

BUREAU OF BUSINESS AND ECONOMIC RESEARCH

UNIVERSITY OF MONTANA

1948-2023



2023 ANNUAL REPORT

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Bureau of Business and Economic Research

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Photo 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

Established in 1948 to monitor Montana's business and economic conditions, the Bureau of Business and Economic Research is celebrating its 75th anniversary this year. 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.

MESSAGE FROM THE DIRECTOR



Is the roller coaster ride finally over? We know now that things weren't as bad as they seemed in 2020. And perhaps now we're beginning to realize that they aren't quite as good as they were in the years that immediately followed, when Montana joined other states in racking up record budget surpluses. Reading the economy has been like trying to focus a blurry picture, distorted first by the fear and contagion of a pandemic and then by the geyser of government cash that followed. So where does that leave us today?

It is easier to ask this question than it is to answer it. But our future seems full of potential negative surprises, from upsetting geopolitical events to financial implosions brought about by higher interest rates and sky-high expectations being unmet. And so those of us in the forecasting business are remaining vigilant.

Those big picture issues are important, but this edition of our Annual Report reminds us of the many pieces of the economy that add up to that total. As you read here, BBER has been at work studying many of them – everything from housing, to energy, to transportation and land management. In fact, we've been doing this continuously since 1948 – a 75-year run of public service that we're proud to continue. It all fits with our mission of helping households, businesses, and policymakers better understand the economy that puts food on all of our tables.

Please take a look at our record of the last year, and join me in thanking the hard-working staff who have made these accomplishments happen.

I hope you have a safe and productive year.

Sincerely,

Patrick M. Barkey Director Bureau of Business and Economic Research

UNIVERSITY LEADERSHIP

Seth Bodnar President, University of Montana

OUR STAFF

Patrick Barkey Director

Todd Morgan Associate Director and Director of Forest Industry Research Scott Whittenburg Vice President, Research and Creative Scholarship

John Baldridge Project Manager

Erik Berg Research Forester

Bob Campbell Senior Database Administrator/ Programmer

Thale Dillon Research Economist

Clayton Dutton Database Administrator/ Programmer

Jayme Fraser Publications Director

Shannon Furniss Marketing Director Suzanne Tilleman Dean, College of Business

Steve Hayes Senior Research Forester

Benjamin Irey Research Social Scientist

Luke Koch Forestry Research Associate

Peter Larsen Research Fellow

Michael Niccolucci Research Economist

Chelsea Pennick Research Social Scientist Paul Polzin Director Emeritus

Mario Puccinelli Fiscal Officer

Eric Simmons Senior Research Associate

Samuel Scott Forest Economist

Derek Sheehan Economist Director of Forecasting

Janet Stevens Survey Research Field Coordinator

ADVISORY BOARD MEMBERS 2022-23

Wendy Dalrymple Controller, Pyramid Mountain Seeley Lake, Montana

Llew Jones

Representative, Montana House Conrad, Montana Jocelyn Lane Regional President, First Interstate Bank Billings, Montana

Phil Matteson

Owner, Modern Recycling Victor, Montana Joe Unterreiner Vice President of Business Development, Glacier Bank Kalispell, Montana

2022-23 YEAR IN REVIEW

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There is nothing that focuses attention like a crisis, and so it is that people pay the most attention to economists when the economy is heading downward. At least this is what I used to say. Because in the last year the economy largely roared ahead, and yet those of us at the Bureau of Business and Economic Research saw our business undiminished, with plenty of attendance at our economic events and a steady stream of new demand for research. That high level of activity is documented in this report. Among the projects and activities the BBER carried out in 2022-23, some stand out. These include:

 The two studies conducted by the BBER that addressed how the television series Yellowstone impacted the economy were some of the highest profile research project we have ever conducted. The second of those studies, carried out in partnership with the UM Institute for Tourism and Recreation Research, estimated that 2.1 million visitors to Montana came to our state because of the show, spending \$730 million in the local economy.



The atmosphere at the gathering was incredible. Everyone there was hanging on every word. Our futures are dependent on reliable information including looking behind us to see what's happened. Everybody should be there and it's nice there's access for everyone online at various places."

2023 seminar attendee

- The surge in in-migration to Montana in the wake
 of the pandemic has been noticed by plenty of
 Montanans, which no doubt contributed to the high
 levels of attendance at the BBER's 48th Economic
 Outlook Seminars conducted in nine cities across
 the state in January through March of 2023. The
 2023 program, "The Future of Montana: What the
 New Wave of In-Migration Means for the State," was
 keynoted by former BBER Associate Director Bryce
 Ward. The registrations were the highest in 10 years,
 with 91% of attendees reporting that they were very
 satisfied with the program.
- The BBER's Forest Industry Research Program (FIRP) had a second straight year of funding in excess of \$1 million in combined new and renewed projects stretching out over multiple years. New projects included an examination of logging residue on sites in Colorado and Wyoming, a milling capacity and timber use analysis for the Black Hills National Forest in South Dakota and a dozen Collaborative Forest Landscape Restoration Program (CFLRP) areas across the western United States.
- The BBER's Analysis of the Flathead Valley Housing Market took on the contentious issue of accelerating housing prices in one of the fastest

growing parts of the state. BBER's analysis concluded that a decade of slow building in residential real estate had wiped out the post-Great Recession housing surplus and opened a gap between demand and supply that fueled rapid price growth. The research was presented to planning boards, city councils, chambers of commerce, and service clubs in the region.

- The BBER's summer Economic Update series was the first opportunity to present the research of the Montana Electricity Reliability Initiative (MERIT) project, which has been underway since 2021. The program theme "Montana Electricity: Adequate for How Much Longer?" brought to light the challenges presented to the grid by stagnant generation, congested transmission, and rising demand for electricity demand in the coming years.
- The 2023 Gallatin Valley Housing Report was another high-profile housing study in the state's fastest growing economy in and around Bozeman. The report was the second annual compendium of markets, regulation, finance, and drivers of growth. The findings of the research were presented at a community event hosted by the Gallatin Assocation of Realtors with more than 300 in attendance.
- The BBER's **Survey Research program had a full slate** of information gathering activities underway in 2022-23. Several of the survey projects, including the survey of manufacturers and the pair surveys directed at both transportation stakeholders and the general public, are long-lived projects that continue to yield vital information for project sponsors and decision makers. A survey of logging truck drivers and logging contractors revealed the extent of labor force challenges that industry is likely to face in the coming years. Other survey projects address drought and climate, bus passenger satisfaction, small business access to capital, and international trade.

The BBER does great work and puts out great content. The state appreciates it."

2023 seminar attendee

I have been attending for about 20 years and believe this may have been the best one ever. Excellent, current, relevant data in important areas of local and state economy with just enough national mixed in. Really liked Bryce Ward's presentation, it was outstanding. Pat is always top notch and tells it like it is."

2023 seminar attendee

- BBER has increasingly been involved with economic impact analysis of a wide variety of business activity. Studies conducted in 2022-23 included analyses of research laboratories, metal mines, tribal economic development, sustainable fuel refineries, and technology consulting.
- BBER Director Patrick Barkey was named to the Governor's Housing Task Force, a group of leaders and researchers in housing policy charged with formulating recommendations to be submitted to the 2023 Montana Legislature that addressed the increasing challenge of Montanan's of buying or renting housing within their budgets. After hearing from the public and housing stakeholders across the state, the Task Force made 36 recommendations to state and local governments as well as state agencies.



Photo provided courtesy of University of Montana.

FINANCIAL REPORT

BBER expenditures returned to pre-pandemic levels in academic year (AY) 2023, as total spending and revenues totaled just under \$2 million. The variation from year to year is explained by the changes in revenue from grants, contracts, and outreach activities, including the Economic Outlook Seminars and the Economic Updates. State funding inched up by just over \$3,000 from last year. Expenses have been impacted by inflation, as well as by the pay plan implemented by the Legislature in the 2023 session. The latter will continue to push up personnel costs in AY 2024, which will be borne by non-state funds since additional state funds were not provided. The growth in external funds combined with the stagnation in state funds saw the fraction of state support fall to 25 percent, where it stood before the pandemic.

	FY 2022		FY 2023	
Total Funding/Expenditures:	\$1,751,125.88	100%	\$1,952,506.62	100%
Total State Funding	\$487,152.97	28%	\$490,434.95	25%
Other Funding Sources:	\$1,263,972.91	72%	\$1,462,071.67	75%
Total Contract Services	\$1,041,124.68	59%	\$1,259,993.41	65%
Total Sales & Services	\$222,848.23	13%	\$202,078.26	10%
Total Personnel Expenses	\$1,434,457.45	82%	\$1,564,101.62	80%
Total Personnel State	\$487,067.60	34%	\$490,231.13	31%
Total Personnel Other Sources	\$947,389.85	66%	\$1,073,870.49	69%
Total Operating Expenses	\$316,651.14	18%	\$387,817.86	20%
Total Operating Expenses State	\$85.37	0%	\$203.82	0%
Total Operating Expenses Other Sources	\$316,565.77	100%	\$387,614.04	100%

Funding Sources



Expenditures



ECONOMIC ANALYSIS





2023 GALLATIN VALLEY HOUSING REPORT 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 economy 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 2022-23 include:

- Economic Contribution of Montana Cooperatives. *Completed December 2022.*
- Review of the MARA Approach to Montana Fiscal Forecasting. Completed November 2022.
- An Assessment of the Potential Impacts of a Montana Low-Income Tax Credit. December 2022.
- Gallatin Valley Housing Report. Completed February 2023.
- Flathead Valley Housing Market Analysis. Completed February 2023.
- The Economic Impact of the Calumet Montana Refineries. Completed July 2023.
- The Economic Contribution of Montana's Hard Rock Mining Industry. *Completed May 2023.*
- Assessing the Impact of the Yellowstone Television Series on Montana's Tourism Economy (joint with ITRR). Completed January 2023.
- The Economic Impacts of Rocky Mountain Laboratories. *February 2023*.
- Montana Manufacturing Report. June 2023.
- Montana Electricity Reliability Initiative. Ongoing.
- The Economic Contribution of the University of Montana. Ongoing.



The Economic Contribution of Montana's Cooperatives

Cooperatives in Montana are so ubiquitous that their unique importance to the economies of the communities where they are located can be overlooked. A recent BBER study fills the information gap with an analysis of their economic contributions as well as providing details about what they do, who they serve and how their activities underpin prosperity in many parts of the state. Like co-ops worldwide, those in Montana now encompass businesses in agriculture, finance, housing, manufacturing, retail, utility, and technology industries.

Using operating and financial data gathered from 126 cooperative businesses located in every corner of the state, researchers constructed a measure of coops' ultimate economic contribution. In short, agricultural co-ops result in more jobs, more income, more sales, and more people and families than would exist in their absence. Their impact is particularly significant to the economic fabric of rural eastern Montana, where cooperatives are sometimes the only viable provider of agricultural services and supplies.

Taken as a whole, the 126 businesses that provided information to this study employed 4,480 people, paid wages and benefits of \$288.3 million and realized revenue of \$1.78 billion in 2021.

The study found that the operations of cooperative businesses are a pillar of economic strength in communities across the state. Their contributions are especially prominent in less populated parts of the state, including areas that have faced significant challenges retaining jobs and families.

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SURVEY RESEARCH

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 more than 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.

2023 Montana Department of Transportation Public Involvement Survey

START HERE Q1. Are you the adult age 18 or older in your household who will have the next

Tutudy' Mark one button (X) O Yes Please continue. O No → Please have the adult in your household who will have the next birthday complete the survey. Administered by: University of More Bureau of Business and Economic I Sponsored by: Moreau Economic I Sponsored by: Mo

Survey research projects for 2022-2023 include:

- Economic Contribution of Montana's Farmers Markets, National Center for Appropriate Technology. Completed July 2022.
- Montana Drought and Climate Survey, U.S.
 Department of Agriculture. Completed September 2022.
- Survey of Montana Manufacturers, Montana Manufacturing Extension Center. Completed July 2022.
- Study of Capital Availability in Montana, Survey of Lenders and Investors, and Survey of New Businesses Seeking Capital, Accelerate MT. Fall 2022 to Spring 2023.
- Survey of Logging Contractors and Survey of Logging Truck Drivers, Idaho Forest Group. Winter to Spring 2023.
- Survey of "Yellowstone" Visitors to Montana, Paramount. Completed Fall 2022.
- Survey of Montana Cooperatives, Montana Cooperatives Association. Fall 2022 to Spring 2023.
- Montana Trade and Investment Survey, Montana World Trade Center. Winter to Spring 2023.
- Survey of Montana Manufacturers, Montana Manufacturing Extension Center. Spring to Fall 2023.
- Montana Public Involvement Survey and Montana Stakeholders Survey, Montana Department of Transportation. Ongoing.
- Mountain Line Passengers Survey, Mountain Line. Ongoing.
- Missoula Transportation Survey, City of Missoula. Ongoing.
- Wolf Management Survey, Montana Fish, Wildlife and Parks. Ongoing.



MERIT: THE MONTANA ELECTRICITY RELIABILITY INITIATIVE

What happens on the other side of the switch when you turn your lights on? Many of us don't know and some of us don't care. The fact that in Montana, like most places in the U.S., the lights reliably come on when we flip that switch has often produced apathy and lack of understanding of how it all happens. Simply put, reliable, affordable electricity has lulled many of us to sleep when it comes to paying attention to the issues involved in keeping it so.

But Montana is fast approaching a time when we will wish we had kept better informed. Economic growth, retirement of coal-based generation, and the changing nature of regional markets where we buy and sell our power are posing challenges to reliability unlike any we have seen in generations. And because the electric power business is a tightly integrated, capital-intensive enterprise where changes can't be made overnight, the time to start paying attention to those issues is now.

That's why the Bureau of Business and Economic Research at the University of Montana is kicking off this first-of-its-kind project to assess the challenges and explore the options for our state's electricity future. We're taking a fresh, independent look at the challenges to maintaining reliable and affordable electric power in the coming years from the point of view of the economy as a whole. Because as the recent experiences of states like Texas and California remind us, the economic damage from lapses in electricity availability and gyrations in prices can be profound.

The mission of MERIT is to inform Montana consumers and key stakeholders responsible for ensuring Montana has safe, reliable, sustainable and efficient electrical power. At the heart of MERIT is a desire to ensure the quality of life and safety of Montana's rapidly growing population, and to ensure continued economic growth and opportunity.

MERIT supporters include government, universities, major power customers, investor-owned and cooperatively-owned electric utilities, independent power generators as well as organization with stakes in economic development.

FOREST INDUSTRY RESEARCH PROGRAM

The Bureau's Forest Industry Research Program (FIRP) had a second straight year of funding in excess of \$1 million in combined new and renewed projects stretching out over multiple years. New projects included an examination of logging residue on sites in Colorado and Wyoming, a milling capacity and timber use analysis for the Black Hills National Forest in South Dakota, and a dozen Collaborative Forest Landscape Restoration Program (CFLRP) areas across the western United States.

During FY 2022, FIRP completed one externally funded project, continued seven ongoing projects, began five new agreements, and submitted four new proposals that were not yet signed by the end of the fiscal year. The program had another year with more than \$1 million of funds added to new and ongoing research agreements (Table 1). FIRP had 10 to 12 externally funded research projects active throughout the year with approximately \$3 million under contract. Personnel ranged from 10 to 12 full- and part-time employees who were paid a total of \$722,156 (including benefits) from agreements, with \$1,066,738 remaining for personnel and \$135,777 for operational expenses at year-end (June 30, 2023). FIRP's workload is expected to increase in FY 2024 as we continue several multiyear projects for the Forest Service and begin new ones. Agreement income for FY 2024 is anticipated to again be over \$1 million.

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. The Forest Industry Research program had a bit of personnel turnover and began a search for several new employees. Chelsea Pennick completed her Ph.D. at University of Idaho in May 2023 and has moved on from BBER to continue her career as a research social scientist in forestry. In June 2023, Luke Koch was accepted in the master's in economics program at UM and will be leaving this fall to be a full-time graduate student. We wish Chelsea and Luke the best.

FIRP Annual Award Volume by Fiscal Year (FY), 2008-2023

FY	Dollar amount	
2023	1,056,471	
2022	1,412,236	
2021	747,601	
2020	514,700	
2019	303,185	
2018	895,374	
2017	724,866	
2016	504,231	
2015	523,433	
2014	213,548	
2013	1,066,052	
2012	356,250	
2011	287,980	
2010	564,330	
2009	539,590	
2008	489,045	
Total	\$10,198,893	

Highlights from the Year

FIRP's research projects benefit a wide range of local and national data users who want more information on the changes, sustainability, economic and carbon impacts of timber harvest and use by the U.S. West's forest products industry.

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:

- The FIRP completed a study of logging utilization in California, examining how much wood is left behind after commercial logging in "green" and salvage (dead tree) sites. A manuscript is being prepared for publication with the Pacific Northwest (PNW) Research Staton.
- We continued our core research with the Forest Service's Forest Inventory and Analysis – Timber Product Output (FIA-TPO) program, conducting annual mill surveys across the 12 western states and we hosted the national TPO program's all-hands meeting at UM this spring.
- We continued to update information on harvested wood products for carbon storage analysis for the PNW FIA program and the respective states.
- We continued our ongoing work with the Northern Region of the Forest Service, collecting timber harvesting and hauling costs

in ID and MT, updating the regional timber sale appraisal system, and investigating the costs of tethered logging systems.

- We continued our capacity and timber flow projects for the Northern Region, delivering several reports for individual forests in Idaho and Montana and development of delivered log prices for the NFS Intermountain Region.
- We also continued our multiyear project with NFS Ecosystem Management Coordination (EMC) economists to update direct employment and income coefficients for measuring economic impacts of National Forest timber harvest and support the national Forest Products Modernization effort.
- New projects initiated during FY 2023 included an examination of logging residue on sites in Colorado and Wyoming, a milling capacity and timber use analysis for the Black Hills National Forest in South Dakota and a dozen Collaborative Forest Landscape Restoration Program (CFLRP) areas across the western U.S.
- We also began an analysis of timber flow for the Washington Office (WO) of the Forest Service.
- We completed the first iteration of a new timber appraisal system for Montana's Department of Natural Resources and Conservation (DNRC), and secured funding to provide updates in coming years.

OUTREACH AND COMMUNICATIONS

From the slow and painful demise of the Anaconda company to the "double dip" recessions of the 1980s and to the COVID pandemic that swept the nation in 2020, BBER has been an important source of economic data for Montana. This year, the Bureau celebrates its 75th anniversary.

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. Our award-winning Montana Business Quarterly reaches business owners, policy makers, and government leaders across the state. We engage with our audience across a variety of platforms, including:

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. Director Patrick Barkey's daily podcasts that are posted on the website keep listeners across the state updated on a wide variety of topics, including inflation, interest rates, green energy trends, and much more. The BBER website has won national awards from the Association of University Business and Economic Research for its groundbreaking articles and innovative design.



BBER developed an interactive app for seminar attendees.







Economic Outlook Seminar

The 2023 Economic Outlook Seminars had the highest attendance across the state in a decade. As always, the Economic Outlook Seminar series featured a keynote speaker on a special topic as well as BBER economists and industry experts who presented national, state, and local economic forecasts on the state's important sectors, including tourism, health care, real estate and housing, energy, agriculture, manufacturing, high-tech, and forest products. The keynote speaker, Bryce Ward, founder of ABMJ Consulting and former BBER economist, presented on "The Future of Montana: What the New Wave of In-Migration Means for the State."

This year, the Bureau introduced a new feature: a BBER app to help attendees connect, network, watch presentations, view seminar materials, and interact in real-time, which seemed popular with attendees.

Midyear Economic Update Series

BBER traveled to seven cities this summer to present the Midyear Economic Update. The program's theme, "Montana's Electricity Supply: Adequate for How Long?" focused on the adequacy of electricity supply and a potential power crunch that could jeopardize the state's economic growth. As always, the Midyear Economic Update presented an assessment of the U.S. and Montana economies, and Montana Chamber of Commerce President Todd O'Hair presented an update on legislative issues.

Montana Economic Report

The 2023 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. This year, the bureau has been planning a transition for MBQ to a mix of online products, both free and paid, in lieu of a printed magazine.

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.

SERVICE TO THE UNIVERSITY, COMMUNITY AND PROFESSIONAL ASSOCIATIONS

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 organizations such as the Rural Institute, the Blackstone Launchpad, the Western Montana Family Residency program, the Mansfield Center, as well as faculty in business, political science, sociology, forestry, public health, education, social work, psychology. We also work with smaller communities with limited resources for planning, research, and analysis. These activities raise the image of the University of Montana 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. This year, Director Patrick Barkey was named to the Governor's Housing Task Force, a group of leaders and researchers in housing policy charged with formulating recommendations to be submitted to the 2023 Montana Legislature that addressed the increasing challenge of Montanan's of buying or renting housing within their budgets.

Current professional affiliations among BBER staff include:

- + American Association of Public Opinion Research
- American Economic Association
- American Society of Health Economists
- Association of Academic Survey Research Organizations
- Association for University Business and Economic Research

- Boy Scouts of America
- City Club Missoula
- Federal State Cooperative of Population Estimates
- Forest Products Society
- Governor's Housing Affordability Task Force
- Greater Montana Foundation
- + 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

Economic Contribution of Montana Cooperatives. Examination of the impact of the activities of Montana cooperatives, including credit unions, electrical coops, telecommunications coops, ag coops and others. Performed for Montana Cooperative Development Center. *Completed December 2022.*

Assessing the Impact of the Yellowstone Television Series on Montana's Tourism Economy (joint with the UM Institute for Tourism and Recreation Research). Survey-based assessment of how the show induced visits to Montana and how the subsequent spending impacted the state economy. Performed for Paramount Studios. *Completed January 2023.*

The Economic Contribution of the University of Montana. A comprehensive study of how UM supports a larger state economy. Performed for UM Presidents Office. *Ongoing*.

Review of the MARA Approach to Montana Fiscal Forecasting. Assessment of the approach of the Montana Legislative Fiscal Division's MARA project. Performed for PEW Charitable Trusts. *Completed November 2022*.

Gallatin Valley Housing Report. Annual compendium of housing and real estate data for Gallatin Valley conducted in cooperation with builders, lenders, regulators, and other players in housing markets. Performed for the Gallatin Association of Realtors. *Completed February* 2023.

Flathead Valley Housing Market Analysis. Assessment of trends in affordability and an analysis of underbuilding in Flathead County. Performed for Location Ventures. *Completed February* 2023. The Economic Impact of the Calumet Montana Refineries. Assessed the conversion of one half of the existing legacy petroleum refinery in Great Falls to the production of sustainable diesel and jet engine fuel. Performed for Calumet Specialty Products. *Completed July 2023*.

The Economic Contribution of Montana's Hard Rock Mining Industry. Assessed how Montana's existing hard rock mines impact the state economy. Performed for the Montana Mining Association. *Completed May* 2023.

The Economic Impacts of Rocky Mountain Laboratories. Modeled the economic contribution RML in Hamilton and the broader regional economy, estimating the overall impacts of the facilities expansion on factors such as employment, personal income, and output. *Completed February 2023*.

Montana Electricity Reliability Initiative (MERIT). A comprehensive assessment of the adequacy and preparedness of Montana's electricity infrastructure. *Ongoing.*

An Assessment of the Potential Impacts of a Montana Low-Income Tax Credit. Performed an econometric analysis to estimate the amount of federal tax credits that could be leveraged with state supplemental low-income housing tax credit. These estimates were used to estimate additional economic and social impacts of such a policy in Montana. *Completed December 2022*.

Forest Products Research

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. *Completed March* 2023.

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Research Projects, continued

Collaborative Forest Landscape Restoration Program. New Landscape Data Summaries of Regional Capacity and Trends in Timber Harvesting and Processing (CFLRP Data & Analysis) a challenge cost share agreement with the USDA Forest Service, CFLRP program, Portland, OR, to provide timber flow and milling capacity and utilization information to support Forest Service and collaborative group decision making. *Project through August 2027.*

Employment and Income Direct Response Coefficients for the U.S. National Forest System Timber Flow and Utilization Analysis (NFS Flow 2.0). A challenge cost share agreement with the USDA Forest Service, Ecosystem Management Coordination program, Fort Collins, CO, to provide timber flow by product and timber industry mill and market information to support Forest Service decision making. *Project through September 2026*.

Black Hills National Forest Timber Program Support. A challenge cost share agreement with the USDA Forest Service, Region Two, Fort Collins, CO, to analyze timber flow, timber-processing capacity, and capability by tree size class among mills for the Black Hills National Forest. *Project through July 2026*.

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 through May* 2026.

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 through December 2025*. Rocky Mountain States Timber Product Output (TPO) and Forest Industry Analysis. A joint venture research agreement with the USDA Forest Service, Rocky Mountain Research Station, Ogden, UT, to provide analysis of the forest industry, timber use, and impact on timber inventory in the Rocky Mountain region. *Project through June 2025*.

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 extended to June 2025*.

Employment and Income Direct Response Coefficients for the U.S. Forest Service (DRC 3.0). 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 (DRCs) for the United States and provide timber industry mill and market information to support Forest Service decision making. Project extended to May 2025.

Colorado and Wyoming Logging Utilization. A research joint venture agreement with the USDA Forest Service, Rocky Mountain Research Station, Forest Inventory and Analysis (FIA) Program, Ogden, UT, to study and report on the quantities of logging residue generated while harvesting timber in Colorado and Wyoming. *Project through December 2024 (to be extended).*

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 through 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* through March 2024.

Montana DNRC Timber Sale Appraisal. A contract with the Montana Department of Natural Resources and Conservation, Missoula, MT, to develop and update the state's timber sale appraisal system for Trust Lands and Good Neighbor Authority (GNA) timber sales with the USDA Forest Service Region One (in Montana). *Project through October 2023 (to be extended)*.

Survey Research

Economic Contribution of Montana's Farmers

Markets. National Center for Appropriate Technology. An extensive data collection effort examining 71 Montana farmers markets. Completed July 2022.

Montana Drought and Climate Survey, U.S.

Department of Agriculture. 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. *Completed September* 2022.

Survey of Montana Manufacturers, 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. *Completed July 2022*.

Study of Capital Availability in Montana. Survey of Lenders and Investors and Survey of New Businesses Seeking Capital, Accelerate MT. *Completed Spring* 2023. Survey of Logging Contractors and Survey of Logging Truck Drivers. Idaho Forest Group. *Completed Spring* 2023.

Survey of "Yellowstone" Visitors to Montana. Paramount. Completed Fall 2022.

Survey of Montana Cooperatives. Montana Cooperatives Association. Completed Spring 2023

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. *Completed Spring* 2023.

Montana Public Involvement Survey and Montana Stakeholders Survey. Montana Department of Transportation. *Ongoing*.

Mountain Line Passengers Survey. Mountain Line. Ongoing.

Missoula Transportation Survey. City of Missoula. Ongoing.

Wolf Management Survey. Montana Fish, Wildlife and Parks. Ongoing.

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Mountain Research Station. (In publication).

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