

MONTANA

BUSINESS QUARTERLY

HOW

MONTANAN'S

GET THEIR NEWS

ARE WE LIVING IN A NEWS
ECHO CHAMBER?

SUMMER 2017

MONTANA

BUSINESS QUARTERLY

SUMMER 2017
ISSUE 55 NUMBER 2

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OFFICES

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

PHONE

(406) 243-5113

WEBSITE

www.montanabusinessquarterly.com

EMAIL

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 School of Business Administration or the University of Montana.

Printed by University of Montana Printing and Graphic Services.



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The Bureau of Business and Economic Research has been providing information about Montana’s state and local economies for nearly 70 years. Housed on the Missoula campus of the University of Montana, the bureau is the research and public service branch of the School of Business Administration. 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 Montana Kids Count; 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
Reporters hold microphones and recorders during a press interview.

INSIDE COVER
Patricia Arquette, Academy Award-winning movie actress, speaks on equal pay for women at the National Press Club in Washington, D.C. in 2016. (Albert H. Teich)

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Message from the president of the University of Montana

In 1969-70, my twin brother Peter MacDonald worked for the Bureau of Business and Economic Research on a project known as the Montana Economic Study. He had just graduated in economics from UM and this was his first job. We have followed the growth and impact of the BBER ever since and it is impressive.

Partly due to my family connection, The Montana Business Quarterly has been a welcome arrival in our mailbox for decades. Nowhere else do we find such readable analyses of economic issues that affect Montana and beyond.

It is ironic that the printed magazine, which you hold in your hands, reports on the rise of the internet as a primary news source for the world. Online communication is a fact of life. Yet it should be accompanied, in my opinion, by a quarterly journal such as this one that is irreplaceable for its hands-on quality. I keep a copy nearby to read in a leisurely way about research and ideas worthy of reflection.

With the BBER we don't have to choose between print and online. The BBER continues to hone its online presence to enhance not only our educational experience for students, but also to provide swift insight into issues affecting our businesses and organizations.

As this issue of the MBQ reminds us, the quantity of information available on the internet does not equate to quality of information. One sure way for those of us entrusted with leadership to be worthy of the public trust is to rely on sources such as the MBQ, known for its research and integrity. Savor this issue as I will and rely on it for insight and information you won't find elsewhere.

Best wishes to all of you for the coming year!

Sheila M. Stearns
President
University of Montana

Missoula's Affordable Housing Crisis

BY BRANDON BRIDGE

Missoula is a great place to live for many reasons – the natural beauty and wealth of available activities are two aspects that have brought consistent population growth to the area. Since 2000, Missoula County's population has grown by over 20,000 people, currently making Missoula the second largest city in the state. But that growth has brought some challenges.



A large proportion of Missoula households, both renters and owners, are financially burdened by the costs of housing.

For instance, a higher population means increased traffic congestion, which results in an endless need for ongoing road improvement projects. More people in the city means larger crowds looking to get away and explore Missoula’s open space recreational areas. But the biggest issue with growth is housing affordability.

An increase in population tends to put upward pressure on the price of housing. The reasons are fairly straightforward – if an increase in population is not combined with an increase in available housing units, then the result is more people trying to outbid each other for the same places to live. And if local housing prices increase faster than local household incomes, then housing affordability decreases. This is what’s currently happening with Missoula’s housing market.

Figure 1 gives us information about the population dynamics in Missoula County since 2000. We see that the majority of the growth to Missoula County has occurred in the city of Missoula itself. That growth and a lack of increased housing has put pressure on housing

prices. In Figure 2, we can see the housing price index increasing to pre-recession highs, making it clear that the cost of housing is largely tied to the increase in the population. But how does this affect housing affordability for the residents of Missoula?

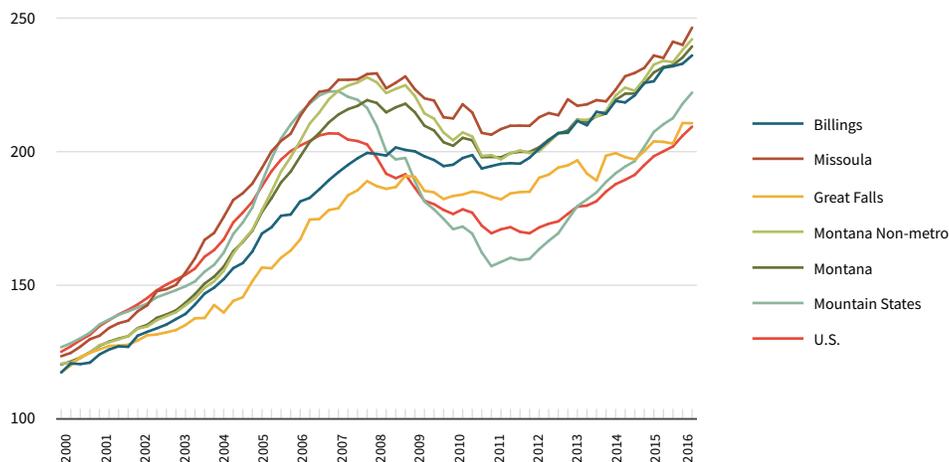
As mentioned before, if growth in housing prices outpaces growth in household incomes, then housing affordability decreases. It is estimated that between 2012 and 2015, the median household income in Missoula remained flat or experienced a slight decrease. As of 2015, the estimated median household income was \$42,815. So essentially, Missoula has an increasing population, increasing housing costs, flat or decreasing household incomes, and thus, decreasing housing affordability.

One way to think about housing affordability is to estimate the level of household income required to purchase a median priced home. In 2016, the average priced home in Missoula was \$255,000, meaning the household income required to purchase a home was around \$89,000.

Figure 1. Population, Missoula County, 2000-2015. Source: U.S. Census Bureau and University of Montana, Bureau of Business and Economic Research.



Figure 2. Housing price index, 2000Q1-2016Q3.
Source: Federal Housing Finance Agency.



The first thing that stands out about this number is that in order to purchase a home, a household is required to earn roughly double the median household income in the area. Another notable aspect of this measurement is that the median household income among homeowners in Missoula is currently \$63,000. This would indicate that if a current homeowner were on the market to move to a new home, they wouldn't be able to afford one. This is a telling measurement for how housing affordability has changed over the last few years.

With home ownership becoming less of an option for median income families, more households are entering the rental market. Between 2010 and 2015, owner-occupied housing units in the city increased by 3 percent, while the number of renter-occupied units increased by 8 percent. Currently, renter-occupied units make up roughly 52 percent of all occupied housing in the city.

The bright side for renters is that rental prices, while higher than the state average, have remained fairly stable since 2013. The average price for rentals in the state is \$711, while the average in Missoula is \$769. If we were to break that down a bit further, an average priced, one-bedroom apartment in a multiplex in Missoula costs around \$625 a month, while a two-bedroom home averages a little over \$1,100 a month.

An interesting aspect about renting in Missoula is that rental vacancy rates have continued to drop. In 2015, only about 4 percent of all rental units in the city were vacant, which is a fairly low rate of vacancy. In 2016, this number fell even further to 2.9 percent. However, in the face of this declining rental availability, prices

have stayed relatively stable over the last three years.

The last measurement of housing affordability is to look at housing costs as a percentage of income. If housing costs exceed 30 percent of household income, then a household is more likely to be financially burdened by the expense. This means that the household will have more difficulty meeting all of their financial needs and be less prepared for unexpected expenses.

A large proportion of Missoula households, both renters and owners, are financially burdened by the costs of housing. Somewhere between 11 to 31 percent of homeowners in Missoula spend more than 35 percent of their income on housing. This figure is even greater for renters in the region – between 28 and 55 percent of renters spend more than 35 percent of their annual income on housing. These estimates taken together would suggest that more residents in Missoula fall under this cost-burdened category, which is concerning.

So we see that Missoula, with all of its attractions and beauty, is having some growing pains when it comes to housing affordability. A growing population, rising home prices, a large proportion of households being cost-burdened with respect to housing, and the growing disparity between the median home price and the median household income, indicate that housing affordability is likely to remain a concern and a challenge for its residents. ■

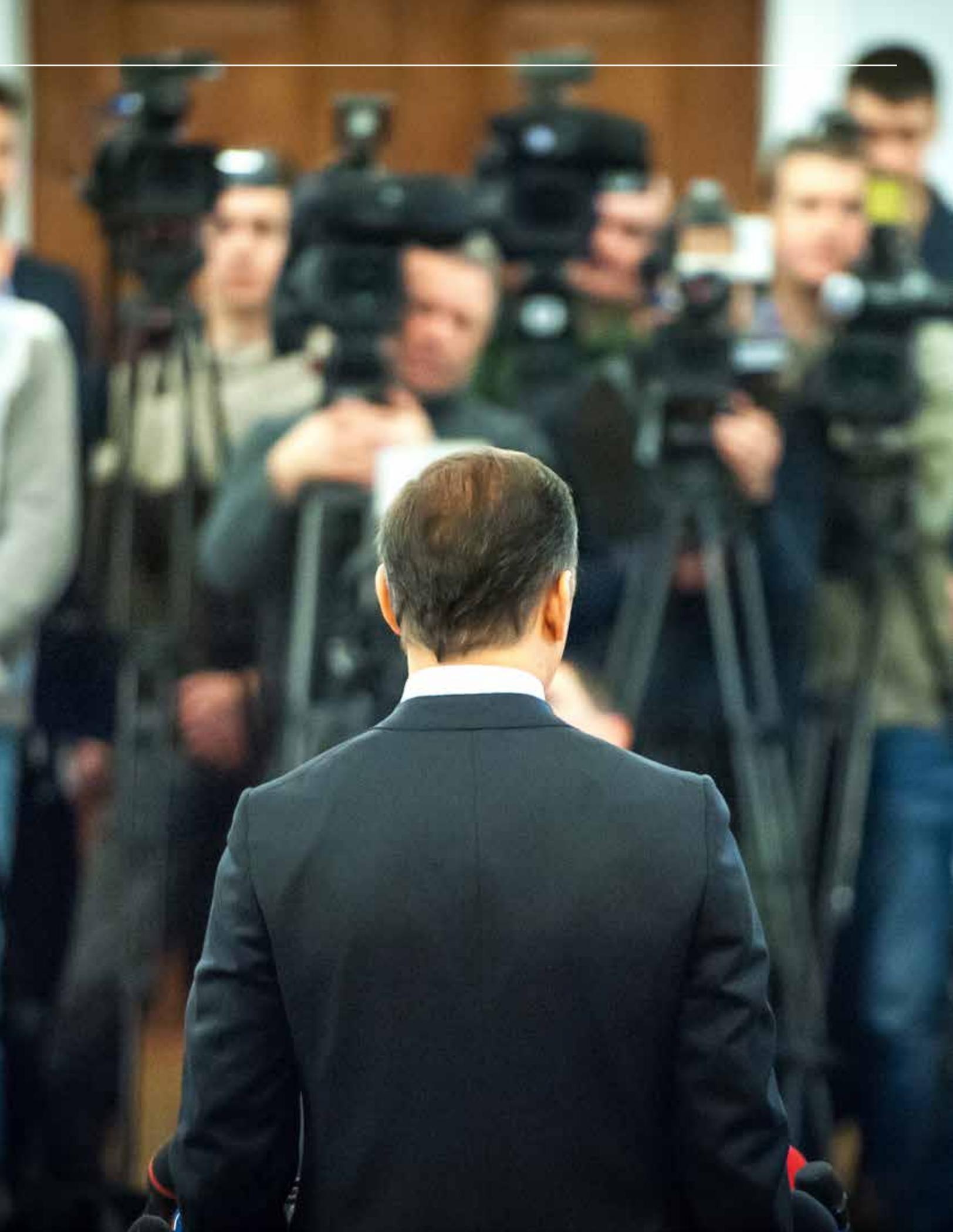
Brandon Bridge is an economist and director of forecasting at the Bureau of Business and Economic Research at the University of Montana.

How Montanan's Get Their News

Living in the News Echo Chamber

BY JOHN BALDRIDGE

Reading the morning newspaper or watching the evening news on television is becoming a bygone habit. Over the past decade, the internet has evolved to become a common tool that Montanans use to consume news – thanks largely to the rise of social media. This fundamental sea change in how we get information is having a sweeping effect on our culture – from the rise of fake news to the filter bubble that feeds and reaffirms our beliefs. As one might expect, younger people tend to use the internet more for news, while older generations fall back on traditional print and broadcast outlets. But that is changing too.



A recent survey sponsored by the Greater Montana Foundation (GMF) and conducted by the Bureau of Business and Economic Research (BBER) at the University of Montana (UM) examined how Montanans get their news and the results illuminate two concerns:

The first is that the internet allows consumers to tailor their news sources and conversations, thus limiting their exposure to differing views. Some worry that reduced exposure to opposing views can erode a person's ability to be an effective participant in their community. The second involves the endless stream of news sources and whether a person can treat them with

the skepticism required to know the difference between rigorous reporting and fake news.

The internet is now a major source of news for Montanans. In 2015, 49 percent of adult Montanans reported that they got news on the internet (Figure 1). In fact, in Montana the internet is essentially tied with television as the most commonly used news source.

Surfing the internet is no longer strictly regulated to one's desktop computer – today, the smartphone is king with nearly three-quarters (74.5 percent) of Montanans accessing the internet using this device (Figure 2).

Figure 1. Montanans' modes of news consumption. Source: Statewide Media Habits Survey, UM BBER, June 2015.

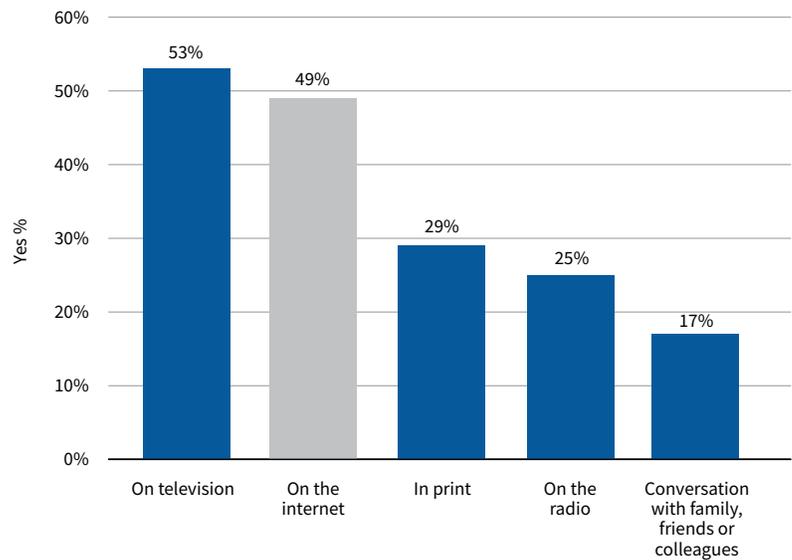
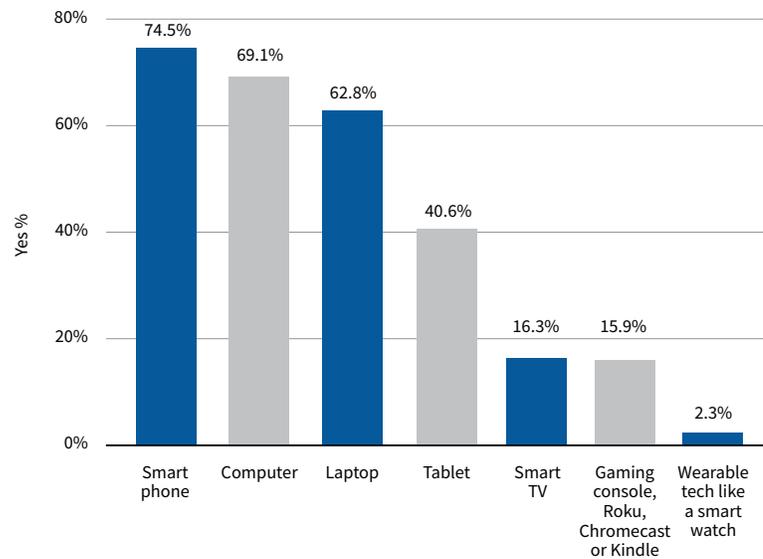


Figure 2. Tools Montanans use to access the internet (% of all internet users). Source: 2016 Internet News Sources and Use Survey.





U.S. Representative Greg Gianforte meets supporters after a campaign rally during the 2017 Montana Special Election at the Kleffner Ranch in East Helena. (Thom Bridge, Independent Record)

The smartphone's smaller screen is having an impact as well, as Montana news providers are tailoring content that can be consumed more quickly and read easily on the go.

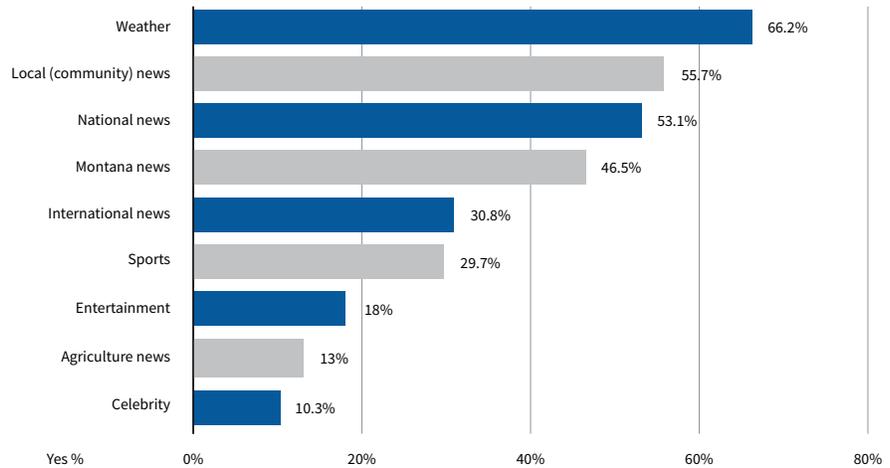
News Websites Used by Montanans

Weather is the type of news that is most often accessed by Montanans (66.2 percent), followed by local (community) news (55.7 percent) (Figure 3).

In addition to providing a snapshot of the types of news Montanans access, the survey gave us a glimpse into which news websites were used most often. Half of the websites (50 percent) used by Montanans to obtain weather information were Montana-based. More than four-fifths of the websites (82.1 percent) used to access local news were too and three-quarters (74.5 percent)

**In Montana,
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Figure 3. Types of news consumed by Montanans using the internet.
 Source: 2016 Internet News Sources and Use Survey.



of all websites used to gain statewide news were based in the state.

The most prominently mentioned included Montana’s largest newspapers, television stations, and radio stations. Montanans most frequently used the Billings Gazette, the Missoulian, KPAX and KTVQ websites to obtain local news (Table 1).

Fox News, CNN and MSN were most often accessed by Montanans seeking national news (Table 2).

When seeking out international news, Montanans most often used the BBC, CNN and Fox News websites (Table 3).

News Access through Social Media

When consuming news via the internet, Montanans don’t always go directly to a news provider’s website, they often access it via social media, like Facebook or

Twitter. In fact, a majority of adult Montanans (53 percent) reported accessing a news item through social media. Not only that, but they did so frequently – more than one in five (22.4 percent) access news through social media twice a day (Figure 4).

And here is where the plot thickens – half of Montanans who access news through social media (49.6 percent) reported they specifically follow a news provider’s website in their social media feed. The most frequently followed were FOX, CNN and the Billings Gazette (Table 4).

A significant change in placing news items on the internet has been the ability for a user to share that content with people they know. While the effects of this new channel of news distribution are not fully understood, this survey offers a first glimpse into its use in Montana.

Table 1. Montanans’ sources for local news via the internet. Source: 2016 Internet News Sources and Use Survey.

Website	Responses %
Billings Gazette	14.5%
Missoulian	10.3%
KPAX	6.6%
KTVQ/Q2	5%
KULR	4.4%
Bozeman Chronicle	4.3%
Great Falls Tribune	4.2%
KRTV	3.8%

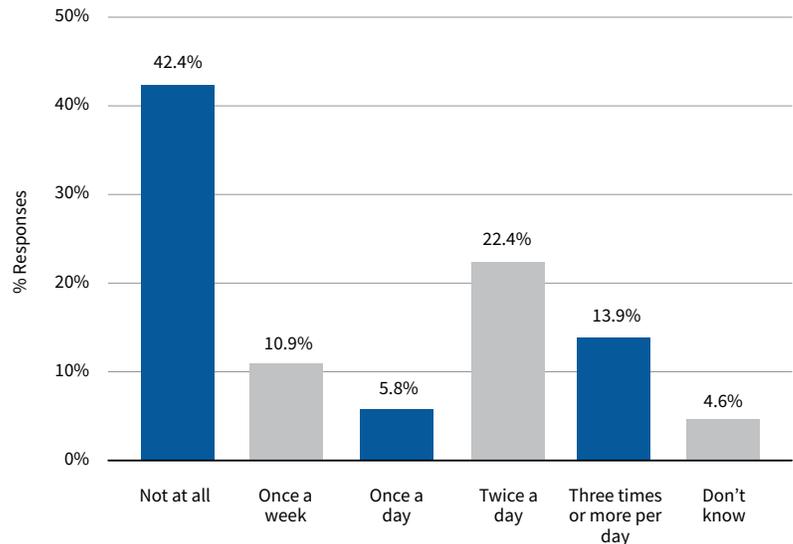
Table 2. Montanans' sources for national news via the internet. Source: 2016 Internet News Sources and Use Survey.

Website	Responses %
FOX	16.9%
CNN	15.3%
MSN	7.7%
New York Times	4.4%
NBC	3.5%
Yahoo	3.4%
CBS	3%
NPR/MPR/YPR	2.6%

Table 3. Montanans' sources for international news via the internet. Source: 2016 Internet News Sources and Use Survey.

Website	Responses %
BBC	18.4%
CNN	14.7%
FOX	11%
MSN	6.1%
NPR	2%
Google	1.9%
New York Times	1.8%
Daily Mail	1.4%

Figure 4. Frequency of news access via social media among all adult Montana internet users. Source: 2016 Internet News Sources and Use Survey.



Almost half of all adults in Montana (46.2 percent) reported that they have shared a news article in an email or on social media – most of the time it is shared with friends. And when asked about their motives for sharing, it's most often because the item was interesting, relevant

or important to them. When asked specifically whether or not they sometimes share a news item on the internet to influence others, 19.7 percent of Montanans said they did (Table 5).

Table 4. News sites most frequently accessed by Montanans from Facebook or Twitter. Source: 2016 Internet News Sources and Use Survey.

Website	Responses %
FOX	7.2%
CNN	5.7%
Billings Gazette	5%
KPAX	4.5%
Missoulian	4.1%
KTVQ/Q2	3.9%
MSN	2.3%
KRTV	2.2%

Montanans do maintain a certain level of skepticism when they read a story that someone has shared with them, though the awareness of its credibility can differ considerably. In general, more than a third (37.9 percent) rate the news item as somewhat credible, while 16.2 percent rated it slightly credible and 5.5 percent rated it as not at all credible.

The News Echo Chamber

Two types of data highlight the concern of the news echo chamber effect – do Montanans access a news provider’s website or social media feeds that reinforces their views and do they access news shared with them by others who hold similar views? Both types of data show that some Montanans do tailor their news sources and interactions, thus limiting their exposure to differing or competing views.

The survey examined websites that Montana Republicans and Democrats reported using for national

and international news in order to learn whether their choices match their politics. Table 6 shows that significant proportions of Montanans do frequently choose to obtain national news from providers that are stereotyped as matching their political party identification. The largest group of Republicans (41.7 percent) said they most frequently got national news from Fox. Similarly, 23.2 percent of Democrats said that they most frequently got national news from CNN.

A parallel pattern is evident in Table 7. Nearly one-third of Republicans reported most frequently getting international news from Fox. A similar number of Democrats (35.6 percent) reported frequently getting international news from the BBC.

To learn more about shared content, the survey examined Montanans who exchange news on the internet with like-minded people. The survey found that more than one-third of Montana’s internet users (36.3 percent) exchange news with people who hold

Many Montanans do tend to live in an internet news echo chamber, not only viewing stories from sources they agree with, but sharing content with like-minded friends.

Table 5. Reasons Montanans share news items on the internet. Source: 2016 Internet News Sources and Use Survey.

Main Reason	Responses %
General (unspecified) relevance/interest/importance.	30.2%
To inform others, share information, educate.	19.5%
It is relevant/interesting/important to someone else.	18.6%
It is relevant/interesting/important to me.	17.1%
It is funny.	4.2%
To influence others.	3%
To encourage debate, stir someone up, argue.	2.3%
It is of local interest or relevance or importance.	1.9%
To show inaccuracies, to show social injustice.	1.6%
To communicate.	0.9%

Table 6. Political party identification by most frequently used website for national news. Source: 2016 Internet News Sources and Use Survey.

Republican		Democrat	
Website	% of Republicans	Website	% of Democrats
FOX	41.7%	CNN	23.2%
CNN	11.1%	New York Times	10.5%
MSN	7.4%	KULR8	6.3%
Drudge Report	4.6%	MSN	6.3%
NBC	3.7%	NBC	6.3%
Yahoo	3.7%	ABC	5.3%
Google	2.8%	NPR	5.3%
Breitbart	2.8%	CBS	4.2%

Table 7. Political party identification by most frequently used website for international news. Source: 2016 Internet News Sources and Use Survey.

Republican		Democrat	
Website	% of Republicans	Website	% of Democrats
FOX	32.7%	BBC	35.6%
CNN	16.3%	CNN	23.7%
BBC	12.2%	Huffington Post	5.1%
MSN	8.2%	New York Times	5.1%
Google	6.1%	Billings Gazette	3.6%
Breitbart	4.1%	Google	3.5%
Reuters	4.1%	Guardian	3.4%
Bloomberg	2%	MSN	3.4%

Montanans who have more education reported being more likely to exchange news with like-minded people than those who have less education.

Figure 5. Party identification by exchanging news mostly with like-minded people. Source: 2016 Internet News Sources and Use Survey.

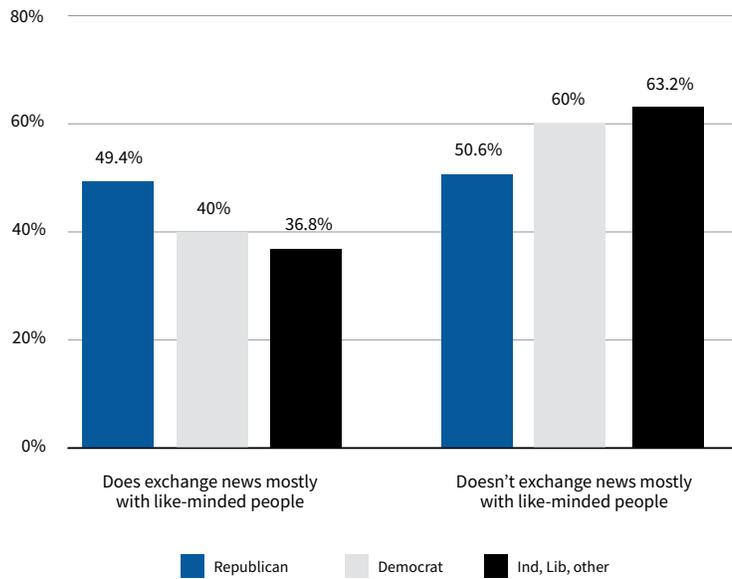
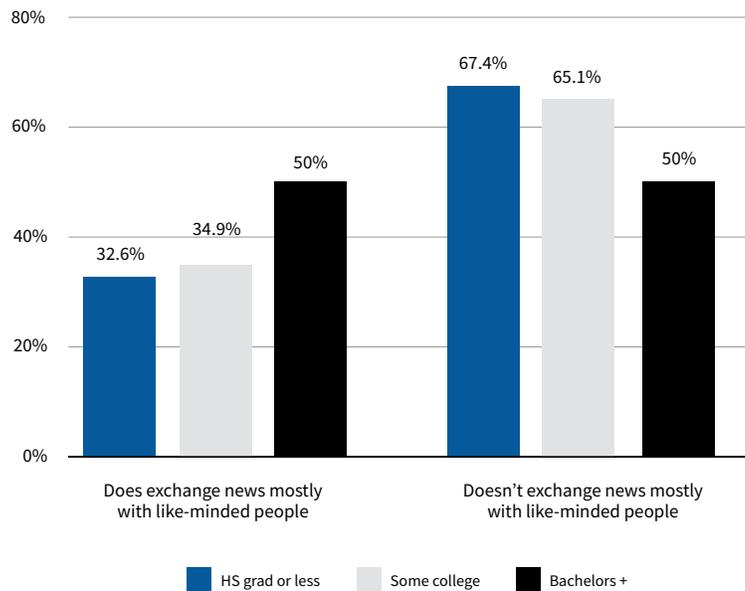


Figure 6. Education attainment by exchanges of news mostly with like-minded people. Source: 2016 Internet News Sources and Use Survey.





U.S. Senator Bernie Sanders speaks at a rally for U.S. House of Representatives candidate Rob Quist during a campaign stop for the 2017 Montana Special Election. (David Gilder)

similar views. Montana Republicans (49.4 percent) were more likely than Democrats (40 percent) or others (36.8 percent) to do this (Figure 5).

Interestingly, Montanans who have more education reported being more likely to exchange news with like-minded people than those who have less education (Figure 6).

In summary, many Montanans do tend to live in an internet news echo chamber, not only viewing stories from sources they agree with, but sharing content with like-minded friends – though they do it with some skepticism. As more Montanans get their news from social media and other Montana-based internet sources, the evidence seems to point toward a continued tailoring of these sources and interactions to match their beliefs.

This first rigorous snapshot of Montana internet news consumers' self-reported behaviors is hardly exhaustive or conclusive. But it does suggest reasons for confidence in Montanans' common sense, while showing signs to worry that some Montanans are tuning out differing viewpoints. ■

John Baldrige is a survey researcher and project manager at the Bureau of Business and Economic Research at the University of Montana. If you'd like to learn more about the Montanans' Internet News Sources and Use Survey, visit bber.umt.edu.

Barriers to Women's Entrepreneurship

BY BRYCE WARD

Have you ever had an idea that you thought might make a good business? How far did you pursue that idea? Did you evaluate it and try to figure out if you should pursue it? Did you start to dabble with how to execute your idea? Did you try and create the product or service? Did you launch it? The five stages above – idea, evaluation, dabbling, doing and launch – comprise the pre-entrepreneurial process. Every entrepreneur and would be entrepreneur goes through at least part of this process. If you made it all the way through, congratulations! You are part of Montana's vaunted community of entrepreneurs.



15 percent of Montana's workers are self-employed – that's 50 percent higher than the U.S. average and ranks Montana first among all states. For the past four years, Montana has also ranked first on the Kauffman Foundation's Index of Entrepreneurship.

If you are a man, odds are you made it further through the pre-entrepreneurial process than if you are a woman. Women comprise only 33 percent of Montana's self-employed workers and only 18 percent of Montana's firms with employees are majority female owned.

To be fair, women are underrepresented as entrepreneurs across the country, not just in Montana. Nationally, only 35 percent of self-employed people are women and 17 percent of employer firms are majority female owned. The big question is why are women less likely to choose to become entrepreneurs?

The answer appears to lie within the five stages of the pre-entrepreneurial process. Women are not just less likely to make it all the way through the process, they are less likely to make through each of the stages.

For instance, since 2014, both the University of Montana (UM) and Montana State University (MSU) have had Blackstone LaunchPads (BLP). These Blackstone LaunchPads help students, alumni, faculty and staff turn their ideas, skills and passions into real world businesses and non-profit organizations. The BLP helps individuals explore any entrepreneurial idea and provides free consulting and resources to help them progress. There is no requirement to use their services, other than being affiliated with either university.

In spite of comprising more than 50 percent of students and offering a low cost way of exploring an

idea, women have been less likely to use BLP resources at UM and MSU. Over the program's first 18 months, women made up just 31 percent of those who registered with the Blackstone LaunchPads.

In a recent research project funded by the Kauffman Foundation, Paul Gladen (UM's Blackstone Launchpad), Kathy Kuipers (UM's Sociology Department) and I sought to better understand women's progression through the pre-entrepreneurial process using survey data from University of Montana students.

We found that women were less likely to report having had an idea for a new venture. Seventy-seven percent of men report having had an idea, but only 64 percent of women did the same. Thus, men are 20 percent more likely to report a past idea.

Women were also less likely to report that they would pursue a new idea if they had one. 84 percent of men reported that they would spend at least a few hours pursuing an idea, but only 68 percent of women indicated they would. In addition, only 28 percent of women indicated that they would be likely or very likely to pursue a new idea all the way through launch. In contrast, 48 percent of men thought it was likely or very likely they would pursue an idea through launch. Consistent with this, 29 percent of women and 45 percent of men believe it's likely that they will launch a venture at some point in their lives. So why are women less likely to show interest in pursuing ideas for potential new ventures?

We can group explanations for this disparity into two broad, though not exclusive, categories. First, the difference may reflect objective challenges that disproportionately affect women. For instance, women may face

Women comprise only 33 percent of Montana's self-employed workers and only 18 percent of Montana's firms with employees are majority female owned.

Only 28 percent of women indicated that they would be likely or very likely to pursue a new idea all the way through launch.

particular barriers, such as a lack of particular skills or traits, difficulty accessing supportive networks, difficulty accessing capital or discrimination. Such barriers may decrease the odds for female entrepreneurs to succeed. Low rates of participation in pre-entrepreneurship may reflect a woman's rational response to these barriers. Fewer women choose to pursue entrepreneurship because they know that they will face these barriers. In this view, removing barriers or training women how to clear them, would increase female entrepreneurial participation.

Second, disparities in entrepreneurial engagement may stem from differences in perceptions of entrepreneurship. Women may be more likely to underrate their potential to succeed as entrepreneurs. This could reflect women overstating what it takes to succeed as an entrepreneur or it could reflect women underrating their own ability to succeed as entrepreneurs. It could also reflect women imagining barriers they may or may not face. In this view, changing how women perceive themselves and/or entrepreneurs could increase female entrepreneurial participation.

Our study did not attempt to measure objective barriers, but we did find evidence that women and men perceive entrepreneurs differently. We asked survey respondents a variety of questions about their perceptions of the potential costs and benefits of entrepreneurship. Overall, men and women offered similar answers to these questions.

For instance, both men and women tend to agree that entrepreneurs face challenges that may not be offset by rewards. Clear majorities of both men and women agree that entrepreneurs face financial risks, work long hours and sacrifice other interests. Yet, minorities of

men and women agree that entrepreneurs are more respected, enjoy greater flexibility in their everyday lives and earn more money.

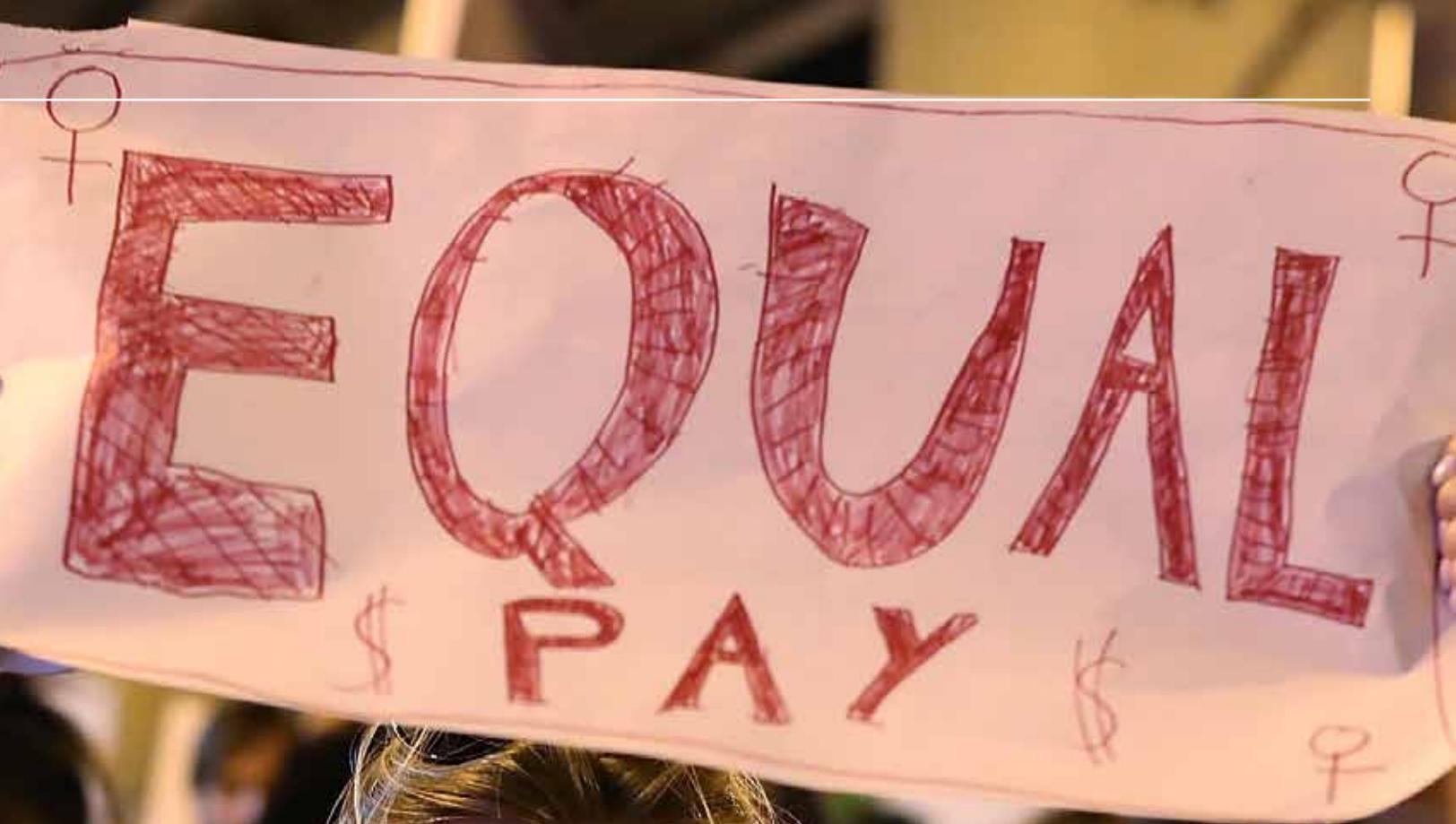
While men and women have similar views of entrepreneurs, there are some differences. For instance, men are more likely to state that becoming an entrepreneur is an important life goal. One-third of men, but less than one-fifth of women, say that starting a venture is important to achieve their best possible life. Women are also more likely than men to cite potential time costs, emotional risks, lack of know-how and lack of skills as reasons why they would not pursue a new idea.

While this research suggests that perceptions may matter, more research is needed to clarify the relative roles for objective barriers and perceptions in creating the gender disparity in entrepreneurship.

Ultimately, entrepreneurs are a key ingredient in building a more robust, resilient Montana economy. The underrepresentation of women among Montana entrepreneurs suggests that our economy may be underutilizing its potential resources. For Montana's economy to reach its potential it is important to do more to broach this untapped potential.

At a minimum, this requires getting more women engaged in the pre-entrepreneurial process. We need more women to pursue new ventures – to evaluate, dabble, attempt to create and launch their ideas. ■

Bryce Ward is the associate director at the Bureau of Business and Economic Research at the University of Montana.



Montana's Gender **Pay Gap**

Some claim the wage gap is a myth, but for Montana's working women the struggle is real.

BY DAPHNE HERLING

As early as 1791, American women were identified as a potential cheap labor force. That stigma is still playing out today despite the fact that 58 percent of all women participate in the workforce. Women do get paid less than men, earning 77 percent of what men earn – the most commonly cited number in discussions about gender wage inequality.

In Montana, women ages 16 and older earn 73 percent of what men earn. Indeed, every state in the nation has an earnings gap, but Montana ranks near the bottom at 46th in the nation. (Table 1).

The amount of the earnings gap in the state largely depends on the job sector. Local government workers have the best pay equity with women earning 85 percent of men's median earnings, followed by federal workers (77 percent) and state workers (79 percent). Private for-profit workers experience the greatest pay inequity – full-time women workers earn only 68 percent of their male counterparts.

The Causes of Gender Pay Inequality

A documented phenomenon called “channeling” (Psychology of Women Quarterly, 2016) shows that from a very early age, social and cultural norms tend to guide women into certain career choices by stereotyping what men and women are best suited to do. Despite significant changes since the 1980s, in the activities and representation of women in society, deeply held beliefs about gender continue.

Educational attainment is one of the greatest predictors of future earnings and historically women have had less education than men; but this is changing. In 2012, Montana women out-performed men in attaining associate or bachelor's degrees. While there was little difference between the numbers of men and women obtaining a graduate or professional degree, their earnings were still lower.

Remarkably, Montana women with less than a high school diploma earn 70 percent of what men earn

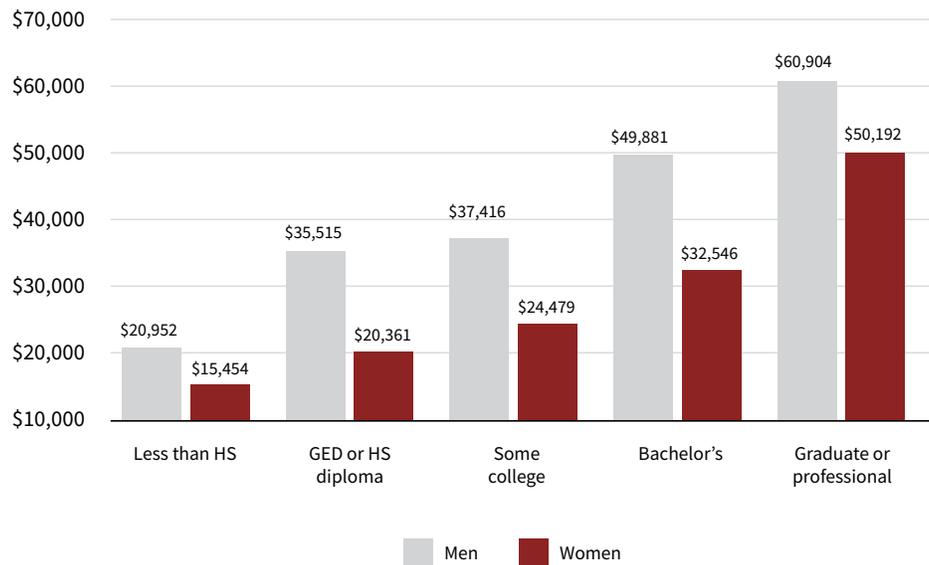
(compared to 79 percent nationally). Women with graduate or professional degrees earn just 75 percent of what men earn.

Occupations in science, technology, engineering and mathematics (STEM) pay more, yet historically few women look at STEM majors for college. This too is changing. In 2012, 40 to 45 percent of the degrees in math, statistics and the physical sciences were conferred upon women and a majority of biology degrees (58 percent) were earned by women. But when it comes to computer science and engineering majors, women make up only 20 percent of students.

This disparity in educational fields between genders is generally not seen until college, as high school girls and boys earn credits in advanced mathematics and science at similar rates. The good news in Montana is

Every state in the nation has an earnings gap, but Montana ranks near the bottom at 46th in the nation.

Figure 1. Median earnings in the past 12 months by sex and educational attainment for the Montana population, 25 years and over. Source: 2015 American Community Survey 1-Year Estimates.



that 32 percent of people working in STEM fields are women, compared with 29 percent nationwide.

Gender segregation by occupation and industry is a major determinant of gender pay inequality. Women in Montana work in the same occupations as they do nationally, but according to 2014 data no industry paid women more than men. The pay gap was closest in the agriculture industry where women earned almost the same as men, although this industry is traditionally male-dominated with only 19 percent of the workers being female. The biggest wage gap was in the finance and insurance industries where women earned 56

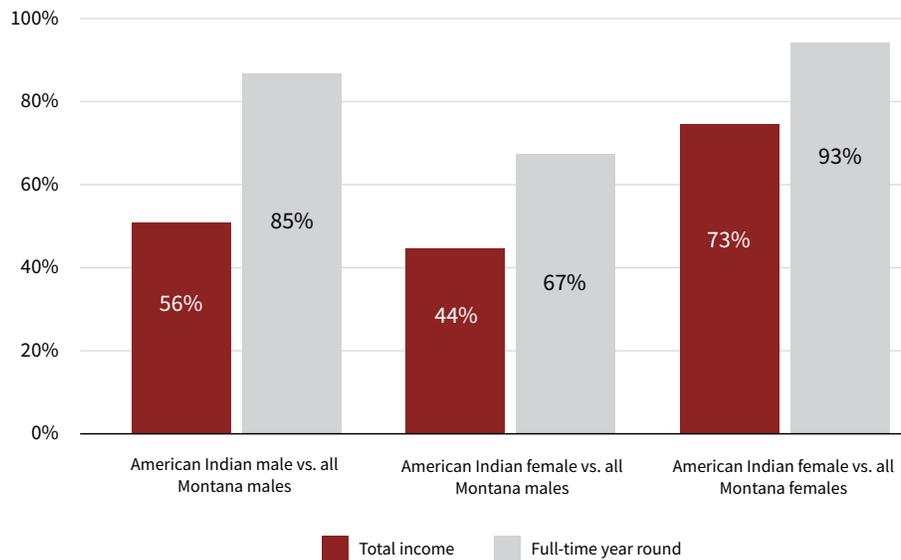
percent of what men earn. Women dominate the health care industry, which employs about three-quarters of Montana's workforce, yet women working in this industry earn 65 percent of what men earn.

Another cause of gender pay inequality is more women work part-time (37 percent) than men (30 percent), thus earning less and gaining less experience to further their careers. More men in Montana work full-time than women and this is not always by choice. Nationally, nearly 5 percent of all women are involuntary part-time workers for reasons such as their hours being cut back or their inability to find full-time jobs. These

Table 1. Median annual earnings and earnings ratio for full-time, year-round workers, by state and gender, 2015. Source: American Community Survey.

State	Male	Female	Earnings Ratio	National Rank
Colorado	\$51,628	\$41,690	81%	22
South Dakota	\$42,605	\$33,268	78%	32
Idaho	\$43,264	\$31,808	74%	44
Montana	\$46,123	\$33,443	73%	46
North Dakota	\$52,031	\$37,016	71%	47
Utah	\$50,741	\$36,060	71%	48
Wyoming	\$55,965	\$36,064	64%	50

Figure 2. American Indian earnings ratio in Montana.
Source: Women's Foundation of Montana, using ACS 2010 data (Table B19326).



are women who would work full-time if the hours were available.

The choice to work part- or full-time is rooted in the sexual division of labor in the household and work/family balance. Time out of the workforce due to childbirth is a major factor in women losing ground. Additionally, women tend to take on more child-rearing and household responsibilities than men and are more likely to make work choices to accommodate their family responsibilities. This inequitable sharing of family tasks and responsibilities is less noticeable among families where both partners earn the same amount or when partners hold shift-work jobs with flextime schedules.

In higher-paying careers, men tend to reduce the number of hours they help in the household. By the time a child is 15 years old, the earnings gap between men and women in a two-income family has increased 32 percent. This motherhood penalty results in lowered performance expectations, a lower likelihood of hiring and lower wage offerings. Yet the opposite is true for men, who tend to see wages increase after a child is born and have a greater likelihood of career advancement, known as the fatherhood benefit.

Workplace gender bias in higher level jobs puts constraints on upward mobility too. There are a disproportionate number of men in leadership positions in Fortune 500 companies. 4.6 percent of CEOs, 20 percent of board seats, 25 percent of executive and

senior level management positions and 36 percent mid-level management positions are held by women, yet women make up 44 percent of all employees in those same companies. Notably, upward mobility does little to improve gender wage inequality – in fact it does the opposite. Women in higher income percentiles earn less than men, where in lower paying occupations the gap narrows substantially.

All of these factors play into the wage gap for women of color. While nationally no racial grouping of women earn more than white men, additionally women earn less than men in their own racial group. For instance, American Indian women in Montana earn nearly 93 percent of what all women earn, but only 67 percent of what Montana men earn. Where the difference is most marked is in the total earnings, which takes into account other factors, such as unemployment and underemployment. American Indian women earn 44 percent and American Indian men earn 56 percent of the total Montana male earnings.

84 percent of American Indian women in Montana have a high school diploma, but less than 10 percent have a bachelor's degree or higher, even though over half of all Montana women have earned some college or above. Overall, the economic and social disadvantages experienced by Montana's American Indian women add up to less earning power, less education, more rural isolation and more racial and gender discrimination. On

a brighter note there are higher rates of Native American women in professional and managerial occupations in Montana than there are nationally.

Montana’s Low-Income Families

Low-income families in Montana are more adversely affected by gender pay inequality than higher earning families – when you start out with less, you end up with less. If gender wage equality were reached for women in poverty it would reduce the number of poor single mothers by nearly 40 percent. If all working women with incomes below the federal poverty line received the same wages as working men, the poverty rate would drop by 43 percent.

Poverty levels in Montana would drop significantly, as 34 percent of female-headed households (with or without children) are at the federal poverty level. This percentage increases for women who head households with children under 18 years old (45 percent) and children under 5 years old (65 percent).

Many women who work to support their families still need to turn to government assistance programs to make ends meet. Nationally, over half of families with children work while receiving food stamps. While bringing women’s wages on par with men’s will not solve the poverty problem, it would reduce the number of families that have to turn to programs, such as the Supplemental Nutrition Assistance Program (SNAP) and Medicaid. Reducing the need for government assistance programs is different than

If gender wage equality were reached for women in poverty it would reduce the number of poor single mothers by nearly 40 percent.

Table 2. Living wage comparisons by family, size and type for Montana. Source: Dr. Amy K. Glasmeier and the Massachusetts Institute of Technology.

Hourly Wage	1 Adult 1 Child	1 Adult 3 Children	2 Adults (One Working) 1 Child	2 Adults (One Working) 3 Children	2 Adults (Both Working) 1 Child	2 Adults (Both Working) 3 Children
Living Wage	\$22.05	\$37.16	\$20.72	\$26.55	\$12.34 per adult	\$19.22 per adult
Poverty Wage	\$7	\$11	\$10	\$13	\$5	\$6
Federal Minimum Wage	\$8.05	\$8.05	\$8.05	\$8.05	\$8.05 per adult	\$8.05 per adult



Gov. Steve Bullock, along with the Equal Pay for Equal Work Task Force, announce the 'Equal Pay Pledge' in 2016 to close the gender pay gap in Montana. (Thom Bridge, Independent Record)

reducing the availability of such programs for women and their children. Supporting and strengthening the social safety net should be maintained for those not working or for those earning below the means tests.

Addressing Gender Wage Inequality

Employers can help by taking steps to ensure that workplace policies, such as recruitment, hiring, family leave and internal pay audits, are encouraging to qualified female applicants. Likewise, internal reviews of workplace practices would ensure employers stay welcoming to female employees.

Unstable shift-work schedules, just-in-time scheduling practices and assigning irregular shift times further destabilizes workers who are seeking to balance work and families. In addition, without knowing how many hours they will work, a workers' earnings become uncertain. Over one-third of women hourly workers in their prime childrearing years receive their work schedules with less than one week advanced notice. These unpredictable scheduling practices particularly hit lower income, predominantly female, service workers.

Another area to consider is family leave. Although the Family and Medical Leave Act of 1993 guarantees

12 weeks of job-protected family leave, this only applies to large scale employers and workers with a minimum job tenure, thus half of all workers do not qualify. Remarkably, Montana does not require employers to offer paid medical, family or sick leave.

One last look at Montana is potentially good news for women. According to the Montana 2016 Labor Day Report, the state is facing a labor shortage. Montana's economy has shown strong growth over the past five years, reducing unemployment and increasing wages. The economy is projected to expand, adding about 9,200 jobs in 2017. However, population data shows that Montana's labor force isn't keeping up with demand, adding only 4,500 workers to fill these jobs. So long as women have access to the skills and training demanded by employers they will be able to benefit from the tight labor market, earning wages and benefits equal to their male counterparts. ■

Daphne Herling is the senior research analyst for Montana KIDS COUNT at the Bureau of Business and Economic Research.

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