



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



2021

ANNUAL REPORT

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



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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 our 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, with a total of \$8.46 million in project agreements since FY08.
- 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

The economy hasn't been boring over the past year. Its steep fall more than 18 months ago was swiftly followed by growth of nearly equal magnitude. Both caught forecasters by surprise, but have provided us with plenty to talk about as the issues surrounding the rapid down-up cycle explode in all of our faces.

It hasn't been a boring year for the Bureau of Business and Economic Research either, as you will read in these pages. Demand for economic information and analysis is always strong during periods of rapid change, even if the realities of a global pandemic rule out some of the traditional means of getting that information into the hands of people who need it. Just as the rest of the economy adapted, our research center jumped in to navigate the new ways of doing business in 2020-21.

We take stock of our accomplishments and challenges in these pages, as we have done for many years. We are proud of the uninterrupted performance of our talented staff in continuing to produce timely, substantive research reports on the industries and issues that matter to Montanans and others throughout the West. This year saw BBER studies on everything from COVID-19 to endangered species, while also hiring some new team members who will make big contributions going forward.

We're particularly proud of our economic outlook seminar's adaption to an online format in the winter of 2021, when most of us were still working from home. Our team embraced the constraint of social distancing by putting on a completely different kind of program, featuring two days of content that gave audiences the chance to virtually tour the state and interact with nationally known keynote speakers in ways that were not possible before.

I invite you to take in some of our work over the past 12 months and please keep us in mind if there is anything we can do for you or your organization.

Have a safe and prosperous year.

Sincerely,

Patrick Barkey

Director

Bureau of Business and Economic Research

Seth Bodnar
President, University of Montana

Scott Whittenburg
Vice President for Research and
Creative Scholarship

Suzanne Tilleman
Dean, College of Business

OUR STAFF

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2020-21 YEAR IN REVIEW

Serving the Research Needs of a Pandemic

The demand for research and information didn't stop just because most Montanans stayed home during the height of the pandemic. 2020-21 was a year of high visibility forecasts, presentations and research projects conducted by BBER staff. As you will read in these pages, it was a different, but still highly productive year. Some of the highlights include:

2021 Economic Outlook Seminar

Due to the COVID-19 pandemic, the 46th annual Economic Outlook Seminar was held online in 2021. For the first time BBER held a statewide two-day event entitled, "The Path Forward: How COVID-19 Has Reshaped the Economy," featuring keynote speakers Edward Glaeser, professor of economics at Harvard University and Neel Kashkari, president of the Federal Reserve Bank of Minneapolis.

Over 1,300 people attended the seminar using our online event platform. It was an overwhelming success and 97% of attendees reported that they were satisfied or very satisfied with the event.

"I was especially pleased with the cross-section of the whole state. Working in an industry that has statewide interactions, I like to get the overall picture but the more localized picture too!"

This year, new seminar elements included:

- A keynote town hall with Edward Glaeser, Fred and Eleanor Flip Professor of Economics at Harvard University. A U.S. economic outlook town hall with Neel Kashkari, president of the Federal Reserve Bank of Minneapolis.

- Local economic outlooks for Helena, Great Falls, Missoula, Billings, Bozeman, Butte, Kalispell, Lewistown, Havre, Sidney and Miles City.

The 2021 Economic Outlook Seminar was made possible thanks to our principal sponsor NorthWestern Energy, and by our statewide sponsors, Benefis Health System, First Interstate Bank, MDU Resources, the Frontier Institute, Idaho Forest Group and Sibanye-Stillwater.

The Economic Contributions of Hospitals in Montana

In partnership with the Montana Hospital Association, we conducted an economic impact study involving 56 hospitals throughout Montana. The study showed those hospitals account for:

- About 83,900 permanent, year-round jobs across the state.
- Over \$6.3 billion of annual recurring income received by Montana households, of which \$5.7 billion is disposable after-tax income.
- State tax and nontax revenues of approximately \$1.5 billion per year.
- Over \$16 billion in added economic output annually.
- About 147,500 additional state residents.

A Profile of Montana's High-Tech Industries

In partnership with the Montana High Tech Business Alliance (HTBA), we surveyed 100 HTBA member firms and 95 nonmember firms and concluded:

- Alliance members expected to add 1,500 new jobs in 2021,

making a significant contribution to Montana's recovery from the pandemic recession.

- Jobs with alliance members paid considerably more than jobs elsewhere in the economy. The average annual salary at member firms (\$73,100) and nonmember firms (\$59,500) was 59% larger than the average earnings per Montana worker.
- HTBA members expected to make at least \$164 million in capital expenditures at their Montana facilities in 2021. This represents a significant increase from the anticipated 2020 major capital expenditures (\$133 million);
- Montana-based activities of high-tech firms were responsible for \$2.9 billion in gross sales in 2020, a robust increase over 2019 revenue (\$2.5 billion).

Lost Possibilities: The Impacts of Inadequate Child Care on Montana's Families, Employers and Economy

This past year the survey research program collaborated with the Federal Reserve Bank of Minneapolis to study the impacts of inadequate child care in Montana. The study used data collected from a representative sample of 404 families with children under the age of 6. The results found large and widespread impacts on Montanans caused by inadequate child care. Specifically, inadequate child care costs Montana families \$145 million each year; causes Montana businesses to lose \$54 million each year; and causes Montana taxpayers to lose \$32 million each year.

California Logging Utilization Study

This project with the Pacific Northwest Forest Inventory and Analysis program and the California Department of Forestry and Fire Protection examined active logging sites in California. We measured felled trees to quantify how much of each tree is sent to mills to become products versus how much is left at the site as logging residue. The study was expanded to include salvage logging sites where dead trees are removed from the forest. This utilization information is used to better understand logging impacts on forest inventory, carbon storage, hazardous fuels and changes in timber harvesting efficiency.

Our Connection to the Association for University Business and Economic Research

Since 1947, the Association for University Business and Economic Research (AUBER) has supported its members, including 75+ leading universities across the United States, by offering ex-

panded opportunities that come from collaboration, education and networking. This year, BBER director Patrick Barkey serves as AUBER president and will be presenting at the fall conference in Boulder, Colorado.

Spotlight on New Personnel

We have made some important additions to our team.

Militia Earl joined BBER as marketing director and event planner. She has a bachelor's degree in public relations and advertising from Weber State University. She is currently pursuing a business degree at the University of Montana. Before moving to Montana, Earl served as the public relations manager for Nightingale College in Salt Lake City, and as education and outreach coordinator for Trans-Jordan Cities.

Clayton Dutton is a database administrator and programmer. Born and raised in Missoula, Dutton holds a bachelor's degree in computer science from the University of Montana and is pursuing a master's degree in information and communication technology at the University of Denver. Dutton previously held a number of IT roles within the College of Health.

Derek Sheehan is an economist who holds a bachelor's degree from Virginia Tech and a master's degree from the University of Montana. Sheehan has extensive experience in economic research and previously served as a Peace Corps volunteer in the West African country of Senegal.

Pete Larsen is a research fellow specializing in energy and electricity market economics and policy. Larsen conducts research and analysis on the economics of electricity reliability and resilience; the energy service industry and project trends; long-term electric utility planning; risk to infrastructure from extreme events; and islanded power systems.

Sam Scott is a forest economist and native Montanan. He holds a bachelor's degree in forest management from the University of Montana and a master's degree in forestry from Virginia Tech. Before joining BBER, he was an economist with the U.S. Bureau of Labor Statistics and a forest technician with the Bureau of Land Management.

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. This past year, it generated 22,482 page views with 13,562 visitors (a 52% increase in page views and a 172% increase in visitors from last year).

Presentations

The COVID-19 pandemic made in-person presentations and travel impractical for most of the year. However, many were still held via Zoom or other video conferencing platforms. BBER researchers gave 42 presentations to a variety of audiences, including business leaders and elected officials. Topic ranged from the economic impact of hospitals in the state to Montana's booming high-tech industry. BBER director Patrick Barkey spoke at the Montana Centers of Opportunity Forum, produced by the Montana Chamber of Commerce, and at the Association for University Business and Economic Research's fall conference.

Publications

BBER researchers produced 53 publications, which were distributed to our clients and made available via our website and through information requests.

- Economic analysis publications – 34
- Forest industry research publications – 17
- Health care research publications – 2

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 56,195 page views.

Montana Chamber Foundation Economic Update Series

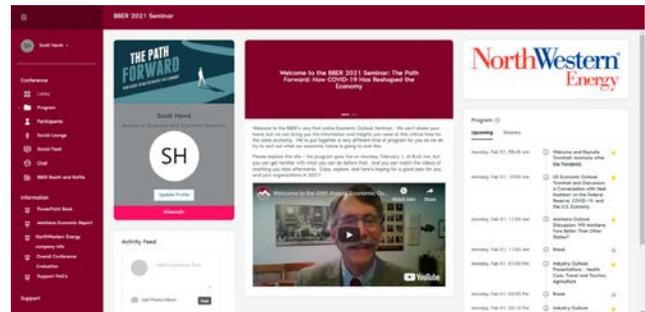
BBER once again partnered with the Montana Chamber Foundation for their economic update series. The program's theme, "Growing Industries and Economic Strongholds," focused on Montana's post-pandemic economy. BBER director, Patrick Barkey gave the keynote entitled, "Montana Economic Update: A Recession Experience Like No Other." The 2021 series traveled to Kalispell, Bozeman, Billings and Helena.

Montana Economic Report

The 2021 Montana Economic Report is produced in tandem with the economic outlook seminar and published in the winter edi-



A screenshot of the 2021 Economic Outlook Seminar website with featured speakers.



A screenshot of the lobby for the 2021 Economic Outlook Seminar online platform.

tion of the Montana Business Quarterly. It provides a detailed analysis of Montana’s economic sectors and was provided to seminar attendees, as well as Montana’s elected officials.

Montana Business Quarterly

For nearly 60 years, the award-winning Montana Business Quarterly has provided research and articles on topics important to Montanans. This past year, the magazine featured articles on affordable housing, the economic impact of hospitals, Montana’s workforce shortage, the housing market frenzy, food insecurity during the pandemic, skyrocketing lumber prices and the state of manufacturing in Montana. 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 13 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.
- A press conference for our analysis on COVID-19’s effect on the economy.
- A dedicated COVID-19 information page on our website with links to interviews, resources and other reputable information.
- 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.



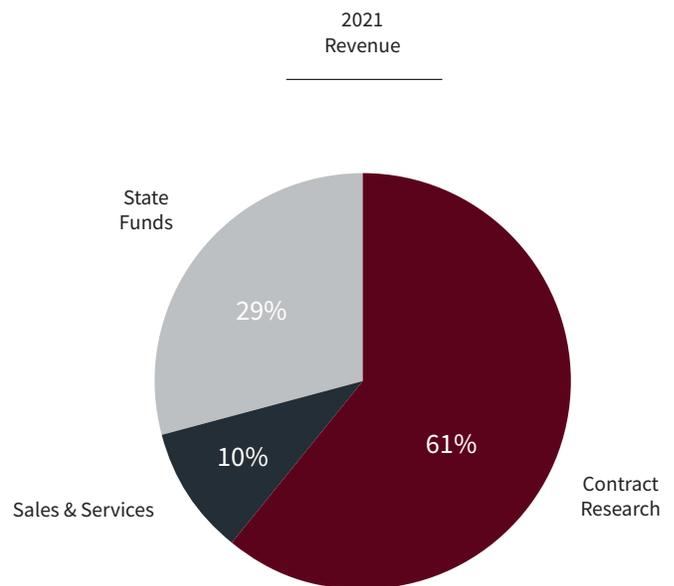
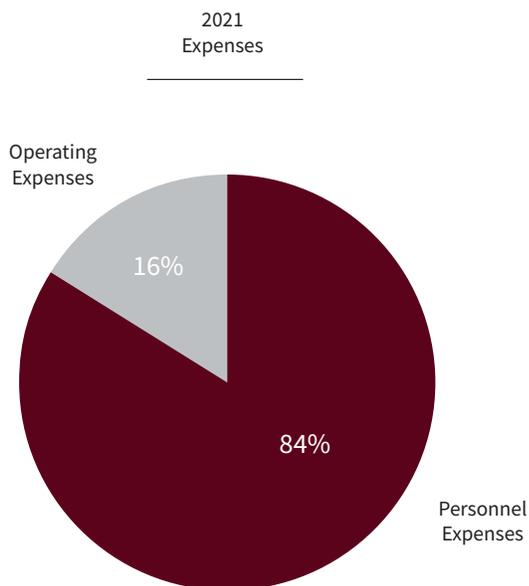
FINANCIAL REPORT

Although total revenues declined in the 2019-20 fiscal year, the bureau's financial health remains robust. We saw a decrease in revenue this year due to the Montana KIDS COUNT program's removal by the Annie E. Casey Foundation, who shifted their focus to advocacy. Seminar profits declined from refunding attendees in our final three cities due to the need to move the seminar to a remote venue.

Our largest revenue source comes from externally funded projects; contracts and grant-funded projects administered by the

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

Revenue	FY 2020	%	FY 2021	%
Contract Research	\$1,008,349	61%	\$1,066,602.57	66%
Sales & Services	\$158,473	10%	\$105,150	6%
State Contribution	\$482,233	29%	\$461,226	28%
Total Revenue	\$1,649,055	100%	\$1,632,980	100%
Expenses				
Personnel – State	\$482,133		\$461,114	
Personnel - Other	\$900,569		\$922,569	
Total Personnel Expenses	\$1,382,702	84%	\$1,383,683	85%
Operating Expenses - State	\$99		\$112	
Operating Expenses - Other Sources	\$266,098		\$247,362	
Total Operating Expenses	\$266,197	16%	\$247,475	15%
Total Expenses	\$1,648,899	100%	\$1,631,158	100%





ECONOMIC ANALYSIS

Offering Decades of Experience in Economic Analysis and Forecasting

The research and activities of the economic analysis program at BBER are as rich and various as the Montana economy itself. BBER has performed industry studies, tax analysis, labor market analysis, economic impact studies, as well as many niche studies. Our team of economists and industry experts offer decades of experience to provide reliable research and highly sought-after insightful forecasting.

Fiscal year 2021 marked a tremendous demand for economic analysis. BBER worked with a variety of clients to provide industry and impact studies. We are thrilled to bring Pete Larson on board for the Montana Electricity Reliability Initiative, which is a self-funded comprehensive assessment of adequacy and preparedness of Montana's electricity infrastructure.

An Assessment of the Market and Tax Revenue Potential of Recreational Cannabis in Montana

This economic study found legalizing and taxing marijuana would generate \$236 million in Montana tax revenue by 2026. Researchers noted that while other tax revenues were down, marijuana represented a significant new source of revenue for the state. BBER's projections are in line with the tax revenue estimates in the I-190 fiscal note from the Governor's Office of Budget and Program Planning.

Sponsored by New Approach Montana, the report used publicly available data and drew from similar research conducted in other states. The report concluded that:

- More adults say that they use cannabis than the national average – the most recent national survey of drug use and health reports that 14.3% of adults in Montana said they had used marijuana in the last 30 days, compared to a national average of 9.3%.
- While those who use cannabis daily or near daily make up only 22% of all cannabis users in the state, their consumption represents more than two-thirds of total cannabis consumption of all users.
- Over 15% of leisure-oriented visitors to states with legal recreational cannabis visit retail stores.

Economic Analysis Research Projects

Economic Impacts of Eastern Heath Snails

An analysis of the economic impact of the eastern heath snail on the Montana economy. This project will not be completed until mid-2022.

Land Use and Regional Economic Growth in the Western U.S.

This paper investigates the role natural amenities play in explaining differences in economic performance across western U.S. counties. Areas with significant natural amenities, such as national parks and monuments, are increasingly using access to attract economic development. Lands with greater public access have some short-run economic benefits, but decline over time.

The Contribution of Montana's Indian Tribes to the Montana State Economy

During the 66th session of the Montana Legislature, representatives passed HB632 requiring a decennial report on the economic impact of Indian reservations on the state economy. BBER is currently working 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.

Montana Manufacturing Report

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 plant's economic performance.

Economic Impact of Cognizant/ATG in Missoula

This is an updated impact study of the high-tech consulting firm with a significant footprint in Missoula. The study examined the continued growth in the company despite the pandemic, which included the construction of a new office space.

The Impacts of the Oil and Gas Industry to the Montana Economy

This project utilized a REMI model to examine the extent to which the oil and gas industry influences the economy of Montana.

An Assessment of the Market and Tax Revenue Potential of Recreational Cannabis in Montana

Sponsored by New Approach Montana, this project provided an estimation of revenue from a 20% tax on recreational cannabis sales in Montana.

The Economic Impact of Montana's Cooperatives

An analysis of the economic impact of cooperatives in the state, which make the economy significantly larger and more populous.

The Continuing Economic Contribution of Sibanye-Stillwater in Montana

An update of the contributions made to the state economy by the production, employment, spending and tax revenues that come about due to the state's largest hard rock metal mining operation.

School Enrollment in Montana

A preliminary descriptive analysis of trends in school enrollment in the state, which includes the impacts of COVID-19 disruptions to local public schools.

The Economic Impact of Outdoor Recreation in Beaverhead County

An analysis of the economic impact of outdoor recreation in Beaverhead County, including big game hunting, bird hunting, hiking, camping, rafting, mountain biking and angling.

State of Gallatin County Housing Market

This is an ongoing project compiling various data sources to give a comprehensive account of the factors driving the hottest housing market in the state.

Missoula Housing Report

A survey of affordable housing programs and properties in Montana. This report examined relevant programs from other states, assessed the demand for affordable housing in population centers in Montana, as well as the costs of not rehabilitating existing properties.

SURVEY RESEARCH

Accurate and Thorough Advanced Data Collection

For more than 30 years, BBER's survey research program has provided Montana's leaders with a rigorous, primary data collection capability that sheds light on some of Montana's most important issues.

This year the survey research program collaborated with the Federal Reserve Bank of Minneapolis on a study of the economic impact of inadequate child care on Montana. The study found large and widespread impacts, specifically inadequate child care costs Montana families \$145 million in lost wages annually, causes Montana businesses to lose \$55 million each year and \$32 million in lost revenue taxes to the state annually.

Survey of Montana's Cooperatives

BBER conducted an analysis that addressed the question, "What would the economy of the state look like if cooperatives did not exist?" Researchers concluded that Montana's customer-owned cooperatives are a diverse group of businesses that share one aspect in common – their close connections to the communities in which they operate. Those connections make what they do and where they do it of special importance. Together they combine to create a substantial economic impact with more than

Survey of Montana's High-Tech Businesses

Montana's high-tech companies not only survived, but even benefited from the dynamics of a pandemic economy, generating more than \$2.9 billion in revenue. In our annual survey of high-tech companies around the state, researchers found that Montana's tech industry is growing seven times faster than other sectors, with an average worker salary of \$73,100, which is 59%

Survey Research Projects

- A survey of Montana's cooperatives
- A survey of Montana's manufacturers
- An analysis of the economic impact of farmers markets
- A survey of Montana's high-tech businesses
- A Montana Department of Transportation public involvement survey
- A Montana Department of Transportation stakeholders survey
- Montana drought and climate survey
- Montana World Trade Center international trade and investment survey

23,000 jobs, \$1.6 billion in annual personal income, \$7.4 billion in economic output every year, and 33,000 additional people in the state.

higher than the average income of a Montana worker. Yet, affordable housing and finding skilled workers remains the biggest challenge as tech continues to grow.

HEALTH CARE INDUSTRY RESEARCH

Monitoring Markets, Trends, Industry Structure and Costs of Health Care

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.

Health Care Research Projects

Data Analysis Support for Reducing Barriers to Complex Care Navigation

BBER was contracted by members of Logan Health (formerly Kalispell Regional Medical Center) to perform qualitative analysis for their project, "Building Capacity to Breakdown Barriers to Complex Care Navigation in Rural America." We used qualitative focus group data analysis to provide insight in how patients, caregivers and health providers differ in their perceptions of health care.

The Economic Contribution of the Island Mountain Development Group and the Impacts of COVID-19

This economic impact study is an update from 2019. Since the previous study, Island Mountain Development Group had expanded its operations and wanted an estimate of the effects of their larger operations and the impact of the pandemic on the local economy.

The Economic Impact of Montana's Hospitals

Montana's health centers contribute a sizable, ongoing and permanent impact on the state's economy. In all, Montana's hospitals support about 83,900 jobs across the state and over \$6.3 billion of annual, recurring income. They generate approximately \$1.5 billion per year in state tax and nontax revenues and produce \$16 billion in added economic output annually.

The Effects of Rent Seeking on Economic Growth

This paper estimates the impact of rent seeking behavior on economic growth. Results suggest that rent seeking affects the level of total factor productivity and rent seeking behavior can have an impact on economic growth.

Income Inequality, Poverty and the Rule of Law: Latin America vs. the Rest of the World

What role does the rule of law play in reducing poverty and income inequality for Latin American countries? In most cases improvements in the quality of legal systems in Latin America help reduce overall income inequality and poverty.

Assessing the Impacts of COVID-19 on the Flathead Indian Reservation Regional Economy

An analysis to better understand the effects of pandemic on the regional economy of the Flathead Reservation over five years.



FOREST INDUSTRY RESEARCH PROGRAM

Nationally Prominent Program Brings in New Funds for Projects

Forest Industry Research Program (FIRP) team members bring decades of combined expertise in forest economics, timber harvesting and utilization research and primary data collection in the forest and wood products facilities. Fiscal year 2021 was a record-breaking year for FIRP, which brought in more than \$1.4 million of additional funds for new and ongoing research agreements. Funding and workloads are expected to increase in 2022, as the program expands mill survey work to Washington and fully implements the annual survey program across the 12 western states.

The core research of the FIRP is with the U.S. Forest Service's Forest Inventory and Analysis (FIA) Program at the regional (12 western states) level. Ongoing agreements with FIA involve Timber Products Output research; studying timber harvest and use and forest industry operations throughout the western U.S.

The previous Oregon and California harvested wood products carbon projects for the Pacific Northwest (PNW) FIA program developed into a new multistate and international project examining the trade of logs and wood chips among California, Oregon, Washington and British Columbia.

The FIRP continued work with the Northern Region of the U.S. Forest Service, collecting timber hauling costs in Idaho and Montana, updating the regional timber sale appraisal system, and supporting national efforts to develop the Pandemic Assistance for Timber Harvesters and Haulers program with the USDA.

We continued projects on milling capacity and timber flow for the Rocky Mountain Region and the National Forest System as a whole, and started a new project to reexamine timber processing capacity in the Northern Region. The program expanded their logging utilization study in California, collected delivered log prices for the Forest Service Intermountain and Northern Regions, and continued out multiyear timber flow and economic impacts analyses with National Forest System Ecosystem Management Coordination Staff.

These 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 forest products industry.

Northern Region Capacity and Capability Analysis

This new project with the U. S. Forest Service updates previous FIRP analyses of Montana and Idaho forest products facilities' capacity and capability to use timber of various sizes. Specifically, this work summarizes the amounts of timber that mills around each national forest can use by tree size and examines how much of that capacity is currently being used. The informa-

tion should help national forest managers plan more feasible timber sales and forest restoration programs across the region.

California Logging Utilization Study

This project with PNW-FIA and the California Department of Forestry and Fire Protection (CAL FIRE) examines active logging sites in California, measuring felled trees to quantify how much of each tree goes to mills to become products versus how much is left at the site as logging residue. The study was expanded to include salvage logging sites where dead trees are removed from the forest. This utilization information is used to better under-

stand logging impacts on forest inventory, carbon storage, hazardous fuels and changes in timber harvesting efficiency.

Region One Capacity and Capability Analysis

Managing forests to reduce fire hazard and restore ecosystem function has increased the need for accurate information on timber-milling capacity and the capability of mills to process trees of various sizes. Implementing treatments to restore desired ecological conditions can require removing both larger,

more valuable trees, as well as smaller trees with limited value and markets.

Forest Industry Research Projects

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).

Rocky Mountain States Timber Product Output 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.

Pacific Northwest Timber Product Output 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.

California Logging Utilization 2.0

A research joint venture agreement with the USDA Forest Service, Pacific Northwest Research Station, Portland, OR, and Cal Fire to study and report on the quantities of logging residue generated while harvesting timber in California.

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.

National Forest System Timber Flow Analysis for Economic Impact Modeling

A challenge cost share agreement with the USDA Forest Service to analyze timber flow by forest and product type for national forests throughout the United States.

Pacific Northwest Timber Product Output 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.

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 Region Four.

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.

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 U.S. Forest Service decision making.

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 saw mills from 2003 through 2018.

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).

California Logging Utilization

A research joint venture agreement with the USDA Forest Service, Pacific Northwest Research Station, Portland, OR, and Cal Fire to study and report on the quantities of logging residue generated while harvesting timber in California.

Timber Product Output and Forest Industry Analysis for the Interior West States

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.

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 co-authoring 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 over 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 president for the organization.

Current professional affiliations among BBER staff include:

- Association of Academic Survey Research Organizations
- 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
- 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 Electricity Technical Advisory Committee
- Pacific Northwest Regional Economic Conference
- Regional Economic Models, Inc. Users Group
- Society of American Foresters
- Southern Economic Association
- Timber Measurements Society
- U.S. Geological Survey
- Western Economic Association
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