



2022 ANNUAL REPORT



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

TABLE OF CONTENTS

Message From the Director	4
Advisory Board and Staff	5
2021-22 Year in Review	6
Financial Report	8
Economic Analysis	10
Survey Research	12
Health Care Industry Research	14
Forest Industry Research Program	16
Outreach and Communications	19
Service to the University, Community and Professional Associations	21
Research Projects	22
Publications	25

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University of Montana College of Business. Photo provided courtesy of University of Montana.

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 (BBER) was established in 1948 to monitor Montana's business and economic conditions. In addition to economic analysis, the Bureau has grown to encompass several specific research areas, including forest products, manufacturing, health care, energy, and survey research. Located in the Gallagher Business Building, BBER serves as the research branch of the College of Business.

The Bureau maintains a standard of excellence by bringing data and information to bear on issues facing the state and region. Our economists and other research professionals have decades of experience in applied economic research.

We have become one of the largest and most successful business research centers in the nation by:

- Bringing our long-running economic outlook seminar to communities across the state each winter.
- Producing timely and insightful analysis of local, state, and national economies.
- Delivering reliable income, employment, and population forecasts.
- Conducting comprehensive research on forest products, manufacturing, health care, energy and real estate.
- Providing high-quality survey research for governments and other organizations
- Publishing the award-winning *Montana Business Quarterly* magazine.
- Growing our Forest Industry Research Program throughout the West.
- Continuing to develop specialized expertise, resulting in increased external funding.
- Cultivating our well-established professional relationships, while developing new connections that further broaden and strengthen our reach.



Bureau Director Patrick Barkey. Photo provided courtesy of Newstalk KGVO.

MESSAGE FROM THE DIRECTOR

Two and a half years after the onset of the pandemic, the temptation to say things are getting back to normal is great. And while the rhythm of life at a research center housed in a university does closely resemble what we took for granted before Covid struck in 2020, the economy that we analyze has been anything but that. The post-pandemic economy has seen war, inflation, rising interest rates, and a bear market for equities. From our vantage point as researchers, it has been a challenging and exhilarating time trying to understand and predict it.

One surprise has been the increase in pressure in housing markets across Montana. After a year of explosive price growth in 2021, communities across the state faced affordability challenges that they struggled to address. BBER's visibility and success in helping illuminate the factors driving those challenges, aided by the addition of economist Derek Sheehan to the research team in 2022, has fueled a number of important studies and reports on this topic.

It is also gratifying to see the increased recognition and success of our Forest Industry (FIRP) team as they continue

to extend their research footprint across the West. Of particular note are the accomplishments of Todd Morgan, FIRP director, and Research Economist Michael Niccoluci as part of the team who won the Chief's Award from the U.S. Forest Service in recognition of their work on pandemic-related assistance to the industry.

There are many other accomplishments of note over the last year. We've tried to compile them in this report. We hope you find it interesting reading, and please consider the BBER for your current and future research needs.

Here's hoping for a less surprising, and more prosperous year ahead.

Sincerely,

Patrick Barkey

Director

Bureau of Business and Economic Research

UNIVERSITY LEADERSHIP

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President, University of Montana

Scott Whittenburg
Vice President for Research and
Creative Scholarship

Suzanne Tilleman
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OUR STAFF

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2021-22 YEAR IN REVIEW

Getting Back to Normal

The daily routines of economic research and outreach were disrupted by the pandemic like just about everything else. The BBER had its first completely online Economic Outlook Seminar in February of 2021, as the threat of contagion had most of us working completely remotely and learning how to make it work. We learned a lot, as did our participants and partners.

2021-22 was a year that saw BBER getting back to its normal work patterns – if you can truly say that there was anything normal about the economy of the last 12 months. The Economic Outlook Seminar resumed its tradition of visiting cities around the state for in-person events. This year’s program, entitled “Where Housing is Headed,” had strong registrations across the state, although attendance in some cases was hampered by the Omicron variant’s outbreak across the state during the same time. As you will read in this report, the BBER’s Forest Industry Research Program (FIRP) had a huge year, nearly doubling its already

“ I have benefited from the seminar for many years. It was wonderful to attend in person again instead of through Zoom.”

-2021 seminar attendee

substantial totals in research funding. And BBER was in the news with a number of high-profile research reports on everything from housing to the filming of the television show *Yellowstone*.

Here are a few of the notable events and achievements from last year.

Forest Industry Research Program Hits Funding Record, Wins Award

The prominence of the BBER’s Forest Products research program continues to grow, as evidenced by its national recognition and success in acquiring funding for current and future operations. The FIRP continued its core research with the Forest Service’s Forest Inventory and Analysis Timber Products Output (FIA-TPO) program, executing annual mill surveys across the 12 western states. Funding secured from different agencies, most prominently the U.S. Forest Service led to the signing of agreements totaling over \$1.4 million in 2021-22, almost twice the funding secured in the previous year.

Additionally, the program’s efforts to develop the Pandemic Assistance for Timber Harvesters and Haulers (PATHH) Program with the U.S. Department of Agriculture, won Mike Niccolucci and Todd Morgan, along with the other PATHH Program members, the Chief’s Award. The Chief’s Award is the highest award that the USDA, Forest Service confers for achievements in specific categories associated with the agency’s mission. The virtual award ceremony was held January 13, 2022.

47th Annual Montana Economic Outlook Seminar

WHERE HOUSING IS HEADED

HOW WILL TODAY'S IMBALANCES BE RESOLVED?

Thanks to Our 2022 Keynote Speaker:
ABIGAIL ST. LAWRENCE

BUREAU OF BUSINESS AND ECONOMIC RESEARCH
UNIVERSITY OF MONTANA

47th Annual Economic Outlook Seminars Return to In-Person Format

The BBER's long running Economic Outlook Seminars visited the state in January-March of 2022 with Butte attorney and water rights expert Abigail St. Lawrence presenting a keynote address on the theme "Where Housing is Headed." The 2022 program was the second time in the past three years that the BBER has focused on housing in its annual program, and interest remains very high in the subject. The programs were well received in the nine communities visited, with registrations exceeding 1,500 across all venues. The programs continue to receive support from private sector sponsors, including our principal sponsor, NorthWestern Energy.

BBER's Study of Yellowstone Television Series Filming in Montana Gets National Attention

The release of the BBER study "The Economic Impact of the Film Industry in Montana: The Production of Yellowstone" in the spring of 2022 received extensive media coverage. BBER was given access to detailed financial records on employment and expenditures by Paramount, the studio producing the series, which formed the basis for a comprehensive analysis of the effects of production activities on the state economy. In addressing the question "what would the economy look like if the filming on Yellowstone Season 4 did not take place in Montana," the study found that more than 500 jobs and \$25 million in income were added to the state as a result.

BBER Tasked by the Legislature to Study Impact of Cost Disallowances on Utility Customers

In House Bill 648, enacted by the 2021 Montana Legislature and signed into law by Governor Gianforte, the BBER was directed to analyze how, if at all, customers of regulated Montana electric utilities have been impacted by the decisions of the Montana Public Service Commission (PSC) to disallow costs incurred as a result of unscheduled maintenance on power generation facilities. In practice, this translates into a study of how the PSC's disallowances of costs incurred by NorthWestern Energy for outages at the Colstrip coal-fired generator that the company partially owns have affected its customers. BBER Associate Director Robert Sonora and Faculty Fellow Keith Jakob have been

“ As a ‘data junkie,’ I enjoyed the data.”

-2021 seminar attendee

“ I’ve attended the Economic Outlook Seminar for years and this year lived up to the high standards. Great content, engaging presentations, talented presenters.”

-2021 seminar attendee

engaged in the research and a final report is expected to be released in November of this year.

BBER Survey of Farmers Markets in Montana

For the first time, the economic contribution of Montana's farmers markets across the state was analyzed in a BBER study that was released in the spring of 2022. Researchers surveyed 71 different markets across Montana through phone and internet surveys as well as site visits, receiving responses from 83 percent of those contacted. Based on information from 2021, it is estimated that the markets together realized revenue of \$17.3 million and employed more than 4,900 people on a full- or part-time basis during that year. On any given market day, there are 1,580 stands operating across Montana.



Photo provided courtesy of University of Montana.

FINANCIAL REPORT

Financials Return to Pre-Pandemic Levels

For fiscal year 2021-2022, BBER's total revenue has increased to \$1.75 million and is more in line with our pre-pandemic financials that averaged around \$1.8 million. This increase is due to increased project opportunities and funding as well as the ability to go back to an in-person economic outlook seminar series, which brought in 1,500+ attendees.

BBER currently generates 72 percent of its revenue from external sources. The portion 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 the 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.

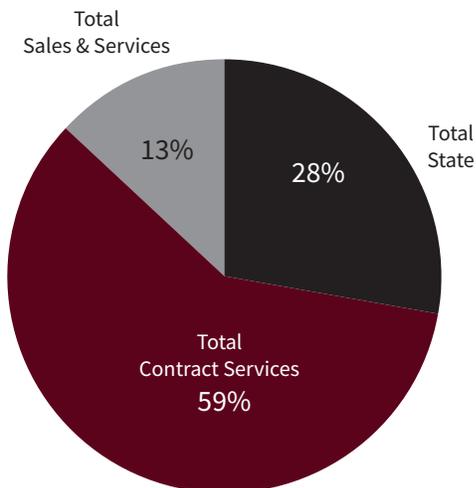
FY 2021

Total Funding/Expenditures:	\$1,632,980.11	100%
Total State	\$461,226.90	28%
Total Other Sources:	\$1,171,753.21	72%
Total Contract Services	\$1,062,829.32	65%
Total Sales & Services	\$108,923.89	7%
Total Personnel Expenses	\$1,383,683.25	85%
Total Personnel State	\$461,114.20	33%
Total Personnel Other Sources	\$922,569.05	67%
Total Operating Expenses	\$247,475.66	15%
Total Operating Expenses State	\$112.70	0%
Total Operating Expenses Other Sources	\$247,362.96	100%

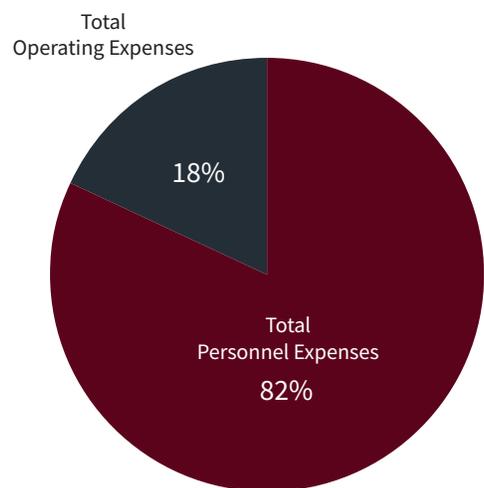
FY 2022

Total Funding/Expenditures:	\$1,751,125.88	100%
Total State	\$487,152.97	28%
Total Other Sources:	\$1,263,972.91	72%
Total Contract Services	\$1,041,124.68	59%
Total Sales & Services	\$222,848.23	13%
Total Personnel Expenses	\$1,434,457.45	82%
Total Personnel State	\$487,067.60	34%
Total Personnel Other Sources	\$947,389.85	66%
Total Operating Expenses	\$316,651.14	18%
Total Operating Expenses State	\$85.37	0%
Total Operating Expenses Other Sources	\$316,565.77	100%

2022
Funding Sources



2022
Expenses



ECONOMIC ANALYSIS

Offering Decades of Experience in Economic Analysis and Forecasting



BBER monitors all aspects of Montana's economy and provides reliable forecasts and analyses to contract clients, policymakers, businesses, and the general public. The research and activities of the economic analysis program are as rich and varied as the Montana economic itself. In addition to producing contract research, Bureau economists also respond to thousands of requests for local, state, and national economic data annually. Economic analysis research projects for fiscal year 2021-22 include:

- The Montana Electricity Reliability Initiative
- The Economic Impact of Cognizant/ATG in Missoula
- The Continuing Economic Contribution of Sibanye-Stillwater in Montana: Update
- 2022 Gallatin Valley Housing Report
- Helena Lot Size Zoning Study
- Economic Impact of Cost Disallowances for Electric Utilities in Montana (ongoing)
- The Economic Contributions of Calumet Montana Refining: Interim Report
- The Impacts of the Oil and Gas Industry in Montana
- The Economic Contributions of the Film Industry in Montana: The Production of *Yellowstone* (see sidebar on page 11)
- Evaluation of Models and Forecasts Used by the Legislative Fiscal Division to Project State Spending and Revenues out to 2040 (ongoing)
- The Economic Impact of the University of Montana (ongoing)
- The Economic Impact of Benefis Health System Expansion in Helena

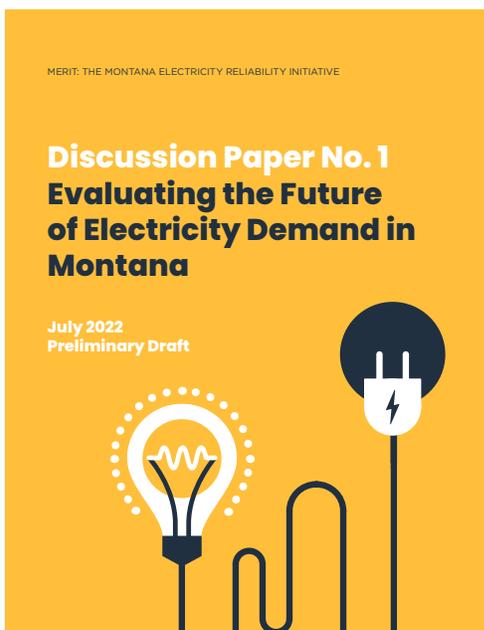




Photo provided courtesy of Paramount Pictures.

The Economic Impact of Filming “Yellowstone” in Montana

Film industry activity has grown significantly in Montana in recent years. Since the enactment of the Montana Economic Development Industry Advancement (MEDIA) Act on July 1, 2019, there has been a 70% increase in content production from 10 years ago. Despite that increase, the footprint of the industry remains modest, and knowledge of the scope and nature of its activities is limited. Certainly, we are all consumers of the output of the film and entertainment industries, but awareness of what takes place to produce that content is not common in our state.

A recently conducted BBER study attempted to address that situation. By examining the actual activities of a major television production carried out in the Bitterroot Valley, we not only can learn how those activities combine to make the Montana economy larger and more prosperous. We also achieve a better understanding of what a major production like the television show *Yellowstone* entails and why its presence within the state makes such significant economic contributions. The television show *Yellowstone* is a dramatic series set on a fictional ranch in Montana that premiered in 2018 on the Paramount Network. Starring Oscar winner Kevin Costner, the concluding episode of Season 4 of the series drew an estimated 9.3 million viewers, becoming the number one rated series of 2021 across broadcast cable

and premium outlets. Originally filmed in Utah, the production relocated to Montana in 2019.

Our basic finding is that the filming of the fourth season of the television show *Yellowstone* in the Bitterroot Valley of Montana has resulted in significant gains for the state economy that extend beyond those receiving the wages and other spending of the production itself. Specifically, we find that because of the *Yellowstone* production in our state that:

- There are 527 permanent jobs in the state that would not have existed otherwise, not including the 624 Montana residents who were employed during the filming as extras.
- Montana households received an additional \$25.3 million in annual income, of which \$24.6 million was after-tax.
- Montana businesses and non-business organizations realized \$85.8 million in additional gross receipts.
- Annual revenues of state government were higher by \$10.6 million.
- The population of our state grew by 233 people, an increase that is almost totally composed of working-aged people.

Read the full article at MontanaBusinessQuarterly.com.

SURVEY RESEARCH

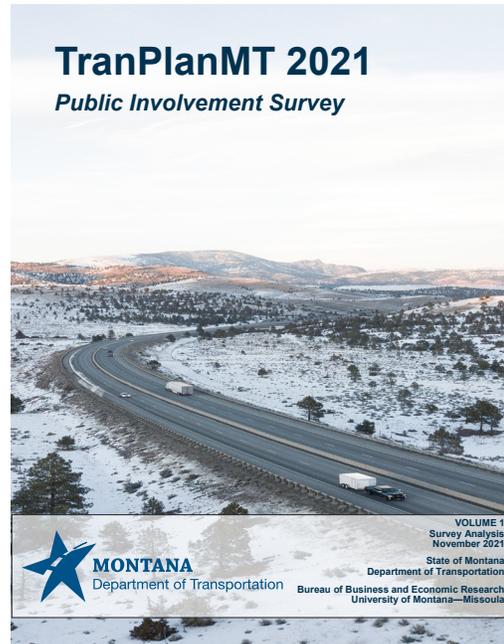
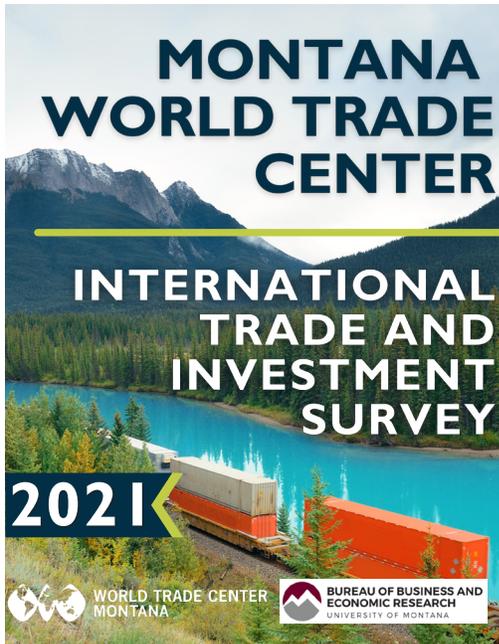
Client-Specific, Scientific Data Collection and Analysis

BBER's professional and highly trained researchers use sophisticated data collection mechanisms and techniques to conduct surveys for contract clients in the private and public sectors. For nearly 40 years, 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 ensure the data will pass demanding tests such as:

- publication in peer-reviewed academic journals,
- testimony before legislators,
- examination in court proceedings, and
- close scrutiny by the media or special interest group.

Survey research projects for this fiscal year include:

- Montana Manufacturers Survey
- International Trade and Investment Survey
- MDT Public Involvement Survey
- MDT Stakeholders Survey
- MDT Road Maintenance Survey
- Economic Impact of Farmers Markets in Montana
- Community Water Quality Survey
- Montana Drought and Climate Survey
- Economic Impact of Cooperatives in Montana



The Economic Contributions of Farmers Markets in Montana

A trip to the farmers market to find fresh tomatoes and huckleberries has always been a fun way to start a weekend. In a first-ever study of the economic contributions of farmers markets in Montana, we're learning that these vibrant markets are more than just fun summer gathering places. They are important centers of commerce that are making significant contributions to the state's economy.

From the small rural towns to large urban communities, Montana farmers markets provide a valuable source of fresh, locally produced food and bring the community together in the centers of the towns in which they operate. They also bring revenue, new spending, and jobs into the community. Farmers markets are growing in popularity in Montana and throughout the United States. In early August, Montana joined markets all over the U.S. in celebrating National Farmers Market Week. To determine the economic contributions of farmers markets to the state, BBER conducted a study from August through November 2021 of 71 farmers markets across Montana. These markets were selected because they represent a mix of market sizes, from small to large, and because they represent the geographic diversity of Montana. The study was commissioned by the National Center for Appropriate Technology, an organization that helps people build resilient communities through local and sustainable solutions. BBER's study found that farmers markets across Montana make significant contributions to the state's economy, including:

- In 2021, Montana farmers markets received \$17.3 million in revenue and generated an additional \$10.4 million in new spending from resident wages, tax payments, sales, and investments that occurred as a result of farmers markets.
- An impressive 4,900 people worked to produce and sell the goods and services offered on one typical market day at Montana's 71 markets during the 2021 market season. In 2021, farmers markets also generated 260 full-time Montana jobs over and above the 4,900 people who worked to put on farmers markets.
- While it varied from town to town, the typical



2021 Montana farmers market offered 22 individual market stands, generated \$244,000 in revenue over the course of the market season, and needed 69 people to put on the market for one typical market day.

- In 2021, farmers markets offered important supplemental products all across Montana, especially in rural areas – from Libby to Broadus. These products often included fresh fruits and vegetables, crafts, baked goods, meat, or other items that are staples in many areas.
- Farmers markets in Montana are highly scalable businesses. As a business, farmers markets have adapted to a wide range of communities, from the smallest and most rural to large urban communities. They have adapted by tailoring an appropriate number of market stands and an appropriate mix of products and services to each community. This scalability has made farmers markets in Montana a very useful business model that has propagated across the state in all sizes of communities.

Read the full article at [MontanaBusinessQuarterly.com](https://montanabusinessquarterly.com).

HEALTH CARE INDUSTRY RESEARCH

Monitoring Health Care Trends in the Wake of Covid-19

Research conducted by BBER has provided keen insight during a global pandemic. Researchers have engaged in timely assessments and analysis of Montana hospitals and health care systems in the wake of COVID-19. Health care services are one of the largest employing sectors in the state, and growth in health care spending has significantly outpaced overall economic growth for almost 30 years.

The pandemic has had a profound and lasting impact on the health care industry. While major hospitals across the state struggle with critical census and nursing shortages, BBER's health care industry research examines markets, trends, industry structure, costs and other high visibility topics.

A special project this year looked policymakers' decisions during the Covid-19 pandemic and how individual behavior converged with policy recommendations (see sidebar on page 15).

Other projects this year include:

- The Economic Impact of Benefis Health System Expansion in Helena
- The Economic Impact and Profile of Montana Bioscience Firms

BBER health care project proposals on the horizon include:

- The Economic Cost of the Unvaccinated to the Montana Economy
- The Economic Impact of Montana's Hospitals: 2022
- Community Benefit and Charity Care Obligations at Montana Nonprofit Hospitals
- The Economic Contribution of the Glendive Medical Center



Covid Policies: How Effective Have They Been Across States?



On March 11, 2020, the World Health Organization issued a statement that Covid-19 was a pandemic that was spreading because of “alarming levels of inaction.” Governments throughout the world reacted to the announcement with a host of policies aimed at slowing the spread of disease. These policies in Montana and elsewhere took several different forms such as the shutdown of nonessential businesses, mandatory masking, school closures, restrictions on individual movement, and testing.

To determine the effectiveness of Covid policies in preventing the spread of Covid, BBER took a look at four different states: Montana compared to Washington and then New York compared to Florida.

Montana vs. Washington

Washington is believed to be home to the first recorded case and Covid-19 death in the U.S., about six weeks before the WHO announced that Covid was a pandemic. The first recorded case in Montana wasn't announced until mid-March 2020, and the first death two weeks after that. To put that in perspective, by the time Montana had its first death, the number of cases in Washington was already 3,500.

Differences in timing, location, population density, and demographics required that Washington and Montana

follow different paths of policy recommendations. Over half of Washington's population of 7.9 million lives in the Seattle MSA, roughly the population of four Montanas. Certainly, we might expect there to be considerable differences between the two states.

Montana has always been somewhat less restrictive than Washington. But the ultimate measure of policy success is comparing the case rates across each state – in Montana, the case rate is 28.1%, whereas in Washington it is 23.1%. From this context, Washington's more stringent policy choices have been better at preventing Covid.

Florida vs. New York

Consider the third and fourth largest states in the U.S., Florida and New York. In the early days, both Florida and New York responded strongly to the pandemic. By August of 2020, however, state policy choices began to separate, with New York remaining more restrictive than Florida.

Which of these two states were most effective at preventing the spread of COVID? And was their policy effective? As of mid-August 2022, the cases rate in New York and Florida are 30.4% and 32.5%, respectively.

While one case is too many, the difference is not that dramatic considering how different their policy prescriptions were and continue to be. However, it is worth noting that winters in New York force more people indoors, whereas in Florida, residents can be relatively comfortable outside all year round. Again demographics, location, and population density play a role. Thus, despite each state having the same information about the causes of COVID, the much looser policy adopted in Florida was comparably as effective as that in New York.

Read the full article at MontanaBusinessQuarterly.com.

FOREST INDUSTRY RESEARCH PROGRAM

Nationally Prominent Program Hits Funding Record, Wins Award



The Chief's Award is the highest award that the USDA, Forest Service confers for achievements in specific categories associated with the agency's mission.

The prominence of the BBER's Forest Products research program continues to grow, as evidenced by its national recognition and success in acquiring funding for current and future operations. Funding secured from different agencies, most prominently the U.S. Forest Service, led to the signing of agreements totaling over \$1.4 million in 2021-22, almost twice the funding secured in the previous year.

Additionally, the program's efforts to develop the Pandemic Assistance for Timber Harvesters and Haulers (PATHH) Program with the U.S. Department of Agriculture, won Mike Niccolucci and Todd Morgan, along with the other PATHH Program members, the Chief's Award. The Chief's Award is the highest award that the USDA, Forest Service confers for achievements in specific categories associated with the agency's mission.

Fiscal year 2021-22 marked a transition back to "normal" for the Forest Industry Research Program (FIRP). COVID-19 restrictions began to loosen and travel for field work resumed. We were successful at recruiting several new employees (see sidebar on page 17) and proposing new projects, while continuing ongoing work and securing additional funding.

This year, FIRP completed four externally funded projects, continued eight ongoing projects, and have proposed four new agreements that were not yet signed by the end of the fiscal year. The program had 10 to 12 externally funded research projects throughout the year worth approximately \$2.8 million. Funding and work load are expected to be similar in FY 2023.

The FIRP continued its core research with the Forest

Service's Forest Inventory and Analysis Timber Products Output (FIA-TPO) program, executing annual mill surveys across the 12 western states. Additionally, our team:

- Completed a report on interstate and international trade of logs and wood chips among California, Oregon, Washington, and British Columbia for the Pacific Northwest (PNW) FIA program;
- Continued our ongoing work with the Northern Region of the Forest Service, collecting timber harvesting costs in Idaho and Montana, updating the regional timber sale appraisal system, and investigating the costs of tethered logging systems;
- Completed our capacity and timber flow projects for the Rocky Mountain Region and the National Forest System as a whole;
- Continued a project to reexamine timber-processing capacity in the Northern Region, delivering several reports for individual forests in Idaho and Montana;
- Continued our logging utilization study in California and development of delivered log prices for the NFS Intermountain Region; and
- Continued our multiyear project with NFS Ecosystem Management Coordination economists to update direct response coefficients for measuring economic impacts of national forest timber harvest and support the national Forest Products Modernization effort.

Meet the Forest Industry Research Team

Employees of the FIRP co-authored reports or articles, made presentations, served as BBER representatives on and off campus, responded to numerous information requests, reviewed and/or submitted journal articles, and served in various professional and community organizations throughout the fiscal year. Highlights of FIRP employee activities include, but are not limited to the following.

Erik Berg—is a retiree research forester working part time and handles many of the FIRP's statistical analyses. Erik helps maintain our west-wide list of timber processors, develops sampling procedures for mill surveys throughout the western U.S., serves on the FIA-TPO Nonresponse Team, and is working on a variety of FIRP projects and national TPO items. He was co-author on our Alaska logging utilization study (in press with PNW), the Alaska harvest and industry reports (PNW-RB-271), and the Forest Service National Environmental Policy Act (NEPA) article in the *Montana Business Quarterly*. Erik is a Certified Forester, USGS Emeritus Scientist, and member of SAF.

Robert Campbell—is senior programmer/database administrator for the FIRP as well as the BBER. Bob maintains and updates the FIRP website and responds to information requests coming through the website. He supports BBER's Economic Outlook Seminar with technical online and hardware support, serves on the College of Business Tech Team, and maintains the Montana Manufacturing Information System (MMIS). During FY 22,

Bob worked closely with FIA-TPO to integrate our forest industry database with the national TPO database.

Thale Dillon—is a research economist with FIRP working on a variety of projects, including managing our annual western mill surveys, developing promotional materials, collecting delivered log prices in the Intermountain Region, documenting data processes/methodologies, and maintaining our five-state timber harvest by county online database. She also serves as the western representative on the FIA-TPO Communications Team. Thale was lead author on our Pacific Coast Region timber flow report to PNW-FIA and co-author on our Montana harvest and industry report. She is lead author on our upcoming Alaska timber harvest and industry report and internal editor/reviewer on many of our other reports and publications.

Clayton Dutton—is our new programmer/database administrator. Clayton joined FIRP in June of 2021 and has revamped Forest Industry Data Collection System (FIDACS) – our database of western timber-processing facilities. He is also building a new (yet-to-be-named) logging utilization database and processing system for managing data from logging sites throughout the west and moving those data into the FIA-TPO national system. Clayton completed his MS in Information and Communication Technology – Database Design and Administration at University of Denver in May 2022. He serves on several technology

Forestry team...continued on page 18

Forestry team...continued from page 17

teams within UM and with the Forest Service and helps provide tech support for BBER's Outlook Seminars and Missoula Community Theater.

Steven Hayes—is a senior research forester with FIRP. He is the lead analyst and author on several recent harvest and industry reports with RMRS. Steve leads our Region One logging and haul cost study and our quarterly reporting of Montana wood products industry employment and log prices. He participated in our California logging utilization field work; mill surveys in several states; and assisted with several mill capacity and capability reports for national forests in Idaho and Montana. Steve was lead author on our Montana harvest and industry publication and the forest products section of the *2022 Montana Economic Report*. He made several presentations and responds to numerous data requests, particularly those related to logging costs and log prices, and Montana and New Mexico timber harvest and industry conditions. He is active in SAF at the national, state, and local levels.

Benjamin Irely—began working as research social scientist with FIRP in May 2022. He is the lead analyst and author on our upcoming Colorado and Utah harvest and industry report, and is a co-author and researcher on several capacity and capability reports for the Northern Region of the Forest Service. Ben will be working with Chelsea on several new projects, including timber-processing capacity analyses for Collaborative Forest Landscape Restoration Program (CFLRP) projects throughout the western U.S.

Luke Koch—is forestry research associate at FIRP. He started as an undergraduate research assistant in 2021, and transitioned to a full-time professional in June 2022, after completing his BA in Economics at UM. He is a data collector and analyst for several mill studies in the PNW and Rocky Mountain States, and member of the field crew for our logging utilization study in California.

Mike Niccolucci—is a research economist with FIRP. Mike is leading our efforts to assist the Forest Service Northern Region with timber appraisal and cost modeling, he works closely with Steve Hayes on logging and hauling cost collection for MT and ID and with Thale on log costs for ID, NV, UT and WY. Mike co-authored the Forest Service National Environmental Policy Act (NEPA) article in the *Montana Business Quarterly* and was a recipient of the 2021 Chief's Award from the USDA, Forest Service for his work

on the Pandemic Assistance for Timber Harvesters and Haulers (PATHH) Program. Mike presented at the Montana DNRC spring training session in Missoula and the Sun Mountain Lumber Contractor Meeting in Deer Lodge.

Chelsea Pennick—is a research social scientist with FIRP. Chelsea was co-PI on the recently completed NFS Timber Flow Analysis for Economic Impact Modeling, is co-PI on the Employment and Income Direct Response Coefficients for the US Forest Service project, and our lead analyst for Wyoming. She will be leading our new projects examining timber-processing capacity for the Black Hills National Forest in South Dakota and Collaborative Forest Landscape Restoration Program projects throughout the western U.S. Chelsea made several presentations on timber flow, economic and community impacts of timber harvesting and processing; and she is co-authoring a related article for *Forest Policy and Economics*. Chelsea is lead author on several reports for the Region One Capacity and Capability Analysis.

Eric Simmons—is a senior research associate with FIRP. Eric is the lead analyst and author on the Alaska logging utilization study in press with PNW-FIA and the Oregon harvest and industry report. He was co-author on several Region One capacity and capability reports; is the lead analyst for our ongoing Arizona, Idaho, New Mexico, and Oregon harvest and industry research, the logging utilization study in California; and is a contributing analyst for harvest and industry research in Alaska, Colorado, and Utah. Eric is a member of SAF and the Timber Measurements Society, where he presented in October 2021. Eric also helped provide logistic support for the BBER's 2022 Economic Outlook Seminar.

Samuel Scott—joined our team as a forest economist in September 2021. He is co-PI on our Direct Response project with the Forest Service, is lead analyst for California and Washington, and economic analyst for several states, while also working on Northern Region timber appraisal and Pacific Coast Regional Wood flow in support of forest carbon modeling. Sam presented the forestry segment at two of the BBER's 2022 Economic Outlook Seminars and has assisted with data requests for Montana DNRC and others. Sam represents BBER at the monthly Montana Forest Products Retention Roundtable, is a member of SAF, and completed several short courses during FY 2022.

OUTREACH AND COMMUNICATIONS

Promoting the Bureau and Expanding Our Reach



BBER is committed to providing up-to-date information that is easily accessible to our clients, the media, and the public. Reports by our researchers can be found on our website, which includes a comprehensive library of research. We engage with our audience across a variety of platforms:

ECONOMIC OUTLOOK SEMINAR WEBSITE

Our seminar website provides access to our economic outlook seminar event and serves as a resource for associated seminar materials, publications, speaker presentations, and videos of past seminars.

PRESENTATIONS

BBER researchers gave presentations to a variety of audiences, including business leaders and elected officials, with topics ranging from Montana's housing challenges to its electricity future.

PUBLICATIONS

BBER researchers produced numerous publications, which were distributed to our clients and made available via our website and through information requests.

BBER WEBSITE

Our most current surveys and studies can be found on our website, which is updated regularly. In the past year, the website generated a record number of page views.

MIDYEAR ECONOMIC UPDATE SERIES

BBER traveled to seven cities this summer to present the Midyear Economic Update. The program's theme, "Supply Chain Stress: How Much Longer?" focused on the torrid pace of economic growth of last year that gave us surging inflation, very tight labor markets, and empty store shelves. As always, the Midyear Economic Update presented an assessment of the U.S. and Montana economies.

MONTANA ECONOMIC REPORT

The 2022 Montana Economic Report is produced in tandem with the economic outlook seminar and published in the winter edition of the *Montana Business Quarterly*. It provides a detailed analysis of Montana's economic sectors and is given to all seminar attendees.

MONTANA BUSINESS QUARTERLY

For 60 years, the award-winning Montana Business Quarterly has provided research and articles on topics important to Montanans. Subscribers to the print editions include business executives, government officials, all Montana legislators, libraries, and universities. We want to thank Clearwater Credit Union for their continued sponsorship of the magazine for the past 14 years.

STRATEGIC MARKETING

Our marketing efforts focus on increasing awareness and reach, as well as fostering new audiences and partnerships to drive future studies and work, and further entrench BBER's reputation as the premier

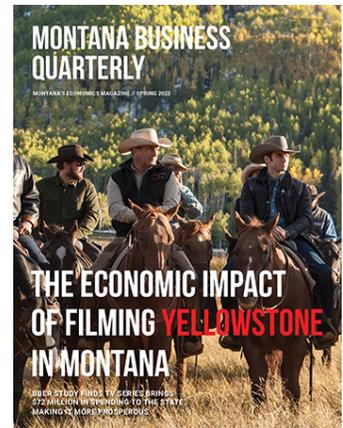
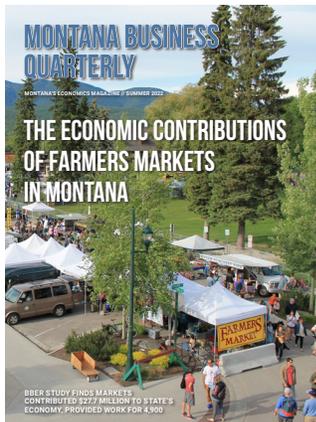
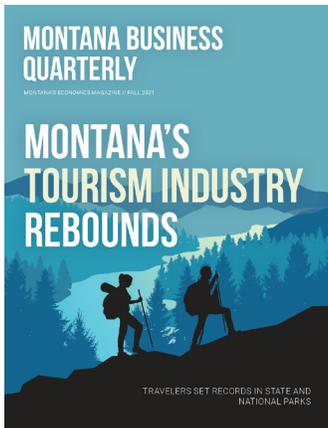
research center in Montana. This year's marketing activities included:

- Targeted social media editorial calendars and campaign evaluations.
- Email, digital and printed materials distributed to our list of subscribers.
- Montana Economic Minute podcasts, broadcast weekdays on Montana radio stations.
- TV, radio, and webinar appearances, as well as interviews in statewide media.
- Collaboration with the Montana Chamber Foundation on messaging and events.
- Researchers personally responding to hundreds of data requests.
- The economic outlook seminar website with registration portal.

2022 BBER GOALS

Maintain BBER's position as the primary source of information and analysis on Montana's economy.

- Uphold BBER's high reputation for carefully researched, unbiased, and relevant analysis of policy issues that are important to Montanans
- Improve customer experience for those who work with or contact the Bureau.
- Strive for greater reach and authenticity on social media, positioning BBER as the foremost authority regarding Montana's business and economic environments.



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, including coauthoring research reports and academic articles, teaching, and serving on committees.

We work 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. We also work 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.

PROFESSIONAL AFFILIATIONS

Collectively, we are members of and serve on boards and committees for more than 30 different organizations. We are one of the founding members of the Association for University Business and Economic Research, a national organization established in 1948. Director Patrick Barkey, currently serves as past president for the organization.

Current professional affiliations among BBER staff include:

- American Association of Public Opinion Research
- American Economic Association
- American Society of Health Economists
- American Society of Hispanic Economists
- Association of Academic Survey Research Organizations
- Association for University Business and Economic Research
- Boy Scouts of America
- Euro Area Business Cycle Network
- Federal State Cooperative of Population Estimates
- Forest Products Society
- Greater Montana Foundation
- Korean American Economic Association
- Missoula Development Authority
- Momentive Corp. Community Advisory Panel
- Montana Council on Economic Education
- Montana Economic Developers Association
- Montana Environmental Education Association
- Montana Forest Products Industry Retention Roundtable
- Montana Health Care Forum
- Montana Manufacturing Extension Center
- Mountain Pacific Quality Health Foundation
- National Association of Business Economists
- NorthWestern Energy and Transmission Advisory Council
- Pacific Northwest Regional Economic Conference
- Regional Economic Models, Inc. Users Group
- Society of American Foresters
- Southern Economic Association
- Timber Measurements Society
- University of Montana Alumni Association
- University of Montana Tech Partners Board
- U.S. Geological Survey
- Western Economic Association
- Western Forest Economists

RESEARCH PROJECTS

ECONOMIC ANALYSIS

The Montana Electricity Reliability Initiative (MERIT).

A comprehensive assessment of the adequacy and preparedness of Montana's electricity infrastructure. Ongoing.

The Economic Impact of Cognizant/ATG in Missoula.

Updated impact study of high-tech consulting firm with a significant footprint in Missoula. The study reflected the continued growth in the company despite the pandemic, which included the construction of new office space. Completed June 2022.

The Continuing Economic Contribution of Sibanye-

Stillwater in Montana: Update. An update of the impact of the higher activities at Montana's only palladium/platinum mine in south central Montana, reflecting recent expansions related to the continued strong markets for palladium. Completed June 2022.

2022 Gallatin Valley Housing Report. Comprehensive assessment of housing demand and supply in Montana's fastest growing, highest priced real estate market for the Gallatin Association of Realtors. Completed February 2022.

Helena Lot Size Zoning Study. Analysis of the impact of a minimum lot-size requirement in the non-Helena portions of Lewis and Clark County on construction and affordability of housing for the Helena Association of Realtors. Completed October 2021.

Economic Impact of Cost Disallowances for Electric Utilities in Montana. State of Montana. Analysis of the effect of PSC cost disallowance decisions on NorthWestern Energy customers for the State of Montana. This study was written into HB 684 by the 2020 Legislature. Ongoing.

The Economic Contributions of Calumet Montana Refining: Interim Report. Analysis of the impacts of the operations of the existing oil refinery in Great Falls for Calumet Mining. Completed January 2022.

The Impacts of the Oil and Gas Industry in Montana. Analysis of impacts for the Montana Petroleum Association. Completed June 2022.

The Economic Contributions of the Film Industry in Montana: The Production of Yellowstone. Analyzed spending that took place in Montana during the five-month production of the television show's fourth season for Paramount Studios. Completed August 2021.

Evaluation of Models and Forecasts Used by the Legislative Fiscal Division to Project State Spending and Revenues out to 2040. Evaluation of forecasting models being constructed by legislative staff as part of the MARA (Fiscal Modernization and Risk Analysis) project being carried out to assess longer term pressures on state finances for Pew Charitable Trusts. Ongoing.

The Economic Impact of the University of Montana. A comprehensive revision of the BBER's 2010 impact study of the University for the UM Office of the President. Ongoing.

Housing Affordability in Lewis and Clark County.

Analyzed factors and trends that impact the affordability of residential housing in Lewis and Clark County, Montana. Completed October 2021.

The Economic Impact of the Eastern Heath Snail.

Estimated potential economic costs of the eastern health snail, an invasive snail species in north-central Montana. Completed March 2022.

The Economic Contribution of the Durango & Silverton Narrow Gauge Railroad, Durango, CO. Economic impact study estimated the total benefits of the Durango & Silverton Narrow Gauge RR to the La Plata County, CO economy. The study finds that the primary economic benefit is derived from the number of tourists that visit the region primarily to ride the train. Completed 2022.

The Contribution of Montana's Indian Tribes to the Montana State Economy. Analysis of the economic impact of Indian reservations on the state economy. BBER worked with members of the Department of Commerce, the Governor's Office of Indian Affairs, the State Tribal Economic Development Commission, and others on collecting data for this report. Completed March 2022.

Submitted Proposals

The Economic Impact of Benefis Health System Expansion in Helena. Benefis Health System, January 2022. Funded.

An Evaluation of the Community Benefits of Montana's Nonprofit Hospitals. Montana Hospital Association, December 2021. Accepted but delayed.

Socio-Economic Analysis of Restored Passenger Rail Service in Southern/South Eastern Montana. Missoula County, December 2021. Not funded.

The Economic Impact of Montana's Cooperatives. Montana Cooperative Development Center, April 2022. Funded.

Is Montana Building Enough Housing? Assessing the Supply Response of Residential Housing Construction to Job and Population Growth. Montana Association of Realtors, June 2022. Not funded.

The Economic Contribution of the Montana IDeA Network of Biomedical Research Excellence. Montana IDeA Network of Biomedical Research Excellence, June 2022. Not funded.

The Economic Contribution of Rocky Mountain Laboratories. Rocky Mountain Laboratories, March 2022. Funded.

The Impact of the Clark Fork Coalition v. DNRC Decision on Residential Development in Montana. Montana Association of Realtors, March 2022. Not funded.

FOREST PRODUCTS RESEARCH

Region One Capacity and Capability Analysis. A challenge cost share agreement with the USDA Forest Service, Region One, Missoula, MT, to analyze timber flow, timber-processing capacity, and capability by tree size class among mills for national forests in Region One (Idaho and Montana). Project completion December 2025.

Employment and Income Direct Response Coefficients for the U.S. Forest Service. A challenge cost share agreement with the USDA Forest Service, Ecosystem Management Coordination program, Fort Collins, CO, to update employment and income Direct Response Coefficients for the United States and provide timber industry mill and market information to support Forest Service decision making. Project extended to May 2025.

Pacific Northwest TPO – 2021. A joint venture research agreement with the USDA Forest Service, Pacific Northwest Research Station, Portland, OR, to provide analysis of the forest industry, timber use, and impact on timber inventory in the Pacific Coast states. Project completion September 2024.

Region Four Logging Costs and Timber Appraisal Analysis. a challenge cost share agreement with the USDA Forest Service, Region One, Missoula, MT, and Region Four, Ogden, UT, to conduct an analysis of timber appraisal zones and collect delivered log prices in R4. Project completion March 2024.

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

Pacific Wood Flow. A joint venture research agreement with the USDA Forest Service, Pacific Northwest Research Station, Portland, OR, to provide analysis of the timber harvest and flow among OR, WA, CA, and British Columbia, and impact on forest and harvested wood products carbon. Project completion June 2023.

California Logging Utilization 2.0. A research joint venture agreement with the USDA Forest Service, Pacific Northwest Research Station, Portland, OR, and CalFire to study and report on the quantities of logging residue generated while harvesting timber in California. Project completion March 2023.

Pacific Northwest TPO – 2019. A joint venture research agreement with the USDA Forest Service, Pacific Northwest Research Station, Portland, OR, to provide analysis of the forest industry, timber use, and impact on timber inventory in the Pacific Coast states. Project completed early, June 2022 and new agreement to continue for five more years initiated.

Oregon Sawmill Production Functions. A joint venture research agreement with Dr. Jean Daniels of the USDA Forest Service, Pacific Northwest Research Station, Portland, OR, to analyze changes in the productivity

of Oregon sawmills from 2003 through 2018. Project completed early, February 2022.

National Forest System Timber Flow Analysis for Economic Impact Modeling. A challenge cost share agreement with the USDA Forest Service, Ecosystem Management Coordination program, Fort Collins, CO, to analyze timber flow by forest and product type for national forests throughout the United States. Project completed early, December 2021.

Region Two Capacity and Capability Analysis. 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). Project completed September 2021.

Direct Response Coefficient Update 3.0. Updating labor and income direct response coefficients used by the U.S. Forest Service (ongoing).

Collaborative Governance for Landscape Prioritization. A project to document the ways in which collaborative governance of public lands is changing the way the U.S. Forest Service does business. Complete.

HEALTH CARE INDUSTRY RESEARCH

The Economic Impact of Benefis Health System

Expansion in Helena. Analysis conducted of the acquisition and construction of three health facilities in the Helena market by Benefis Health System, based in Great Falls. These included a Now Care facility, a testing laboratory and an inpatient surgery center. Completed January 2022.

The Economic Impact and Profile of Montana Bioscience Firms. Analysis of the U.S. Bureau of Labor Statistics Quarterly Economic Census of Employment and Wage (QCEW) to assess the rapid growth in the industry across the State of Montana. Completed April 2022.

SURVEY RESEARCH

Montana Manufacturers Survey, Montana Manufacturing Extension Center. This ongoing survey is sponsored by the Montana Manufacturing Extension Center. The report details findings of a survey of manufacturers in the state of Montana, which aims to

learn about manufacturers' assessment of their plants' economic performance. Ongoing.

International Trade and Investment Survey, Montana World Trade Center. A survey of Montana firms that export or import goods or services from outside the United States. September 2021 – March 2022.

MDT Public Involvement Survey, Montana Department of Transportation. A survey of adults in Montana that examines opinions about and preferences for the Montana transportation system. June 2021 – November 2021.

MDT Stakeholders Survey, Montana Department of Transportation. A survey of Montana transportation interest group members that examines their opinions about and preferences for the Montana transportation system. June 2021 – November 2021.

MDT Road Maintenance Survey, Montana Department of Transportation. A survey of adults in Montana that examines their perceptions about road maintenance in Montana. January 2022-June 2022.

Economic Impact of Farmers Markets in Montana, National Center for Appropriate Technology. An extensive data collection effort examining 71 Montana farmers markets. March 2021 – March 2022.

Community Water Quality Survey, National Science Foundation. A survey of adults in Anaconda, Deer Lodge, and the Judith River basin to learn about their perceptions regarding water quality in their community. February 2022 – June 2022.

Montana Drought and Climate Survey, Montana Drought and Climate Project. A survey of Montana farmers and ranchers to learn about their perceptions regarding drought in Montana and the measures they use to mitigate the effects of drought on their farm or ranch. April 2021 – September 2021.

Economic Impact of Cooperatives in Montana, Montana Cooperative Development Center. An extensive data collection effort to examine Montana's electric, telephone and agricultural cooperatives and Montana's credit unions. June 2022 – present.

PUBLICATIONS

- Barkey, Patrick M. "The Economic Impact of Filming Yellowstone in Montana" *Montana Business Quarterly*, Vol. 60 No. 1, (Spring 2022).
- Barkey, Patrick M. "Where Housing is Headed: How Will Today's Imbalances Be Resolved?" *Montana Business Quarterly*, Vol. 59 No. 4, (Winter 2021).
- Barkey, Patrick M. "The U.S. Economic Outlook: The Expansion Rolls on in 2022," *Montana Business Quarterly*, Vol. 59 No. 4, (Winter 2021).
- Barkey, Patrick M. "The Major Economic Events of 2021: Montana Bounces Back," *Montana Business Quarterly*, Vol. 59 No. 4, (Winter 2021).
- Barkey, Patrick M. "Montana's Cities and Regions: Pre-COVID Growth Patterns Reemerge," *Montana Business Quarterly*, Vol. 59 No. 4, (Winter 2021).
- Barkey, Patrick M. "Statewide Economic Performance: Consumers Lead Strong Bounce Back" *Montana Business Quarterly*, Vol. 59 No. 4, (Winter 2021).
- Barkey, Patrick M. and Brandon Bridge. "Tackling Housing Affordability in Montana," *Montana Business Quarterly*, Vol. 59 No. 3, (Fall 2021).
- Barkey, Patrick M. "The Economic Contributions of Montana Cooperatives," *Montana Business Quarterly*, Vol. 59 No. 1, (Spring 2021).
- Barkey, Patrick M. and Derek Sheehan. "Updating the Economic Impacts of Sibanye-Stillwater in Montana," Sibanye-Stillwater, June 2022.
- Barkey, Patrick M. and Derek Sheehan. "Updating the Economic Impact of ATG/Cognizant in Missoula," ATG/Cognizant, June 2022.
- Barkey, Patrick M.. "The Economic Contributions of the Film Industry in Montana: The Production of *Yellowstone*," Paramount Studios, April 2022.
- Barkey, Patrick M. "The Economic Impact of Benefis Helena," Benefis Health System, February 2022.
- Barkey, Patrick M. "The Economic Contribution of Calumet Montana Refining: Interim Report," Calumet Montana Refining, January 2022.
- Christensen, Glenn; Gray, Andy; Kugler, Olaf; Tase, Nadia; Drummond, John; Morgan, Todd; Dillon, Thale; Scott, Samuel; Evans, Sam. Pacific Coast Region Temperate Forest Carbon Stocks and Flux: 2001-2019: A Regional Forest Carbon Assessment of California, Oregon, Washington, and British Columbia. 2022. Awaiting publication. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.
- Dutton, Clayton. March 6, 2022, Database Administration Documentation Checklist, University of Denver.
- Hayes, S.W.; Townsend, L.; Dillon, T.; Morgan, T.A.; Shaw, J.D. 2021. Montana's forest products industry and timber harvest, 2018. Resour. Bull. RMRS-RB-35. Fort Collins, CO: USDA, Forest Service, Rocky Mountain Research Station. 54 p. <https://www.fs.usda.gov/treesearch/pubs/63512>
- Larsen, Peter, Patrick M. Barkey, and Derek Sheehan, "Montana's Electricity Future: New Project Evaluates the Adequacy of Our Electricity Supply" *Montana Business Quarterly*, Vol. 60 No. 1, (Spring 2022).
- Marcille, K.C.; Berg, E.C.; Morgan, T.A.; Christensen, G.A. 2021. Alaska's Forest Products Industry and Timber Harvest, 2015: Part 1: Timber Harvest, Products, and Flow. Resour. Bull. PNW-RB-271. Portland, OR: USDA, Forest Service, Pacific Northwest Research Station. 11 p.
- Marcille, K.C.; Berg, E.C.; Morgan, T.A.; Christensen, G.A. 2021. Alaska's Forest Products Industry and Timber Harvest, 2015: Part 2: Industry Sectors, Capacity, and Outputs. Resour. Bull. PNW-RB-271. Portland, OR: USDA, Forest Service, Pacific Northwest Research Station. 12 p.
- Marcille, K.C.; Berg, E.C.; Morgan, T.A.; Christensen, G.A. 2021. Alaska's Forest Products Industry and Timber Harvest, 2015: Part 4: Alaska Data Tables. Resour. Bull. PNW-RB-271. Portland, OR: USDA, Forest Service, Pacific Northwest Research Station. 11 p.

Marcille, K.C.; McIver, C.P.; Berg, E.C.; Morgan, T.A.; Christensen, G.A. 2021. Alaska's Forest Products Industry and Timber Harvest, 2015: Part 3: Sales, Employment, and Contributions to the Statewide Economy. Resour. Bull. PNW-RB-271. Portland, OR: USDA, Forest Service, Pacific Northwest Research Station. 10 p.

Morgan, T.A.; Niccolucci, M.J.; Berg, E.C. 2021. Implementing the National Environmental Policy Act on National Forests: a review of U.S. Forest Service land management accomplishments, budget and litigation. *Montana Business Quarterly*, Vol. 59, No. 2. 24-30.

Pennick McIver, Chelsea; Kate C. Marcille; Ashton Hargrave. In prep. "Characterizing timber flow and utilization at the sub-state level using Timber Product Output data: method and applications." *Forest Policy and Economics*.

Pennick McIver, Chelsea; Eric A. Simmons and Todd A. Morgan. 2022. "Timber Use, Processing Capacity and Capability of Mills to Utilize Timber by Diameter Size Class within the Lolo and Bitterroot National Forest Timber-Processing Area." Missoula, MT: University of Montana, Bureau of Business and Economic Research. 26 p.

Pennick McIver, Chelsea and Todd A. Morgan. 2022. "Timber Use, Processing Capacity and Capability of Mills to Utilize Timber by Diameter Size Class within the Flathead National Forest Timber-Processing Area." Missoula, MT: University of Montana, Bureau of Business and Economic Research. 26 p.

Pennick, C., Morgan, T.A. 2022. Timber Use, Processing Capacity and Capability of Mills to Utilize Timber by Diameter Size Class within the Custer-Gallatin National Forest Timber-Processing Area. Report submitted to USDA Forest Service Northern Region, Missoula, MT. 26 p.

Sheehan, Derek and Patrick M. Barkey. "2022 Gallatin Valley Housing Report," Gallatin Association of Realtors, March 2022.

Sheehan, Derek and Patrick M. Barkey. "Housing Affordability in Lewis and Clark County," Helena Association of Realtors, October 2021.

Sheehan, Derek. "The Performance of the BBER Forecast: Forecasts Relatively Accurate Despite Economic Shocks," *2022 Montana Economic Report*.

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Simmons, Eric A.; C. Pennick McIver; T.A. Morgan, Timber Use, Processing Capacity and Capability of Mills to Utilize Timber by Diameter Size Class Within the Shoshone National Forests Timber-Processing Area. Report submitted September 21, 2021 USDA Forest Service Rocky Mountain Region, Lakewood, CO. 19p.

Simmons, Eric; Scott, Samuel; Morgan, Todd; Townsend, Lucas; Shaw, John. Idaho's Forest Products Industry and Timber Harvest: 2019. In progress. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.

Sonora, Robert. "Estimates of a 'Pandemic Taylor Rule' Loss Function," *Applied Economics Letters*, online June 2022, doi.org/10.1080/13504851.2022.2089619

Sonora, Robert. "The State of Montana Manufacturing, 2021," Montana Manufacturing Extension Center, annual report, Bozeman, MT.

Sonora, Robert. "How Land Use Affects Montana's Economy," *Montana Business Quarterly*, November 2021.

Sonora, Robert. "The State of Manufacturing in Montana," *Montana Business Quarterly*, January 2022.

Sonora, Robert "Health Care: Covid-19 Drives Exodus of Health Care Workers," *Montana Business Quarterly*, January 2022.

Sonora, Robert. "Covid Policies: How Effective Have They Been Across States?," *Montana Business Quarterly*, Fall 2022.

BBER DIRECTOR RECEIVES PRESTIGIOUS NATIONAL AWARD

Patrick Barkey, director of the University of Montana Bureau of Business and Economic Research, recently received the Thayne Robson Award from the Association for University Business and Economic Research (AUBER). The award is the highest honor that AUBER gives to an individual for longtime commitment and service to the organization. Award winners must be economic and public policy leaders in their state.

Barkey is the past president of AUBER, has served as Secretary-Treasurer for more than a decade, and has been a member of the organization's board of directors. The award was presented at AUBER's annual conference held earlier this year in Boulder, Colorado.

"I am humbled to receive this honor, especially considering the outstanding AUBER leaders who have preceded me, Barkey said.

"No one has been a stronger advocate of AUBER than Pat," according to John Deskins, AUBER's president and director of West Virginia's Bureau of Business and Economic Research. "He has devoted years to working to make the community stronger, and we owe him so much for his dedicated service. He is a great asset to applied economics research centers nationwide."

AUBER is the professional association of business and economic research organizations at public and private universities and consists of 75+ leading university-based economic research centers and affiliate organizations across the U.S.



Patrick Barkey (on right) pictured with AUBER President John Deskins, received the most prestigious AUBER award at the conference held recently in Boulder, Colorado.



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