



# ANNUAL REPORT 2019

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



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

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## OUR MISSION

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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

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The Bureau of Business and Economic Research has been providing economic information and analysis on Montana's state and local economies for more than 70 years. Located on the Missoula campus of the University of Montana, the bureau is the research and public service branch of the College of Business.

BBER analyzes local, state and national economies and provides 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 in the past five years and conducts research throughout the West.



## MESSAGE FROM THE DIRECTOR

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The idea of solving all of our problems by asking experts, real or self-proclaimed, may be falling out of fashion. There is a skepticism over what experts say and the facts they cite that has manifested itself in countless ways – politics being the most prominent example.

The expertise of the Bureau of Business and Economic Research is no exception. Our research, analysis and information gathering activities are closer to home, and focus on economic and business issues that matter most to Montana and the western region. How do we deal with those who might portray our work as “fake news” or “alternate facts?” We do it by being as transparent as possible, and thoroughly documenting all of the work and evidence that supports the conclusions we reach.

Part of that documentation lies in your hands now, our 2019 Annual Report. As you inspect these pages, you will see a record of accomplishments that make us proud. You will also see the breadth and depth of our work, as we continue to explore and understand the evolving nature of the economy in which all of us live and work.

We’ve had an exciting and productive year. The 2019 Economic Outlook Seminar series, titled “Facing the Challenge of Affordable Housing,” touched a nerve in every community we visited across the state. We’re following that up this year with another timely topic, “Finding Good Workers.” The 2020 program will be our 45th year of putting on these events. Perhaps we will see you at one of those presentations.

Please don’t hesitate to contact us if we can be of help to you or your organization. Have a great year.

Sincerely,

**Patrick Barkey**  
Director  
Bureau of Business and Economic Research

**Seth Bodnar**  
President, University of Montana

**Scott Whittenburg**  
Vice President for Research and  
Creative Scholarship

**Suzanne Tilleman**  
Interim Dean, College of Business

## OUR STAFF

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### Administration

**Patrick Barkey**  
BBER Director

**Paul Polzin**  
Director Emeritus

**John Baldrige**  
Project Manager

**Brandon Bridge**  
Economist/Director of  
Forecasting

**Megan Elensky**  
Fiscal Manager

### Publications & Outreach

**Scott Hawk**  
Publications Director

**Katrina Johnson**  
Marketing Director and  
Event Planner

**Forest Industry  
Research Program**

**Todd Morgan**  
Director

**Steve Hayes**  
Research Forester

**Erik Berg**  
Research Forester

**Eric Simmons**  
Research Associate

**Kate Marcille**  
Research Associate

**Thomas Donahue**  
Research Associate

**Dorian Smith**  
Research Associate

**Luke Rymniak**  
Research Assistant

**Bob Campbell**  
Senior Database  
Administrator/  
Programmer

### Health Care Research

**Robert Sonora**  
Director

**Thale Dillon**  
Montana Child Research  
Initiative

**Kelsey Halvorson**  
Research Assistant

**Daphne Herling**  
Senior Researcher

### Survey Research

**Janet Stevens**  
Survey Research Field  
Coordinator

**Ramona Alspaugh**  
Senior Interviewer

## ADVISORY BOARD MEMBERS 2019-20

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**Taylor Brown**  
President  
Northern Broadcasting  
System  
Billings

**Webb Brown**  
Executive Director  
Montana Society of Asso-  
ciation Executives  
Helena

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

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

**Scott Levandowski**  
Market President  
First Interstate Bank  
Bozeman

**Heather McDowell**  
Vice President Legal,  
Environmental and  
Government Affairs  
Sibanye-Stillwater  
Columbus

**Thomas Schultz**  
Vice President of  
Government Affairs  
Idaho Forest Group  
Coeur d'Alene

**Bill Whitsitt**  
Executive in Residence  
Devon Energy Corp.  
(retired)  
Bigfork

## 2019 YEAR IN REVIEW

### New Personnel Add to BBER's Strengths

The Bureau of Business and Economic Research has been Montana's preeminent source of business and economic information, and analysis for more than 70 years. As the state's oldest and most respected business research center, BBER continues to provide accessible and reliable information about Montana's business and economic climate.

BBER serves both the private and public sector, providing highly sought after economic analysis, industry studies, education and statistical analysis, as well as expert policy analysis as required. The bureau also has nearly four decades of experience providing a full range of survey services, including study design, evaluation and digital surveys – BBER is equipped to help with the survey needs of any business or organization.

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.

The bureau operates in a competitive arena for the grants and projects that generate a large portion 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 focus in-house resources while subcontracting or partnering with other professional organizations.

Past collaborators include the Rural Institute, Blackstone Launchpad, the Institute for Tourism and Recreation Research, the Montana Manufacturing Extension Center, Montana's High Tech Business

Year	Projects	Publications
2014	35	35
2015	33	46
2016	66	54
2017	79	60
2018	54	50
2019	45	78
<b>Total</b>	<b>312</b>	<b>323</b>

Alliance, faculty in business, forestry, public health, education and social work, as well as Montana University System centers and departments.

The notable events and activities in 2018-19 include:

- BBER welcomed Katrina Johnson to its staff, as marketing director and events planner. Johnson has worked in the marketing and media industry for 15 years and adds her communications expertise to the team.
- The bureau also added Megan Elensky to its staff to fill the role of fiscal and office manager. Elensky worked for BBER as a student while attending the College of Business and has extensive experience with our operations. Most recently, she led the registration process for the Economic Outlook Seminars.
- BBER published a notable study on the economic impact of Medicaid expansion in Montana, which received national attention. Enrollment in the expanded program exceeded projections, and was followed up by an updated study in 2019.

The study found the overarching economic impact would be about \$1.6 billion in additional personal income and just over \$2 billion in gross state product, including the support of 6,000 additional jobs in the state.

- BBER published the 2019 Montana Economic Report. This comprehensive analysis and assessment of Montana's economic performance was integrated with the 2019 Economic Outlook Seminar series to deliver more in-depth information to attendees. It was also distributed to key decision-makers across the state.
- The 2019 Economic Outlook Seminar series celebrated its 44th year of delivering half-day programs on Montana's economy. The past year, we added a 10th city to the tour – Big Sky. BBER economists and other industry experts presented statewide and regional economic forecasts. Those forecasts included reports on key industries, such as health care, forest industry products, real estate and housing, agriculture, tourism and energy. The theme, "Facing the Challenge of Affordable Housing," examined the future of housing markets.
- NorthWestern Energy again served as the primary sponsor of the 2019 Economic Outlook Seminar series – continuing their long record of generous support. EOS 2019 was also sponsored by First Interstate Bank, Benefis Health System, Blackfoot Communications and the Montana Housing Partnership.
- The health care research program hired Robert "Tino" Sonora as its new health care director. Sonora is working on new developments in health care research and economic analysis for the 2020 Economic Outlook Seminar series.
- Montana KIDS COUNT will no longer be housed at BBER as the Annie E. Casey Foundation has shifted their focus from research to advocacy. A new effort, the Montana Child Research Initiative, is underway to continue BBER's highly regarded family research program.
- BBER partnered with the Montana Chamber Foundation to present the 2019 Economic Update Series. This year's program focused on the demographic challenges and opportunities in Montana's labor markets. The tour traveled to seven cities and featured BBER director Patrick Barkey, who gave a mid-year update on the economic outlook for Montana and its local communities.
- The Forest Industry Research Program continued its work with the USDA Forest Service in collecting data and reporting results from projects inside and outside of Montana. The program

works with the forest service throughout the West, including Alaska, Washington, Oregon, Idaho, New Mexico, California and other states. This year they have added several University of Montana graduate students to their staff.

- The survey research group collaborated with the Greater Montana Foundation for a third study on how Montanans get their news. The study found that Montana has moved into the mobile device phase of the digital media age, with 60 percent of residents now using a mobile device to access online sources. The study also found that Montanans are paying more attention to news source credibility, are often untrusting of the news media, and views on credibility were high correlated with political party affiliation.
- BBER's Economic Outlook Seminar website continues to be a resource for attendees to the annual seminar series. This past year, the website generated 15,243 page views from 5,042 visitors. The 2020 Economic Outlook Seminar series will implement a new registration portal for ease of access and improved customer experience.
- BBER's website continues to be a resource for users, having generated 45,114 page views in 2018-19 with 11,251 unique users and 16,295 sessions.

## Goals for 2020

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1. Maintain BBER's position as the primary source of information and analysis on Montana's economy.
2. Uphold BBER's high reputation for carefully researched, unbiased and relevant analysis of policy issues that are important to Montanans.
3. Improve the customer experience for those who work with or contact the bureau.
4. Strive for greater reach and authenticity on social media, positioning BBER as the foremost authority regarding Montana's business and economic environments.



## FINANCIAL REPORT

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Although total revenues declined slightly in the 2018-19 fiscal year, the bureau's financial health remains robust. These declines came about largely due to a transition in leadership in the health care research program and the winding down of Montana KIDS COUNT. The Economic Outlook Seminar series and other revenue streams remain relatively stable.

The largest revenue source for BBER comes from externally funded projects. These are the contracts and grant-funded projects administered by the University of Montana's Office of Research

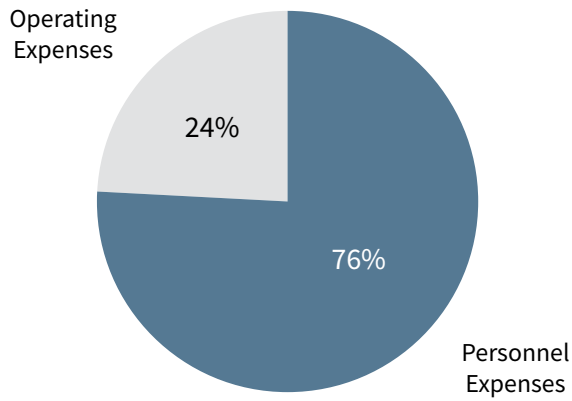
and Sponsored Programs and carried out by BBER researchers and staff. They include a mixture of multiyear and short-term projects. Sponsors include the federal government, state government, private foundations, nonprofits and businesses.

Nearly one-fourth of expenditures in 2019 (\$441,271) were used on operations and about three-fourths were spent on personnel expenses.

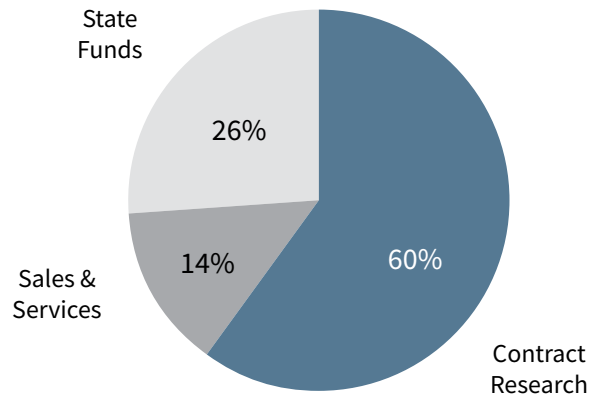


Revenue					
	FY 2018	%	FY 2019	%	
Contract Research	\$1,366,695	67%	\$1,094,213	60%	
Sales & Services	\$212,711	10%	\$253,205	14%	
State Contribution	\$468,962	23%	\$480,037	26%	
<b>Total Revenue</b>	<b>\$2,048,369</b>	<b>100%</b>	<b>\$1,827,455</b>	<b>100%</b>	
Expenses					
Personnel – State	\$468,616		\$479,876		
Personnel – Other	\$987,062		\$901,289		
<b>Total Personnel Expenses</b>	<b>\$1,455,679</b>	<b>71%</b>	<b>\$1,381,165</b>	<b>76%</b>	
Operating Expenses – State	\$346		\$161		
Operating Expenses – Other Sources	\$574,718		\$441,110		
<b>Total Operating Expenses</b>	<b>\$575,064</b>	<b>29%</b>	<b>\$441,271</b>	<b>24%</b>	
<b>Total Expenses</b>	<b>\$2,048,369</b>	<b>100%</b>	<b>\$1,827,455</b>	<b>100%</b>	

FY 2019 Expenses



FY 2019 Revenue



# ECONOMIC ANALYSIS

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

The Bureau of Business and Economic Research is Montana's premier applied economic research center. BBER has been providing economic analysis, survey research and forecasts for Montana businesses, organizations, governments and key decision makers for more than 70 years. The bureau analyzes local, state and national economies and provides annual income, employment and population forecasts. BBER disseminates this information across the state via seminar presentations, publications, several websites, social media channels and interviews with the news media.

2019 marked another year of high profile BBER projects and publications. These included:

- An updated report on the economic implications of the early retirement of the Colstrip electric generation stations larger units, addressing the consequences for electric rates, system changes, tax revenues, and job and income impacts.
- An impact study of the contribution of the hard rock mining industry in Montana, including the potential economic gains that could occur should proposed projects move forward.
- A study of how the Ravalli County economy might look today had harvest levels from federally owned lands continued at their predecline levels. The study was intended to demonstrate the economic consequences of land management policies and decisions.
- BBER continued its long established role serving as the Montana representative with the Federal-State Cooperative for Population Estimates. We are advising and assisting in preparations for the 2020 Census and working on various projects, including the 2018 Vital Statistics Report, 2018 State/County Population Review, 2018 Housing Units Estimates Review, 2018 Sub-County Population Estimates Review, 2018 Group Quarters Estimates Review and the 2018 FSCPE Annual Meeting.
- Bureau director emeritus Paul Polzin continued his contribution to the Economic Outlook Seminar series for his 44th year. He also published articles challenging the findings of a private economic research group, including one which stated that timber-dependent communities in Idaho were not affected by the decades long decline in the timber industry.
- We completed research on the economic impact of scientific research taking place within the Montana University System on Montana's economy.
- Brandon Bridge published a paper entitled, "Household-Level Effects of Electricity on Off-Farm Income" in the peer-reviewed academic journal, *Economics Bulletin*. Bridge also was a presenter at the 2018 Great Conversations Conference in Helena, where he discussed bitcoin in Montana. He presented a paper on energy poverty at the 2018 Energy Council Global Energy and Environmental Issues Conference in Denver, Colorado and produced housing data for the annual Missoula Organization of Realtors Missoula Housing Report.

## The Economic Impact of the Hutterite Communities

A recent study by the Bureau of Business and Economic Research at the University of Montana, in partnership with Montana State University's Department of Agricultural Economic and Economics in the MSU College of Agriculture, highlights the economic impact of the Lehrerleut branch of Hutterite communities in Montana. Researchers from UM and MSU sought to quantify the statewide role Hutterite communities and businesses play in Montana's economy.

The study found that the 38 Lehrerleut communities examined support significant production, employment and income in the state. BBER director Patrick Barkey noted that those impacts extend beyond their own communities. The study took into account the high degree of self-sufficiency of the communities and the in-kind compensation for labor.

Because of the presence of the Lehrerleut communities in the state, there are:

- 2,191 more permanent, year-round jobs.
- An additional \$63.2 million in income received by Montana households annually.
- \$365.3 million more gross revenue received by Montana business and nonbusiness organizations annually.
- More than 5,300 more people in the Montana economy.

## Under the Big Sky Music Festival

The entertainment management program at the University of Montana has a reputation as a place to get immersed in the business side of the entertainment industry. When director Michael Morelli wanted explore the economic footprint of a new music festival in Whitefish, Montana this past summer, he turned to BBER for help.

Entertainment management students worked with BBER on an economic impact assessment of the two-day festival, which brought 14,000 people to the community. The students collected data, worked with statistical modeling and helped interpret analytical results to better understand what music festivals bring to communities.

## BBER Undergoes Five-Year Review by the University of Montana

As a regent approved research department at the University of Montana, the Bureau of Business and Economic Research is reviewed by the provost's office every five years to assess its performance and contribution to the mission of the university. As part of that process, an external reviewer was selected to evaluate BBER's activities, which included telephone interviews with BBER and university personnel.

While the results of the university's review are not yet finalized, the process has been enlightening and invigorating. The external reviewer, Dr. Eric Thompson, K.H. Nelson Professor of Economics and director of the Bureau of Business Research at the University of Nebraska-Lincoln said in his report:

"My assessment is that the BBER is one of the leading university-based business and economic research centers in the country. The bureau takes this leading role because of the size and scope of its activities. ... The scope, quantity and quality of (its) activities is large relative to nearly all such research centers throughout the United States. ... BBER contributes to the University of Montana's strategic goal of workforce and economic development, as well as to the Partner with Place Priority for Action."

We thank Dr. Thompson for his thorough assessment and look forward to serving the university and Montanans in the coming years.

# SURVEY RESEARCH

## Client-Specific, Scientific Data Collection and Analysis

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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 nearly four 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 2018-19, 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.

**2019 News Media Preferences and Issues Survey.** The Greater Montana Foundation. A survey of how Montanans get their news and what they view to be the important issues facing the state.

**Social Survey: USDA Forest Service Region One.** USDA Forest Service. A survey to help policymakers and planners quantify public opinions about federal public lands that are close to the homes of Region One residents.

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

## High-Tech Growth Continues to Surge

High-tech companies have grown to become an important component of Montana's economy, particularly in its larger cities. This past year, BBER conducted a study for the High Tech Business Alliance, which surveyed high-tech companies statewide. It found that collectively, the high-tech industry generated more than \$2 billion in revenue in 2018 and is growing nine times faster than the statewide average. The study also found that high-tech employers paid more than twice the median earning per Montana worker, making it the third highest paying industry in Montana.

Montana's quality of life, its lifestyle, work/life balance, recreational opportunities and the 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.

The study found that Montana High Tech Business Alliance member businesses continue to grow, employing about 7,500 workers and paying an average annual salary of \$65,000, which is 60 percent higher than the average earnings per Montana worker. Montana high-tech companies expect to increase wages by 5 percent in

2019, significantly faster than the 3.2 percent growth of all Montana employers. Survey respondents expect to add 1,700 new jobs in 2019, and make at least \$125 million in capital investments in Montana – a 45.3 percent increase over 2018.

The 2019 survey included a question on what skills high-tech employers were looking for in new hires. The most sought-after skills are coding and programming, followed by technical skills and sales and marketing skills. Nearly 80 percent of newly hired employees at these firms came from Montana.

High-tech companies reported that hiring skilled technology workers and finding capital are their firms' largest impediments to growth, though somewhat fewer companies reported that it was harder to obtain capital in 2018 compared to 2017.

## How Montanans Get Their News

Montanans have moved into the mobile device phase of the digital media age. That's one of the important findings from the latest Greater Montana Foundation survey on news media preferences.

This shift in how we get information has a number of important implications for us as citizens, voters and consumers of news and information. For those in Montana's media industry it's certainly worth a moment of reflection – how is news content consumed and what will be their future business model?

This was the third such study by the Greater Montana Foundation on how Montanans use media to stay informed and what issues they see as most important. Among the results:

- More Montanans are paying attention to the news.
- Ninety percent of Montanans now say they have internet access, and internet provided news and social media are driving a proliferation of news sources that complement more traditional sources, such as broadcast television, radio and print newspapers.
- Nearly 70 percent of Montanans say they get at least a portion of their news from the internet or social media, although other traditional sources remain very important.
- Almost 60 percent of Montanans say they use a mobile device more than a computer to access online sources.
- This combination of more available sources and mobile access has caused declines in the regular consumption of traditional news sources, such as nightly national television news programs, Montana newspapers and local broadcast news.

# HEALTH CARE INDUSTRY RESEARCH

## BBER Hires New Director, Brings in Newly Funded Projects

The topic of health care and health care finance were featured prominently in local and national news in 2018-19 and BBER's health care research program played a prominent role in the discussion.

In 2019, Robert "Tino" Sonora became director of the program after serving as a professor of economics at Fort Lewis College in Durango, Colorado. Sonora received his Ph.D. from Ohio State University, and has extensive experience in applied economics, macroeconomics and econometrics.

BBER's health care research program continues to play a high profile role in the discussion of health care reform in Montana. Its evaluation of the expansion of Medicaid for low-income households was key to the successful renewal of that expansion during the 2019 legislative session.

In the coming year, BBER is preparing a proposal for the Benefis Health System, which includes an economic impact study and an

analysis of health care outcomes within the Benefis system. A second seed grant proposal is in preparation entitled, "Affordable Housing and Health in Montana" for the Montana Healthcare Foundation.

Other projects in the works include: an economic analysis for MilTech at Montana State University, which works for the Department of Defense, a research project quantifying the economic impact of Montana's seven Native American tribes, and a study titled, "The Child Care Crisis in Montana: The Economic Impact of Inadequate Child Care" for the Helena Branch of the Federal Reserve Bank of Minneapolis.

On the academic side, Sonora will be presenting a paper, "Land Use and Regional Economic Growth in the West: An Investigation Across Time and Space," which he co-authored with Paul Polzin for the annual Association for University Business and Economic Research conference. He will also present "Giving a Good Research Presentation: Thoughts on Content" as a panelist at the Southern Economic Association annual conference in Ft. Lauderdale, Florida.

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# MONTANA CHILD RESEARCH INITIATIVE

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

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In 2019, the Montana Child Research Initiative produced data sheets for each of the state's house and senate districts in preparation for the 2019 legislative session. It also produced a biannual data book, which was released this past spring.

Researchers conducted data research and analysis for the Rocky Mountain Tribal Epidemiological Center, and supported the KIDS COUNT Data Center in their publicity of four different publications.

The Montana Child Research Initiative also released its own publications: LGBTQ Youth in Montana; Paid Family and Medical

Leave; and Youth Suicide in Montana, as well as articles for the Montana Business Quarterly.

This year, the Montana Child Research Initiative filled numerous information requests and was featured in the news media on several occasions, including print, web and radio.

Moving forward, Montana KIDS COUNT will no longer be housed at BBER as the Annie E. Casey Foundation has shifted its focus from research to advocacy.

## Youth Suicide in Montana: Guns Matter

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Montana persistently ranks in the top three states with the most youth who die by suicide – and their method of choice is overwhelmingly firearms.

Nationally, 39 percent of youth ages 11-17 who committed suicide used a firearm to kill themselves. In Montana, that number is significantly higher at 63 percent. Girls in Montana kill themselves at a rate that's six times higher than the rest of the country. While the percentage of firearms used by Montanans to successfully kill themselves has stayed consistently high for years, the numbers of people dying has risen significantly.

Using a gun as a means to kill oneself is significant because people are far more likely to die using a firearm than from any other means – 83 percent of suicide attempts using a firearm results in death. This is particularly important because if someone survives a suicide attempt they are unlikely to try again. Among those who have attempted suicide 70 percent make no further attempts.

Growing up with firearms does not make an individual more prone to suicide. But if a gun is present in a household, having access is an important consideration. Almost half of all people who've survived a suicide attempt report that they spent less than 10 minutes deliberating between the emergence of suicidal thoughts and the actual attempt. Therefore, delaying access is important so that someone has time to consider their actions.

Youth suicide is a public health crisis. Keeping guns out of the hands of youth who are having suicidal thoughts makes sense and delaying action has proven to give them time to reassess their choices.







The 2019 Economic Outlook Seminar in Missoula. (Todd Goodrich)

# FOREST INDUSTRY RESEARCH PROGRAM

## Program Welcomes New Staff and Brings in New Funds for Projects

The Forest Industry Research Program, the largest and oldest individual research program contained within BBER, continued its high profile research activities. This year it welcomed two new members to the research team, including Mike Niccolucci, who recently retired from the U.S. Forest Service and Luke Rymniak, who became a full-time staff member after serving in the program as an undergraduate intern.

FIRP completed three externally funded projects. One on the study of carbon stored in California's harvested wood products and energy use by California sawmills for the USFS Pacific Northwest Research Station and the California Department of Forestry and Fire Protection; another on logging and log hauling cost collection for the USFS Northern Region; and a third to identify, understand and reconcile differences in published timber harvests and log export data in Alaska.

FIRP is continuing six projects: Pacific West timber product output and forest industry analysis, Oregon sawmill production functions, Region Two capacity and capability analysis, National Forest System timber flow analysis for economic impact modeling, timber product output and forest industry analysis for the interior West states, and Alaska logging utilization.

Three new project started in FY 2019: a new agreement with the USFS Northern Region to conduct an analysis of logging and log hauling costs, and assist with timber appraisal in Montana and Idaho; a new agreement with the Pacific Northwest Research Station and CalFire to study and report on the quantities of logging

residue generated while harvesting timber in California; and a new agreement with the Pacific Northwest Research Station and Oregon Department of Forestry to analyze sawmill energy use and carbon captured in harvested wood products in Oregon.

Over the course of the past year, there were between nine and 12 projects underway, engaging the program's 10 to 12 full- and part-time employees. FIRP continues to be funded almost exclusively by external grants and contracts, supporting a half-million dollar payroll and other expenses.

Research activities in 2018-19 included: the continuation of its core research with the Forest Service's Forest Inventory and Analysis Program at both the regional (12 western states) and national levels; maintaining our working relationship with the Northern Region (R1) of the USFS, collecting timber harvesting costs in Idaho and Montana; capacity and timber flow projects for the Rocky Mountain Region (R2) and the National Forest System (NFS); and securing funding to conduct a logging utilization study in California and analyses of carbon stored in harvested wood products, as well as energy use by sawmills in Oregon.

FIRP researchers published articles in the Montana Business Quarterly and the Journal of Forestry. Staff co-authored reports and articles, made professional presentations, presented posters, served as the bureau's representatives on campus and off, responded to numerous information requests, reviewed journal articles, and/or served in various professional and community organizations throughout the 2019 fiscal year.

## FIRP Agreement Expands Timber Capacity

Economists and policymakers within the USFS need accurate information on where and how national forest timber is being utilized. Through an ongoing agreement, FIRP leverages primary forest industry data collected and made available periodically to characterize national timber flow and utilization. The resulting dataset is incorporated into USFS economic impact analyses. This helps to increase the understanding of the economic benefits generated by timber harvest activities on national forest land. This agreement has been extended through 2021.

The Forest Industry Research Program expanded its scope of work with the U.S. Forest Service in 2018. For over 10 years, FIRP has provided Region One (Montana and Northern Idaho) with annual updated logging and hauling cost estimates, for inclusion in the USFS timber sale appraisal systems. In 2018, this agreement was updated and extended out to 2024, with the scope of work expanding to include direct updates of the Region One timber sale appraisal system moving forward.

## Decline in Timber Harvests Impact Ravalli County Economy

Ravalli County is not the only county in Montana that has a high fraction of its land owned and managed by the federal government. Management policies on that land have an economic impact on the livelihoods of families, businesses and governments.

To make that point, Ravalli County commissioners asked BBER researchers to examine how land management policies for federally owned forest lands in Ravalli – policies that reduced the rate of timber harvests – affected the economy as a whole. In other words, what would the Ravalli County economy look like today had the harvests from federally owned timber-producing

lands been maintained at late 1980's levels, instead of suffering the significant declines that actually occurred?

Researchers from FIRP, taking into account the profound changes in production and technology in mills that has reduced labor needs since that time, created a sustained timber harvest scenario for the local economy that ultimately retained mill capacity and other productive facilities which were lost when harvests declined. Those facilities supported significant employment, income, and tax revenue.

## University of Montana Student Staff Members

**Thomas Donahue** is a research associate who joined BBER after completing his bachelor's degree in resource conservation from the University of Montana in 2018. Donahue became a full-time employee in 2019, and has been working on the California and Oregon harvested wood products carbon and sawmill energy analyses, as well as our logging utilization studies in Alaska and California.

**Luke Rymniak** is a student research assistant with BBER. Rymniak joined the bureau as an intern in 2019, while an undergraduate student. He completed his bachelor's degree in forestry this past

year and will continue working for BBER while he pursues his graduate degree. He is working on the Oregon mill study and presentation for the 2019 SAF National Convention, several Region Two capacity and capability reports, and our logging utilization studies in Alaska and California.

**Philip Williams** was a graduate research associate, working part-time for BBER. He helped with GIS, map making, surveying mills and measuring trees on our logging utilization studies. Williams left to pursue his graduate studies in the spring of 2019.

## SEMINARS AND OUTREACH

### Making Our Research Accessible to the Public

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The Bureau of Business and Economic Research continued its public outreach in 2018-19 by producing over 78 publications and delivering over 130 presentations.

Marketing included targeted social media campaigns; distribution of printed material, including the Montana Business Quarterly, and collaborating with the Montana Chamber Foundation on their economic update series of seminars. We grew our digital audience on social media and produced a number of mass email communications.

Our yearly Economic Outlook Seminar series traveled to 10 cities across Montana. Registrations for 2019 reached 1,500 attendees. In conjunction with the series, BBER produced the 2019 Montana Economic Report. We expect a larger audience in 2020 thanks to a new registration portal making it easier for attendees to register.

BBER responded to over 50 information requests from elected officials and staffers, the forest industry, environmental nongovernmental organizations, state and federal agency personnel, university researchers and students, local and regional reporters,

business consultants, and the public throughout Montana and the West. Responses typically entailed brief face-to-face or telephone conversations, newspaper or radio interviews, custom prepared data summaries and maps, and distribution of electronic or printed copies of various reports.

BBER is one of the most sought after research centers because of its continued dedication to delivering information that helps businesses and economic sectors grow.

Presentations over the past year spanned a variety of topics, including, Medicaid expansion, trends in the economy, growth of the tech industry in Montana, global energy consumption, how Montanans get their news, affordable housing, the impact of timber harvests in Ravalli County and the economic contributions of the Hutterite community.



## 44th Annual Economic Outlook Seminar: Facing the Challenge of Affordable Housing

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In 2019, the Bureau of Business and Economic Research traveled to 10 cities across the state for its 44th annual Economic Outlook Seminar series.

From January through March, BBER economists and professional industry experts presented statewide and regional economic forecasts for the coming year. Those forecasts included reports on key industries, such as health care, the forest industry, real estate and housing, agriculture, tourism and energy.

The 2019 Economic Outlook Seminar, “Facing the Challenge of Affordable Housing,” examined the question of how Montana’s

affordable housing system is holding ground in an ever changing economy. Speakers included guests from universities, banking and real estate to help shape the outlook of affordable housing across the state.

Seminars were held in Missoula, Helena, Great Falls, Billings, Bozeman, Butte, Kalispell, Big Sky, Sidney and Miles City. 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.

## 14th Annual Economic Update Series: Silver Tsunami – Are Montana Businesses Ready?

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In August 2019, the Montana Chamber Foundation presented the 2019 Economic Update Series, “Silver Tsunami: Are Montana Businesses Ready?” Co-produced by the Bureau of Business and Economic Research, the update focused on the aging population of Montana’s workforce and how it will affect our economy.

The tour traveled to seven cities and featured BBER director Patrick Barkey, who gave a midyear update on the economic outlook for Montana and its local communities.

# MONTANA BUSINESS QUARTERLY

A Legacy of Research on Topics Important to Montanans

For 57 years, the award-winning Montana Business Quarterly has provided research on economic and social economic trends in the state.

The first edition was published in 1962 and featured articles on Montana's economy and statewide personal income estimates. Today, we are still addressing issues important to Montanans, like affordable housing, entrepreneurship and the state's growing high-tech industry.

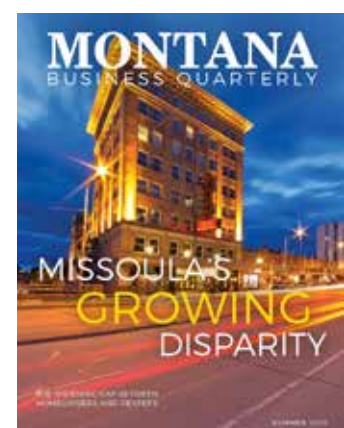
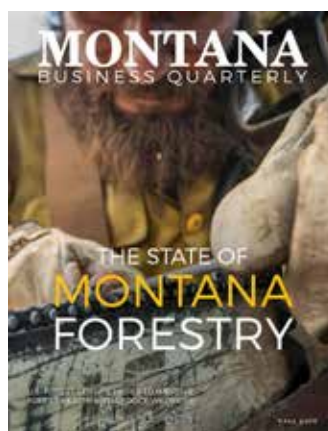
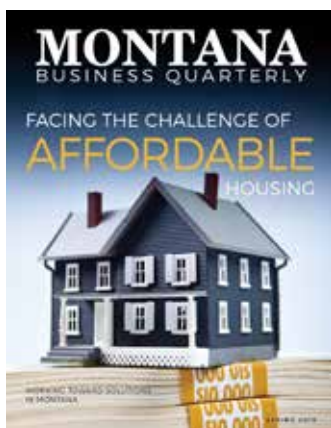
We tackled Medicaid expansion, the state of the forest industry and homebuilding in Montana's major markets. And just like in our first edition of the magazine, we cover Montana's economy and important sectors.

The decline of print media in recent years has spurred a growing social media audience for the magazine and its accompanying website. Individual articles reach thousands of Montanans with the opportunity for readers to comment and share those stories with their friends.

We still print the Montana Business Quarterly for a small group of readers who enjoy having it in their home or office. Our subscribers include business executives, government officials and policymakers, as well as libraries and universities. Plus, every Montana legislator receives a complimentary copy of the magazine.

This year, we lowered our subscription price and introduced a new online subscription portal, which offers recurring billing, gift subscriptions and more. We also celebrated the 10-year anniversary of Missoula Federal Credit Union, now renamed Clearwater Credit Union, as our signature sponsor.

Over the next year, we hope to continue our success in digital publishing and launch a podcast. Finally, we plan to continue our long tradition of publishing research on topics important to Montanans.



# SERVICE TO THE UNIVERSITY, COMMUNITY AND PROFESSIONAL ASSOCIATIONS

## Partnering with Our Community

Our 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 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 130 presentations were given to audiences throughout the state in 2018-19, 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 as 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.

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

The bureau is one of the founding members of the Association for University Business and Economic Research, a national organization established in 1948. BBER Director Patrick Barkey currently serves as president-elect for the organization.

# RESEARCH PROJECTS

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## Economic Analysis

**The Economic Contribution of Montana's Hutterite Communities** (June 2019). Church Harris Johnson & William, P.C. Using financial records from 38 Hutterite (Lehrerleut) communities, the ongoing economic contributions of 81 farming operations on the state economy was examined.

**The Economic Contribution of Montana's Hardrock Mining Industry** (September 2018). Montana Mining Association. Examining the ongoing impacts of metal and other mining operations around the state, including exploration activities. Also analyzing the impacts of new mining projects should they come to fruition.

**The Impact of Timber Harvest Declines on the Ravalli County Economy** (October 2018). 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. Presenting an estimate of the economic impact of timber availability by constructing how the economy may have evolved should those mills had remained in operation.

**The Economic Contribution of Sibanye-Stillwater in Montana** (February 2019). Examining the ongoing contributions of palladium and other precious metal mining and processing activities in three facilities located in Stillwater and Yellowstone Counties.

**The Economic Impact of University Research in Montana** (January 2019). Montana University System. Modeling the ways university research in Montana contributes to the economy.

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

**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.

**Household-Level Effects of Electricity On Off-Farm Income** (ongoing). A study investigating whether, and by how much, the earnings potential of a household in a developing country is impacted by gaining access to electricity.

## Forest Products

**Alaska Timber Harvest and Log Export Data Evaluation** (December 2018). 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. Examining published data and working with agencies and businesses that collect, compile and report log export and timber harvest information.

**Region One Logging and Log Hauling Costs** (January 2019). A 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.

**California Harvested Wood Products Carbon & Sawmill Energy** (June 2019). 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.

**Region One Logging Costs and Timber Appraisal Analysis** (March 2024). A challenge cost share agreement with the USDA Forest Service, Region One, Missoula, Montana to conduct an analysis of logging and log hauling costs and assist with timber appraisal in Montana and Idaho.



**California Logging Utilization** (May 2022). 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 Project.

**Oregon Harvested Wood Products Carbon & Sawmill Energy** (May 2020). A cost reimbursable agreement with the USDA Forest Service, Pacific Northwest Research Station, Portland, Oregon and Oregon Department of Forestry to analyze sawmill energy use and carbon captured in harvested wood products in Oregon.

**Pacific West Timber Product Output 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.

**Oregon Sawmill Production Functions** (May 2022). A joint venture research agreement with Dr. 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.

**Region Two Capacity and Capability Analysis** (September 2021). 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).

**National Forest System Timber Flow Analysis for Economic Impact Modeling** (September 2021). 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.

**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.

**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.

#### Health Care

**Montana's Hospitals and the Montana State Economy** (2019). The Montana Hospital Association. A study on the economic impact of hospitals on state and local economies, including employment, wages and Medicaid funding.

**The Economic Impact of Medicaid Expansion in Montana: Updated Findings** (January 2019). Montana Healthcare Foundation and Headwaters Foundation. A study on the economic impact of the 2016 Medicaid expansion in Montana – updating a report from April 2018.

**Data Analysis Support for Reducing Barriers to Complex Care Navigation** (ongoing). Kalispell Regional Medical Center. Providing research support and data analysis to Kalispell Regional Medical Center to help develop a course of action to reduce barriers to health care access in Flathead County, Montana.

**Affordable Housing and Health in Montana** (ongoing). Montana Healthcare Foundation. Investigating the impacts of affordable housing availability for low-income households on health and mental health outcomes in Montana. Estimating the effects of affordable housing on health benefits in terms of outcome, such as access to nutritious food; stress reduction and addiction; effects of poor quality housing on health; chronic illness – e.g. diabetes; access to health care; and reduction of communicable illness due to overcrowding and subpar housing.

#### Manufacturing

**Evaluation and Economic Impact of the Montana Manufacturing Extension Center** (ongoing). Montana Manufacturing Extension Center. Report detailing client survey results of the MMEC in 2018.

**Montana Manufacturers Survey** (ongoing). Montana Manufacturing Extension Center. Report detailing findings of the survey of manufacturers in the state of Montana, which aims to learn about manufacturers' assessment of their plant's economic performance in 2018 and their outlook for 2019.

### Montana Child Research Initiative

**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 subgrantee programs that deliver services to expecting and parenting teens across the state.

**Rocky Mountain Tribal Epi Center Data Research** (February 2019). Developing methodology for calculating reservation specific demographic information for American Indian populations in Montana and Wyoming, based on data from the 2010 Census and the American Community Survey's five-year estimates. Wide scope gathering of all state specific data pertaining to American Indian populations in Montana and Wyoming, using state and national/federal sources.

**Montana KIDS COUNT** (2019). 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.

### Real Estate and Housing

**Montana Housing Starts Report** (ongoing). Gathering data for the calculation of housing starts in Montana for 2018.

### Other

**The Economic Contribution of the Island Mountain Development Group** (ongoing). An economic impact study of an economic development corporation owned by the Gros Ventre and Assiniboine Nations of the Fort Belknap Indian Community.

**Economic Benefits of Improving Montana's Transportation Infrastructure** (ongoing). Montana Department of Transportation. Investigating the potential economic benefits of improving Montana's road and bridge infrastructure to a level of "good," and to estimate the rate of return to Montana's capital infrastructure.

**2019 News Media Preferences and Issues Survey** (2019). A statewide survey of how Montanans get their news and what they view as important issues facing the state.

**A Profile of Montana's High-Tech Industries** (2019). Montana High Tech Alliance. A survey of member of the Montana High Tech Alliance on job growth, wages and workers in the high-tech industry, and its economic impact on the state.

# RESEARCH PUBLICATIONS

## Economic Analysis

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Barkey, Patrick M., "The Contribution of Cognizant/Advanced Technology Group to the Missoula Economy," June 2018.

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