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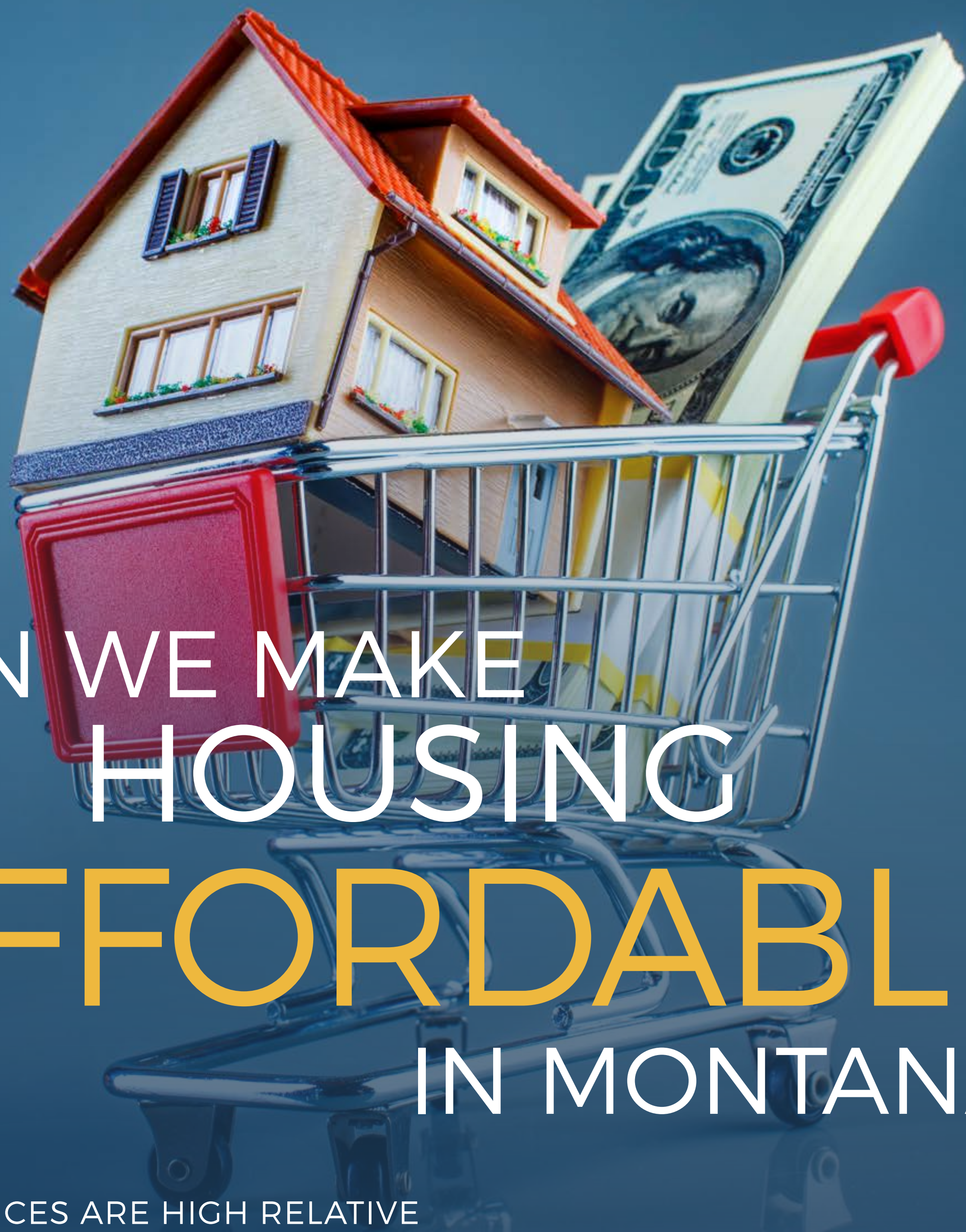

CAN WE MAKE HOUSING AFFORDABLE IN MONTANA?

HOME PRICES ARE HIGH RELATIVE TO INCOMES

WINTER 2017

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The Bureau of Business and Economic Research has been providing information about Montana's state and local economies for 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 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
Artwork by Andrey Armyagov.

INSIDE COVER
Morgan Maul-Smith from the Missoula Children's Theatre works with the cast of Pinocchio during dress rehearsal. (Veronica Montes)

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MESSAGE FROM THE DEAN OF THE COLLEGE OF BUSINESS

It is my pleasure to welcome you to the winter issue of the Montana Business Quarterly. I am excited for the opportunity to address you for the first time since the School of Business Administration at the University of Montana became the College of Business.

The vote to rename us – in fall 2017 by the Montana University System board of regents – gave us a name that is more reflective of who we are and our footprint on campus. With nearly 20,000 alumni, six majors, a minor and three graduate degrees, the College of Business is responsible for educating a large portion of UM students. I believe we've earned the *college* moniker and I'm so pleased to share this news with you.

As we embark on our first semester as a college, it's a momentous time on campus. President Seth Bodnar took the helm in January and the university marks the 125th anniversary of its chartering this spring.

Here in the Gallagher Business Building, we've channeled this energy into inspiring new initiatives designed to help us continue meeting our mission of providing a world-class education to our students. Two examples are our redesigned MBA program that lets students earn their degree no matter where they are in the world and our newly launched podcast, "A New Angle," which showcases the unique stories of UM alumni and friends who have defined their own success through creativity and hustle. Indeed, there are so many powerful stories of success associated with our college that we decided an ideal way to share them with our students and the world was through the popular format of a podcast that you can find on iTunes.

I invite you to learn more about the challenges and opportunities related to business in our state in this latest issue of the Montana Business Quarterly. I hope you enjoy the valuable insights in these pages, which cover timely and critical topics ranging from LGBTQ youth in Montana to the state's tax collection shortfall and affordable housing. Between issues please check out www.business.umt.edu and www.bber.umt.edu and follow @UmontanaBiz and @MontanaBBER on social media to stay connected with us.

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POVERTY WITH A VIEW

Can We Make Housing Affordable in Montana?

BY BRYCE WARD

Buying a house in Montana can be hard. A recent Gallup study found 45 percent of Montanans were dissatisfied with the availability of good affordable housing. This tied Montana with Maryland and Oregon for eighth worst in the country.

In many Montana markets prices are high. As shown in Table 1, prices are high relative to other parts of the country. Home prices are also high relative to the incomes typically earned by Montanans, relative to the cost of building a house, and they are also much higher than they used to be.

Montana renters fare better. Rent in Montana markets tends to be lower than in other parts of the county. Montanans are less likely than the average American renter to be rent burdened (spending more than 30 percent of their income on rent). However, Montana's median gross rents have been rising faster than across the country.

Combined, Montana's owners and renters spend a higher percentage of their income on housing than they did 25 years ago. In 1990, Montana was one of the most affordable states, but its affordability advantages have eroded. Given these challenges some have wondered what, if anything, can be done to ensure housing in Montana is affordable?

Standard economic logic suggests increasing affordability requires slowing housing price growth, while also boosting income growth – this is difficult. Slowing housing price growth entails limiting demand (making Montana less desirable) or increasing the supply response (making it easier to build).

Thus, those seeking to improve affordability must ask two questions: 1) Can we reduce demand – can Montana become less desirable and do we want it to be less desirable? 2) Can we increase supply – can Montanans make it easier to build more housing?

Housing Demand

Places with strong demand experience either population growth or housing price growth or both. Based on these metrics demand for Montana is strong. Over the past 25 years, Montana has enjoyed both faster-than-average population growth and faster-than-average housing price growth.

Productivity and quality of life drive demand for place. Places that are very productive (i.e., places that produce lots of value per worker) tend to offer high wages and good job opportunities. As such, they tend to attract people. Similarly, places that offer an appealing quality of life also tend to attract people.

Demand growth in Montana reflects some productivity improvements, but mostly it reflects demand for Montana's quality of life. Productivity and wages have grown relatively quickly in Montana over the past 15 years. For instance, while wages in Montana remain low, average wages have grown faster than across the country. In 2000, average weekly wages for Montana's wage and salary workers were only 69 percent of the U.S. level. In 2016, they were 76 percent of the U.S. level. This faster than average wage growth could contribute to demand for Montana.

Demand for the quality of life, though, is likely the stronger force driving demand – many people come to Montana just for that. But this demand creates some specific challenges for the state's economy.

Some portion of those who seek to enjoy Montana's quality of life do not rely on the state's economy for income. This group includes out-of-state residents who own second homes in Montana, people whose income comes from savings (e.g., capitalists or retirees) and telecommuters. While it is hard to precisely identify the size of this group in the available data,

Table 1. Housing costs in Montana relative to the U.S. and other Western states. Source: BBER analysis of 2016 American Community Survey (1-year).

	Median home value	% of U.S.	% of West	Median gross rent	% of U.S.	% of West
Billings	$220,900	108%	66%	$829	85%	69%
Bozeman	$347,900	170%	103%	$925	94%	77%
Great Falls	$169,500	83%	50%	$710	72%	59%
Helena	$227,900	111%	68%	$787	80%	66%
Kalispell	$247,800	121%	73%	$831	85%	69%
Missoula	$270,300	132%	80%	$818	83%	68%
Montana	$217,200	106%	64%	$741	76%	62%
U.S.	$205,000	-	-	$981	-	-
West	$337,200	-	-	$1,200	-	-

Table 2. Percent change in housing prices and number of housing units, 2000-2015. Sources: BBER analysis of OFHEO Housing Price Index (CBSA), 2000 Census and 2015 American Community Survey. Note: Percentile rank is among metropolitan and micro-politan areas.

	Percent change housing price index	Percentile rank	Percent change housing units	Percentile rank
Great Falls	52%	76th	7%	32nd
Butte-Silver Bow	55%	79th	4%	20th
Helena	65%	86th	19%	76th
Kalispell	67%	88th	36%	96th
Missoula	69%	88th	24%	85th
Billings	77%	92nd	20%	78th
Bozeman	78%	93rd	49%	99th

A RECENT GALLUP STUDY FOUND 45 PERCENT OF MONTANANS WERE DISSATISFIED WITH THE AVAILABILITY OF GOOD AFFORDABLE HOUSING.

several pieces of evidence suggest this group is relatively large.

First, Montana has a larger-then-typical share of second homes and the number of second homes has grown at a relatively fast rate. In 1990, the census classified 5.8 percent of Montana homes as seasonal, recreational or occasional use. This was nearly double the U.S. share (3 percent). By 2010, the share of second homes in Montana grew to 8 percent, while the U.S. share grew to only 3.5 percent.

Second, Montana appears to have attracted a growing number of people who have the means to live wherever they choose (e.g., capitalists, retirees and telecommuters).

The Treasure State has a larger than typical share of income from non-wage sources. Twenty-three percent of Montana's personal income comes from dividends, interest and rent. This is higher than the U.S. level (19 percent) and ranks third highest among all states. Thirty Montana counties, including Flathead, Missoula and Gallatin, rank in the top 10 percent among all U.S. counties in the share of personal income from dividends, interest and rent.

Similarly, the share of income reported to the IRS from non-wage sources is significant and has grown over time. In 1990, 31 percent of Montana's total adjusted gross income (AGI) was from non-wage sources. By 2015, this share had grown to 36 percent. In 19 Montana counties, including both Gallatin and Missoula counties, over 40 percent of AGI comes from non-wage sources. These counties all rank in the top 10 percent of counties.

Thus, Montana's rising housing costs, in part, reflect Montana's desirability to people whose income is not derived from the state's economy. While demand from these footloose individuals provides clear evidence that Montana offers a great quality of life, it also makes housing in Montana more expensive, which can create problems. It means that housing cost increases may not be tethered to wage increases. This can make Montana untenable to certain workers and firms.

In theory, Montana could try and avoid such problems by becoming less attractive – i.e., by becoming less productive or by lowering the quality of life. Neither of those outcomes are enticing. Thus, it is difficult to argue that the state should try to improve housing affordability by reducing demand, but what about supply?

Housing Supply

When strong demand for a place exists, the range of feasible outcomes is bound by two extremes. At one extreme, strong demand is met by very little increase in the number of houses. In this case, strong demand leads to big increases in housing prices, but very little population growth. At the other extreme, strong demand is met by a very large increase in the number of houses. In this case, strong demand leads to big increases in population, but very little housing price growth.

Whether demand for place translates into an increase in housing prices or an increase in population depends on the number of houses that get built. That is, for a given change in demand, the price response depends on the supply response.

Supply response varies widely across the country. Some communities are expensive (e.g., San Francisco). They have built little, experienced slow population growth, but have seen rapid home price growth. Some communities are expansive (e.g., Las Vegas). They have built a lot, experienced massive population growth, but have seen relatively little home price growth.

Communities across Montana vary in both demand growth and supply response. Table 2 shows housing price growth and housing unit growth between 2000 and 2015 for several Montana communities relative to other places. Each of the listed communities has experienced housing price growth in excess of 50 percent. This places each above the 75th percentile, which tells us that these parts of the state have all experienced strong demand.

The supply response has varied across Montana. The percentage change in the number of housing units in Butte and Great Falls is below average (and well below the average for places who experienced similar housing price growth).

Billings, Helena and Missoula all built more than average and ranked in the 75th to 85th percentile in terms of housing unit growth; however, they built slightly less than expected given how much prices increased. Kalispell and Bozeman built an extraordinary amount. Bozeman ranks 10th and Kalispell ranks 26th in percentage change in housing units between 2000 and 2015. Both also built substantially more than average given price appreciation.

The message of these findings is disconcerting. Many places in Montana built a fair amount of housing and yet they still experienced large increases in house prices. Thus, given the level of demand, these communities needed to build more (likely much, much more) if they had wanted to keep housing prices down. The question is why didn't they build more housing?

Places that make it easier to build have three advantages: First, they have abundant developable land (places with mountains and large bodies of water have a less responsive housing supply.) Second, they have fewer land-use regulations. Third, they have robust development sectors.

Montana cannot do anything about its natural constraints on land supply. But if we want to lower prices or slow price growth, regulatory barriers need to fall or the efficiency of the development sector needs to increase.

Unfortunately, we do not know how many houses need to be built to substantially lower prices. It is hard not to notice that the two areas that built the most housing, Bozeman and Kalispell, experienced some of the largest housing price appreciation in the country. It is worth considering whether building more housing contributed to the growth in demand.

Thus, increasing affordability in Montana may prove difficult. Some degree of unaffordability may be hard to avoid. Montanans, or at least Montanans in certain places, may need to learn to adapt to relatively unaffordable housing.

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

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LGBTQ YOUTH IN MONTANA

Bullying in Schools is a Major Problem

BY DAPHNE HERLING

Montana's sexual minority youth have it rough. Despite enormous strides in acceptance and understanding there's still much work to be done. Lesbian, gay, bisexual, transgender and queer/questioning (LGBTQ) youth have higher rates of suicide, mental health problems and substance abuse to name just a few issues. But policies and programs that build resiliency can be enacted so that young people can be confident in who they are without worrying about bullying, violence, job security or a lack of legal protections.

Sexual minority youth face challenges at home and in their communities as a result of stigma and discrimination – rejection by family being the most tragic outcome. It is estimated that between 20 to 40 percent of youth who become homeless each year are LGBTQ and these youth often cycle through foster homes, group homes and the streets. A review conducted by the Annie E. Casey Foundation showed that LGBTQ youth were less likely to be placed in a permanent home and were more likely to face abuse and harassment in their foster or group homes.

Suicide attempts and depression among LGBTQ youth is of grave concern. A low sense of belonging or social alienation and feeling like "an outsider" is linked to suicide. There is a startling difference among LGBTQ youth from positive, accepting families compared to those who've been completely rejected. Rejected youth were more than eight times as likely to attempt suicide, almost six times as likely to report high levels of depression, more than three times as likely to use illegal drugs and three times as likely to be at high risk for HIV and sexually transmitted diseases.

School-based bullying is a major problem. Sixty percent of LGBTQ students doubted they would graduate high school because of the hostile climate in their school. More than half felt unsafe because of their sexual orientation – just under half commonly avoided school bathrooms, locker rooms and gym classes. Almost one quarter were verbally harassed because of their sexual orientation and nearly all heard homophobic remarks.

LGBTQ students who've experienced victimization had lower grade point averages than other students and were

three times as likely to have missed class because of safety concerns. LGBTQ students attending rural or small town schools, which would include most Montana schools, experienced the highest levels of victimization based on sexual orientation and gender expression.

In 2015, Montana included only one question related to LGBTQ issues in the Youth Risk Behavior Survey – had the student been teased or called names because someone thought they were gay, lesbian or bisexual? Almost 11 percent of Montana high school students reported being teased or called names for that reason. Table 1 shows that these students are at greater risk than those who were not called names or teased.

For the most part Montana schools have supportive policies for LGBTQ students; as do most schools nationally. However, Montana falls well behind in several areas: teachers receiving professional development on how to teach students about different sexual orientations or gender identities, the number of schools with a gay/straight alliance or similar clubs, identifying safe spaces for LGBTQ students and the whole school staff receiving professional development on preventing, identifying and responding to student bullying and sexual harassment. Montana did slightly better than the national average in having a designated staff member to whom students could confidentially report bullying or harassment.

60 PERCENT OF LGBTQ STUDENTS DOUBTED THEY WOULD GRADUATE HIGH SCHOOL BECAUSE OF THE HOSTILE CLIMATE IN THEIR SCHOOL.

Secondary schools in Montana have existing practices to help students (not just LGBTQ students) who are victims of bullying. But there is a real need to educate staff specifically in the area of bullying sexual minority students. Forty-four percent of LGBTQ students reported hearing negative

Table 1. Health risk indicators based on victimization due to perception of being lesbian, gay or bisexual. Source: OPI, Montana YRBS. Victimization and Sexual Orientation Report, August 2017.

Health risk behavior	Students who were teased or called names for perception of being gay, lesbian or bisexual.	Students who were not teased or called names for perception of being gay, lesbian or bisexual.
Did not go to school because they felt unsafe at school or on their way to or from school.	20%	6%
Felt sad or hopeless almost every day for two or more weeks in a row.	58%	28%
Reported that the largest number of drinks they had in a row was 10 or more (within a couple of hours, during the past 30 days).	12%	6%
Ever took prescription pain medicine without a doctor's prescription.	24%	12%
Were offered, sold or given an illegal drug on school property.	38%	29%
Described their grades in school as mostly A's or B's.	68%	79%
Received help from a resource teacher, speech therapist or other special education teacher at school.	23%	14%

remarks from teachers or other school staff. Forty-eight percent of the time, neither school staff nor other students intervened when they heard homophobic remarks. Students who reported harassment or assault said that the staff took no action or told the student to ignore it. **Twenty-seven percent of students were told to change their own behavior.**

Social support from peers is the strongest protective factor for LGBTQ youth. While family acceptance and support also decreases the emotional and psychological distress among these youth, it was not as strong as support from their peers. There is a significant correlation between the presence of a gay/straight alliances (GSA) at a school and the reduction of self-reported cases of homophobic victimization, fear for safety or hearing homophobic remarks. Yet only 16 percent of Montana schools have any type of LGBTQ support group – nationally this number is disappointingly low at 27 percent.

Data specific to LGBTQ youth in Montana are scarce. The fact that some agencies, schools and nonprofits are serving these youth well is undeniable, however, it is based on anecdotal evidence and isolated service-specific numbers. Without such data, evidence-based policies cannot be enacted and the lack of data specific to LGBTQ youth makes progress hard. Programs and policies need to be based on facts and robust evaluations need to be conducted on programs geared to help sexual minority youth.

Why LGBTQ youth face such challenges is a political/social question and despite progress can be explained in part by the sad fact of religious intolerance, institutional homophobia, sexism, gender prejudice and antiquated views. In the 2017 Montana legislative session, a bill to add civil rights protections for LGBTQ people to the Montana Human Rights Act died in committee. Opponents argued the bill would fix a nonexistent problem, encourage immoral lifestyle choices, allow sexual predators into bathrooms and would become a weapon against conservative Christians. These claims are unsubstantiated by any evidence from other states enacting such legal protection.

Policymakers can do more to protect these vulnerable young people, but political will is still lacking to do so. Until leaders with outdated homophobic attitudes make way for the younger generations, who support inclusivity and acceptance, this will remain the case.

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

ARTS EQUAL BIG BUSINESS

The Economic Impact of the Arts in Missoula

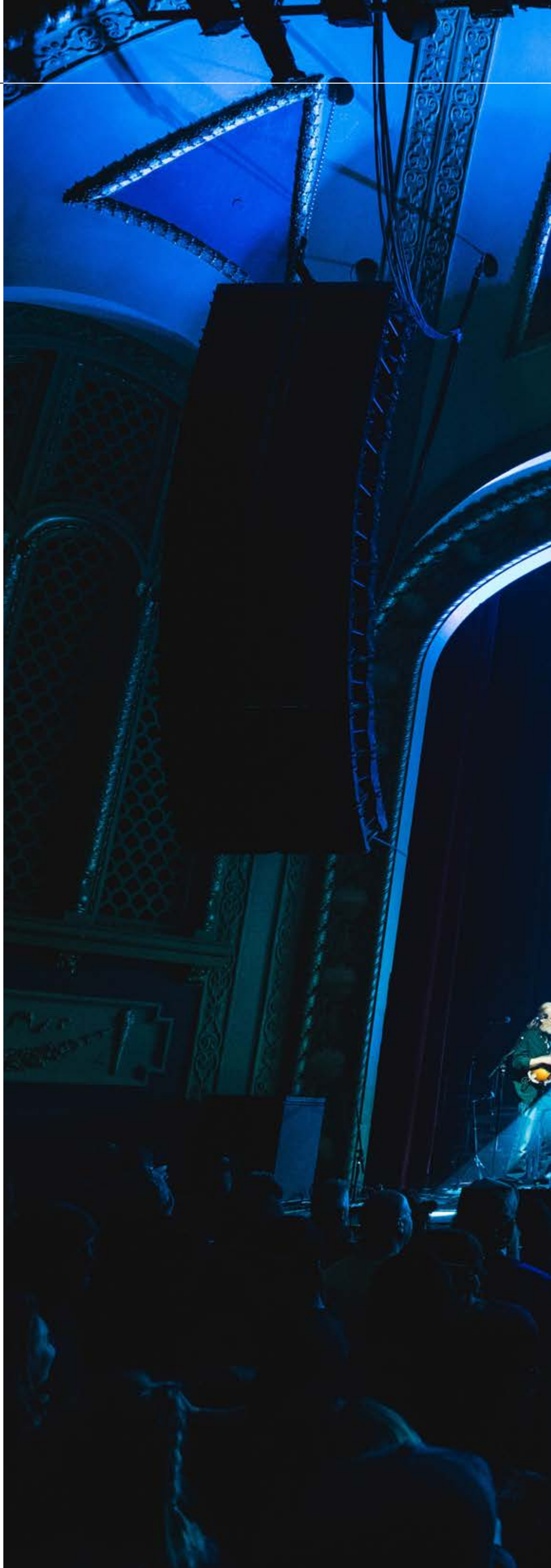
BY TOM BENSEN

It's no secret that Missoula has a vibrant arts and entertainment industry. Art shows, music concerts and movie festivals fill the city every weekend. In fact, some residents complain there are just too many events to attend.

From early spring through late fall Caras Park hosts a series of local art events, brew fests and fundraisers. Each month, First Friday Gallery Night packs the streets of downtown with visitors to the city's art galleries.

The MCT Center for the Performing Arts, Missoula Art Museum, Clay Studio of Missoula, the Downtown Dance Collective and Zootown Arts Community Center all have a full schedule of ongoing classes, exhibitions and events.

The Missoula Symphony regularly sells out performances at the 1,100 seat Dennison Theatre at the University of Montana and the Montana Museum of Art & Culture on campus has a permanent collection of 11,000 works – one of the largest in the Northwest.



Railroad Earth perform at the Wilma in Missoula.
(Neubauer Media)

Each month a different festival brings tourists to town – the Big Sky Documentary Film Festival, the Buddy DeFranco Jazz Festival, the Rocky Mountain Ballet Theatre's VIBE competition, the International Wildlife Film Festival, River City Roots Festival and the Montana Book Festival, to name a few.

Missoula is also an exporter of the arts. Known throughout the world for their "Little Red Trucks," the Missoula Children's Theatre tours communities large and small. The Montana Repertory Theatre performed in several cities in China this past spring, and the Rocky Mountain Ballet Theatre and Dolce Canto have also toured internationally.

Music fills the Garden City on a regular basis. In recent years, some of the biggest names in popular music have performed, including The Rolling Stones, Paul McCartney and Elton John. Plus, this past summer saw the opening of not one, but two outdoor music amphitheaters – both had successful inaugural seasons.

At the ribbon cutting for the new 4,000 seat KettleHouse Amphitheater, Montana Gov. Steve Bullock said that the venue brought together three great things about Missoula and western Montana: local breweries, the performing arts and a stunning landscape. He specifically mentioned the economic importance of each. At the same event Missoula

Table 1. Top 10 arts vibrant medium communities (pop. 100,000 to 1,000,000). Source: NCAR Arts Vibrancy Index III: Hotbeds of America's Arts and Culture, National Center for Arts Research.

Rank	MSA (* = metro division)	Region	2015 population
1	Pittsfield, MA	Northeast	127,828
2	Santa Fe, NM	West	148,686
3	San Rafael, CA*	West	261,221
4	Missoula, MT	West	114,181
5	Burlington-South Burlington, VT	Northeast	217,042
6	Bremerton-Silverdale, WA	West	260,131
7	Ithaca, NY	Northeast	104,926
8	Asheville, NC	South	446,840
9	Barnstable Town, MA	Northeast	214,333
10	Des Moines-West Des Moines, IA	Midwest	622,899

Table 2. Total economic impact of the nonprofit arts and culture industry in the city of Missoula (combined spending by nonprofit arts, cultural organizations and their audiences). Source: Arts and Economic Prosperity 5, Americans for the Arts.

	City of Missoula	Median of similar study regions	National median
Total industry expenditures	$54,035,493	$19,538,777	$35,750,645
Full-time equivalent jobs	1,913	512	1,131
Resident household income	$39,184,000	$11,623,000	$23,154,000
Local government revenue	$2,361,000	$905,500	$1,407,000
State government revenue	$2,005,000	$1,049,000	$1,961,000

Dancers perform during the Vienna International Ballet Experience at the University of Montana's Dennison Theatre. (Todd Goodrich)

Mayor John Engen said, "The arts community is incredibly significant to a place like Missoula."

Recently, Missoula appeared in two independent national studies that quantify the arts industry and support what many have long suspected – the arts are a big business in Missoula.

Last April, the National Center for Arts Research (NCAR) at Southern Methodist University released its annual Arts Vibrancy Index, a ranking of the nation's most vibrant arts communities. Two months later, Washington, D.C.-based Americans for the Arts released their Arts and Economic Prosperity (AEP) report. Both studies highlight the economic impact of the arts, which is significant and demonstrate their importance to the Missoula economy.

The NCAR study names Missoula as the fourth most vibrant mid-sized city in the country and addresses what it calls the "arts and culture ecosystem," a mix of arts providers (individual artists, arts and cultural organizations, arts and entertainment firms), community arts dollars (program revenue, contributions, program expenses, salaries) and government support (local, state and federal arts grants).

With 937 unique cities and towns studied, Missoula ranked high in the arts provider category and in or near the top 10 percent of all cities in most categories. In comparison, Bozeman ranked fourth in the small cities category. The overall numbers indicate that the state of Montana is certainly active and healthy regarding the arts.

MISSOULA'S NONPROFIT ARTS SECTOR IS A $54 MILLION INDUSTRY – NEARLY THREE TIMES THAT OF OTHER COMMUNITIES THE SAME SIZE.

Americans for the Arts published its first economic impact study in 1994 and have updated their study every five years since 2002. This report was limited to the nonprofit arts sector and does not include production companies, art galleries or individual artists.

Clinton Fearon and the Boogie Brown Band at River City Roots Festival in downtown Missoula. (Athena Lonsdale, Missoula Downtown Association)

Table 3. Total economic impact of spending by nonprofit arts and cultural audiences in the city of Missoula (excluding the cost of event admission). Source: Arts and Economic Prosperity 5, Americans for the Arts.

	City of Missoula	Median of similar study regions	National median
Total industry expenditures	$33,643,180	$10,546,708	$18,871,511
Full-time equivalent jobs	1,115	222	430
Resident household income	$22,485,000	$4,413,000	$8,402,500
Local government revenue	$1,755,000	$432,000	$898,000
State government revenue	$1,092,000	$565,000	$1,007,500

Arts and Economic Prosperity 5 was their largest study yet, documenting 341 communities and regions across the country. It measured both direct spending by nonprofit organizations (salaries, program production, marketing, and other goods and services) and indirect impact by audiences (event related spending, such as restaurants, hotels and retail goods).

Missoula's nonprofit arts sector is a $54 million industry – nearly three times that of other communities the same size. Of that, $20.4 million is direct impact and $33.6 million represented spending by audiences beyond the cost of admission.

In addition, Missoula's nonprofit arts sector contributed $39.2 million in household income and $4.4 million is state and local revenue in 2015 – supporting 1,913 full-time jobs. That number is comparable to Missoula's more recognizable employers, specifically the University of Montana, Community Medical Center and St. Patrick Hospital.

AEP also measured audience spending in 2015. The average attendee to a Missoula arts event spent $25.99 beyond the cost of admission on food, beverages, transportation, lodging, clothing, gifts and other related goods. Out-of-town visitors, who represent 20 percent of this audience, spent $53.45 per an arts event – more than twice what residents spent.

The arts continue to spur tourism with events like the 2017 Big Sky Documentary Film Festival, which drew 2,817 out-of-town participants and spectators from more than 20 cities in seven countries. The 2016 International Choral Festival brought 1,091 out-of-town and foreign visitors to the city for the four-day festival that occurs every three years. All these visitors pump dollars into the local economy.

Overall, these two studies highlight that the arts, while decentralized and often overlooked as an economic sector, are a big business in Missoula and provide tangible benefits beyond their entertainment value.

A recent poll by Americans for the Arts indicated that 87 percent of people believe arts and culture improve their quality of life and Missoula provides a fine example. The arts inspire, delight and unite us, making us all more creative, productive and interesting. They are a fundamental component of our humanity.

It is often said that the arts are food for the soul. In this case, the arts also put food on the table of Missoulians.

Tom Bensen is executive director of Arts Missoula. If you'd like to learn more about Arts Missoula, visit www.artsmissoula.org.

The cast of "Mary Poppins" perform at the Missoula Community Theatre. (Megan Brown)

MONTANA'S REVENUE WOES

What's Causing the State's Tax Collection Shortfall?

BY PATRICK M. BARKEY

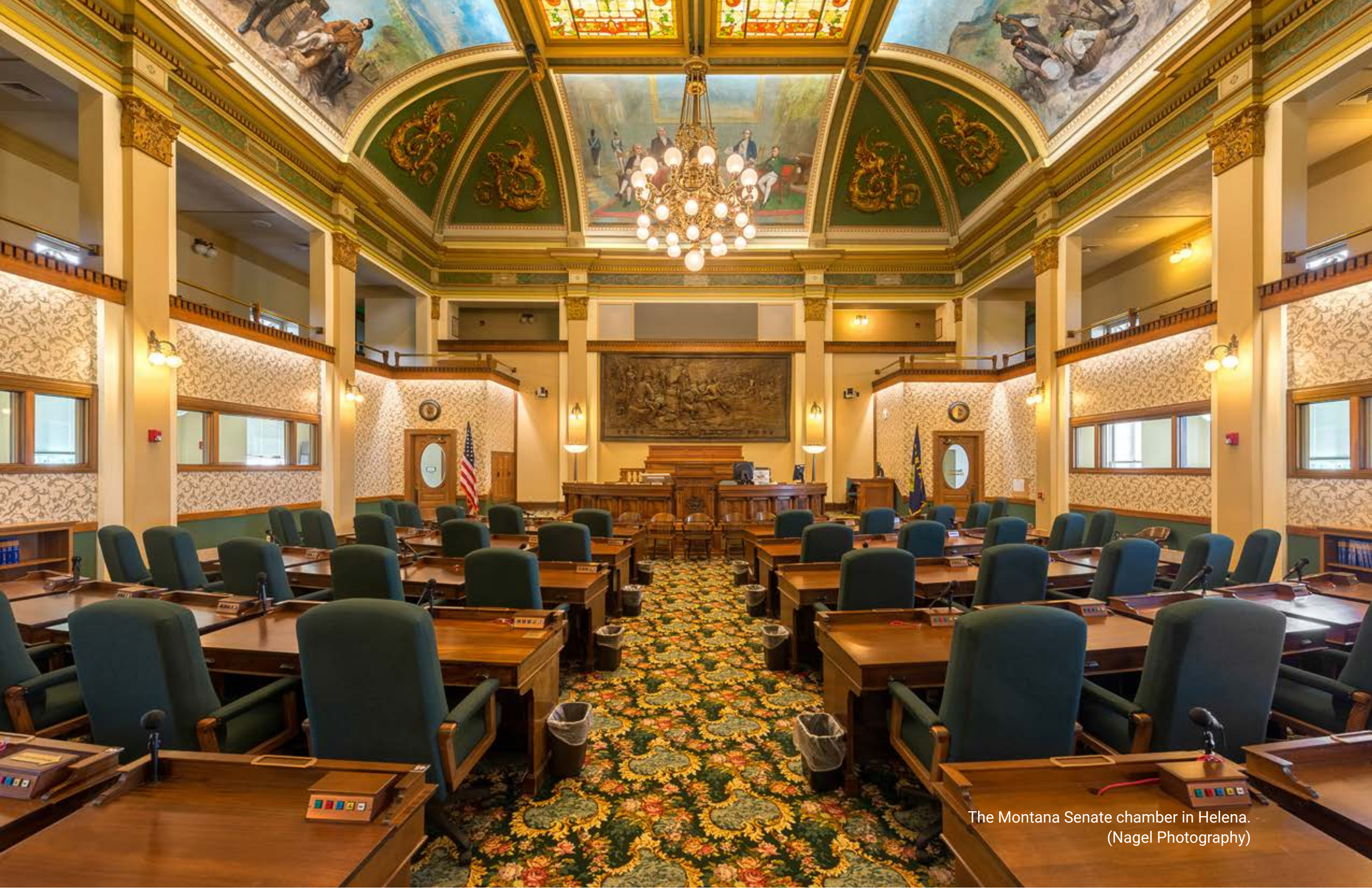
There has always been a lot of confusion in discussions about tax revenues in Helena. More accurately, there is confusion when these discussions circulate outside the political community in our state capital. Most of the confusion centers around language. A spending "cut" in budget speak usually means a lower rate of growth than previously planned. Revenues which grow less than forecasted are referred to as "down." Thus, the news about revenues, which ultimately required a special legislative session last November, requires some interpretation.

The discussion of declines and shortfalls in Montana tax revenues is more than semantics. General fund revenues are extraordinarily weak. On a fiscal year basis, general fund collections – encompassing the entire suite of state taxes and fees not earmarked for specific use – managed to grow by just $20 million in 2017. On a base of $2.1 billion, that's roughly a tenth of a percentage point growth. The first four months of the new fiscal year have been a bit better with revenues up about 2.4 percent. That's mostly because the July-October period of 2016, which was used as a basis of comparison for this calculation, was extraordinarily weak. If we compare recent collections to two years ago, the growth is just 1 percent.

This stark reality has led to a new kind of confusion. Why aren't revenues coming in as they should be? Behind this question is the premise that the economy is strong and thus the underperformance of revenue collections reveals a flaw in our tax system, not weakness in the base. As a matter of logic this is certainly possible, but calling a forecast right and the data wrong is not something that forecasters commonly do.

The Heart of the Matter: The Personal Income Tax

There are 32 taxes, fees and other sources of revenue that account for about 98 percent of all Montana general fund revenue. Of those, the personal income tax accounts for more



The Montana Senate chamber in Helena. (Nagel Photography)

than half. In some years, big swings in more volatile taxes have made general fund revenues surge and wane. But the story behind this recent sluggish revenue performance has been stagnation in the receipts of Montana's most important tax.

Are personal income collections tracking the economy? A glance at Figure 1, which displays income tax collections and personal income for each fiscal year 2002-17 along a regression line, reveals that tracking is less than perfect. While there is a close fit between income growth and tax collections, there have been some significant departures from what you might expect at different points in history.

In the prerecession years of 2005-07, income tax receipts were stronger than income growth would seem to support. There was a run of errors in the opposite direction following the recession, when in 2010-12 revenues fell substantially short of what personal income growth would predict. And at the upper right edge of the graph, you can see that 2017 collections lay exactly on the line. By this measure 2017 revenues were exactly consistent with the historical relationship between taxes and the economy.

This is hardly the last word, of course. The considerable deviations from the tax/income trend relationship over recent years calls into question exactly why departures that cause revenue to over- or underperform take place. With the increasing importance of the retired population, this undoubtedly reflects the significance of taxable retirement account drawdowns, which are not considered current personal income. Also, the 2017 data on personal income are preliminary estimates, subject to future revisions that could substantially change the story told above.

The Changing Composition of Income Growth

This finding suggests that the root of the issue for personal income tax collections lies in the trends in the base. For this analysis it is preferable to deal with annual personal income data from the U.S. Bureau of Economic Analysis, rather than quarterly information, because it has already undergone some revision and is based on more complete source information. This necessitates focusing on calendar years, which do not exactly correspond to the state's fiscal year data.

Personal income, in the main, consists of three components: 1) earnings, which is income derived from employment; 2) unearned income, consisting of dividends, interest, rent and royalties; and 3) transfer payments, which are largely payments from government programs, such as Social Security,

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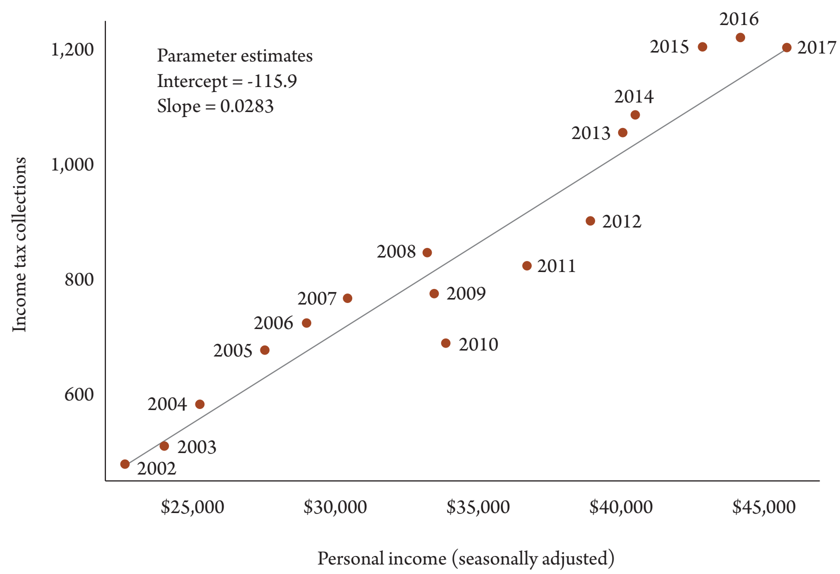
Figure 1. Income tax receipts vs. personal income. Sources: U.S. Bureau of Economic Analysis and Montana Department of Revenue.



disability or unemployment insurance. There are other pieces as well, but these are less important. Of the three, the most important is earnings, which comprises about 60 percent of the total.

After surging in 2015, earnings growth in Montana fell to 1.2 percent in 2016 (Figure 2). There was also a steep decline in growth of unearned income in Montana in 2016 after two years of heady increases. This may reflect declines in energy-related royalty payments. Only the transfer payment category, which accounts for about 18 percent of personal income, saw a surge in growth. Many pieces of the latter category are not subject to tax. Overall, personal income growth was just 2.1 percent in 2016.

A closer look at the factors behind slow earnings growth reveals more that can explain the trends in income tax collections. Earnings can also be broken down into three components: 1) wages and salaries; 2) other labor income, consisting primarily of benefits and pension fund contributions made by employers; and 3) business proprietor income.

Of the three the largest, wages and salaries has been performing best (Figure 3), registering 3.1 percent in the calendar year 2016. This is roughly consistent with Montana income tax withholding, the sole bright spot in the income tax collection reports, which grew by 2.8 percent in the same year. The most volatile component of earnings has been business proprietor income, which turned from strong growth in 2015 to a decline of 5.6 percent in 2016.

It has been the other components of income tax collections – estimated payments, refunds, final payments – which led to overall declining revenues in 2017. The big surprise for

Montana generally comes in the spring, when most taxpayers settle up on their previous tax year liabilities. For both the U.S. as a whole, as well as in Montana, both final payments and refunds, which are negative revenue for the treasury, were bad in the spring of 2017 compared to the spring of the preceding year (Figure 4).

Other Explanations for Revenue Stagnation

While there is a consistency between income growth and income tax receipts for fiscal year 2017, the far-from-perfect relationship between the two measures over the past 15 years leaves room for other explanations for stagnant receipts. These include:

- **The Trump effect.** Since business owners do have discretion in deciding what year to record their income, the expectation of lower tax rates tomorrow could make wealthier individuals reduce their tax liabilities today. Past tax law changes at the federal level, such as changes in the tax treatment of capital gains, have produced dramatic

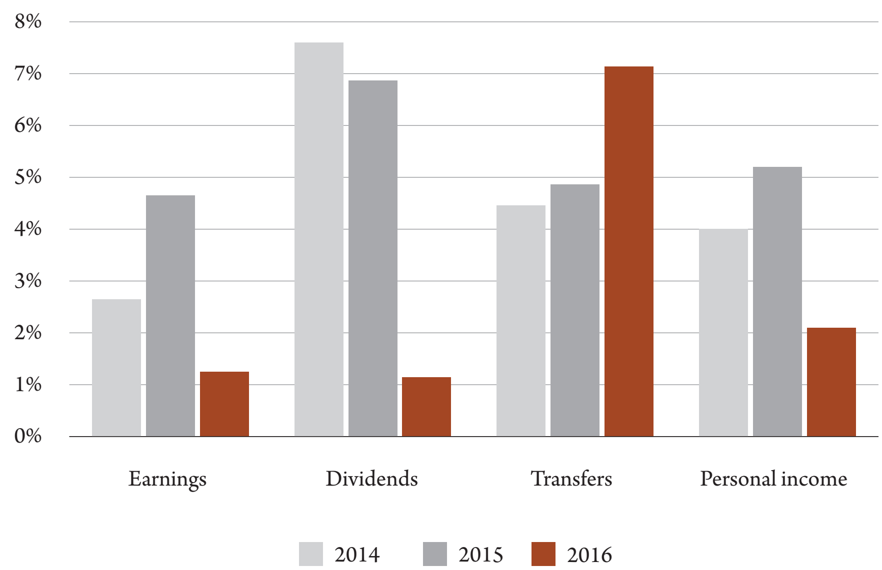


Figure 2. Percentage change in Montana personal income, 2014-16. Source: U.S. Bureau of Economic Analysis.

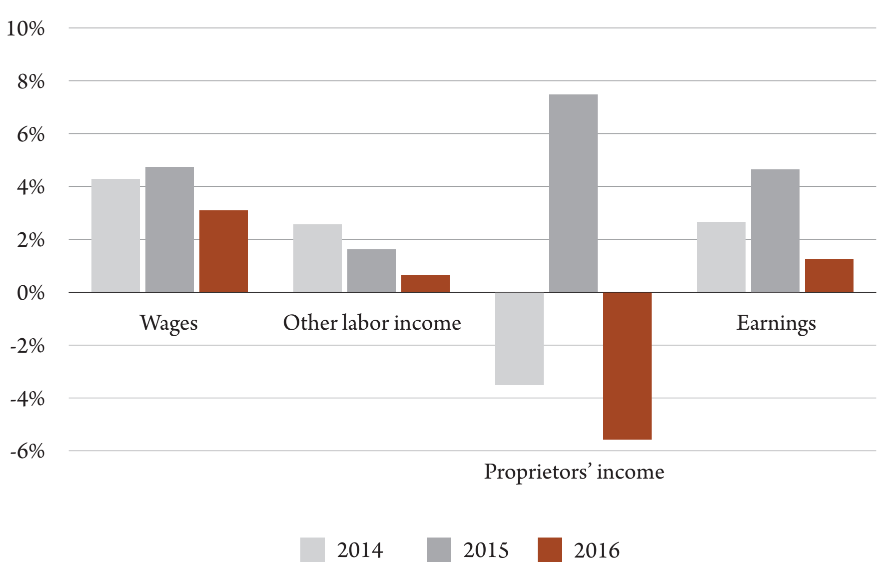
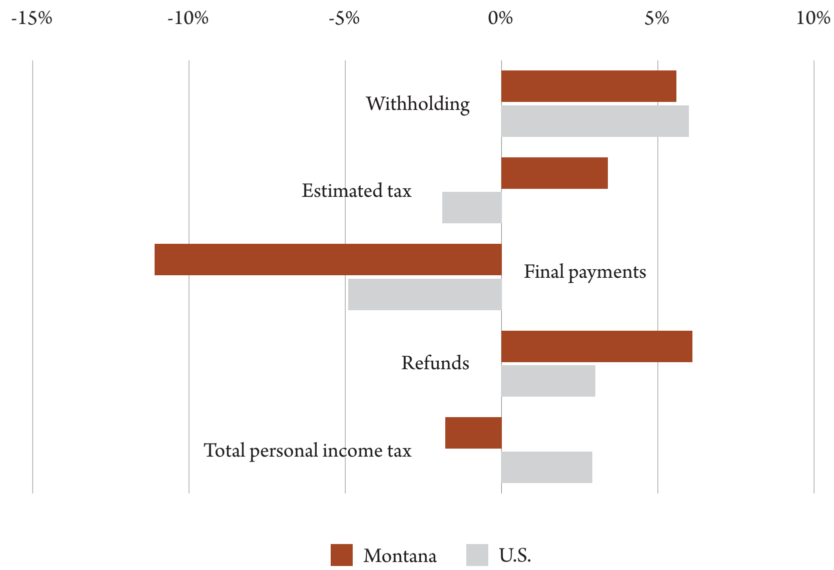


Figure 3. Percent change in Montana earnings, 2014-16. Source: U.S. Bureau of Economic Analysis.

Figure 4. Percent change in income tax collections, Jan.-May 2017 vs. Jan.-May 2016. Source: Rockefeller Institute.



changes around the tax change dates. The implication is that the recent weakness will be offset by unexpectedly higher revenues next year.

- **Shifts in retirement disbursements.** Not much is understood about the timing and behavior of disbursements from retirement accounts, which can cause changes in tax collections independent of other economic activity. Since there is withholding on many disbursements, this explanation is not entirely consistent with the observed behavior of tax receipts.

- **The new economy.** In an economy with increasing higher rates of mobility, telecommuting and online commerce, higher income households have more freedom to declare income in lower or zero income taxes. The implication is that Montana should be considering whether its tax system can adapt to this change to prevent the erosion of its base.

One last explanation is perhaps the most conventional one. That is to examine the income tax base.

The end of the oil boom in the Bakken affected state revenues in ways beyond the oil and gas severance tax. The loss of high wage jobs, reduced hours, reduced royalties and closures of business as the oil business contracted were all factor in Montana's revenue woes. The current situation for Montana's farmers and ranchers, beset by drought, wildfires and low prices, is another challenge that will certainly show up in the state's bottom line.

There is no escaping the fact that the revenue forecast adopted by the Legislature overshot the actual trajectory of revenues. There is no shame in the error either – forecasting is a tough business and the events that produced the weaker revenue trajectory are still not fully understood. But the big picture descriptions of economic activity – personal income, earnings and wages – get us most of the way there.

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