and Steven W. Hayes
Manufacturing and Forest Products, Bureau of Business and Economic Research

For a fourth consecutive year Montana's manufacturing sector has posted increases in production, employment, and earnings by workers. The BBER's annual survey of manufacturers had 178 respondents this year, representing a cooperation rate of 90 percent from the state's largest manufacturers. More than half of surveyed firms indicated that gross sales increased in 2014 from 2013, and 47 percent saw an increase in production levels. Although 45 percent indicated increased profits during 2014, one-quarter of firms indicated a decline in profits compared to 2013. Roughly half of manufacturers indicated major capital expenses in 2014, and one-quarter of firms started new product lines. On a very positive note, just 4 percent of firms indicated eliminating capacity during the year, while 15 percent said they temporarily curtailed production.

Manufacturing employment in Montana was estimated at nearly 23,500 workers for 2014, solidly on par with pre-recession levels and a marked improvement from the 2010 low of 19,800 workers (Table 1). One-third of firms responding to the BBER's annual survey indicated increasing their workforce during 2014, while just under 20 percent said they reduced employment. More than one-third of firms indicated having a shortage of workers during 2014. At 42 percent of respondents, the food and beverage manufacturing sector had the highest proportion of firms reporting worker shortage, and wood products, at 30 percent, reported the lowest.

Indicators for manufacturing workers and firms alike improved during 2014. Earnings of manufacturing employees were estimated at around $1.15 billion during 2014, an increase of about 6 percent from 2013 earnings of $1.09 billion when five Montana counties had more than $60 million in manufacturing employee earnings (Table 2). The increased levels of

Table 1
Employment in Montana Manufacturing Sectors, 2010 and 2014

Manufacturing Sector	2010	2014*	Percent Change
Wood, paper & furniture	4,216	4,460	6%
Food & beverage	938	1,550	65%
Primary & fabricated metals	2,063	3,020	46%
Chemicals, petroleum & coal	2,085	2,085	0%
Machinery	1,168	1,220	4%
Nonmetallic minerals	938	1,550	65%
Textiles, clothing & leather goods	784	910	16%
Computers, electronics & appliances	641	810	26%
All other manufacturing	6,969	7,890	13%
Total	19,802	23,495	19%

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

Table 2
Montana Manufacturing Earnings by County, 2010 and 2013

	2010 Manufacturing Worker Earnings (Millions of 2013 $)	Percent of Total	2013 Manufacturing Worker Earnings (Millions of 2013 $)	Percent of Total	Percentage Change 2010 to 2013
Yellowstone	265	26%	282	26%	6%
Flathead	149	15%	173	16%	17%
Gallatin	123	12%	138	13%	12%
Missoula	111	11%	100	9%	-10%
Cascade	62	6%	64	6%	4%
Silver Bow	43	4%	45	4%	5%
Lewis and Clark	38	4%	45	4%	19%
Ravalli	39	4%	39	4%	-1%
Lake	21	2%	22	2%	3%
Park	17	2%	19	2%	10%
Lincoln	8	1%	9	1%	12%
Other counties	130	13%	154	14%	18%
Montana total	1,006	100%	1,090	100%	8%

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

employment and earnings of Montana manufacturing employees in 2014 coincided with improved sales as well. Annual sales from Montana manufacturers were estimated at around $15 billion in 2014, an increase of about 7 percent from 2013.

While Montana manufacturing has been growing fairly consistently since the end of the Great Recession, some industries in the sector have grown even more rapidly. Brewing is one of the fastest growing industries in the Montana manufacturing sector. Based on economic impact studies conducted by the BBER during 2012 and 2014, Montana beer production was up 49 percent from 2010 to 2013, and brewery employment increased 110 percent over the four-year period. By the end of 2013, there were 40 breweries operating in the state; the total is expected to pass 50 breweries during 2015. With increasing popularity of craft beer around the country and within Montana, the outlook is strong in this Montana manufacturing industry.

2015 Outlook: Channeling the Positive Energy

Following on the successes of the past few years, manufacturers in Montana have positive expectations for 2015. Overall, the 2015 manufacturing outlook for Montana is quite positive, with more than 92 percent of firms expecting 2015 to be the same as or better than 2014. Just over half of the manufacturers who responded to the BBER's annual survey expect production to increase in 2015, 55 percent expect profits to increase, and more than 60 percent expect gross sales to increase. Ten percent or fewer of survey respondents expect declines in production, prices, gross sales, and profits during 2015. For the third consecutive year, more than 90 percent of respondents expect to keep their workforce at the same level or increase employment, while only 6 percent anticipate a decline in their employment during 2015 (Figure 1).

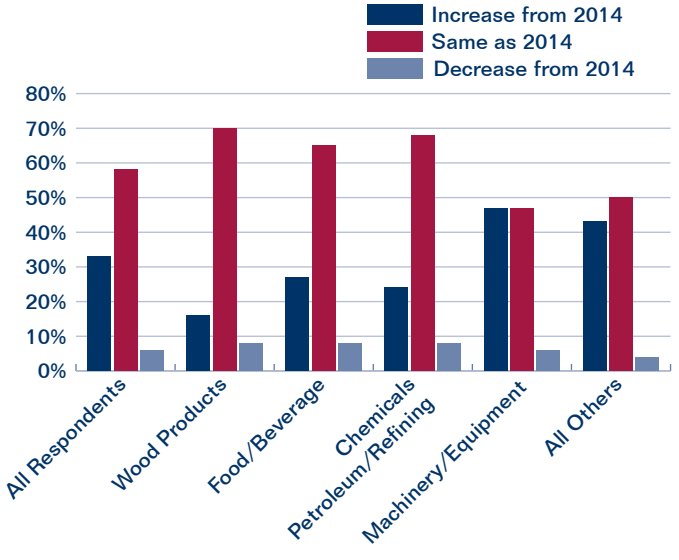
With cautious eyes on operating conditions, a growing majority (65 percent this year compared to 60 percent last year) of manufacturers expect costs of major inputs to increase in the coming year; and less than half (40 percent) are planning a major capital expense for 2015.

Like last year, almost 80 percent of Montana manufacturers rated health insurance cost as very important to their business, with another 11 percent rating it somewhat important (Figure 2). Other important issues included worker compensation, the cost of energy, and the supply of qualified workers. Once again, foreign competition was ranked the least important among the eight issues presented, with more than half of respondents rating it as very unimportant and just 15 percent rating it as very important.

Increased domestic production of natural gas and oil and relatively low energy costs compared to other industrialized countries are widely believed to benefit manufacturers in the United States. To better understand the impacts of Montana's energy development on manufacturing in the Treasure State and in keeping with the 2015 Outlook Seminar's theme, manufacturers were asked a variety of energy-related questions.

Responses from Montana manufacturers were divided on the question of how energy development in Montana has impacted their businesses. About 60 percent of respondents indicated that the impacts of energy development on their firms were unknown, small, or

Figure 1
Employment Outlook for 2015 by Montana Manufacturing Sector



Source: Bureau of Business and Economic Reasearch, University of Montana.

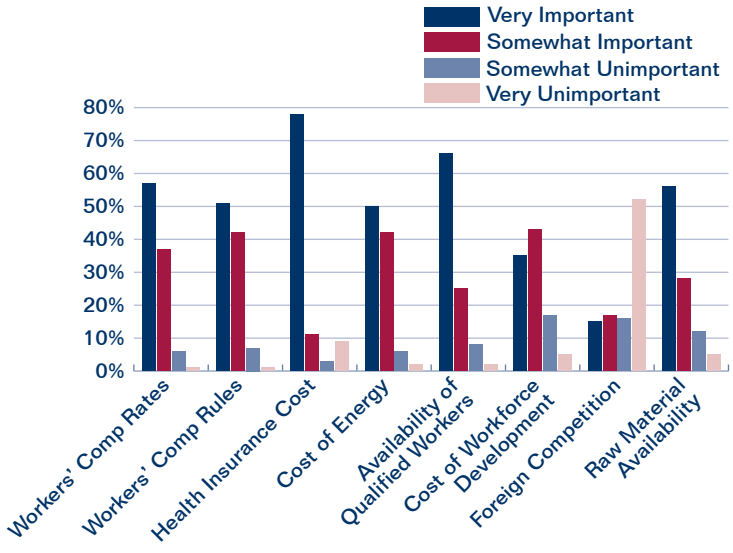
none. The remaining responses were split evenly between positive and negative. The most common positive responses were from firms that indicated selling products directly or indirectly to the energy sector or its employees, and thus having increased sales and more business activity. The negative responses were from firms that noted increased costs of labor, shortages of workers, and increased energy and transportation costs. Clearly, energy development activity in Montana is not impacting Montana manufacturers uniformly, and most manufacturers are not noticing much impact on their businesses.

In separate questions, two-thirds of BBER's survey respondents indicated that their firm's energy costs have increased over the past three years, and almost 60 percent expect their energy costs to increase in 2015 (Figure 3). These results are similar to those from BBER's 2012 Outlook survey, when 58 percent of firms indicated their energy costs increased from 2010 to 2011, and 55 percent expected energy costs to increase in 2012. Whether energy costs nationally are declining in real terms or not, there is a consistently strong perception among Montana manufacturers that their energy costs are increasing, with fewer than 10 percent of firms surveyed in 2011 and 2014 indicating a decline in past or future energy costs.

When asked if they had a formal energy audit or other assessment of energy use and efficiency in the past three years, 40 percent of firms in the 2015 Outlook survey said that they had. These results are also similar to what was found in the 2012 Outlook survey when 42 percent of all Montana manufacturers indicated having an energy audit in the previous five years. Although most manufacturers in Montana indicate experiencing increasing energy costs, less than half are taking part in formal energy audits or other assessments of energy use and efficiency. Perhaps this is an area where improvements can be made, helping manufacturers to become more energy efficient and have more control of their own energy costs.

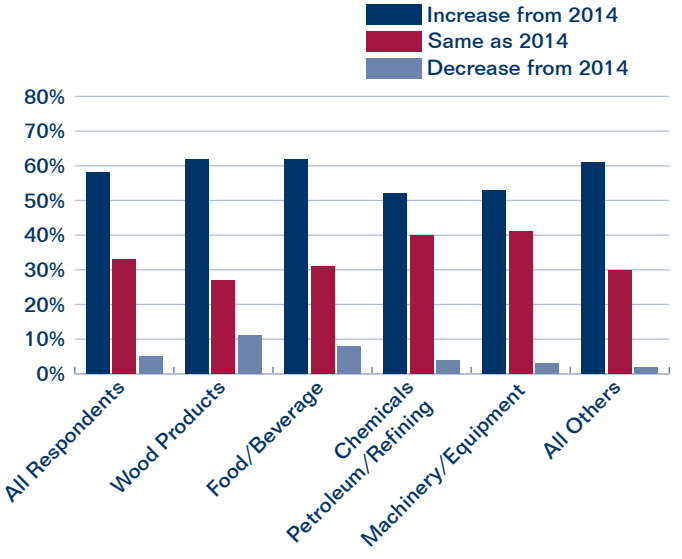
Looking to the future, Montana manufacturers were a bit more optimistic about the impacts of energy development. While most (55 percent) were still unsure if energy development would have much if any impact on their business, those expressing a positive outcome from energy development in Montana outweighed those expressing negative impacts by two-to-one. Continued labor shortages and high labor costs were the predominant concerns. The more frequent positive outcomes expressed were hopes for lower energy costs, overall economic improvement for the state, and increased business activity. 15

Figure 2
Other Business-Related Issues for Montana Manufacturers



Source: Bureau of Business and Economic Reasearch, University of Montana.

Figure 3
Energy Cost for 2015 by Montana Manufacturing Sector



Source: Bureau of Business and Economic Reasearch, University of Montana.

Montana's Forest Products Industry

Still Looking for the "Real" Homebuilding Recovery

Todd A. Morgan, Steven W. Hayes, Colin B. Sorenson, and Charles E. Keegan III
Forest Products and Manufacturing, Bureau of Business and Economic Research

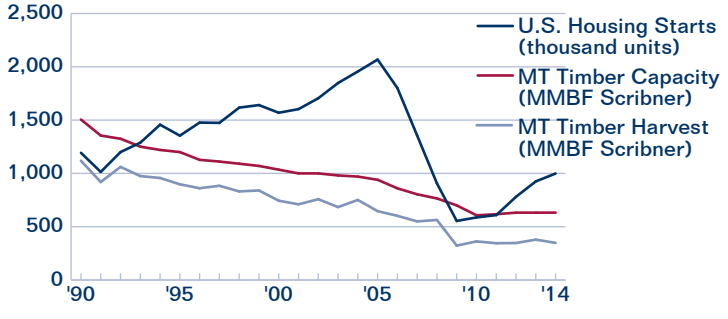
While new home starts in the U.S. continued their gradual increases, from 924,900 in 2013 to just about 1 million for 2014 (Figure 1), the gains were less than anticipated. New home starts got off to a slow start in the first half of 2014, with only April showing a seasonally adjusted annual rate of more than 1 million starts. That took some of the momentum out of the forest products industry's advances of the past four years. Lumber and structural panel production in the U.S. and Canada were only somewhat higher in 2014 than 2013. Neither the lumber nor panel price indices reached the post-recession highs seen in early 2013, but both were solidly above their 2009 lows. Prices during 2014 were less volatile overall, with average prices for lumber on par with 2013, plywood prices higher, and composite panel (particleboard and medium-density fiberboard) prices somewhat lower than 2013.

For Montana's forest products industry, 2014 brought mixed results. Half of the Montana wood products firms surveyed annually by BBER indicated increased production in 2014, but 16 percent reported decreased output. Lumber production was estimated to be about 5 percent higher in 2014 than 2013, marking the fifth consecutive year of production increases from the post-World War II record low during 2009 (Figure 2). Several log home manufacturers also indicated increased orders and production. Production levels of panel products (plywood, particleboard, and medium-density fiberboard) were estimated to be down from 2013, with the June fire at the Plum Creek medium-density fiberboard plant, upgrades at the Missoula's Roseburg particleboard plant, and tight supplies of veneer logs.

Total sales value from Montana's forest products industry increased very slightly from 2013, with gains in lumber and log homes. While 54 percent of surveyed firms indicated higher sales for 2014, 16 percent indicated lower sales. Total sales value of Montana's primary wood products during 2014 was about $600 million (fob the producing mill), up about $8 million in constant dollars or just 1 percent from the revised 2013 estimate of $592 million (Figure 3).

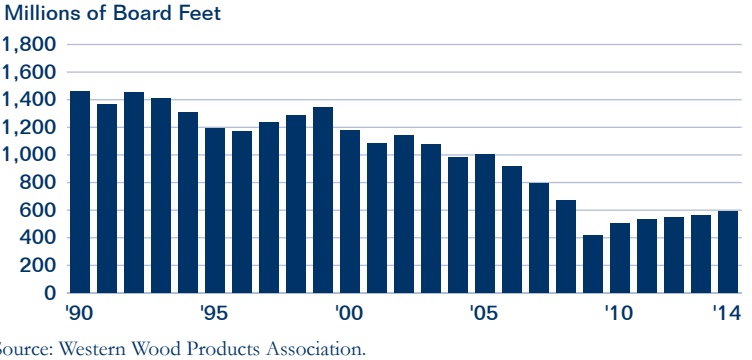
Worker earnings in Montana's forest industry were slightly under $335 million during 2014, about 5 percent higher than the revised 2013 estimate of $319 million. Wages paid to mill workers were more than 10 percent higher than in 2013, but income among forest workers was estimated to be down slightly. Total forest industry employment in Montana during 2014 was about 7,660 workers (including private

Figure 1
New U.S. Home Starts, 1990-2014



Sources: U.S. Census Bureau; USDA Forest Service; BBER, University of Montana.

Figure 2
Lumber Production, Montana, 1990-2014



Source: Western Wood Products Association.

sector foresters and loggers, primary and secondary wood product manufacturers, and workers engaged in forestry support activities), increasing less than 1 percent from 2013 (Figure 4). The number of production workers at Montana wood products facilities increased about 4 percent during 2014, with almost 40 percent of wood products facilities indicating they increased their workforce during 2014 but nearly one-quarter indicating a reduced number of employees. Montana's in-woods employment levels were down slightly from 2013 due in large part to a decline in timber harvest.

"Continued increases in U.S. housing starts are projected, although getting back to the long-term average of 1.4 million to 1.5 million new home starts annually is still anticipated to be two or more years away."

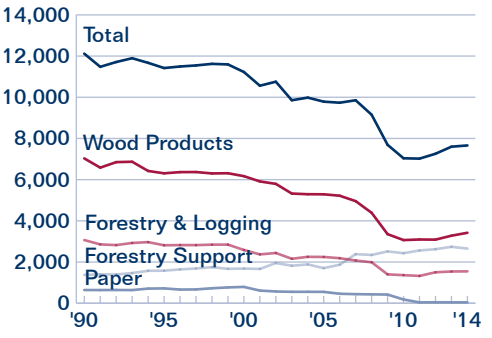
Montana's total timber harvest volume during 2014 was about 348 million board feet (MMBF) Scribner, having dropped about 8 percent from 2013 and just 7.5 percent above the 2009 low of 323 MMBF (Figure 5). Harvest was estimated to have declined across all the public owners (state, BLM, and Forest Service) and tribal lands, while private lands harvest was estimated to have increased somewhat. National forests in Montana reported cutting 6 percent less timber during fiscal year (FY) 2014 than FY 2013 (Figure 6). The cut volume in FY 2014 was 113 MMBF, of which 49 percent was sawlogs, 28 percent was firewood, and the remainder was a combination of posts and non-saw material. The Northern Region of the Forest Service, which includes Montana, northern Idaho, and North Dakota, reported a major accomplishment in its timber program. Region-wide, the agency offered and sold nearly 280 MMBF Scribner during FY 2014, thus achieving its annual timber sale target for the first time in more than a decade. It may be two years or more until timber from those sales is cut, and several of the sales are being (or will be) litigated, but the additional timber supply that those sales represent is welcome news for Montana's wood products industry.

As wood product prices and the volume of products being demanded have increased over the past four years, Montana's forest industry has been challenged by raw material availability. Delivered log prices in Montana have been increasing, rising almost 50 percent since 2011, as mills have tried to procure more timber to capitalize on the stronger product markets. Current log markets are good for Montana forest owners that want to sell timber.

Figure 3
Sales Value from Montana Primary Wood Products Industry 1990-2014

Sources: BBER, University of Montana; Western Wood Products Association.

Figure 4
Montana Forest Employment 1990-2014

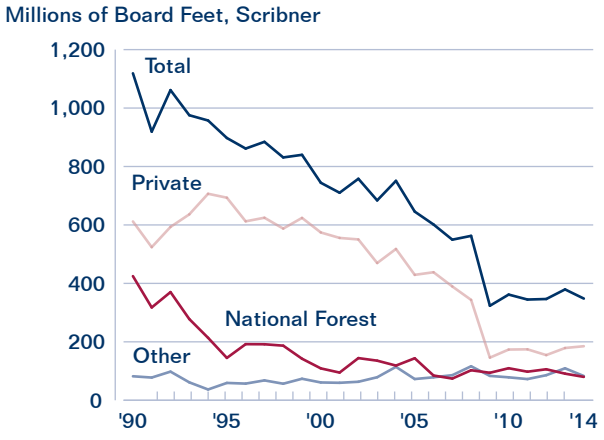


Source: U.S. Department of Commerce, Bureau of Economic Analysis and UM, BBER.

2015: Modest Gains Expected

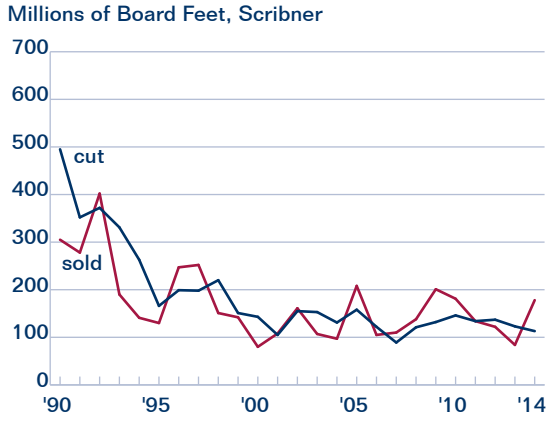
Looking forward, wood products markets in 2015 are expected to improve. Continued increases in U.S. housing starts are projected, although getting back to the long-term average of 1.4 million to 1.5 million new home starts annually is still anticipated to be two or more years away. Housing experts point out several factors related to demographics, slow job and wage growth, rising interest rates, and strict lending that could continue to constrain new home construction and purchases, while also indicating there is significant pent up demand from years of below average construction.

Figure 5
Montana Timber Harvest by Ownership Class, 1990-2014



Sources: USDA Forest Service Northern Region; Bureau of Business and Economic Research, University of Montana.

Figure 6
National Forest Cut and Sold, Volumes in Montana, FY 1990-2014



Source: USDA Forest Service Northern Region.

In addition to housing, several factors are expected to benefit domestic wood product manufacturers in the coming year: reduced timber harvest and lumber production in western Canada resulting from the mountain pine beetle epidemic; continued overseas demand for logs, lumber, wood pellets, and other products; increasing public recognition that wood products are sustainable, renewable, and have significant carbon benefits relative to many other materials; and a U.S. Congress favoring increased use of domestic natural resources.

All these factors should benefit Montana's forest industry, further stimulating production, sales, and employment for the state's mills and loggers. Most Montana mills are operating at less than full capacity and, with an adequate supply of timber, can increase production to meet market demand. As in previous years, availability of timber continues to be a major challenge to Montana's forest industry. Most of the timber-processing facilities in Montana have indicated that raw material availability – log supply – was a major issue that affected their plant in 2014 and will impact them in 2015. Three-quarters of wood products firms responding to the Bureau's annual survey of Montana manufacturers indicated that raw material availability is a very important issue to their firm, with another 20 percent indicating it as somewhat important.

The vast majority (90 percent) of Montana's forest products industry expect 2015 to be the same as or better than 2014 for their business. Half of wood products manufacturers responding to the Bureau's annual survey believe that production in 2015 will be about the same as 2014, with another third predicting increased production. Almost three-quarters of firms expect employment levels to remain constant, and less than 10 percent expect to lay off employees in 2015. About half of wood product firms expect gross sales, product prices, and profits to increase in 2015, however, only one-quarter expect to make major capital improvements in 2015.

In keeping with the annual Outlook Seminar's energy-related theme, Montana wood product manufacturers were asked several questions related to the impacts of energy development on their business. Most of the wood product firms indicated that energy development in Montana had little or no impact on their business. Several indicated that energy development has been or could be positive for their business, while several mentioned that energy development has made it difficult to find workers. Three-quarters of respondents indicated their energy costs have increased over the past three years, and 62 percent anticipate their energy costs will increase in 2015. Slightly less than half of surveyed wood products firms in Montana indicated they have had an energy audit or assessment of energy use or efficiency at their facility in the past three years. Many of the wood product firms in Montana produce energy or products used by the energy industry, including wood pellets, firewood, other forms of biomass, or electricity. [15]

Montana's Housing Market

Stable but First-Time Homebuyers Challenged

Sue Larew & Paul Olson, Retail Delivery Manager & Home Loans Manager
First Interstate Bank

The Montana sales data from the state's seven major markets for the third quarter of 2014 indicated a 4.36 percent rise in total number of home sales, outpacing the national rise of just 2 percent. According to the Montana Association of Realtors, the third quarter of 2014 showed 3,037 single-family homes sold, compared to 2,910 in 2013. Modest increasing activity in home sales in the state is also supported with steady home values.

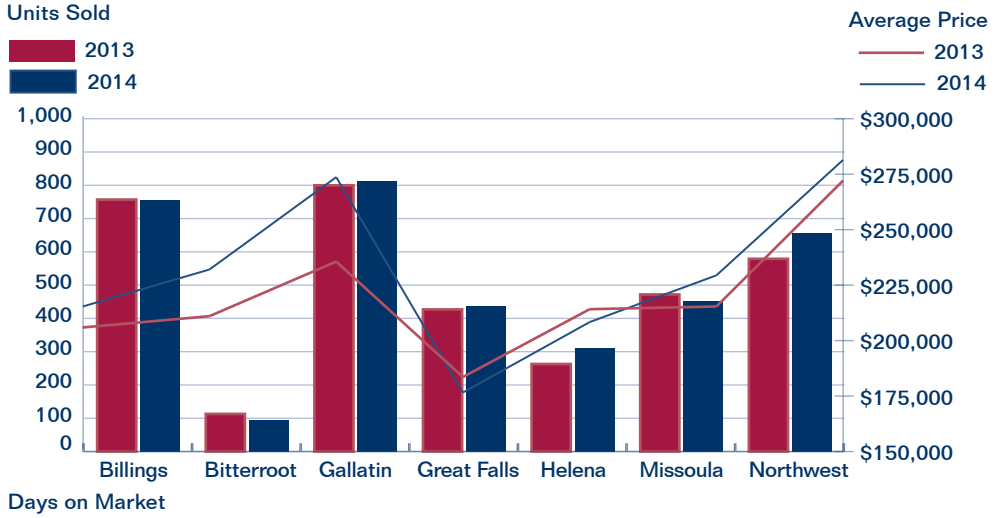
A slow but steady growth in the seven major Montana markets – Billings, Bitterroot, Gallatin, Great Falls, Helena, Missoula, and Northwest – is accompanied by a growing optimism and expectations that the housing market will normalize over the next five years. Since the 2009 lows in volume of houses sold and values, each of the seven markets has experienced a moderate rebound.

First-Time Homebuyers

The media buzz is that first-time homebuyers are a factor for holding back the housing market recovery. There are several considerations surrounding the first-time homebuyers' influence on the market. Why so much ado about the first-time homebuyers? They are a cornerstone of the housing market. When a first home is purchased, a trickle effect begins where the existing homeowner is enabled to move or trade up. The turnover is critical to the economy and spurs momentum in the housing sector. Typically, first-time homebuyers have accounted for four out 10 home purchases. This has been out of the norm since 2011. The share of first-time homebuyers has dropped to its lowest level in 27 years nationally. Only 33 percent were first-time homebuyers this year, down from 38 percent last year. Generally, the demographics of the 18- to 34-year olds have changed dramatically over the past 30 years. It's a shift from married couples with children falling off to single people who don't have children. Typically, the married with children group has the highest ratio of homeowners. *Has the "normal" changed?*

Several other reasons account for the decline in first-time homebuyers.

Figure 1
Sales Statistics from Major Montana Markets, 2013-2014



Days on Market

	Billings	Bitterroot	Gallatin	Great Falls	Helena	Missoula	Northwest
2013	54	343	79	138	117	94	157
2014	56	271	80	145	124	105	131

Source: Montana Association of Realtors.

There are fewer affordable homes for sale to this demographic, and available inventory remains low in most markets. Saving for the down payment is difficult, with obstacles stemming from either high student loan debts or credit card balances. Flat wage growth, combined with rising rents deters savings. Tight lending standards and tough regulations can shut out many, along with high mortgage insurance premiums hindering the ability to obtain affordable payments.

The good news on the flip side is that the Millennials/Gen Y'ers are in a mood to buy and are coming of age for home ownership. This group represents the largest potential number of buyers into the market. One advantage to this group of first-time homebuyers is they are not hampered by underwater mortgages or having to sell one house before buying another. According to Trulia.com, people ages 35 to 54 are the ones who are truly suffering and are of more influence to the slow housing recovery. Why? This is the group that was hardest hit with the foreclosure crisis and devaluation of their homes. Additionally, this group would like to downsize and simplify – there just isn't the inventory in the market to purchase for this purpose.

The more predictable trends – job growth, income growth, and new household formation – mean more demand ahead even if we see no movement in the credit standards or lower down payments.

Regional

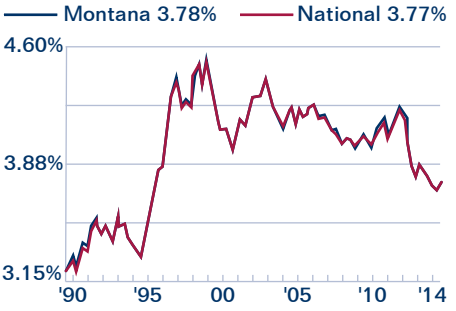
Eastern Montana's real estate values didn't have the highest highs when the economy was great, and, consequently, that area escaped the lowest lows experienced by much of the country from 2009. Oil and gas activity in the Bakken aids the market stability, as well new retail growth.

Of the seven reporting markets, Helena Association of Realtors reported the largest residential home sales increase of 16.6 percent, and the Northwest Association in Kalispell followed a close second, with a 14.2 percent increase. Yellowstone County had almost 2,000 units started, thanks to a big increase in new multi-unit dwellings started last year. Gallatin County's 1,409 units started in 2013 was second highest in the state, with a larger proportion of single-family homes. There is also considerable building activity in oil-dominated counties such as Richland and Roosevelt counties in the east.

What will the changing price of crude oil do to Montana's housing market? We are unsure of how much, but it will have an effect. The big growth and boom for the Bakken will likely slow down, lending to maturation in exploration activities.

Montana's real estate market is one of the last to go downward when the economy is not good, and it's also one of the last ones to come back up. It's possible that we may have avoided the worst of the downturn and will go straight into a stabilizing market with moderate growth. *Has the "normal" changed?*

Figure 2
Montana vs. U.S. Mortgage Rates 1990-2014



Source: http://www.zillow.com/mortgage-rates/.

Mortgage Interest Rates

Over the past few years, no major movement has been indicated in mortgage interest rates. In October 2014, the Federal Reserve lifted the quantitative easing, or QE, a monetary policy that began in 2009 to stimulate the economy. The Fed's decision in 2013 to gradually reduce the monthly economic boost (the taper) did not spark any major activity in the mortgage rates. The full discontinuing of QE in October 2014 also did not spark any major mortgage rate changes. Economists debate whether the Federal Reserve tapered too soon, with global economic recovery still weak, or too late. Either way, interest rates are not moving in any major way, holding at historic lows below 5 percent. Many potential homebuyers in the demographic have never seen mortgage interest rates above single digits. *Has the "normal" changed?* 15

Montana's Energy Industries

Year of Change?

Terry Johnson, Director, Natural Resource and Energy Development,
Bureau of Business and Economic Research

The rapid pace of innovation and change in the domestic energy industries has produced an upheaval in markets so profound that it has been dubbed a revolution by some. While technology changes introduced terms like "fracking" and "the Bakken" into everyday conversations across our state, it is an old and familiar issue that might be most important to Montana's short-term energy future – the prospect of an oil price bust. As of this writing, Central Montana sweet crude is fetching less than $50 per barrel, drastically changing the entire equation for new investment and production.

Even before the crude oil price freefall that began in earnest in mid-fall, the U.S. energy sector faced some formable headwinds in 2014. Environmental concerns over hydraulic fracturing in the oil and gas industries, new EPA CO2 emission standards for coal, and raptor and sage grouse protection issues affecting all development created new uncertainties. And slowing or stagnant growth in markets abroad – particularly the slower pace of growth in once-booming Asia – has produced the outcome in oil markets many producers and state treasuries (including Montana) have feared.

The Situation in Oil

The West Texas Intermediate (WTI) price has declined by almost 30 percent since the beginning of October. This decline in price is the result of slower economic growth in Asia combined with a significant increase in U.S. domestic production. There was also a second oil price shock that occurred near the end of November. In a matter of days, prices plummeted by almost 17 percent – the market's reaction to OPEC deciding to maintain production targets at current levels.

Before this price collapse occurred, U.S. production had grown by more than 36 percent from 2010 to 2013 while imports have declined by 16 percent over the same period. This remarkable turnaround was primarily driven by horizontal drilling and hydraulic fracturing methods – a technology advancement that has changed the drilling landscape for many of the tight shale formations in the U.S. Specifically, drilling in the Eagle Ford formation in Texas and the Bakken formation in North Dakota was leading the way toward energy independence. As Figure 2 shows, U.S. production was almost equal to imports in 2013 – a condition that did not exist since the early 90s.

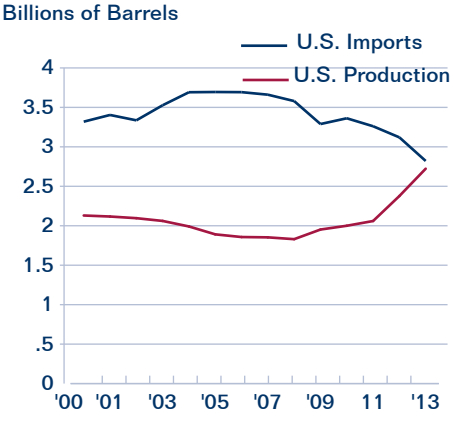
However, with such a profound drop in prices, the question becomes: What will happen to domestic production and what are prices expected to be in the future? Will companies redirect investment away from marginal exploration and focus more on economical areas?

According to the U.S.Energy Information Administration (EIA), WTI oil prices are expected to average $62.75 per barrel for 2015. Prices are expected to be lower during the first half of the year and then gradually increase during the second half. This outlook is based on expectations that world consumption next year will be less than global production and that OPEC producers will not curtail production. Domestic production, especially from tight oil plays, is

Figure 1
West Texas Intermediate Oil Prices

Source: U.S. Energy Information Administration.

Figure 2
U.S. Domestic Oil Production vs. Imports



Source: U.S. Energy Information Administration.

expected to slow. These plays have high decline rates which require high levels of drilling to maintain production. Because producers have already made investment and drilling plans for the first half of 2015, the slowdown is not expected until the second half of the year or potentially into the following year. If the deceleration does not occur until 2016, then there is the possibility that production could increase modestly in 2015. Low prices, reduced production, and reluctance for new investment indicate that the outlook for the industry is not positive, and the ramifications on state and local government finances could be significant.

Other Important Energy Developments

U.S. production of natural gas has increased by almost 22 percent since 2007. Similar to oil, natural gas production growth can be attributed to shale formations and hydraulic fracturing. The U.S. is now the largest natural gas producer in the world.

The U.S. coal industry has been struggling for the past several years. Since 2008, U.S. domestic production has declined by more than 16 percent. Reduced demand from U.S. power plants and the implementation of the new EPA CO2 emission standards has taken its toll on the industry. According to the EIA, consumption by electricity producing power plants (93 percent of domestic production) has dropped by over 17 percent since 2008. Slowing growth in markets abroad has limited export potential.

U.S. wind production has increased by more than 200 percent since 2008. Montana's wind generation sector has also experienced significant production growth – 236 percent since 2008. There are currently 12 wind generating facilities in Montana. Environmental concerns over the use of fossil fuels, federal production tax credit (FPTC) incentives, and reduced costs associated with wind turbines, have all contributed to enhanced wind production.

The Public Service Commission approved the purchase of 11 hydroelectric facilities by NorthWestern Energy from PPL Montana. According to NorthWestern Energy, customer rates, due to the purchase, will probably increase by 5 percent to 7 percent. Longer term rates, however, will be based on the cost of production minus depreciation which will reduce supply charges to the consumer. Owning the dams limits NorthWestern's exposure to volatile market conditions.

The Short-Term Outlook

High oil prices have been the catalyst for such game-changing investments as horizontal drilling and hydraulic fracturing. These innovations are not going away, but the pace of investment is going to change abruptly in 2015 unless price declines are reversed in a hurry. With current prices, producers will be reluctant to invest, especially in Montana where the return potential is lower compared to other states. Reduced investments will cause production declines especially in the second half of the year. Total value of production will be below last year's amount.

Hydraulic fracturing has reversed the downward trend in U.S. natural gas production. This technology has been deployed in states like Pennsylvania and Texas where the economic return is high. In the near term, prices are expected to be flat as U.S. production and consumption are expected to be relatively equal with stable inventories. New technologies have been applied in Montana, but producers will be reluctant to invest significantly in Montana when the return potential is much higher in other states. The industry in Montana will be stable at best.

The coal industry is facing some very difficult times ahead. Slower world economic growth combined with significant U.S. environmental issues does not paint a bright picture for the industry. Unless the industry can find creative ways to tap into a larger export market, the industry in Montana will experience a decline.

Wind is somewhat of a bright spot for Montana, but future development depends on the FPTC policy. Extension of the credit could spur additional development while no further action by Congress will discourage further development. Since the repeal of the FPTC there has been minimal new development in Montana. 15

Outlook 2015 Speakers

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