



# ANNUAL REPORT 2018

---



**BUREAU OF BUSINESS AND  
ECONOMIC RESEARCH**  
UNIVERSITY OF MONTANA

Bureau of Business and Economic Research  
College of Business  
University of Montana

# TABLE OF CONTENTS

---

MESSAGE FROM THE DIRECTOR	04
STAFF & ADVISORY BOARD	05
2018 YEAR IN REVIEW	06
FINANCIAL REPORT	08
ECONOMIC ANALYSIS	10
FOREST INDUSTRY RESEARCH PROGRAM	11
SURVEY RESEARCH	12
MONTANA KIDS COUNT	14
MANUFACTURING RESEARCH	15
HEALTH CARE INDUSTRY RESEARCH	16
SEMINARS AND OUTREACH	17
MONTANA BUSINESS QUARTERLY	18
SERVICE TO THE UNIVERSITY, COMMUNITY AND PROFESSIONAL ASSOCIATIONS	19
RESEARCH PROJECTS	20
RESEARCH PUBLICATIONS	24

## OUR MISSION

---

The Bureau of Business and Economic Research's purpose is to serve the general public, as well as people in business, labor and government, by providing an understanding of the economic environment in which Montanans live and work.

## ABOUT US

---

The Bureau of Business and Economic Research has been providing information and analysis on Montana's state and local economies for more than 70 years. Housed on the Missoula campus of the University of Montana, the bureau is the research and public service branch of the College of Business. On an ongoing basis, the bureau analyzes local, state and national economies; provides annual income, employment and population forecasts; conducts extensive research on forest products, manufacturing, health care and child welfare; designs and conducts comprehensive survey research at its on-site call center; presents annual economic outlook seminars in cities throughout Montana; and publishes the award-winning Montana Business Quarterly magazine.

BBER has grown to become one of the largest and most successful business research centers in the country. That growth has come about through an increase in external funding, which has resulted from growth in BBER's specialized expertise. In the mid-1970s, the bureau established the Forest Industry Research Program, which has attracted \$3.1 million in funding over the past five years and conducts research throughout the West. The Montana KIDS COUNT program, health care industry research program and survey research activities also have contributed to making BBER one of the most visible, sought-after sources of information and research in the state.



**BUREAU OF BUSINESS AND  
ECONOMIC RESEARCH**  
UNIVERSITY OF MONTANA



## MESSAGE FROM THE DIRECTOR

---

The myth that people come to universities for wisdom and expertise is alive and well, thankfully – because it’s not really a myth. We have some smart and talented people here and enjoy putting our skills and knowledge to work in research projects that have helped inform decisions and influence debates. Many of those projects are described in this year’s report.

We’re proud of our accomplishments, but we’re also honest about one thing in particular and that is how much we learn in everything we do.

Economic forecasting is one endeavor where our learning is out in public view. When we get a forecast wrong, it’s hard to hide from it. Learning why it happened is something that we always try to do. We’re learning in so many other research projects as well.

We’ve come to appreciate the history and backdrop in many of the issues that we study, as well as the knowledge and wisdom

of those who have addressed them in the past. Progress is incremental and good research is richer and better informed when it incorporates what has come before.

We’re currently hard at work and busy trying to improve on last year’s Economic Outlook Seminar program for 2019. We hope to see you as we travel around the state to share with you the results.

Have a great year!

Sincerely,  
**Patrick M. Barkey**  
BBER Director

## OUR STAFF

---

### Administration

**Patrick Barkey**  
Director BBER

**Debora Simmons**  
Office Manager

**Jordan Claveria**  
Student Assistant

### Publications and Outreach

**Scott Hawk**  
Publications Director

### Economic Analysis

**Brandon Bridge**  
Director of Forecasting

**Paul Polzin**  
Director Emeritus

### Montana KIDS COUNT

**Thale Dillon**  
Director

**Jennifer Calder**  
Outreach Coordinator

**Kelsey Halverson**  
Research Assistant

**Daphne Herling**  
Senior Research Analyst

### Survey Research

**John Baldrige**  
Project Manager

**Janet Stevens**  
Survey Research Field Coordinator

**Ramona Alspaugh**  
Senior Interviewer

### Forest Industry Research Program

**Todd Morgan**  
Director, Associate Director BBER

**Steven Hayes**  
Research Forester

**Erik Berg**  
Research Forester

**Eric Simmons**  
Research Associate

**Kate Marcille**  
Research Associate

**Dan Loeffler**  
Research Associate

**Bob Campbell**  
Programmer & Database Administrator

**Corey Bingaman**  
Graduate Research Assistant/Intern

## ADVISORY BOARD MEMBERS 2018-19

---

**Dennis Beams**  
Executive Vice President/Chief Credit Officer  
Glacier Bank  
Kalispell

**Paddy Fleming**  
Director  
Montana Manufacturing Extension Center  
Bozeman

**Webb Brown**  
President/CEO  
Montana Chamber of Commerce  
Helena

**Allison Johnston**  
Chief Financial Officer  
Payne West Insurance  
Missoula

**Taylor Brown**  
President  
Northern Broadcasting System  
Billings

**Thomas Schultz**  
Vice President, Government Affairs  
Idaho Forest Group  
Boise

**Bill Whitsitt**  
Executive in Residence  
Bigfork

## 2018 YEAR IN REVIEW

### The Bureau of Business and Economic Research Celebrates 70 Years

This year, the Bureau of Business and Economic Research celebrates its 70th anniversary. Since its founding, BBER has grown into one of the largest economic bureaus in the country, covering a variety of sectors and providing analysis of Montana's economy.

The quality of these research offerings is evidenced by: a) the frequent authorship of BBER researchers in peer-reviewed publications, b) the large and growing number of presentations given by BBER personnel and c) the involvement of BBER researchers in leadership roles in professional organizations.

BBER has earned its reputation as an independent, nonpartisan, objective research organization, which brings facts, information and analysis to bear on issues of importance to the Montana economy.

BBER operates in a competitive arena for the grants and projects that generate 77 percent of its revenue with a focus on the price, quality and reliability of its products and services. We have thrived in that environment by seeking ways to streamline and dedicate our own resources, while subcontracting or partnering with other organizations when that provides more value.

Past collaborators include the Rural Institute, Blackstone Launchpad, the Institute for Tourism and Recreation Research, the Montana

Year	Projects	Publications
2013	40	32
2014	35	35
2015	33	46
2016	66	54
2017	79	60
2018	54	50
<b>Total</b>	<b>307</b>	<b>277</b>

Manufacturing Extension Center, Montana's High Tech Business Alliance, faculty in business, forestry, public health, education and social work, as well as Montana State University centers and departments.

For outreach and projects supported by state funds, BBER continues to carry out all of the core services that are performed by our peers and continues to receive national recognition for its efforts.

The notable events and activities in 2017-18 include:

- The bureau's 2018 Economic Outlook Seminar program, "The Future of Higher Education," was well received by an audience of business professionals and leaders, hitting overall attendance

totals that were 30 percent higher than 2017. The program featured Regent Robert Nystuen as the keynote presenter and was delivered in nine cities across the state from January through March.

- BBER published the 2018 Montana Economic Report. This analysis and assessment of Montana’s economic performance was produced in conjunction with the 2018 Economic Outlook Seminars and was distributed to attendees, as well as decision-makers across the state.
- The health care research program received national attention for its study on the economic impact of Medicaid expansion in Montana. The study found Medicaid expansion in Montana generates several thousand additional jobs and several hundred million dollars in additional income. It also pays for itself and grows the economy.
- Montana KIDS COUNT continued their work by conducting multiple projects relating to child and family well-being, including papers on issues like the gender wage gap in Montana.
- The Montana Chamber Foundation presented the 2018 Economic Update Series, which featured the “State of Entrepreneurship in Montana” study produced by the Bureau of Business and Economic Research. The tour traveled to nine cities and featured BBER director Patrick Barkey, who gave a mid-year update on the economic outlook for Montana and its local communities.
- BBER published the 2018 State of Montana Manufacturing report in partnership with the Montana Manufacturing Extension Center at Montana State University. Montana added 3,500 manufacturing jobs during 2010-17, an increase of 21 percent. That’s compared to 8 percent nationwide.
- The Forest Industry Research group continued in their work with the USDA Forest Service in collecting data and reporting results from projects inside and outside of Montana, including Alaska, Washington, Oregon, Idaho, New Mexico, California and other western states.
- The survey research group continued its collaboration with the Montana High Tech Business Alliance to produce a profile of Montana’s high-tech industries. The report showed that Montana’s high-tech companies are growing nine times faster than other sectors in the state and reached a record \$1.7 billion in revenue.
- BBER’s 2018 Economic Outlook Seminar website won the 2018 Award of Excellence in Websites from the Association for University Business and Economic Research, a national

association for regional economic centers across the United States with members from 75+ leading universities and affiliate organizations.

- The BBER website continues to be a resource for users, generating 41,645 page views in 2017-18 with 10,098 unique users and 15,387 sessions.

## GOALS FOR 2019

1. Maintain BBER’s position as the primary source of information and analysis on Montana’s economy.
2. Uphold BBER’s reputation for well-researched, impartial and relevant analysis of policy issues that are important to Montanans.
3. Continue to advance BBER’s digital footprint relating to publications, the web and economic outlook seminars.
4. Strive for increased reach and engagement on social media, positioning BBER as the foremost authority regarding Montana’s business and economic environments.

## FINANCIAL REPORT

---

For the academic years 2013-18, BBER's total revenue has been relatively consistent at about \$2 million, with a quarter coming from state funds (general fund). That fraction has declined slightly with growth in external funding offset by university budget cuts.

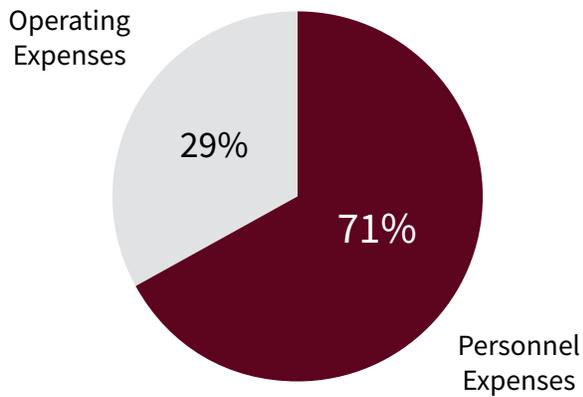
BBER currently generates 77 percent of its revenue from external sources. The fraction of its revenue that comes from state support is equal to the average similar-sized university-based business research centers across the nation.

The largest revenue source comes from contracts and grants. These are the externally funded projects administered by UM's Office of Research and Sponsored Programs and carried out by BBER researchers and staff. They include a mixture of multiyear and short-term projects. Sponsors include the federal government, state government, private foundations, nonprofits and businesses.

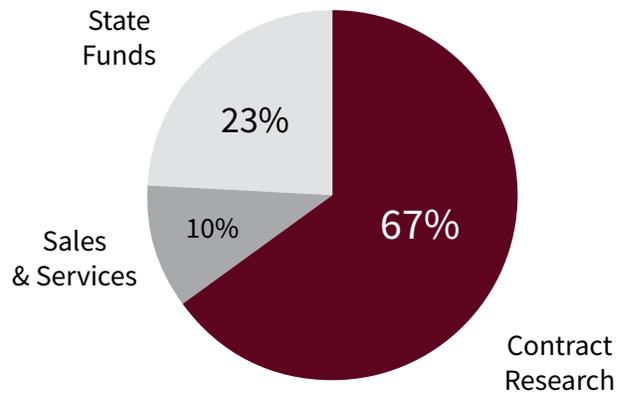
Nearly one-third of expenditures in 2018 (\$575,064) were used on operations and about two-thirds were spent on personnel expenses. The largest fraction (48 percent) of the former was spent on other services, primarily contracted services. We note that almost all operating expenses are now paid for using external funds.

Revenue					
	FY 2017	%	FY 2018	%	
Contract Research	\$1,330,190	65%	\$1,366,695	67%	
Sales & Services	\$222,353	11%	\$212,711	10%	
State Contribution	\$499,097	24%	\$468,962	23%	
<b>Total Revenue</b>	<b>\$2,051,641</b>	<b>100%</b>	<b>\$2,048,369</b>	<b>100%</b>	
Expenses					
Personnel – State	\$498,209		\$468,616		
Personnel - Other	\$868,689		\$987,062		
<b>Total Personnel Expenses</b>	<b>\$1,366,899</b>	<b>67%</b>	<b>\$1,455,679</b>	<b>71%</b>	
Operating Expenses - State	\$887		\$346		
Operating Expenses - Other Sources	\$683,846		\$574,718		
<b>Total Operating Expenses</b>	<b>\$684,734</b>	<b>33%</b>	<b>\$575,064</b>	<b>29%</b>	
<b>Total Expenses</b>	<b>\$2,051,641</b>	<b>100%</b>	<b>\$2,048,369</b>	<b>100%</b>	

**2017-18 Expenses**



**2017-18 Revenues**



# ECONOMIC ANALYSIS

## Providing Expert Analysis on Montana's Business and Economic Environments

The Bureau of Business and Economic Research is Montana's premier economic analysis center. BBER has been providing economic analysis, modeling and forecasts for a variety of Montana businesses, organizations, trade associations and legislators for 70 years. On an ongoing basis, the bureau analyzes local, state and national economies and provides annual income, employment and population forecasts. The bureau conveys this information across the state via in-person presentations, publications, their website, social media and interviews with the news media.

### The Economic Impact of the Early Retirement of Colstrip Units 3 and 4

In July 2016, the owners of Units 1 and 2 of the coal-fired Colstrip Electric Generating Station in Rosebud County, Montana, agreed to shut those units down no later than July 2022. The agreement was reached as a settlement from a lawsuit alleging violations of the Clean Air Act brought by the Montana Environmental Information Center and the Sierra Club in 2013.

While this agreement said nothing about the future of the two larger, newer generating units in operation at Colstrip since the 1980s (3 and 4), it underscored the seriousness of the challenges faced by coal-fired power plants in general – and Colstrip in particular – as they face a future of uncertain markets, technologies and policies. While that future might be in doubt, it is certain that the path of actions and policies that frame that future have economic implications that extend well beyond communities such as Colstrip.

BBER used its economic model to make two projections about the Montana economy. One future envisioned no changes beyond the announced closures of Units 1 and 2 in year 2022. The second

was one that in addition to this, also closed the two remaining units in year 2027. In this early retirement scenario, the changes in spending, jobs, income and population that occurred propagated throughout the economy and ultimately brought the economy to a new resting point. Thus, the difference in these two projections represents the economic impact of the early retirement of Colstrip Units 3 and 4.

Our findings indicated that the early retirement of Colstrip Units 3 and 4 would ultimately produce:

- An estimated statewide loss of 3,300 jobs with wages considerably above the state average.
- An anticipated income loss of between \$250 and \$350 million per year or \$5.2 billion over a 16-year period.
- A decline in annual gross sales and economic output between \$700 and \$800 million or \$12.5 billion over the same 16-year period.
- An expected loss of \$80 million in state tax and non-tax revenues per year or \$1.2 billion over the same 16-year period.

The Montana Chamber Foundation commissioned the Colstrip economic impact study.

# FOREST INDUSTRY RESEARCH PROGRAM

## Nationally Prominent Program Welcomes New Staff, Brings in New Funds for Projects

This was another busy year for the Forest Industry Research Program (FIRP), a regional operation with national prominence that works closely with the USDA Forest Service and has projects with the state of Montana, the western U.S. and Alaska.

Dan Loeffler joined FIRP, coming from the University of Montana's College of Forestry and the Forest Service's Rocky Mountain Research Station. Loeffler brought with him a new project, which examines carbon stored in harvested wood products in California, and he is developing a similar project in Oregon.

Research Specialist Chelsea McIver transitioned to part time last year and left to pursue her Ph.D. at the University of Idaho.

A graduate student intern, Corey Bingaman, joined FIRP in 2017 and worked on our upcoming report on the Four Corners forest industry before completing his degree in June 2018. He has taken a job with Collins Pine in California.

Our graduate assistant, Philip Williams, rejoined FIRP part time while he's completing his master's degree in forestry.

Lastly, Dorian Smith began working for FIRP part-time after retiring from the Washington Department of Natural Resources.

FIRP completed four externally funded projects (including the five-year, \$644,000 Pacific States Forest Industry and Timber Harvest Analysis), began two new ones and continued eight ongoing projects. We successfully brought in \$910,243 in additional funds for new and ongoing research agreements during FY 2018, but had no sales and service revenue.

The program had 10 to 12 externally funded ongoing research projects throughout the year worth more than \$1.9 million (not including the \$872,000 in projects that ended during the fiscal year).

Personnel ranged from 8 to 11 full- and part-time employees who were paid a total of \$511,921 from FIRP agreements, with \$853,131 remaining for personnel and \$96,440 for other expenses at year-end.

FIRP continued its core research with the USDA Forest Service's Forest Inventory and Analysis (FIA) Program at both the regional (12 western states) and national levels. Our ongoing agreements with FIA involve timber products output (TPO) research, studying timber harvest and use and the forest industry throughout the western U.S. This year, our program developed TPO data for several western states – Alaska, Arizona, Colorado, New Mexico, Utah, Idaho, Montana, Nevada – and submitted reports that will be published through our partners in the Forest Service FIA Program.

We continued our ongoing work with the Northern Region of the Forest Service, collecting timber harvesting and log hauling costs in Idaho and Montana, as well as capacity and timber flow projects for the Rocky Mountain Region and the National Forest System. These efforts benefit local and national data users seeking more information on the changes, sustainability and economic impacts of timber harvest and the West's forest industry.

Finally, all members of the Forest Research Industry Program co-authored reports or articles, made professional presentations, presented posters, served as BBER representatives on and off campus, responded to numerous information requests, reviewed journal articles and/or served in various professional and community organizations throughout the 2018 fiscal year.

# SURVEY RESEARCH

## Client-Specific, Scientific Data Collection and Analysis

---

BBER's professional and highly trained researchers utilize sophisticated data collection mechanisms and techniques to conduct surveys for contract clients in the private and public sectors. For more than three decades, the expert team in the survey research program has been governed by the rigorous professional standards established by the American Association of Public Opinion Researchers.

The advanced methodology of study design development, sample design and selection – along with sophisticated mathematical analysis – ensures the data will pass demanding tests such as:

- Publication in peer-reviewed academic journals.
- Testimony before legislators.
- Examination in court proceedings.
- Close scrutiny by the media or special interest groups.

During 2017-18, survey research assisted Montana state agencies, federal agencies, trade associations, the University of Montana and nonprofit organizations by collecting and analyzing primary data for a variety of projects, including:

**Montana Manufacturers' Survey.** Montana Manufacturing Extension Center. A survey examining the status of manufacturing in Montana.

**Perceptions about Alcohol Survey Follow-up.** Montana Department of Public Health and Human Services. A follow-up study of adult Montanans' opinions about alcohol use and abuse in Montana.

**Southwest Crown of the Continent Survey.** USDA Forest Service. A survey of Seeley Lake area residents to study their views on the effectiveness of Forest Service activities in the region.

**Social Survey: Monitoring Forest Contribution to Social Sustainability.** USDA Forest Service. A survey to examine the contribution of Region 1 to the social well-being of Region 1 residents.

**High Tech Business Alliance Members Survey.** Montana High Tech Business Alliance. A survey examining the state of high-tech businesses in Montana.

## Montana's High-Tech Companies Growing Nine Times Faster Than Other Sectors

High-tech companies continue to be an important component of Montana's economy, growing nine times faster than the statewide economy and generating nearly \$1.7 billion in revenues.

For the fourth year in a row, BBER conducted a survey of Montana's high-tech businesses. Commissioned by the Montana High Tech Business Alliance, the survey included responses from 134 members of the statewide organization.

The study found that the high-tech sector continues to grow, with Montana employment just under 6,000 and median annual salaries of \$63,000, a 5 percent increase over 2016.

High-tech survey respondents expected to add more than 1,200 new jobs in 2018, an 18.5 percent increase over 2017. According to the study, high-tech pays more than twice the median earning per Montana worker and represents the third highest-paying industry in Montana.

The 2018 survey added questions on the ease or difficulty of hiring in Montana and obtaining new capital. Substantially more high-tech businesses, 28 percent of members and 48 percent of nonmembers, reported that it was harder to hire more qualified new employees in Montana in 2017. More than two-thirds of survey respondents said there was no change in their ability to acquire capital in 2017.

The study also found that Montana's quality of life – its lifestyle, work/life balance, recreational opportunities and beauty of the landscape – provided significant advantages to doing business in the state. Survey respondents also mentioned Montana's high-quality workforce as a major advantage.

High-tech companies reported that attracting talent and hiring skilled technology workers were their firm's largest impediments to growth. Alliance members added that visibility to customers is a new, but significant impediment to growth.

# MONTANA KIDS COUNT

## Conducting Cutting Edge Research on Child and Family Well-Being in Montana

For the past 18 years, Montana KIDS COUNT has been based in the Bureau of Business and Economic Research, conducting data and policy research as a member of the larger national KIDS COUNT network and performing additional independent contract work related to child and family well-being in Montana. KIDS COUNT staff make presentations on a variety of topics, but most notably in the areas of early childhood education and development, mental health care, suicide prevention, traffic safety and substance abuse prevention in the state.

Montana KIDS COUNT is part of a network of 53 similar projects throughout the United States that are dedicated to tracking the well-being of children on a state-by-state and national basis. Funded by The Annie E. Casey Foundation, a private philanthropic organization, the network provides high-quality data and trend analysis, seeking to enrich local, state and national discussions concerning ways to secure better futures for all children.

In the past, Montana KIDS COUNT has performed needs assessments in the area of early childhood education and has done extensive data research for Montana counties and for Montana and Wyoming tribal communities.

### LGBTQ Youth in Montana

Despite big strides in acceptance and understanding, Montana's sexual minority youth are struggling. Lesbian, gay, bisexual, transgender and queer/questioning (LGBTQ) youth have higher rates of suicide, mental health problems and substance abuse, to name a few issues.

In 2015, Montana KIDS COUNT included one question related to LGBTQ issues in the Youth Risk Behavior Survey – had the student been teased or called names because someone thought they were gay, lesbian or bisexual? Almost 11 percent of Montana high school students reported being teased or called names for that reason.

In 2018, the Montana KIDS COUNT team examined LGBTQ issues further and found that:

- 58 percent of LGBTQ students felt unsafe at school because of their sexual orientation.

- Between 35 to 40 percent of LGBTQ students commonly avoided school bathrooms, locker rooms and gym classes because they felt unsafe or uncomfortable in those spaces.
- 24 percent of LGBTQ students were verbally harassed in the past school year because of their sexual orientation.
- 96 percent of LGBTQ students heard homophobic remarks.

In addition, Montana KIDS COUNT researchers found there was a big difference among LGBTQ youth from positive, accepting families compared to those rejected by their families. Rejected youth were:

- More than eight times likely to attempt suicide than those in accepting families.
- Almost six times likely to report high levels of depression.
- More than three times likely to use illegal drugs.
- More than three times likely to be at high risk for HIV and sexually transmitted diseases than those in accepting families.

# MANUFACTURING RESEARCH

## Monitoring Montana's Manufacturing Industry Through Surveys and In-Depth Research

From neighborhood breweries that manufacture craft beers like Moose Drool and Cold Smoke, to shops in the far corners of the state that produce structural steel for hospitals and malls, manufacturing is a thriving industry in Montana.

Through our manufacturing research program, BBER focuses on manufacturing activity in Montana and in surrounding states.

Each year, BBER researchers conduct several manufacturing surveys: the Montana Manufacturers Survey, which examines the status of the manufacturing sector in the state; the State of Montana Manufacturing, which looks into how manufacturers view their industry and their outlook for the future; and the Montana Manufacturing Extension Center's (MMEC) client satisfaction survey.

BBER also houses the Montana Manufacturers Information System, an online directory of Montana's manufacturers developed to connect manufacturers with each other, as well as customers, suppliers and industrial service providers.

### Employment in Montana's Manufacturing Industry Growing Faster Than Other States

Employment in Montana's manufacturing sector has grown much faster than the rest of the United States, adding 3,500 manufacturing jobs during 2010-17, an increase of 21 percent. That's compared to 8 percent nationwide.

For the past nine years, BBER has conducted this manufacturing survey, commissioned by the Montana Manufacturing Extension Center at Montana State University.

The 2018 survey finds that the increase in employment in Montana's manufacturing industry can be explained partly by an increase in the number of businesses making alcoholic beverages, structural metals and electronic instruments. This increase occurred despite the decline in wood and paper products manufacturing. Other significant sectors of Montana's manufacturing economy included food and furniture products.

BBER researchers also found that:

- Most manufacturers who were surveyed said in 2018 they expected increases in their production (62 percent) and profits (59 percent).
- Montana's manufacturing workers earned \$1.2 billion in 2016, an increase of more than 19 percent since 2010.
- Montana manufacturing workers earned an average of \$47,831 per year, higher than the state average of \$40,943.
- Montana's exports of manufacturing products was valued at roughly \$1.1 billion in 2017. Roughly half of that was purchased by Canada, followed by China and Korea.
- Most manufacturers in Montana are small businesses. Roughly half with fewer than four employees.
- Manufacturing of alcoholic beverages continued to be an area of strong growth in the state. In 2015-16, the number of people employed by breweries increased from 575 to 752; the number employed by distilleries increased from 102 to 154.
- Other growing sectors included small arms and electrical instruments, both of which roughly tripled their number of employees between 2010 and 2016.

# HEALTH CARE INDUSTRY RESEARCH

## Groundbreaking Health Care Research Makes National Headlines

---

From local news media to Forbes and the New York Times, BBER's health care research program was in the national spotlight in 2018 for its groundbreaking Medicaid expansion study.

In addition to Medicaid expansion, BBER researchers tackled a variety of pressing health care issues this year. The health care research program is regularly engaged in monitoring supply and demand, along with costs of health care impacting Montana's health care markets.

The health care research and social policy analysis program has continued its collaboration with the University of Montana's Research and Training Center on Disability in Rural Communities (RTC). RTC conducts disability research to help improve the lives of people living with disabilities in rural communities. In the past year, BBER worked on eight projects with RTC, preparing a number of scholarly articles and reports.

Other topics BBER researchers in the program have explored include workforce shortages, poverty and affordable housing.

### **Medicaid Expansion Boosts Montana's Economy, Creating New Jobs and Increasing Income**

---

Over the past few years, policymakers and stakeholders in Montana's health care system have had questions about the costs of Medicaid expansion and whether the state could afford it. But analysis showed Medicaid expansion in the state not only pays for itself, it significantly boosts the state's economy.

Montana approved Medicaid expansion in 2015, which extended coverage to more than 90,000 low-income and disabled Americans. During its first two years, Medicaid expansion provided beneficiaries more than \$800 million in health care and infused a significant amount of money into the economy.

The study, funded by the Montana Healthcare Foundation and Headwaters Foundation, found Medicaid expansion introduces \$350 to \$400 million in new spending to the state's economy each year. This means spending on Medicaid expansion rivals some of the state's larger sectors. It's 33 percent bigger than Montana's

beverage manufacturing industry (e.g., craft brewing, distilling, wineries, etc.) and only 10 percent smaller than the total budget for the Montana University System.

BBER used its economic model to make two projections: one without Medicaid expansion and another adding Medicaid expansion. The economic impact of Medicaid expansion is the difference between these two scenarios.

The study found that this spending creates a ripple effect, which will generate about 5,000 jobs and \$270 million in personal income over the next two years. In addition to generating economic activity, Medicaid expansion appears to improve outcomes for Montanans – reducing crime, improving health and lowering debt.

# SEMINARS AND OUTREACH

## Making Our Research Accessible to the Public

The Bureau of Business and Economic Research continued its public outreach in 2018 through traditional and digital means. BBER marketed its work through popular social media platforms while growing its audience through mass email communications and in person, traveling to nine cities on its annual Economic Outlook Seminar tour.

Registrations for the 2018 seminar series reached 1,600. In conjunction with the series, BBER produced the 2018 Montana Economic Report.

### 43rd Annual Economic Outlook Seminar

#### The Future of Higher Education in Montana

In 2018, the Bureau of Business and Economic Research traveled to nine cities on its 43rd annual Economic Outlook Seminar tour. From January through March, BBER economists and other industry experts presented statewide and regional economic forecasts for the coming year. Those forecasts included reports on key industries, such as health care, forest industry products, real estate and housing, agriculture, tourism and energy.

EOS2018, “The Future of Higher Education in Montana,” examined the question of how Montana’s higher education system returns value to its residents in an economy that increasingly rewards knowledge and expertise. The keynote was given by Robert Nystuen, vice chair of the Montana University Board of Regents and market president of Glacier Bank.

Seminars were held in Missoula, Helena, Great Falls, Billings, Bozeman, Butte, Kalispell, Lewistown and Havre. The tour included a live webcast from our seminar in Bozeman. Audiences for the seminar series included professionals from finance and insurance, real estate, manufacturing, utilities, higher education and public administration.

### 13th Annual Economic Update Series

#### Make Montana Home – Enticing Entrepreneurs

In August 2018, the Montana Chamber Foundation presented the 2018 Economic Update Series, which featured the “State of Entrepreneurship in Montana” study conducted by the Bureau of Business and Economic Research.

The report found the percentage of Montanans whose main occupation is owning a business is the highest in the country – about 10 percent of Montanans are their own boss – and 3,400 people in the state start a business each month.

The tour traveled to nine cities and featured BBER director Patrick Barkey, who gave a mid-year update on the economic outlook for Montana and its local communities. Additionally, a panel of local entrepreneurs shared their thoughts on how entrepreneurs could succeed in the state.

# MONTANA BUSINESS QUARTERLY

## Digital Publishing and Social Media Expand Magazine's Reach

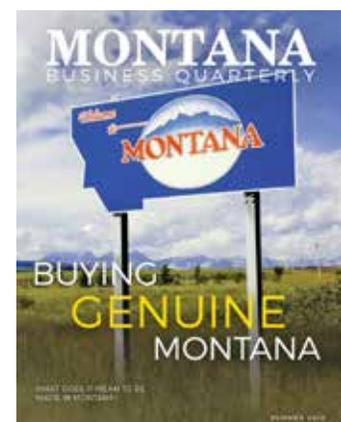
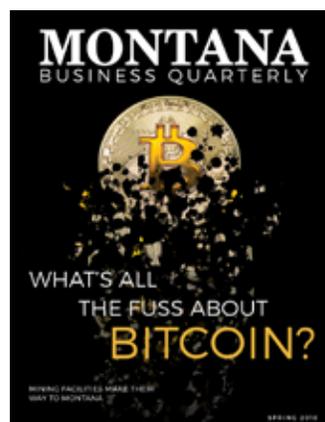
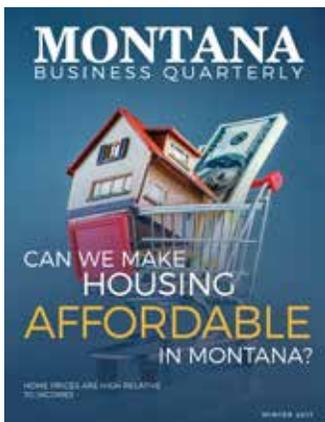
For 55 years, the award-winning Montana Business Quarterly has provided a comprehensive overview of business and economic trends throughout the state.

The print edition of the magazine has a readership of 4,800 across Montana. Its readers include business executives, government officials and policymakers, as well as businesses, libraries and universities. Plus, every Montana legislator receives a complimentary copy.

Issues from the past year tackled subjects important to Montana, such as the results of Medicaid expansion in the state, our growing high-tech sector, Montana's workforce shortage, how the state is recovering from the mountain pine beetle epidemic, the affordable housing crisis and how wildfire emissions affect the state.

A growing social media audience has expanded the reach of the magazine with thousands viewing articles from quarterly issues. Engagement rates have been impressive, rising far above the norm for nonprofits or higher education institutions. Individual articles are reaching 2,500 to 3,000 people - sometimes more - and we've crossed the 600 followers milestone on Facebook, which now has more followers than BBER's page.

The magazine continues looking toward the future with its subject matter, design and digital distribution. Over the next year, we hope to continue our success in digital publishing while focusing on growing our print magazine subscriptions.



# SERVICE TO THE UNIVERSITY, COMMUNITY AND PROFESSIONAL ASSOCIATIONS

## Partnering with Our Community

---

BBER researchers are frequent collaborators in educational and research activities at the University of Montana. This includes co-authoring research reports and academic articles, as well as teaching and serving on thesis committees. BBER has worked closely with the Rural Institute, the Blackstone Launchpad, faculty in business, political science, sociology, forestry, public health, education, social work, psychology, as well as the Mansfield Center and the Western Montana Family Medicine Residency program.

More than 120 presentations were given to audiences throughout the state in 2017-18, including work in support of the legislature, responding to hundreds of data requests, offering expert opinion for the media, sharing its publications and broadcasting its one-minute radio feature, as well traveling throughout Montana for the Economic Outlook Seminars.

BBER also works with smaller communities that lack the resources for planning, research and analysis. These activities raise the image of the University of Montana among taxpayers and decision-makers across the state by providing services and information of value.

The bureau partners with a range of other units within the Montana University System to share expertise and regularly collaborates with state and local government leaders (legislators, city councilors, agency heads), economic development agencies, industry associations, local business and nonprofit executives on research projects, informational presentations and network building.

BBER's researchers and staff have served on boards and committees for many different organizations, including:

- Society of American Foresters
- Forest Products Society
- Montana Environmental Education Association
- Montana Manufacturing Extension Center
- American Association of Public Opinion Research
- Northwestern Energy and Transmission Advisory Council
- Association for University Business and Economic Research
- Pacific Northwest Regional Economic Conference
- Montana Health Care Forum
- Mountain Pacific Quality Health Foundation
- Montana Council on Economic Education
- Montana Economic Developers Association
- Missoula Development Authority
- Mountain Pacific Quality Health Foundation
- Parent Teacher Home Visit Project
- Association of Public Data Users
- Western Forest Economists

BBER is one of the founding members of the Association for University Business and Economic Research, a national organization established in 1948. BBER currently serves as secretary-treasurer for the organization.

# RESEARCH PROJECTS

---

## Economic Analysis

**The Economic Impact of Montana's Mining Industry (ongoing).** Montana Mining Association. A survey-based economic impact analysis of the economic contribution made by operations of the hard rock metal mines in the state with an additional analysis of the impact of new mine development.

**The Economic Impact of the Early Retirement of Colstrip Units 3 and 4, June 2018.** Montana Chamber Foundation. Reexamines the impact of an early closure of the Colstrip coal-fired electric generation station's two larger units in light of developments that will cause the two older units to close by year 2022 and the changes in the marketplace brought about by increased production of solar and wind energy.

**The Economic Impact of Advanced Technology Group, January 2018.** Advanced Technology Group. An examination of the economic impact of the operations of technology consulting firm ATG's operations in Missoula.

**The Continuing Contributions of the Oil and Gas Industry to the Montana Economy. (July 2018).** Modeling the ways in which the oil and gas industry contribute to the Montana economy.

**The Missoula County Fairgrounds' Contribution to the Missoula Economy. (June 2018).** Missoula County Fairgrounds. An examination of the ways in which the activities taking place at the Missoula County Fairgrounds contribute to the Missoula economy.

**The State of Montana's Entrepreneurial Ecosystem (ongoing).** Montana Chamber of Commerce. Benchmarking the size, growth, strengths and challenges to Montana's entrepreneurship activities.

**Montana Economic Forecast (ongoing).** Developing state- and county-level forecasts of employment and wages by industrial sector.

**Household-Level Effects of Electricity on Off-Farm Income (ongoing).** A study investigating whether, and by how much,

the earning potential of a household in a developing country is impacted by gaining access to electricity.

## Forest Products Industry

**The Impact of USDA Forest Service Land Management Policies on the Ravalli County Economy (ongoing).** A historical examination of the wood products industry in Ravalli County with an assessment of what kind of industry capacity might have continued to exist if timber availability from federally managed forests had been sufficient. Presents an estimate of the economic impact of timber availability by constructing how the economy may have evolved should those mills have remained in operation.

**Idaho 2015 FIDACS.** A research joint venture agreement with the Rocky Mountain Research Station, Interior West Forest Inventory and Analysis to collect and report information on Idaho's primary forest products industry and timber harvest for the year 2015.

**California 2016 FIDACS.** A research joint venture agreement with the Pacific Northwest Research Station, PNW Forest Inventory and Analysis to collect and report information on California's primary forest products industry and timber harvest for the year 2016.

**Montana 2014 FIDACS.** A research joint venture agreement with the Rocky Mountain Research Station, Interior West Forest Inventory and Analysis to collect and report information on Montana's primary forest products industry and timber harvest for the year 2014.

**Southwest Crown of the Continent Survey, 2016 (ongoing).** USDA Forest Service. A survey of Seeley Lake area residents to study their views on the effectiveness of Forest Service activities in the region.

**Social Survey: Monitoring Forest Contribution to Social Sustainability, Summer 2017 (Summer 2018).** USDA Forest Service. A survey to examine the contribution of Region 1 to the social well-being of Region 1 residents.

**California Logging Utilization (ongoing).** A research joint venture agreement with the USDA Forest Service, Pacific Northwest Research Station, Portland, Oregon, and CalFire to study and report on the quantities of logging residue generated while harvesting timber in California. (\$70,000 initial funding, \$140,000 total expected). Project completion May 2022.

**California Harvested Wood Products (HWP) Carbon & Sawmill Energy (ongoing).** A cost reimbursable agreement with the USDA Forest Service, Pacific Northwest Research Station, Portland, Oregon, and CalFire to analyze sawmill energy use and carbon captured in harvested wood products in California (\$130,024). Project completion June 2019.

**Pacific West Timber Product Output (TPO) and Forest Industry Analysis (ongoing).** A joint venture research agreement with the USDA Forest Service, Pacific Northwest Research Station, Portland, Oregon, to provide analysis of the forest industry, timber use and impact on timber inventory in the Pacific Coast states (\$300,000 for phase 1). Project completion May 2022.

**Oregon Sawmill Production Functions (ongoing).** A joint venture research agreement with Jean Daniels of the USDA Forest Service, Pacific Northwest Research Station, Portland, Oregon, to analyze changes in the productivity of Oregon sawmills from 2003 through 2018 (\$15,000). Project completion May 2022.

**Region Two Capacity and Capability Analysis (ongoing).** A challenge cost-share agreement with the USDA Forest Service to analyze timber flow, timber-processing capacity and capability by tree size class among mills for national forests in Region Two – Wyoming and Colorado – (\$87,500). Project completion September 2021.

**National Forest System Timber Flow Analysis for Economic Impact Modeling (ongoing).** A challenge cost-share agreement with the USDA Forest Service to analyze timber flow by forest and product type for national forests throughout the United States (\$85,000). Project completion September 2021.

**Ongoing Timber Product Output and Forest Industry Analysis for the Interior West States (ongoing).** A joint venture research agreement with the USDA Forest Service, Rocky Mountain Research Station, Ogden, Utah, to provide analysis of the forest industry,

timber use and impact on timber inventory in the Rocky Mountain region (\$984,245). Project completion April 2021.

**Alaska Logging Utilization (ongoing).** A joint venture research agreement with the USDA Forest Service, Pacific Northwest Research Station, Portland, Oregon, to study and report on the quantities of logging residue generated while harvesting timber in Alaska (\$143,157). Project completion date July 2020.

**Region One Logging and Log Hauling Costs (ongoing).** A challenge cost-share agreement with the USDA Forest Service, Region One, Missoula, Montana, to conduct an analysis of logging and log-hauling costs in Montana and Idaho (\$42,500). Project completion January 2019.

**Alaska Timber Harvest and Log Export Data Evaluation (ongoing).** A joint venture research agreement with the USDA Forest Service, Pacific Northwest Research Station, Portland, Oregon, to identify, understand and reconcile differences in published timber harvest and log export data in Alaska and other Pacific states by examining published data and working with the agencies and businesses that collect, compile and report log export and timber harvest information (\$47,141). Project completion December 2018.

**Monitoring in the Southwest Crown of the Continent (June 2018).** Contract Attributes Monitoring, a challenge cost-share agreement with the USDA Forest Service to develop a contract attributes database of Collaborative Forest Landscape Restoration Program (CFLRP) contracts issued in the SWCC and perform local contract capture analysis of CFLRP contracts awarded in the SWCC area – i.e., northwest Montana. (BBER portion \$21,469).

**Nevada Forest Products Industry and Timber Harvest, 2016.** USDA Forest Service, Rocky Mountain Research Station. This work characterizes the Nevada state 2016 timber harvest.

**Socioeconomic Direct Effects Monitoring for NEW Forest Vision 2020, May 2018.** A cost-reimbursable agreement with the USDA Forest Service to measure and understand the distribution and effects of Forest Service contracts for projects on the Colville National Forest in northeast Washington (\$27,335).

**Ongoing Pacific States Forest Industry and Timber Harvest Analysis (July 2017).** A joint venture research agreement with the USDA Forest Service, Pacific Northwest Research Station, Portland, Oregon, to conduct a comprehensive analysis of the primary forest products industry in Alaska, California, Hawaii, Oregon and Washington by examining trends in wood products, industry structure, source of timber supply and employment (\$644,000).

**Southern Rockies Logging Utilization (July 2017).** A joint venture research agreement with the USDA Forest Service, Rocky Mountain Research Station, Ogden, Utah, to study and report on the quantities of logging residue generated while harvesting timber in Arizona and New Mexico (\$180,000).

**Wyoming 2014 FIDACS.** A research joint venture agreement with Rocky Mountain Research Station, Interior West Forest Inventory and Analysis to collect and report information on Wyoming's primary forest products industry and timber harvest for the year 2014.

**WO Timber Flow Analysis and Direct Response Coefficients.** A challenge cost-share agreement with the USDA Forest Service Washington Office to characterize federal timber flow and utilization for input-output modeling using western TPO data.

**Oregon Mill Production Functions.** A research joint venture agreement with PNW Research Station economist to research shifts in the production structure of Oregon's sawmill sector during 2003, 2008, 2013 and 2017.

**AK/OR/WA Market Integration and Price Signals.** A research joint venture agreement (extension) with PNW Research Station economist and Mississippi faculty member to research if Alaska log markets are integrated with Washington and Oregon log markets.

**Four Corners 2016 FIDACS.** A research joint venture agreement with Rocky Mountain Research Station, Interior West Forest Inventory and Analysis to collect and report information on Arizona, Colorado, New Mexico and Utah's primary forest products industry and timber harvest for the year 2016.

## Health Care

**The Economic Impact of Medicaid Expansion in Montana. (April 2018).** Montana Healthcare Foundation, Headwaters Foundation. A

study of the economic impact of Medicaid expansion in Montana's economy.

**Economic Contribution of Benefis Health System (June 2018).** Benefis Health System. This report outlined the contribution of Benefis Health System to the regional economy.

**The Impact of Medicaid Expansion on Hospital Financials and Healthcare Capacity (June 2018).** Benefis Health System. An examination of how the influx of Medicaid expansion money has affected hospital financial health and health care capacity in Montana.

**Unmet Need in the Partnership Healthcare Service Area (September 2017).** Partnership Health Center. A study focusing on the unmet health care needs among the low-income population within Partnership Health Center's market area.

**Effort Capacity and Choice: Investigating a Dynamic Model of Participation (October 2016-October 2019).** National Institute on Disability, Independent Living and Rehabilitation Research. This project, a collaboration with the University of Montana's Rural Institute for Inclusive Communities, investigates the role of effort constraints on participation decisions among individuals with disabilities using a randomized evaluation of both a physical training and a home modification intervention.

**Research and Training Center on Independent Living, Home Base (October 2016-October 2021).** National Institute on Disability, Independent Living and Rehabilitation Research. This project, a collaboration with the University of Kansas and the University of Montana's Rural Institute for Inclusive Communities, investigates the effects of home usability on people with disabilities.

**Measurement of Disability (ongoing).** Prepared multiple scholarly articles in collaboration with the University of Montana RTC Rural that describe movement in individual reports of disability over short periods of time and the sources of movement and consequences for scholars understanding of the effects of disability.

**Rural Penalty (ongoing).** A study conducted in collaboration with the University of Montana RTC Rural that documents that individuals living in rural areas experience disability at much higher rates than those living in metro areas.

**Geographic Variation in Labor Force Participation of the Disabled (ongoing).** A study conducted in collaboration with the University of Montana RTC to examine the large variation across counties in the labor force participation of the disabled population.

## High-Tech

**Montana High Tech Business Alliance Members Survey, Winter 2018.** Montana High Tech Business Alliance. A survey examining the state of high-tech businesses in Montana.

## Manufacturing

**The State of Manufacturing 2018, Fall 2017-Spring 2018.** A survey examining the status of manufacturing in Montana.

**Montana Manufacturing Extension Center.** A survey examining the status of the manufacturing segment in Montana.

## Montana KIDS COUNT

**Healthy Montana Teen Parents Program, March 2018.** Early Childhood Services Bureau, Montana DPHHS (from U.S. Office of Adolescent Health). State-level evaluation of grant implementation and outcomes for nine sub-grantee programs that deliver services to expecting and parenting teens across the state.

**Montana Behavioral Initiative, (completed.) Montana Office of Public Instruction (from U.S. Department of Education).** Initiative that promotes positive behavior and climate in Montana schools, in part through the national Parent-Teacher Home Visit Program (PTHVP) and the Academic Parent-Teacher Teams (APTT) model. Collaborative project with Missoula County Public Schools; Missoula City-County Health Department; and UM School of Education, School of Counselor Education, School of Social Work and School of Psychology.

**Montana KIDS COUNT 2018 (ongoing).** Annie E. Casey Foundation. Data and policy analysis and information dissemination on issues pertaining to child and family well-being in Montana. Promotion and media relations for reports published by the national KIDS COUNT organization.

**Montana SPF-PFS/Partnership Program (ongoing).** Addictive & Mental Disorders Division, Montana DPHHS (from U.S. Substance Abuse & Mental Health Services Administration). State-level evaluation of implementation and outcomes of two-tiered substance abuse prevention effort across 22 Montana communities.

**Montana Alcohol and Marijuana Perception Study, completed.** Addictive & Mental Disorders Division, Montana DPHHS. State-level telephone survey exploring the attitudes and perceptions held by Montana residents regarding underage drinking, general problem drinking, and the legalization of recreational-use marijuana in the state.

**Paid Family and Medical Leave Policy Research Grant, (completed.)** Annie E. Casey Foundation. Developing communications material and methods for policy advocates to work with Montana business owners and other employers in order to succeed in passing a paid family and medical leave policy in the 2019 legislature.

## Real Estate & Housing

**2018 Montana Housing Starts Report (ongoing).** Combining data from Census and utility records to produce a comprehensive estimate of housing starts in Montana for 2017.

## Other

**Perceptions about Alcohol Survey Follow-up, Summer 2017 (Summer 2018).** Montana Department of Public Health and Human Services. A follow-up study of adult Montanans' opinions about alcohol use and abuse in Montana.

# RESEARCH PUBLICATIONS

---

## Economic Analysis

Barkey, Patrick M. and Brandon Bridge. "The Economic Impact of Advanced Technology Group," Advanced Technology Group, January 2018.

Barkey, Patrick M. "Research Update: Trends in the Montana Retail Beer Market Since 2012," Montana Tavern Owners Association, June 2018.

Barkey, Patrick M. "The Economic Impact of the Early Retirement of Colstrip Units 3 and 4," Montana Chamber Foundation, June 2018.

Barkey, Patrick M. and Todd A. Morgan. "Wildfire Emissions in Montana," Montana Business Quarterly, Vol. 55 (3), Fall 2017.

Barkey, Patrick M. "Montana's Revenue Woes," Montana Business Quarterly, Vol. 55 (4), Winter 2017.

Barkey, Patrick M. "Behind the Malaise in Montana Revenue Collections," Montana Economic Report, January 2018.

Barkey, Patrick M. "The U.S. and Global Economies: Is Stagnation Behind Us?" Montana Economic Report, January 2018.

Barkey, Patrick M. "Major Economic Events of 2017: Trump, Wildfires and Medicaid," Montana Economic Report, January 2018.

Barkey, Patrick M. "Montana's Regions and Cities: Western Growth Dominates," Montana Economic Report, January 2018.

Barkey, Patrick M. "Statewide Economic Performance: Unraveling the Mystery," Montana Economic Report, January 2018.

Bridge, Brandon and Barkey, Patrick M. "The Continuing Contributions of the Oil and Gas Industry to the Montana Economy," Treasure State Journal, 2018.

Polzin, Paul. "World Economic Outlook," Montana Business Quarterly, Vol. 55 (4), Fall 2017.

## Forest Products

Berg, Erik C., Simmons, Eric A., Hayes, Steven W., Morgan, Todd A., and John D. Shaw, 2017. "Logging Utilization in Montana, 2011-2016," Draft General Technical Report. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.

Loeffler, Dan, 2018. "Recovering from the Mountain Pine Beetle," Montana Business Quarterly, Vol 56 (1), Spring 2018.

Martinkus, Natalie, Greg Latta, Todd Morgan and Michael Wolcott. "A Comparison of Methodologies for Estimating Delivered Forest Residue Volume and Cost to a Wood-Based Biorefinery," Biomass and Bioenergy 106 (2017) 83-94. 2017.

Marcille, Kate C., Eric A. Simmons, Todd A. Morgan. "The Forest Products Industry in Idaho, Part 3: Sales, Employment and Contribution to the State's Economy," Forest Industry Brief BBER-FIB-12. Missoula, MT: University of Montana, Bureau of Business and Economic Research, 2018.

Marcille, Kate C., Chelsea P. McIver, Erik C. Berg, Todd A. Morgan, Glenn A. Christensen. "Alaska's Forest Products Industry and Timber Harvest, Part 3: Sales, Employment and Contribution to the State's Economy," Forest Industry Brief No. 9. Missoula, MT: University of Montana, Bureau of Business and Economic Research, 2017.

Marcille, Kate C., Erik C. Berg, Todd A. Morgan, Glenn A. Christensen. "Alaska's Forest Products Industry and Timber Harvest, Part 2: Industry Sectors, Capacity and Outputs," Forest Industry Brief No. 8. Missoula, MT: University of Montana, Bureau of Business and Economic Research, 2017.

Marcille, Kate C., Erik C. Berg, Todd A. Morgan, Glenn A. Christensen. "Alaska's Forest Products Industry and Timber Harvest, Part I: Timber Harvest, Products and Flow," Forest Industry Brief No. 7. Missoula, MT: University of Montana, Bureau of Business and Economic Research, 2017.

Marcille, Kate C., Mclver, C.P., Hayes, Steve W. and Todd A. Morgan, 2017. "Montana's Forest Products Industry and Timber Harvest, 2014, Part 3: Sales, Employment and Contribution to the State's Economy," Forest Industry Brief No. 6. Missoula, MT: University of Montana, Bureau of Business and Economic Research.

Mclver, C.P., Marcille, K.C., Sorenson, C.B., and Todd A. Morgan. "Wyoming's Forest Products Industry and Timber Harvest, 2014, Part 3: Wyoming's Sales, Employment and Economic Impacts," Forest Industry Brief No. 3. Missoula, MT: University of Montana, Bureau of Business and Economic Research. 5p. 2017

Morgan, Todd A., Marcille, Kate C. and Steve W. Hayes. "Forest Products: Wildfires Present Opportunities," 2018 Montana Economic Report: An Analysis and Assessment of Montana's Economic Performance. University of Montana, Bureau of Business and Economic Research. January 2018.

Simmons, Eric A., Todd A. Morgan. "The Forest Products Industry in Idaho, Part 2: Industry Sectors, Capacity and Outputs," Forest Industry Brief No. 11. Missoula, MT: University of Montana, Bureau of Business and Economic Research, 2018.

Simmons, Eric A., Todd A. Morgan. "The Forest Products Industry in Idaho, Part I: Timber Harvest, Products and Flow," Forest Industry Brief No. 10. Missoula, MT: University of Montana, Bureau of Business and Economic Research, 2018.

Simmons, Eric A., Morgan, Todd A., Berg, Erik C., Hayes, Steven W., and Glenn A. Christensen, 2016. "Logging Utilization in Oregon and Washington, 2011-2015," Resour. Bull. PNW-RB-268. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 24 p.

Simmons, Eric A., Morgan, Todd A., Hayes, Steven W., Berg, Erik C., and John D. Shaw, 2017. "Logging Utilization in Arizona and New Mexico, 2012-2017: Current and Past Trends," Draft General Technical Report. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.

## Health Care

Greiman, L., Fleming, S. P., Ward, B., Myers, A., & Ravesloot, C. "Life Starts at Home: Bathing, Exertion and Participation for

People with Mobility Impairment," Archives of Physical Medicine and Rehabilitation.

Ward, Bryce. "Health Care: Recent Trends in Health Care Spending," 2018 Montana Economic Report.

Ward, Bryce. In collaboration with the University of Montana RTC Rural prepared multiple scholarly articles using Ecological Momentary Assessment data that examine the impact of pain and disability on individuals' daily choices.

Ward, Bryce. In collaboration with the University of Montana RTC Rural prepared multiple scholarly articles using original survey and American Time Use Survey to describe the effect of home environment on individual participation in daily life.

Ward, Bryce. In collaboration with the University of Montana RTC Rural prepared multiple scholarly articles using original survey to examine participation in daily life for people with disabilities living in rural communities.

## Manufacturing

Polzin, Paul. "2017 Montana Manufacturers Survey," Bureau of Business and Economic Research, University of Montana.

Polzin, Paul. "2017 Evaluation and Economic Impact of the Montana Manufacturing Extension Center," Bureau of Business and Economic Research, University of Montana.

Polzin, Paul. "The State of Montana Manufacturing 2018," Bureau of Business and Economic Research, University of Montana.

## Montana KIDS COUNT

Herling, Daphne. "LGBTQ Youth in Montana: Bullying in Schools is a Major Problem," Montana Business Quarterly, Vol. 55 (4), Winter 2017.

Herling, Daphne. "LGBTQ Youth in Montana," Montana KIDS COUNT, 2017.

Herling, Daphne. "Paid Family and Medical Leave," Montana KIDS COUNT, 2018.

The Annie E. Casey Foundation. "Race for Results: 2017 Policy Report," Baltimore, MD, The Annie E. Casey Foundation, 2018.

The Annie E. Casey Foundation. "2018 KIDS COUNT Profile – Montana," Baltimore, MD, Annie E. Casey Foundation, 2018.

The Annie E. Casey Foundation. "2018 National KIDS COUNT Data Book: State Trends in Child Well-Being," Baltimore, MD, The Annie E. Casey Foundation.

## Real Estate & Housing

Bridge, Brandon. "2017 Montana Real Estate," 2018 Montana Economic Report.

Bridge, Brandon. 2018 Economic Roundtable, Montana Business Quarterly, Vol. 56 (1), Spring 2018.

Bridge, Brandon. "Affordable Housing in Montana: Are We Pricing Out Our Residents?" 2018 Montana Economic Report.

## Other

Brandon, Bridge. "Bitcoin in Montana," Montana Business Quarterly, Vol. 56 (1), Spring 2018.

Polzin, Paul. "2017 AUBER Membership Report," Bureau of Business and Economic Research, University of Montana.

Polzin, Paul. "Oil, Natural Gas and Coal. How Bad is Montana's Bust?" 2018 Montana Economic Report.

Polzin, Paul. "Transportation and Logistics. Worldwide Expansion Revives Growth." 2018 Montana Economic Report.

Ward, Bryce. "Tackling Montana's Workforce Shortage: If You Want Answers, Talk with Workers," Montana Business Quarterly, Vol. 56 (1), Spring 2018.

Ward, Bryce. "Poverty with a View," Montana Business Quarterly, Vol. 55 (1), Winter 2017.

Ward, Bryce "Barriers to Women's Entrepreneurship," Montana Business Quarterly, Vol. 55 (2) Summer 2017.





**Bureau of Business and Economic Research**

Gallagher Business Building, Suite 231

32 Campus Drive

Missoula, Montana 59812

Phone: (406) 243-5113

[bbermail@business.umt.edu](mailto:bbermail@business.umt.edu)

[www.bber.umt.edu](http://www.bber.umt.edu)