MONTANA BUSINESS QUARTERLY

MONTANA'S ECONOMICS MAGAZINE // FALL 2021



TRAVELERS SET RECORDS IN STATE AND NATIONAL PARKS

MoFi

Does your business need money now?

- Special recovery loans up to \$100K
 3% interest rate
- Fast, easy application Work with a trusted, local nonprofit
 - Money to bridge back to business as usual

Learn more and get started at mofi.org/business-loans

MONTANA BUSINESS QUARTERLY

FALL 2021 ISSUE 59 NUMBER 3

PRESIDENT, UNIVERSITY OF MONTANA Seth Bodnar

VICE PRESIDENT FOR RESEARCH AND CREATIVE SCHOLARSHIP, UNIVERSITY OF MONTANA Scott Whittenburg

DEAN, COLLEGE OF BUSINESS Suzanne Tilleman

DIRECTOR, BBER Patrick M. Barkey

PUBLICATIONS DIRECTOR, EDITOR Scott Hawk

ADVISORY BOARD Christina Henderson Llew Jones Scott Levandowski Heather McDowell Mike Peery Bill Whitsitt

OFFICES

Montana Business Quarterly Bureau of Business and Economic Research Gallagher Business Building, Suite 231 32 Campus Drive University of Montana Missoula, Montana 59812

WFBSITE

www.montanabusinessquarterly.com info@montanabusinessquarterly.com

The Montana Business Quarterly (ISSN0026-9921) is published four times a year and is a service of the University of Montana. Contents reflect the views and opinions of the authors and do not necessarily represent those of the Bureau of Business and Economic Research, the College of Business or the University of Montana.



Tourists stop to photograph a bison crossing Grand Loop Road in Yellowstone National Park. (Soeren Stache, AP Photo)

TRENDING

Tackling Housing Affordability in Montana

By Patrick M. Barkey and Brandon Bridge

With few affordable homes available for households earning a low income, many are being priced out of housing markets.

TRENDING

Resolving Montana's Labor Shortage

12

6

By Patrick M. Barkey

Demand in the economy has roared back with unexpected speed, but employers are having trouble hiring back laid-off workers.

FEATURE

Montana's Tourism Industry Rebounds Through the Pandemic

16

By Carter Bermingham and Kara Grau

Despite the challenges of closed borders, schools and businesses, travelers set records in Montana's state and national parks.

RESEARCH

How Land Use Affects Montana's Economy

22

By Robert Sonora

Do counties with access to ski resorts, open space or national parks have greater economic growth and prosperity in the long run?



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



COVER
Illustration of a couple hiking in the wilderness. (Yuriy2012)



MESSAGE FROM THE DIRECTOR EMERITUS OF THE BUREAU OF BUSINESS AND ECONOMIC RESEARCH

After arriving in Missoula as a newly minted Ph.D. economist in 1968, a hot-off-the-press issue of the Montana Business Quarterly was deposited on my desk. This was my introduction to the economics of the real world in the American West.

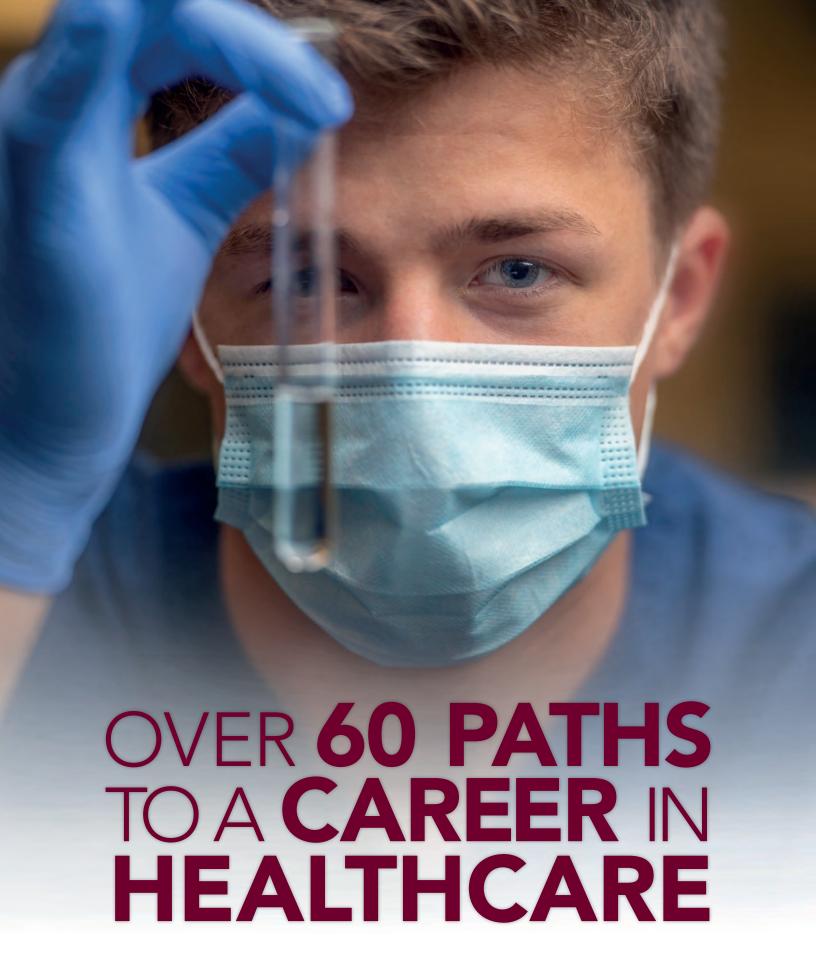
The Montana Business Quarterly continues to document trends in state and local economies, as well as the economic mega events of the past decades – such as the coal and electricity boom of the 1970s; the disastrous impacts of the double-dip recessions and the demise of the Anaconda Company in the 1980s; and the emergence of high tech in recent years.

The Montana Business Quarterly not only reports economic trends, it also provides expert commentary on important political and social topics. These articles are not the one-sided rants that often appear in Op-Ed pages, they are carefully crafted discussions by those who have firsthand experience.

Among the issues and events covered were the 1972 Constitutional Convention; revising Montana's state and local taxes (including the perennial sales tax issue); and the changing role of women in Montana's workforce.

I am proud to have contributed to the Montana Business Quarterly and I am sure that it will continue as the state's premier economics publication into its sixth decade and beyond.

Paul E. Polzin
Director Emeritus
Bureau of Business and Economic Research





TACKLING HOUSING AFFORDABILITY IN MONTANA

What Are the Challenges Facing Our Housing Programs

BY PATRICK M. BARKEY AND BRANDON BRIDGE

Put roofs over the heads of their citizens are not judged kindly by either their people or by history. In the United States there are dozens of policies aimed at making it easier for Americans to own or rent housing. These range from national policies, such as the tax deduction of mortgage interest to the provision of subsidized housing in local communities. The fact that housing prices continue to rise faster than income and that a high fraction of families are stressed by housing costs – or they have no housing at all – tells us that much work still needs to be done.

One category of housing policies that are targeted explicitly at low-income households are known as affordable housing programs, and the housing units they subsidize are known as affordable housing. Collectively these programs form a key part of the safety net that provides part of the daily necessities of life to families, individuals and their children who are most in need. In Montana, those programs are oversubscribed and face daunting challenges.

The Bureau of Business and Economic Research recently delivered a comprehensive report of those challenges (Bridge, 2020). This article highlights the findings of that report.

Affordable Housing Programs in Montana

There are currently over 23,000 housing units in Montana that are supported by one or more affordable housing programs. This is a substantial number, yet in comparison



to the more than 510,000 housing units of all kinds in the state, it is clearly a tiny segment of the market. That number is also low relative to potential demand, amounting to 39% of the number of households who earn extremely low incomes, defined as 30% or less of local median income.

Most support for housing subsidies comes from federal government programs, often with state match and state participation. The success or failure of these programs can hinge on how successfully states pursue this federal support.

The most important of these programs in Montana include:

- The federal Low-Income Housing Tax Credit (LIHTC) program awards nonrefundable tax credits to developers (who then sell them to investors) to raise cash for construction of units with restricted rents. There are currently 7,977 apartments for rent in Montana that were developed using the LIHTC program as the majority funding source, including new and rehabilitated units.
- There are 11 local housing authorities in Montana that own and manage 2,009 public housing units, whose tenants pay an average of \$321 per month in rent and whose average annual household income is \$13,658.

- The Native American Housing Assistance and Self-Determination Act offered block grants, infrastructure resources and assistance in obtaining support for other programs to the more than 500 federally recognized tribes. There are 5,972 public housing units managed by seven Montana tribes.
- The Home Investment Partnerships Program (HOME) initiated by the U.S. Department of Housing and Urban Development in 1990 provides block grants to governments, affordable housing authorities and nonprofits to build, acquire and/or rehabilitate both apartments and single-family homes. In return, those units are made available to low-income households at subsidized rates. The HOME program includes down payment assistance. There are 1,076 housing units in Montana currently being subsidized by the HOME program.
- Community Development Block Grants are available to general-purpose local governments, such as counties, cities and towns to help fund single and multi-family construction and rehabilitation projects.
- Individual and Project-Based Section 8 Housing Choice Vouchers provide rent subsidies to very low-income households, elderly persons and persons with disabilities. The

Figure 1. Montana homelessness by group and reporting gender. Source: Montana Homeless Management Information System, 06/12/2020.

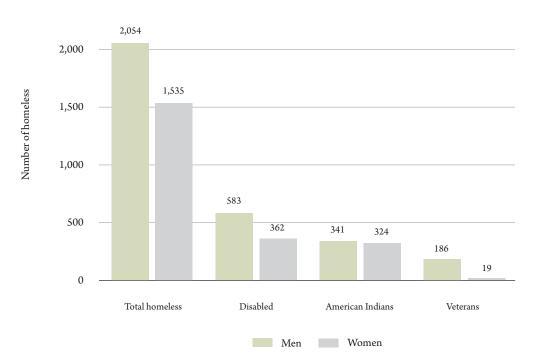
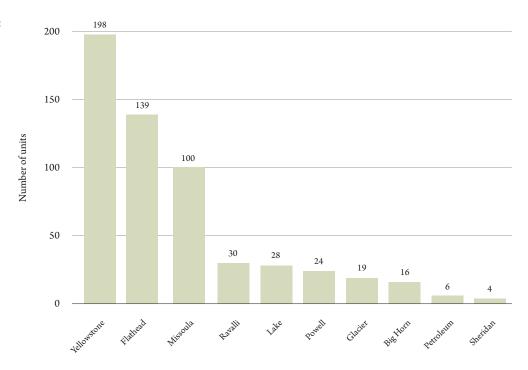


Figure 2. LIHTC units with potential for loss to market by 2025, by county. Source: Montana Housing.



two types of vouchers differ in that project-based vouchers are attached to buildings, rather than individual renters. There are currently 4,319 housing units in Montana being subsidized by Section 8 programs, of which 1,500 are targeted for families earning low incomes.

- The USDA Rural Development programs offer loans, guarantees and other credit support for housing development in rural areas for low-income households. One of those, the Section 515 program has ultimately subsidized 1,737 housing units across the state, with a very large proportion of those in less populous counties.
- The Multifamily Coal Trust Homes program was created by the Montana Legislature in 2019 to develop or preserve rental apartments that are affordable to working families, seniors and persons with a disability. The loans awarded have financed seven developments with a total of 252 units.

Key Challenges for Montana's Housing Programs

"Poverty programs will always be poor programs," said former U.S. Health, Education and Welfare Secretary Wilbur Cohen in the 1960s, and there is no question that the programs directed at helping low income Montanans secure adequate housing are starved for resources.

Since 2016, there have been over 30,000 applications for housing choice voucher programs, yet in that same time frame only about 4,000 have been issued. Other programs display sizable gaps between demand and availability.

Homelessness

The rise in the number and visibility of homeless individuals and families in Montana is perhaps the best reminder of this shortfall. The Montana Homeless Management Information System estimated that in 2020 there were more than 3,500 homeless statewide in that year. As shown in Figure 1, the disabled and American Indians comprise a significant fraction of the overall homeless population.

The costs borne by homeless individuals and families are stark and clearly visible. The instability caused by homelessness makes finding many basic necessities nearly impossible – adequate food, shelter, clothing, washing facilities, transportation, health care, education, personal safety and security, and employment. These challenges are compounded by the

high levels of substance abuse and mental illness experienced by homeless individuals and families.

Loss of Affordable Housing Units

Low-income Housing Tax Credit program properties must commit to a 30-year period of affordability, but they are only subject to a 15-year compliance period. This is the period of time where the tax credits that have been given to developers can be taken back or recaptured if the property fails to comply with LIHTC regulations, which is a rare occurrence. During the following 15 years (or more), the property is still required to maintain affordability and comply with LIHTC rules and regulations. Though without the ability to take back the credits, the states do not have many enforcement options for compliance.

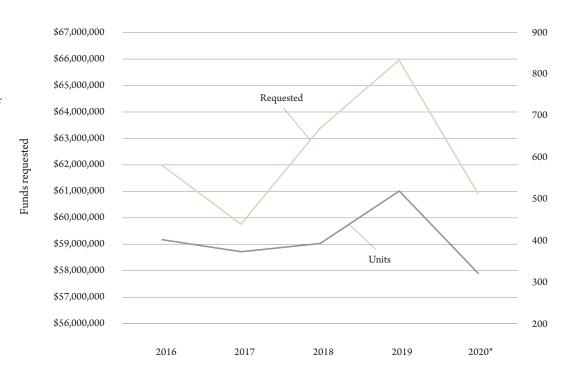
In areas with relatively booming housing markets, selling the property may be a more attractive option than continued compliance. Over the next five years, 564 LIHTC housing units in Montana will be facing the potential of being lost to the market. Figure 2 shows the number of these housing units by county. Notably, the majority of units with the potential of being lost to the market within the next five years (77%) are located in counties with relatively high affordability challenges.

Underutilization of Federal Resources

Since 2012, Montana has only financed 717 affordable housing units (including acquisition, rehabilitation and new construction) with federal 4% low-income housing tax credits. This illustrates the difficulty this program has for attracting developers in Montana. In this same period of time, Montana has abandoned \$949 million in tax-exempt private activity bonds. Private activity bonds are revenue-backed bonds issued by a state or local authority for a private project. These bonds are exempt from federal income taxes, which enables the project to access capital at a lower interest rate than could otherwise be attained. When they are unclaimed for a period of years, they are abandoned.

Since 2016, an average of \$62 million per year in 9% low-income housing tax credit requests have been denied due to a lack of funding (Figure 3). These projects would have significantly expanded the inventory of affordable

Figure 3. Unfunded proposed LIHTC projects since 2016. Source: Montana Housing. *Data as of 09/11/2020.



housing in Montana. A state LIHTC program similar to those implemented in other states would likely allow developers to leverage the 4% federal tax credits, which are currently unutilized in order to increase the supply of affordable housing in the state.

Conclusion

The United States as a whole is currently facing a shortage of affordable homes and Montana is no exception. With relatively few affordable homes available for households earning a low income, and with much of the existing affordable inventory aging and in need of rehabilitation, many households earning a low income are being priced out of housing markets. We are now facing ever expanding economic challenges, and these issues and concerns are not going away or getting better. When housing becomes unaffordable, it imposes costs on entire communities, but the most vulnerable in society bear the brunt of those costs. Housing affordability will likely be a challenge that Montanans continue to face in the coming years, and as such it deserves a place in public conversation.

Patrick M. Barkey is director of the Bureau of Business and Economic Research at the University of Montana. Brandon Bridge is an economist and former director of forecasting at the Bureau of Business and Economic Research.



TAKE YOUR CAREER TO THE NEXT LEVEL

MBA masters of business administration MSBA masters of science in business analytics

MActt masters of accountancy

FLEXIBLE

All programs are offered in-person or remotely

CUSTOMIZABLE

Specialize through unique certificates or through our joint MBA programs with law, pharmacy and physical therapy

WORK AT YOUR PACE

All three programs can be completed in a single year



OVER 95% OF **OUR GRADUATE** STUDENTS HAVE **JOBS PRIOR TO GRADUATION**



RESOLVING MONTANA'S LABOR SHORTAGE

Is There Any End in Sight?

BY PATRICK M. BARKEY

emand in the economy in Montana and elsewhere has roared back with unexpected speed from the pandemic declines of 2020. When you combine that surprising growth surge with the reality that public health disruptions in schools, workplaces and logistics remain with us, albeit in different forms, you have an economy that is supply constrained in a significant number of sectors.

One of those sectors is the labor market. To say that the balance of power in the give and take between workers and employers has swung toward workers in recent months would be an understatement, and that is just one of many surprises. In past recessions, employment growth lags economic growth, as employers hire back laid-off workers only after all other measures to boost output – such as working the existing workforce more hours - have been taken.

The brief but severe 2020 pandemic recession has been a completely different animal. Not only did the resumption of job growth occur in April 2020, barely two months after the February 2020 date considered to be the pre-recession peak, but the growth was strong. As shown in Figure 1, this very rapid down-up pattern of employment stands in stark contrast to the two-year-long malaise in employment that occurred during the Great Recession of 2007-09.

Now as we move through the fall of 2021, we have a mixture of circumstances that are placing heavy demands on the labor market at a time when labor supply is challenged. Not all of these are unique to this recession, but many are. They include:

- The reopening of the economy as vaccination rates rose and anxiety levels over pandemic contagion eased. The reopening was strongest in industries previously hurt the most, notably the highly seasonal and labor-intensive accommodations, restaurant and personal services industries.
- The redirection of national visitor demand from international to domestic destinations, including Montana, as international travel continued to be challenged by COVID-related restrictions. The Bozeman Yellowstone International Airport enplanements were almost 90%



higher in June than pre-pandemic, the second highest increase of any airport in the country.

• The withdrawal of many former workers from the labor market for a variety of reasons, including financial security from stock market and housing wealth increases, government support payments, spousal income and COVID-related concerns.

One last factor contributing to pressure on Montana labor markets is the seasonal nature of our economy. During the summer months of any year, employment generally surges by 25,000 jobs or more as tourist volume ramps up and labor-intensive industries that serve that demand expand. The timing of the reopening of the state economy in 2021 coincided almost exactly with that seasonal peak.

The upshot of these events has been a shortage of workers across a wide spectrum of occupations and industries in Montana that is as severe as any place in the country. By almost any measure, the scarcity of labor is apparent, particularly for entry level jobs, where increases in starting wages have been the strongest. There has been a marked increase in voluntary quits by workers, a sign of their confidence in future job availability. And speaking of availability, the 62%

increase in job openings experienced in Montana since before the pandemic began was higher than any state (Figure 2).

Labor Shortages Forever?

The labor shortages being experienced by Montana employers in 2021 reflect the fact that labor markets take time to adjust to major events like recessions and reopenings. The immediate resumption of demand for workers after more than 50,000 jobs were destroyed in the span of two months in 2020 was a surprise to workers and employers alike. Each anticipated employment separations of a longer duration than actually occurred. Employers let skilled workers go, to their profound regret, and workers used their employment hiatus as a time to consider other kinds of jobs or even retirement.

It is easy to forget in the upheaval of the past year and a half that the state economy entered this recession with employers expressing plenty of anxiety about labor force availability. The forces that helped produce those pre-pandemic concerns have not fundamentally changed. Demographic events like falling birth rates and the retirement of baby boomers, coupled with huge disruptions in international migration, are stagnating the growth of the working-age population. And the shift in the interests and desires of Generation Z workers just entering the labor market continues to work against the needs of employers in less desired trades and construction occupations.

That's why the lists of action steps that employers and policymakers might consider to address the tight labor markets of 2021 are almost the same as the ones we put forth two years ago, when no one knew what a coronavirus was. For employers, most of these are already being pursued, out of necessity. They include:

- Raising wages. In fact, this is already being done, but its impacts on growing the entire labor force have been limited.
- Searching more broadly for workers, relaxing requirements, looking at nontraditional workers. Looking outside local areas for a broader category of jobs.
- Investing more in training, hiring less qualified workers and training them up to acceptable skill levels. Clearly, this is a risk, but more Montana firms will have to take it.
- Reconfiguring job roles to find ways to make existing staff more productive, covering needed functions with the existing workforce.

 Recruiting future workers by connecting with middleschool-aged students to give them exposure to the nature of jobs they may otherwise know nothing about.

Other actions, such as automation and outsourcing of work, has been underway when feasible for decades, but recent shortages have pushed the envelope further. The lack of available workers, while not a pleasant challenge for employers, nonetheless may prod them to take steps to eliminate the "bad jobs" in their workplaces. These may be jobs with high physical burdens, long or inconvenient working hours and other aspects that make them less competitive in a seller's market for labor services.

Action Steps for Policymakers

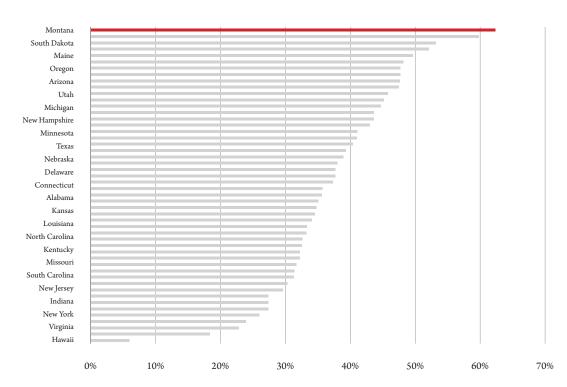
There is much that policymakers could do as well. Perhaps first on the list would be better management of the economy from the Federal Reserve and Congress. Current central bank policy has seemed to throw inflation concerns out the window and continues to push down very hard on its economic stimulus levers at a time when broad swaths



Figure 1. Montana employment as percent of pre-recession peak in recent U.S. recessions. Source: U.S. Bureau of Labor Statistics.

Months since recession start

Figure 2. Percent change in job openings, Feb. 2020-July 2021, *by state. Source:* Indeed.com.



Percent change in job openings

of the economy are running at capacity. And new multitrillion-dollar spending plans in Congress won't do anything to relieve pressure on labor markets either.

But there are steps that policymakers can make that will have a more lasting impact. The problem is that many items on this list are deeply unpopular, even if the logic of carrying them out is powerful. These steps include:

- Boosting the retirement age, which is effectively set by the age at which individuals become eligible for Social Security and Medicare. This needs to be done to make these programs more solvent anyway.
- Increasing female labor force participation. More flexibility and an order of magnitude increase in child care availability would help tap into an underutilized segment of the potential workforce.
- Fixing immigration policy. This traditional strength of the U.S. labor market has foundered on the rocks of political storms for almost a decade.
- Raising teenage labor force participation, currently at rates that are 20 percentage points lower than 40 years ago.
- Rethinking drug testing policies. Legalized cannabis is

- just one of many factors that are causing attitudes and policies to change.
- Reconsider occupational licensing requirements. These limit the ability of two-earner couples to relocate to states with more economic opportunities.

Few of these actions get much consideration, much less a majority of votes. Yet removing formidable obstacles to labor force growth, in light of demographic realities, will require some new thinking along these or similar lines.

Of course, what actually occurs to end labor force shortages may be something much more ordinary, yet much less desirable. That is a collapse in labor demand caused by an economic reversal. I think most of us would agree that the problem of too much demand is better than the problem of too little.

Patrick M. Barkey is director of the Bureau of Business and Economic Research at the University of Montana.

MONTANA'S TOURISM INDUSTRY REBOUNDS THROUGH THE PANDEMIC

Travelers Set Records in State and National Parks

BY CARTER BERMINGHAM & KARA GRAU

ontana's tourism industry is now through its second summer under the cloud of COVID-19. Despite the challenges presented in 2020, including stay-at-home orders, closed borders, businesses and schools, Montana's abundance of open space and outdoor activities drew millions of travelers. In fact, some locales were overwhelmed with the number of visitors, which stretched the capacity of campgrounds, public lands and some businesses as they operated with limited staffing, hours and customer capacity. It made for challenges that some were eager to face, as it meant a return of business, while others were dismayed with the crowds.

How Tourism Fared in 2020

2020 estimates from the Institute for Tourism and Recreation Research (ITRR) indicate that 11.13 million travelers came to the Montana during the year, down 12% from 2019. Half of those travelers (5.6 million or 51%) came during the third quarter (July-September). Despite the interruptions to business as usual, nonresident travelers

spent \$3.14 billion in Montana in 2020. While still a 16.5% decrease from 2019, the drop was less bleak than anticipated.

Travel spending by out-of-staters directly supported \$2.60 billion in economic activity in the state, with a combined industry output of \$4.4 billion. Directly supported were 30,750 jobs and \$776 million in employee compensation, and a contribution of \$212.7 million in state and local taxes.



Indicators of Another Successful Year in 2021

Even with the uncertainty surrounding the continued presence of COVID-19, Montana residents used the experiences gained in 2020 to position themselves for another busy year entering 2021. ITRR will soon begin analysis of data collected during the third quarter of the year from nonresident travelers to the state. In the meantime, signs point toward evidence of a busy summer.

Already for 2021, Yellowstone National Park has set visitation records for the months of May (473,799), June (938,845) and July (1,081,062) with no signs of slowing down in August or September. Glacier National Park also began implementing a summer reservation system to access the popular Going-to-the-Sun Road.

While Montana State Parks experienced record-setting visitation in 2020, data from 2021 indicate things have been even busier than before. Both residents and nonresidents have flocked to state parks - with an estimated 1,570,134 visitors as of July 2021, an increase of 11.1% over 2020, and a 44.1% increase over 2019.

Air travel to Montana is also showing a rebound, with the number of deboarding passengers increasing over 80% (January-July) from 2020. While not back to pre-pandemic levels, 2021 figures are down just 8% from 2019 deboardings through July.

Lodging facility use tax collections have far surpassed both 2020 and 2019 figures for the first two quarters of this year. Assessing statewide collections for the second quarter of 2021 showed a 204% increase from 2020, which is a 32% increase over 2019. While there is some variation across the state in this pattern of bed tax collection recovery, the regions adjacent to our two national parks account for the majority of the trend.

An Important Piece of Tourism - Locals

As a state that relies heavily on the economic impact tourism provides, a key component to facilitating a healthy tourism industry is maintaining a positive relationship between visitors and residents. Anecdotal reports from public land managers and local tourism partners suggested two things:

Figure 1. 2020 nonresident visitation and spending by quarter. Source: Institute for Tourism and Recreation Research.

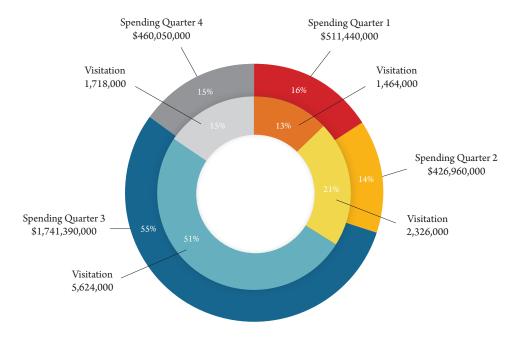




Table 1. 2020 economic impact of nonresident travel spending. Source: Institute for Tourism and Recreation Research.

	Direct	Indirect	Induced	Combined
Industry output	\$2,584,550,000	\$935,100,000	\$876,510,000	\$4,396,160,000
Employment (# of jobs)	30,750	5,950	6,450	43,150
Employee compensation	\$776,200,000	\$189,360,000	\$228,740,000	\$1,194,300,000
Proprietor income	\$109,980,000	\$58,300,000	\$44,310,000	\$212,590,000
Other property type income	\$277,130,000	\$120,860,000	\$156,860,000	\$554,850,000
State and local taxes				\$212,690,000

First, visitors arriving to Montana in 2020 and 2021 were different than in previous years, and second that the level of use on public lands from residents and nonresidents in 2020 and 2021 has been higher than in previous years.

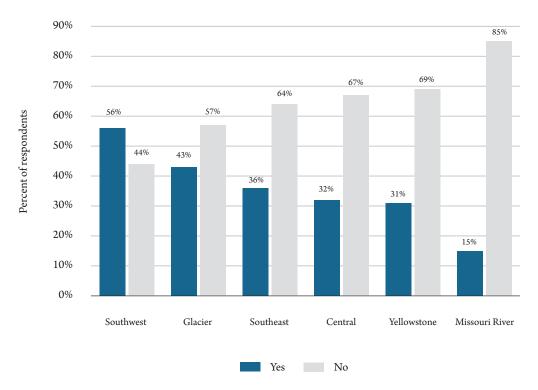
Part of ITRR's annual surveying efforts include conducting in-person surveys with residents across the state. For nearly 30 years, ITRR has asked residents if they agree or disagree with three specific questions: 1) Do the overall benefits of tourism outweigh the negative impacts? 2) If tourism increases in Montana, will the overall quality of life for Montana residents improve? 3) In recent years, is the state becoming overcrowded because of more tourists?

Trend data from 2020 indicate that a majority of Montanans (75%) agree that the overall benefits of tourism outweigh the negative impacts. However, 42% of Montanans agreed that the state is becoming overcrowded because of more tourists, a 31% increase from 2019 and the highest reported agreement level since 1994.

These results also echo a similar report conducted by ITRR during 2020 that found residents still perceived visitors and

Figure 2. Survey of resident travelers: Source: Institute for Tourism and Recreation Research.





to years past. It could be the case that many people are simply venturing out into the great outdoors for the first time, lacking a proper visitor etiquette many Montana residents have come to expect from those who choose to travel to the state under more normal circumstances. It could also be the case that the behavior they are seeing from other visitors is actually that of their fellow residents, prompting questions about the current state of public land use in Montana by residents.

For third quarter of 2021, ITRR specifically focused on gaining a better understanding of residents' public land use in Montana over the past 12 months, including: camping, perceived staffing levels by public land agencies, visiting new locations and trying new activities, among other topics.

Preliminary results (July-August) show, overall, 60% of residents surveyed had camped in Montana in the past 12 months (including trailer and RV camping). Of those, 76%

had camped at a designated public campground (state park, national park, etc.). Furthermore, 38% of residents camped on public land at dispersed or undesignated sites, followed by 22% who found solace camping in the backcountry.

When asked if they had visited any public lands in Montana in the past 12 months they had not previously visited, 37% of residents said yes, indicating almost two-thirds of residents were content returning to their usual locations. When analyzing results by travel regions, the only region to report over 50% of its residents visiting new public lands was in southwest Montana (56%). Conversely, 85% of respondents in Missouri River Country (northeastern Montana) had not visited a new public land area.

Another area of concern, particularly to public land managers, is the perception of staffing levels on public lands by associated management agencies. Even without the recent increase in outdoor recreation, the ability to properly



staff public lands has often been a challenge for a state like Montana – one that has a small population and a large swath of land to patrol.

When asked if they felt public land management agencies in Montana are sufficiently staffed, 62% of respondents said no. Much like the visitation to new public lands in Montana, results varied widely across the six travel regions. Missouri River Country was the only travel region to report that the public land management agencies in their region are sufficiently staffed (60%).

Public lands are important to Montanans and a strong attraction for visitors. With the increasing popularity of outdoor activities and public lands seen during the pandemic, adequate staffing on these lands is vital for the health of the land and safety of those visiting them. It also highlights the crucial reality of finding the balance between the importance of tourism to Montana's economy and the support for the industry from residents.

The path through Montana's second pandemic summer tourism season has been one with less uncertainty than the previous year, though the remainder of 2021 still faces plenty of unknowns. As the Delta variant of COVID-19 has become prevalent, traveler confidence has waned. According

to Destination Analysts, 63% of American travelers have a high degree of concern about contracting the virus, even with 72% reporting they have received a COVID vaccine. Travelers postponing a trip due to concerns about the Delta variant has increased to 43%, while 28% canceled a trip.

Americans are still excited to travel during the next 12 months, with over 70% indicating a high level of excitement at the idea, though there has been a recent downward trend in those who have plans for leisure travel over the next three months. There is a mix of optimism and hesitancy, and only time will tell how this current surge in the pandemic affects people's willingness to travel throughout the remainder of this year.

Carter Bermingham is a social scientist and research associate at the Institute for Tourism and Recreation Research. Kara Grau is assistant director of economic analysis at the Institute for Tourism and Recreation Research.

HOW LAND USE AFFECTS MONTANA'S ECONOMY

Do National Parks and Open Spaces Attract Economic Development?

BY ROBERT SONORA

Like most, if not all Western states, Montana is blessed with a seemingly endless variety of environmental endowments. Many of our natural resources can be used by the economy in one of two ways. First, land can be used as a direct input for the production of other goods, e.g. timber or coal. Secondly, the land can be used as an amenity.

Land amenities are defined as the value derived from the land – uses other than as a direct input to production, such as from recreation or environmental, cultural, historical, wildlife and nature conservation value. Land's use value is defined in terms of how much people enjoy it as a service, such as for tourism.

Roughly 37.5% of Montana is publicly owned land with a variety of uses, mostly in the western third of the state. The land is managed by numerous state and federal agencies who must balance the resource versus amenity characteristics of the environment. The underlying question is: Do land amenities lead to economic growth and prosperity?

First, we need to define a couple of terms. Economic growth refers to the long-run steady march of economic

progress over long periods of time, say 30 years. Progress at the regional level is generally measured using familiar concepts, such as total income and overall employment. However, total income and employment are not generally good measures of economic development. Economists agree that what causes growth are changes in productivity and, on aggregate, population growth. In turn, productivity is the result of the accumulation of skills, ideas, innovation and/ or improved institutions. Economic growth is an appealing goal as it leads to improved standards of living, better health, more leisure and improved environmental quality.

On the other hand, short-term economic fluctuations are caused by transitory events, such as business cycles and other shocks to an economy, like a disaster or government



stimulus spending. The effects of these shocks are generally short lived – less than say five years – and have no permanent effects, all things being equal. Natural disasters can be very painful in the short run, but they usually die out quickly. The 2018 Camp Fire in Northern California's Butte County destroyed the town of Paradise. While employment has yet to fully recover, in terms of income it had no lasting impact.

Research to Date

Much of the research on the relationship between land amenities and growth does find a positive and sometimes statistically significant relationship between land amenities and income, migration, employment, real estate prices, etc. However, the results only demonstrate significance over short periods of time and rarely have a positive impact on real earnings, which is the preferred measure economic activity. Therefore, analyses that rely on short time frames exaggerate the effects of land amenities on economic performance and may be confused with economic growth.

This reflects the so-called "paradox of plenty" or the "resource curse," which refers to the inability of resourcerich economies to fully benefit from their natural resource wealth. This is applied to the use of resources as production inputs and the same logic applies to land amenities as well. In other words, if an economy puts all their eggs in the resource amenity basket without diversifying their economic portfolio, it sets the region up for boom and bust cycles.

Therefore, to understand how amenities impact economic growth, we need to extend the time horizon. Studies conducted by the Bureau of Business and Economic Research and others demonstrate that over longer time frames land amenities have a statistically significant positive effect, but in some cases, they have a negative effect on growth. The reason is relatively straightforward - any positive economy wide shock will increase wages and income because tourism rises. But because the amenities are fixed over time, their additional impact declines in the longer run.

Viewed through this lens, when analysis does find that amenities do increase income and employment, the results should be interpreted as amenities attract income and employment, via migration, not necessarily drive income. As it turns out, over time real per capita earnings, often used as a proxy for economic growth, tend to be negatively related to amenities or not statistically significant. This makes sense - if amenities attract income to small regional economies, holders of wealth tend to buy hospitality and leisure services

Figure 1. Real per capita earnings in dollars: Gallatin, Flathead and Yellowstone counties. Source: BBER calculations using data from the Bureau of Economic Analysis.

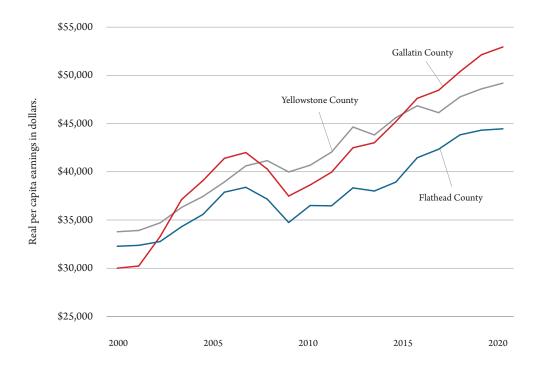
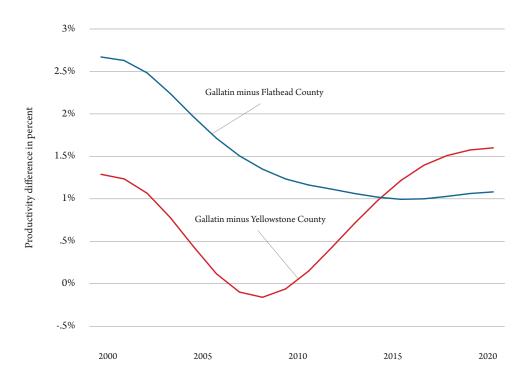


Figure 2. Productivity: Gallatin minus Flathead and Yellowstone counties. Source: BBER calculations using data from the Bureau of Economic Analysis.



that generally offer lower wages and may, in fact, crowd out other sectors.

Land Amenities and Economic Growth in Montana

To see the effects of productivity and land amenities on growth, let's consider two similar counties in Montana -Flathead and Gallatin. Yellowstone County is also included as representative of a more traditional agricultural and industrial economy.

According to a recent report by the Institute for Tourism and Recreation Research at the University of Montana, Flathead and Gallatin counties have the largest share of nonresident spending in the state. Flathead County's economy has many tourist attractions, such as Glacier National Park, Whitefish Mountain Resort and Flathead Lake. Gallatin County borders Yellowstone National Park and has one of America's largest ski resorts (Big Sky Resort), as well as other areas of protected land. A key distinction is that Bozeman is home to Montana State University and has become a center for the state's high-tech industry.

To compare differences across the two counties, Figure 1 shows inflation adjusted, or real per capita earnings, which is defined as income derived solely from labor income for 2001 to 2019. Given that formal county level productivity data is not available, economic theory can demonstrate that real earnings can be used as proxy for productivity, the driver of economic growth. Income comes from a variety of additional sources - interest income, rental income, transfer payments, etc. - and therefore can overstate the level of regional economic activity. For example, a trust funder working at a bar may take home relatively little in terms of earnings, but may also receive substantial income from owning other assets.

As the data in Figure 1 shows, 2001 real per capita earnings in Gallatin County were below both Flathead and Yellowstone counties, but accelerated sharply in 2002. 2012 was notable as the year Bozeman based RightNow Technologies was bought by Oracle. This is generally credited as the beginning of Bozeman's tech boom, but the data suggest the seeds of tech innovation were sown earlier.

In Gallatin County, real per capita earnings averaged 2.2% growth per year between 2001 and 2019. Over the same period, Flathead and Yellowstone counties real per capita earnings grew 0.8% and 1.6% respectively. This may not seem like a big difference, but at those growth rates Gallatin County's real per capita earnings will double in roughly 32 years. Meanwhile, in Flathead and Yellowstone counties it will take 88 and 43 years, respectively.

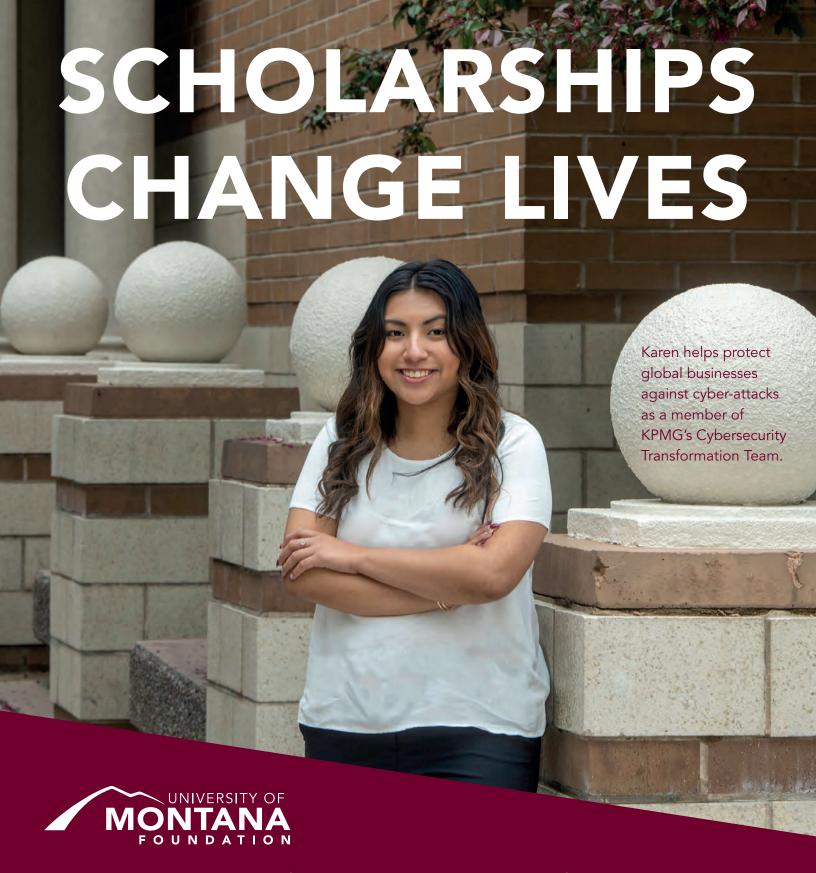
What determines these differences is productivity? As a hub of the tech industry and the ancillary institutions and businesses associated with technology, productivity in Gallatin County is relatively high and contributes to higher long-run growth. Figure 2 shows the change in productivity in Gallatin County minus the change in productivity in Flathead and Yellowstone counties. Productivity growth in Gallatin County is on average 1.5% higher than Flathead County and 0.8% higher than Yellowstone County. But we do see that productivity in Flathead County is rising relative to Gallatin and the opposite for Yellowstone.

This is where communities like Bozeman provide a blueprint for other economies wishing to reduce the risk associated with the resource curse. Bozeman is able to attract highly skilled workers who want to enjoy regional land amenities, which does attract income. Revenues generated in the tourist sector can be used to leverage an innovation sector, one specific to the region to drive productivity and long-lasting economic development.

Clearly, one size does not fit all. Bozeman has the advantage of having a high-quality research university in its city limits, but other regions could adapt some version of this model. Kalispell has a tertiary research and academic medical center and could provide incentives to support the local development of productivity.

This article is not about whether or not resources or amenities should be protected, but rather how small local economies can sustain viability in the face of continuous short-term business cycle fluctuations. The long-term health of Montana's land amenities relies on the higher incomes associated with growth because as incomes rise, people are willing to buy greater access to environmental amenities, improving the quality of life and vibrant economies.

Robert Sonora is associate director and director of health care research at the Bureau of Business and Economic Research, and a senior research professor at the University of Montana.



Scholarships made it possible for Karen De La Luz Martinez — a first-generation college student who graduated from the UM College of Business in May — to access a world-class, hands-on education that prepared her to launch a meaningful career.

Imagine the impact your gift could have.



Domini | Owner, Hippie-Ki-Yay Herbals

Banking can strengthen local economies.



As a sixth generation Montanan, when Domini wanted to open her first business account she knew she could trust Clearwater to offer the tools and services to help her business thrive.





BUREAU OF BUSINESS AND ECONOMIC RESEARCH GALLAGHER BUSINESS BUILDING, SUITE 231 32 CAMPUS DRIVE UNIVERSITY OF MONTANA MISSOULA, MONTANA 59812-6840 NON-PROFIT U.S. POSTAGE PAID MISSOULA, MT PERMIT NO. 100