

# A Profile of Montana's High Tech Industries

February 2018

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## Acknowledgements

The members of the Montana High Tech Business Alliance worked hard to provide the thorough information presented here, for that they are due sincere thanks.

The sound counsel of the board of directors of the Montana High Tech Business Alliance commissioned this report and provided a clear vision for its implementation. They are:

Lance Tinseth, Chief Information Officer, Murdoch's Home and Ranch Supply, Bozeman (Board Chair)

Rob Gilmore, Executive Director, Northern Rocky Mountain Economic Development District, Bozeman

David Hayden, Co-founder, Service Target, Bozeman

Liz Marchi, Founder, Frontier Angel Fund, Polson

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Greg Gianforte, Founder, RightNow Technologies, U.S. Congressman, State of Montana, Bozeman

The Montana High Tech Business Alliance Board of Advisors also provided vital input. They are:

John Adams, CIO / VP / Director of Information Technology, Kampgrounds of America, Billings

Tim Austin, Senior Vice President, Chief Operations Officer, D.A. Davidson, Great Falls

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Tom Spika, CEO, Spika Welding, Lewistown  
Tom Stergios, Vice President, Advanced Technology Group, Missoula  
Will Swearingen, Executive Director, TechLink, Bozeman  
Jimmy Talarico, Business Development, CTA Architects and Engineers, Bozeman  
David Thompson, Director Engineering, SoFi, Helena  
Jeanne Vold, Officer of Business Technology, NorthWestern Energy, Butte  
Shon Wedde, Senior Director, Product Management, Oracle, Bozeman  
Steve Wheeler, President, First Security Bank, Bozeman

This study would not have been possible, nor would it have achieved so much without patience and tireless efforts of Ms. Christina Henderson, executive director of the Montana High Tech Business Alliance. In addition, the staff of the Alliance, Katy Spence, Margo Schmidt, and Jillian Davis put forth excellent effort in guiding this project to a successful conclusion.

Finally, Bureau of Business and Economic Research is grateful to Dr. Yasuyuki Motoyama of the University of Kansas for his collaboration on this project.

Dr. Patrick Barkey  
Director  
Bureau of Business and Economic Research, University of Montana  
February 13, 2018

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## Key Findings

This is the fourth annual report on the high tech industry in the state of Montana. The Montana High Tech Business Alliance (HTBA), formed in 2014, is a member-driven group of high tech businesses and other organizations statewide. The Alliance asked the University of Montana Bureau of Business and Economic Research (BBER) to collect information and insights from its members so that a better assessment of its economic footprint and its prospects for continued growth could be made. This report presents the findings of that research. The fourth iteration of this study adds new questions focused on hiring and the high tech labor force.

The BBER finds that on the basis of 134 HTBA member firm and 55 nonmember firm survey completions:

- Alliance member firms and responding nonmember high tech firms report quite similar characteristics and concerns, which adds credibility and depth to the findings presented in this study;
- Alliance members expect to add a very significant 1,100 new jobs in 2018, an 18.5% increase, and a much stronger job growth than has occurred in the overall economy. Responding nonmember firms will add an additional 190 jobs;
- Jobs at businesses who are Alliance members pay considerably more than jobs elsewhere in the economy. The median annual salary at HTBA businesses (\$63,000) and nonmember businesses (\$54,800) was twice as large as the median earning per Montana worker as measured by the Census Bureau's American Community Survey;
- By essentially any measure, growth projected in member and nonmember high tech businesses vastly exceeds average statewide economic growth. Employment and revenues are expected to grow at rates that are nearly nine times the BBER's projection of statewide growth for member firms, and four times projected statewide growth for nonmember firms;
- The high tech businesses that are members of HTBA expect to make at least \$86 million in capital expenditures at their Montana facilities in 2017. This represents an increase from anticipated 2017 major capital expenditures (\$78 million);
- High tech companies, HTBA members and nonmembers, will raise wage rates by 5% in 2017, significantly faster than the 1.6% rate of growth realized in wage rates of all Montana employers in the most recent data;
- The Montana-based activities of HTBA members were responsible for \$1.4 billion in gross sales in 2017, a significant increase over 2016 revenue (\$1.1 billion). Responding nonmember firms generated \$267 million in 2017 gross sales;
- For the fourth year in a row HTBA members, and for two years running for nonmembers, reported that Montana's quality of life – its lifestyle, the work/life balance available here, the recreation opportunities, and the beauty of the landscape – provides them a significant advantage in business;
- HTBA members and nonmembers clearly report that attracting talent and hiring skilled technology workers is their firm's largest impediment to faster growth. Visibility to customers was also recognized as an impediment to faster growth by both member and nonmember firms.

- Substantially more high tech businesses, 28% of members and 48% of nonmembers, reported that it was harder to hire qualified new employees in Montana in 2017 than reported it was easier in 2017. The Alliance's largest firms, in terms of revenue, were more likely to report increased difficulty hiring in 2017 than were Alliance firms with lower revenue.

In addition to survey research, BBER also conducted research using data from federal statistical agencies. While these data can only be used as a broad benchmark of high tech economic activity, they are suggestive of the size of the high tech activity of businesses who are not members of the Alliance. These data indicate that activity in the Montana economy that fits a published high tech definition used in national-level research comprises about 5.4% of total wages, paying wages that are roughly double the overall average and higher than all but three other Montana industries. Based on this analysis, BBER concludes that the aggregated responses of HTBA members reported here greatly understate the actual size of industry activity in Montana. While no precise estimate is possible, it is likely that the true size of the industry is 2-3 times as large as what is reported in the survey results in this study.

## Background of the Project

### The Montana High Tech Business Alliance

Launched in April 2014, the Montana High Tech Business Alliance is a statewide membership organization focused on creating more high tech jobs in Montana. The Alliance currently has 320 member firms.

Full membership in the Alliance is available to for-profit firms engaged in high tech and manufacturing that have operations in Montana. High tech is defined as firms that make or sell high tech products, provide professional services or consulting related to high tech, conduct e-commerce, or engage in manufacturing using skilled labor.

Organizations that are not in the high tech industry such as law firms, banks, or economic development agencies may join as affiliate members.

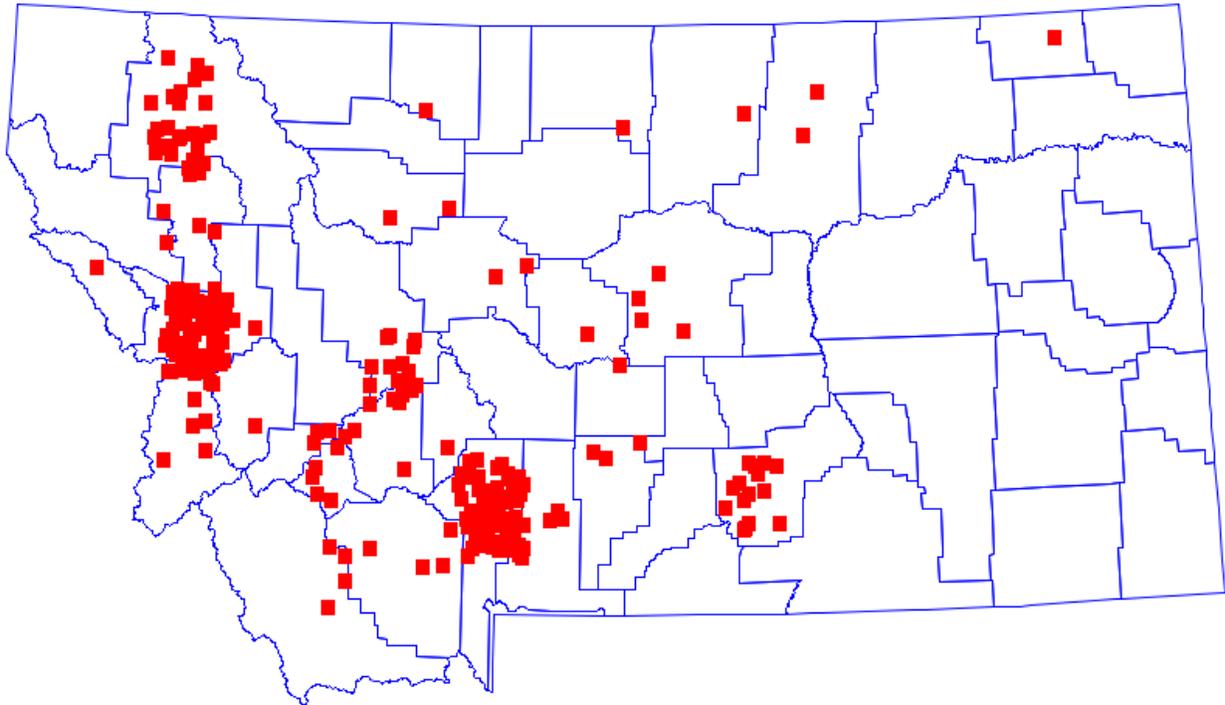
The Alliance is recognized as a 501(c)(6) nonprofit trade association.

Benefits include:

- Connecting with tech leaders across the state at quarterly networking events.
- Promoting your company and Montana's strong high tech and manufacturing sector through a biweekly e-newsletter, website and other communications channels.
- Accelerating growth by recruiting through our high tech jobs portal.

The Alliance's members are located throughout the state of Montana, with more prominent concentrations found in Gallatin and Missoula counties, as indicated in Figure 1.

**Figure 1: Locations of 2018 HTBA Members**



## **The Bureau of Business and Economic Research**

The Bureau of Business and Economic Research is the primary research unit of the University of Montana's School of Business Administration. Begun in 1948, the Bureau regularly participates in forecasting and economic analysis, survey research, industry studies, and information dissemination. Since its founding, BBER has conducted hundreds of survey research projects of both businesses and households, utilizing its state-of-the-art survey center.

## **About This Study**

This is the fourth annual study conducted in order to objectively and accurately assesses the characteristics and the concerns of members of the Montana High Tech Business Alliance. Its findings illustrate the rapidly evolving activities and concerns of the membership. It also serves as an important assessment of one of Montana's fastest-growing and highest-paying industry clusters, addressing a gap in information that is available from public sources. Because this is the fourth replication of this study, it is possible to observe some changes that have occurred among Alliance membership and in the high tech industry as a whole.

This study also examines the characteristics and concerns of nonmember high tech firms located in Montana. Including nonmember firms in the study provides data users a useful glimpse into the broader population of high tech firms. Nonmember data also provide helpful context that broadens data users' understanding of Alliance member firms.

We begin this report with some insights on high tech activity in Montana that draw from public data on industry aggregates. We then turn to the findings of the survey of HTBA members, including data gathered on business activity as well as responses to open-ended questions on their needs and concerns. Information on the methods used to derive the results is found in an appendix.

The data presented here represent aggregated information on all HTBA members. BBER fully respects the privacy of individual companies, and no data that might reveal individual company information or viewpoints is contained in this report. For this study 270 of the 320 member firms, only those that work in the areas of high tech or manufacturing, were invited to participate. In addition, 290 nonmember high tech firms were invited to participate.

This year's survey contains new additions. First, the survey adds questions on the ease or difficulty of hiring in Montana and of obtaining new capital in Montana. Next, the survey adds an open-ended question exploring what members would like to get out of Alliance membership. Dr. Yasuyuki Motoyama of the University of Kansas conducted in-depth analysis of the data obtained by this survey on hiring and obtaining capital. Those results are also reported below. Finally, trends in wages, employment, revenue, and capital expenditures over the four years the survey has been conducted are examined at the end of this report.

## Measuring High Tech Business Activity

In this study we present the results of a survey of high tech businesses in Montana. It is instructive, however, to get a sense of the industry from the federal government statistical data before turning to the survey-based results. Adopting a nationally derived definition of high tech (defined in the paragraphs that follow), the data suggest that the presence of high tech economic activity in Montana is considerable, as shown below in Table 1. To put these broad estimates into context, Montana high tech companies accounted for 5.4% of total Montana wages, 3.3% of total Montana payroll jobs, and 5.3% of Montana business establishments in 2017. The data suggest that high tech companies here are relatively small-sized, but pay wages well above the state’s overall average.

**Table 1: Characteristics of Montana’s High Tech Industries, 2017**

Category	2017	2016	2017 Change
<b>Wages (\$ mill.)</b>	\$1,032.89	\$971.40	6.3%
<b>Employment</b>	15,069	14,581	3.3%
<b>Establishments</b>	2,368	2,326	1.8%
<b>Wages per Job</b>	\$68,544	\$66,622	2.9%
<b>Jobs per establishment</b>	6.36	6.27	1.5%

Note: Figures derived using Hecker (2005) definition of industry described below. Source: U.S. Bureau of Labor Statistics.

While broad, the estimates in Table 1 suggest that the high tech industry is a significant economic contributor. Furthermore, the publicly available data suggest that the industry’s presence is growing. When compared to 2016, the total number of establishments in the state grew by 1.8% in 2017, while wages and employment grew by 6.3% and 3.3%, respectively. Montana’s high tech firms are becoming more numerous. They also are paying higher wages. Wages per job grew by 2.9% in 2017.

The data also suggest that Montana’s high tech employers pay considerably more in 2017 than the state average and rank among the highest paying Montana industries, as shown in Figure 2. The average wages per job in Montana high tech companies was \$68,554 per year, or roughly two-thirds higher than the state average of \$41,775 per year for all Montana industries. The wages do not include the value of benefits. As is clear from Figure 2 below, only three industries in the state paid higher average wages.

Figure 2: Montana Earnings per Job



These data can only be considered as suggestive of the size of Montana’s high tech industry. Much more refined analysis and better defined data are needed to isolate and identify the characteristics of our state’s high tech producers. But the data clearly indicate that Montana’s high tech sector is a sizable source of economic activity in the state.

The direct measurement of high tech business activity in the economy has always been hampered by two issues: 1) the lack of a consistent definition, and 2) the shortcomings of publicly available data in adequately capturing whatever definitions are used. Simply put, estimates of high tech business activity derived from the standard sources for economic data shown above – the federal government statistical agencies – miss some activities that are clearly high tech and count other activities that are not.

A study by the U.S. Bureau of Labor Statistics in 2005 used a very conservative definition of the high tech industry, detailed in Table 2, to track national high tech growth. It was based on a national-level analysis that considered industries to be high tech if they:

- Employed a high proportion of scientists, engineers, and technicians,
- Had a high proportion of R&D employment,
- Produced a high tech product, or
- Used high tech production methods.

**Table 2: 2005 BLS-Defined High Tech Industries**

<b>NAICS Code</b>	<b>Definition</b>
<b>3254</b>	Pharmaceutical and medicine manufacturing
<b>3341</b>	Computer and peripheral equipment manufacturing
<b>3342</b>	Communications equipment manufacturing
<b>3344</b>	Semiconductor and electronic component manufacturing
<b>3345</b>	Electronic instrument manufacturing
<b>3364</b>	Aerospace product and parts manufacturing
<b>5112</b>	Software publishers
<b>516</b>	Internet publishing and broadcasting
<b>517</b>	Telecommunications
<b>518</b>	Data processing, hosting and related services
<b>5413</b>	Architectural and engineering services
<b>5415</b>	Computer systems design and related services
<b>5417</b>	Scientific research and development services

Source: Hecker (2005).

We use this definition to identify high tech in the public data. Clearly such discrete classifications miss some high tech firms and include others that are not high tech. It is certain that the classification does not match the composition of HTBA membership. Thus, we must examine the survey results to more fully reflect the composition of the high tech industry in Montana.

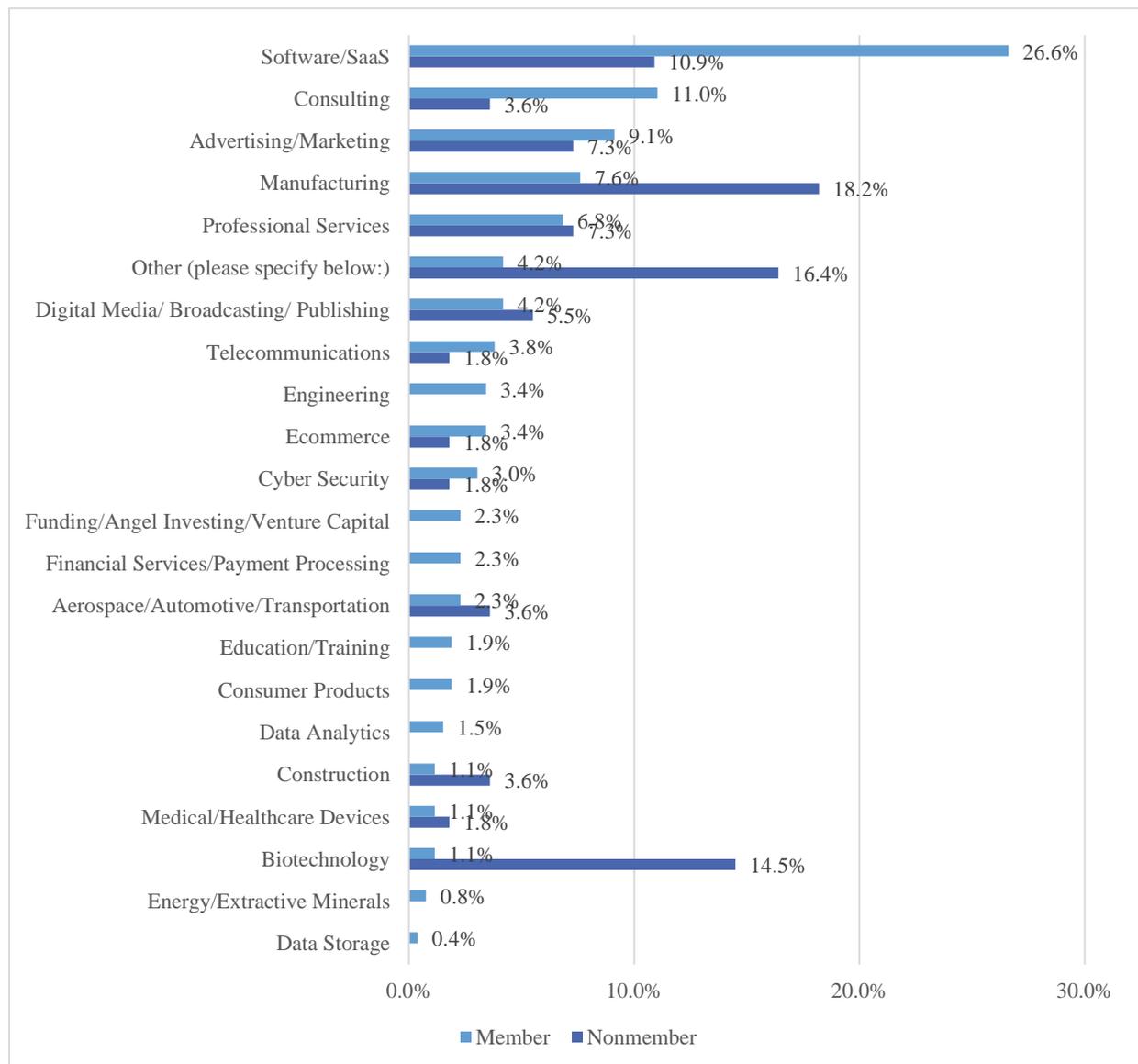
## Results

The paragraphs that follow present the findings of the Montana High Tech Business Alliance that was conducted from December 2017 to February 2018. This section of the report is organized in the order that the questions appeared in the questionnaire, and the text of each question is provided to assist the reader.

### Q1. Which high tech sub-industry best represents your company?

Figure 3 describes the members of the High Tech Business Alliance as of December 2017 by their type of business. HTBA consists of businesses from a wide range of industry sectors. Software, consulting, and high tech advertising/marketing firms are the three most common firm types in the Alliance. Among nonmember firms, manufacturing and biotechnology were the most common firm types.

Figure 3: High Tech Business Types

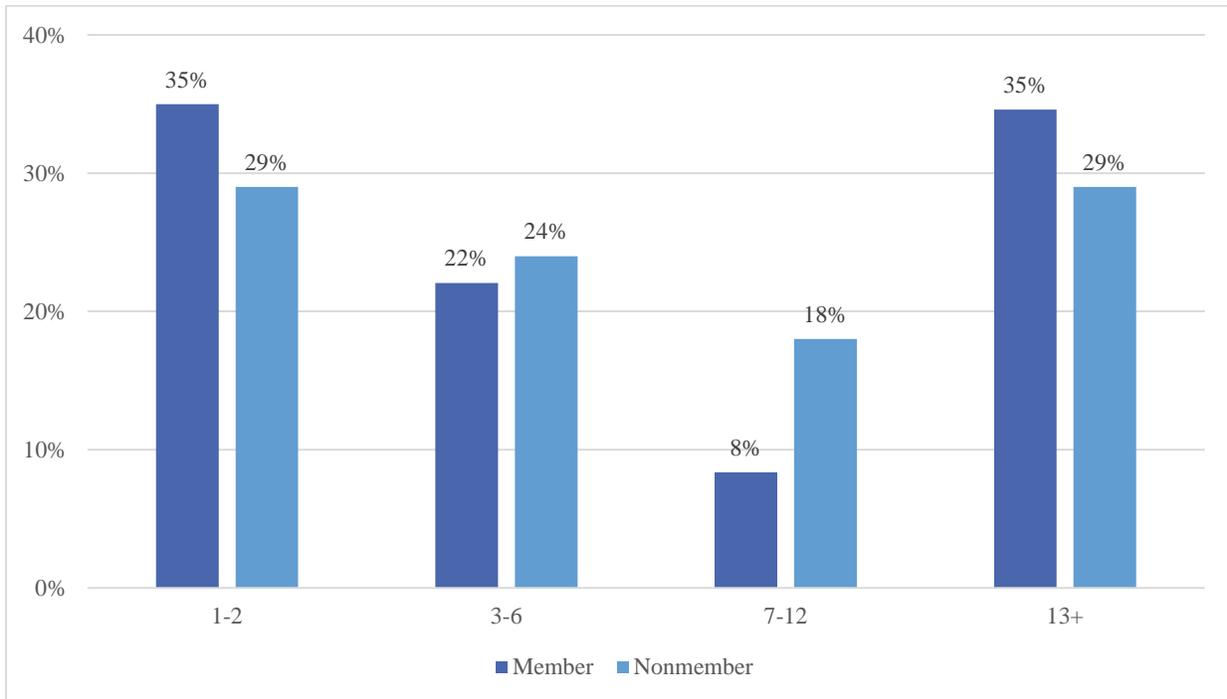


**Q2. How many employees does your company have in total?**

**Q3. How many employees does your company have in Montana?**

Nearly two-thirds (65%) of Alliance high tech firms employed 12 or fewer people in Montana. Figure 4 describes the distribution of employment sizes among the Montana High Tech Alliance. HTBA members employed 5,958 Montana workers as of December 2017. Responding nonmember firms employed an additional 1,211 Montana workers.

**Figure 4: Employment Distribution among High Tech Firms in Montana**

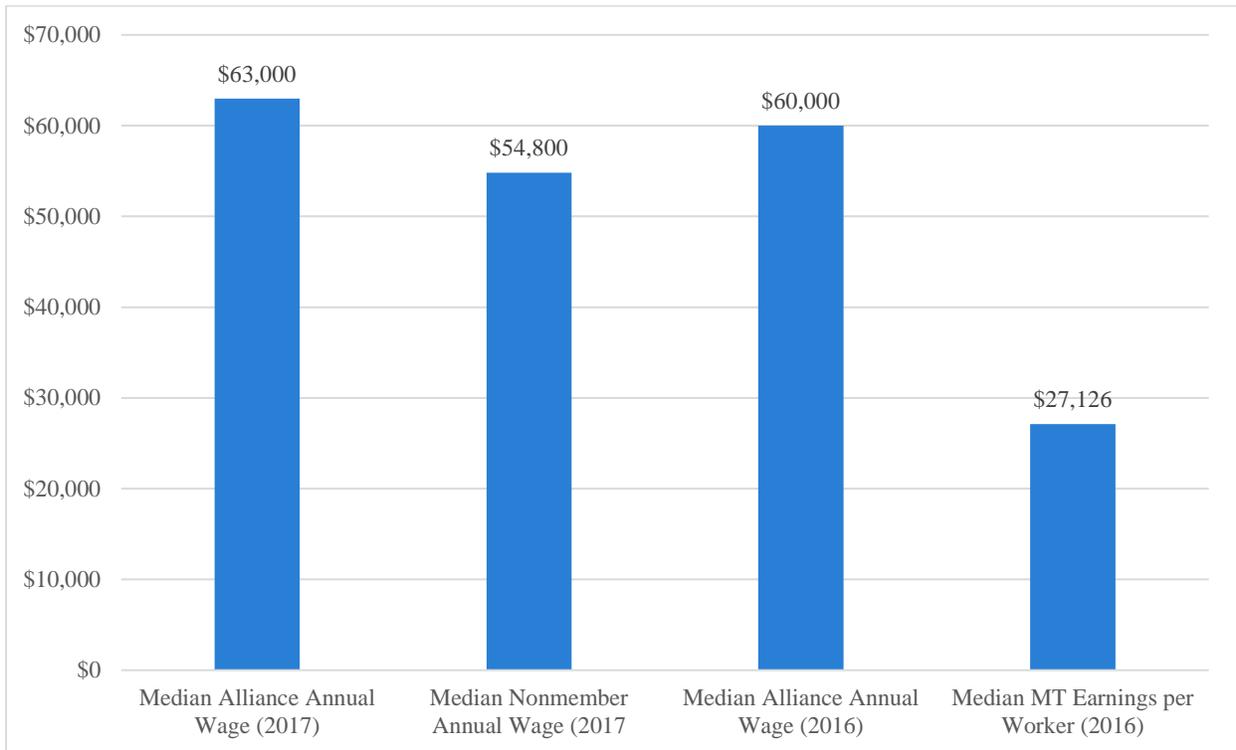


**2017 Changes.** The distribution of large versus small firms in the Alliance changed from 2016 to 2017. The proportion of larger firms, those with 13+ employees, grew, from 25% in 2016 to 35% in 2017. Likewise, the proportion of smaller firms dropped from 75% in 2016 to 65% in 2017. Readers should keep in mind that again this year the Alliance grew in 2017. The Alliance consisted of 300 member firms in 2016 and 320 member firms in 2017. The employment distribution of the nonmember firms was similar to that of member firms.

#### Q4. What is your company's average annual Montana wage?

The members of the HTBA and responding nonmember firms provide high paying jobs for Montanans. Figure 5 below illustrates that HTBA jobs and nonmember high tech jobs pay *double* Montana's median annual earnings per worker.

Figure 5: HTBA Annual Wages



**2017 Changes.** Median annual wages paid by Alliance member firms increased by 5% from 2016 to 2017. The increase in median Alliance wages is higher than the total wage increase of 2.9% found in publically available data for all 2,368 Montana high tech firms.<sup>1</sup> Nonetheless, Alliance annual wages increased at a rate that significantly exceed the 2017 national inflation rate of 2.1%.<sup>2</sup>

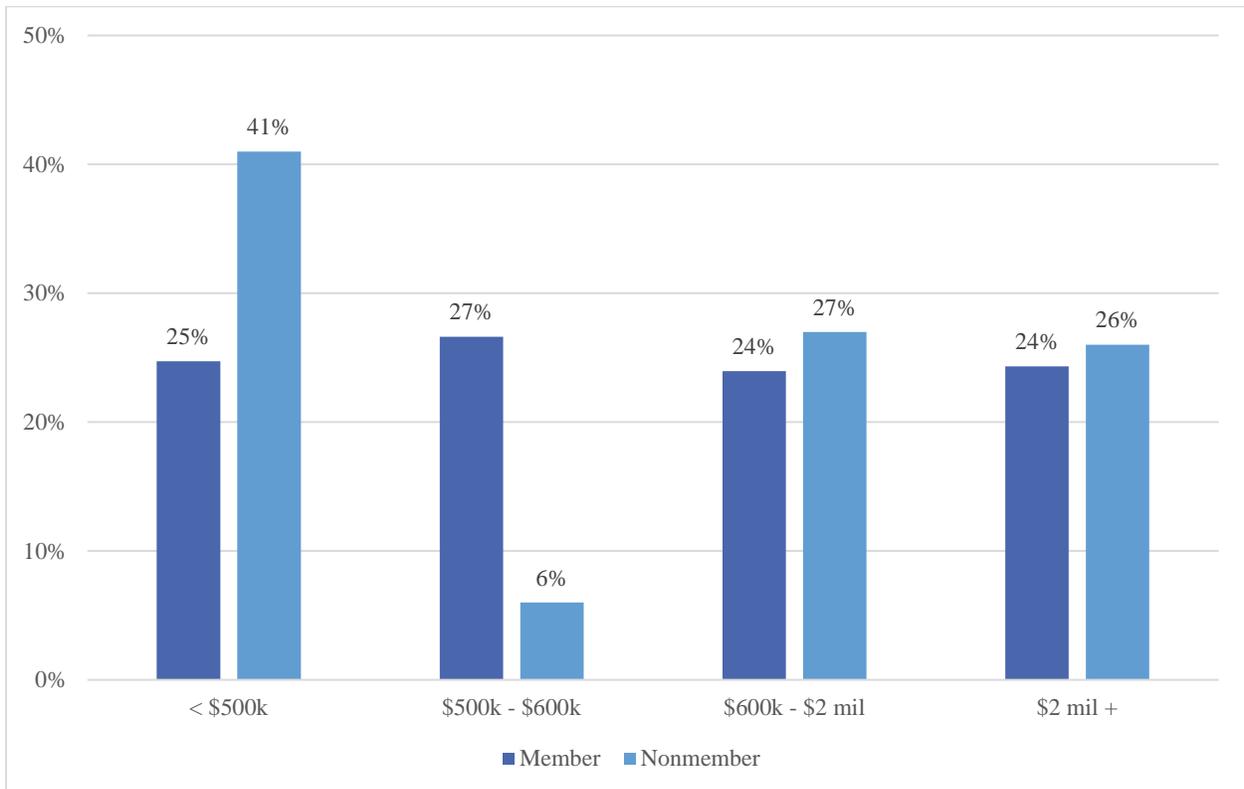
<sup>1</sup> Sources: UM Bureau of Business and Economic Research and U.S. Bureau of Labor Statistics.

<sup>2</sup> Source: U.S. Bureau of Labor Statistics, CPI Detailed Report for December 2017.

### Q5. What were your company's annual revenues in 2017?

Montana HTBA companies may also be considered a very important component of Montana's economy in terms of revenue. The Montana-based portions of the HTBA firms generated an estimated \$1.4 billion in 2017 revenue. Responding nonmember firms generated an additional \$267 million in Montana-based revenue during 2017. Examining company revenue, Figure 6 shows that HTBA members range from start-ups with very little, if any, revenue to Fortune 500 companies.

Figure 6: 2017 HTBA Revenue by Firm

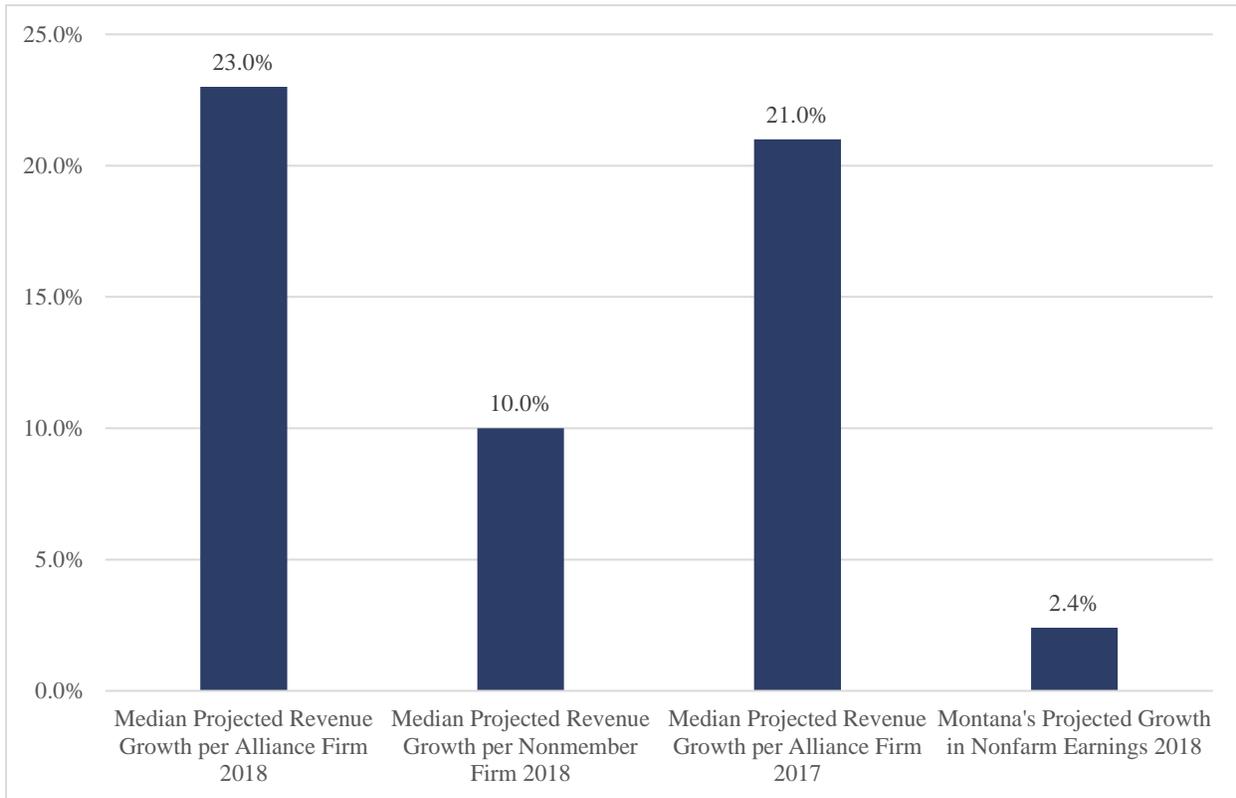


**2017 Changes.** Total Alliance firm revenue increased from \$1.092 billion in 2016 to \$1.4 billion in 2017. This increase suggests that Alliance firms are growing quickly. This observation must be tempered by a bit by recognizing that again in 2017 the number of firms in the Alliance also grew. In addition, a significant number of member and nonmember firms chose not to answer this question. This respondent choice required UM BBER to impute the missing responses. For this reason, readers should use the data presented for question 5 with some caution.

**Q6. By what percentage do you estimate your company's annual revenues will increase or decrease next year (2017)?**

Montana's high tech companies still anticipate growing very quickly. Figure 7 demonstrates that Montana HTBA firms anticipate growing more than nine times faster than the Montana economy as a whole. Responding nonmember firms anticipate growing at four times the rate of the entire Montana economy.

**Figure 7: HTBA Growth Rate**

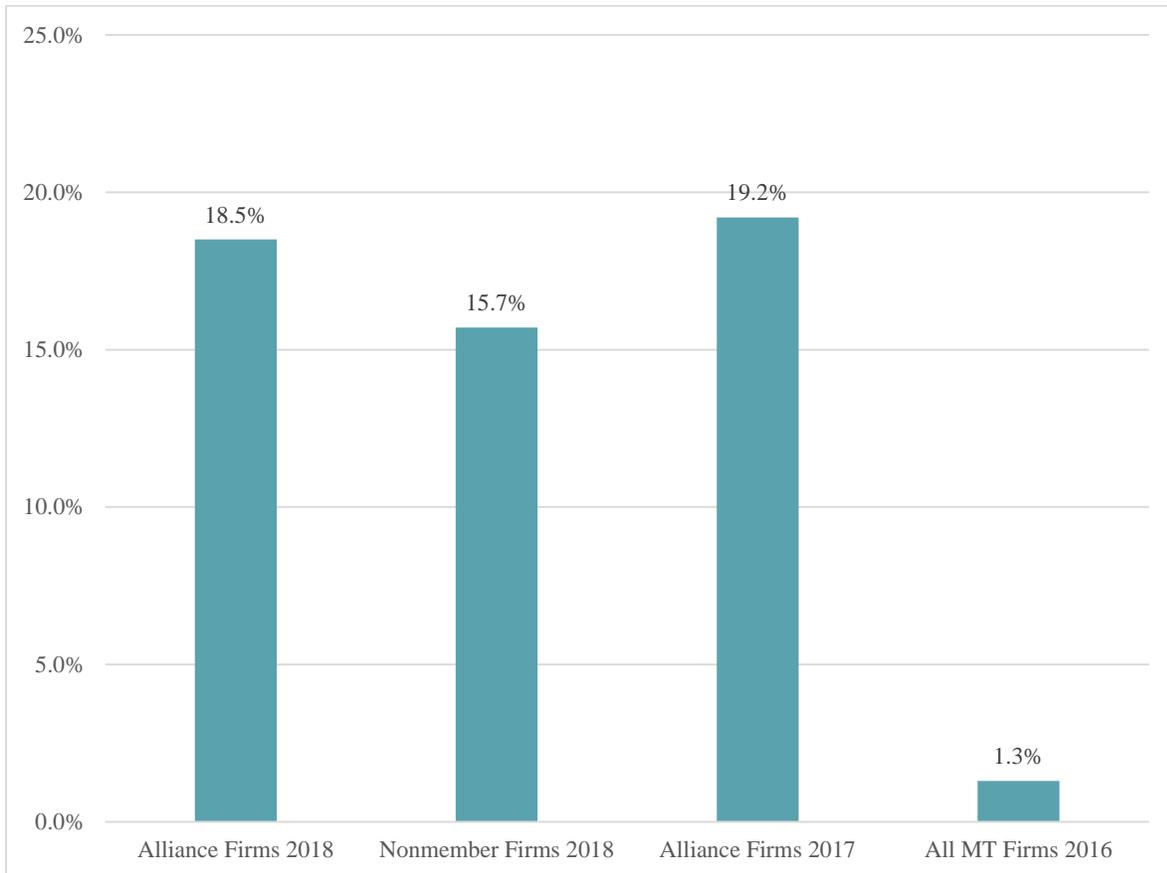


**2017 Changes.** 2018 projected median Alliance revenue growth per firm (23%) increased slightly when compared to 2017 projected growth (21%). 2018 projected revenue growth aligns well with projected 2018 employment growth presented on the next page. The continuing anticipation of fast growth is an indication of the entrepreneurial nature of the firms in the Alliance.

**Q7. About how many new jobs do you expect your company will create in Montana next year (2018)?**

Montana’s HTBA firms will add an estimated 1,100 new jobs in Montana in 2018. Responding nonmember firms will add an additional 190 new jobs. This annual Alliance employment growth rate (18.5%) is significantly faster than Montana’s 2016 total employment growth rate of 1.3% (see Figure 8 below).

**Figure 8: Annual Employment Growth Rate**



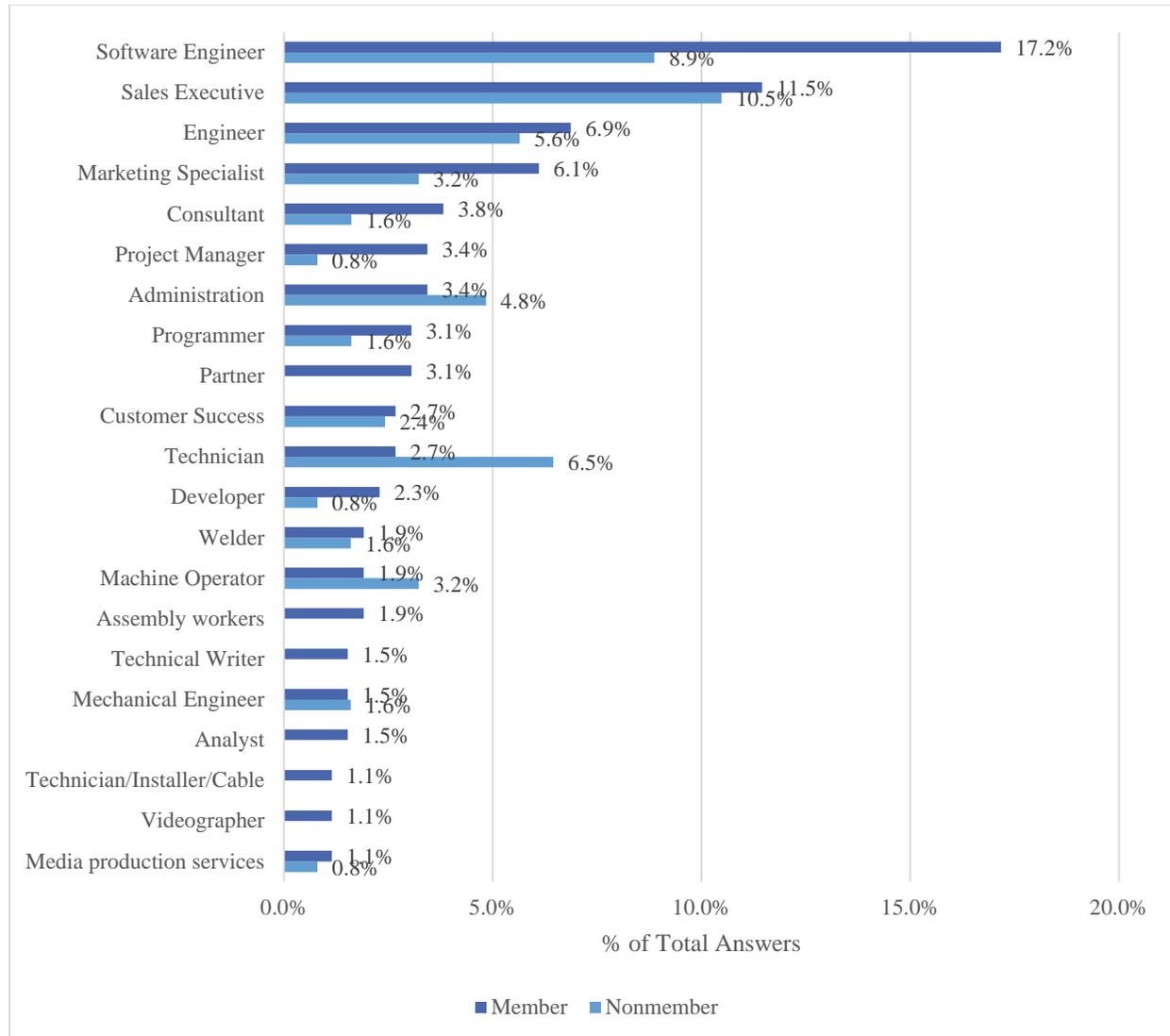
**2017 Changes.** 2018 projected employment growth is slightly lower than 2017 projected employment growth. 2018 employment growth aligns well with projected 2018 revenue growth presented on the previous page. Given that UM Bureau of Business and Economic Research and Montana Department of Labor and Industry both view the Montana economy as nearing full employment<sup>3</sup>, it is clear that many of these new jobs are likely to be filled by persons from outside Montana.

<sup>3</sup> Sources: Montana Department of Labor and Industry 2017 Labor Day Report and UM Bureau of Business and Economic Research Montana Economic Report: 2018.

**Q8. What are the job titles of the three job types that your firm most often hires?**

Alliance member firms provided a total of 262 answers to this question. Among these 262 answers, Alliance members said that they most often hire 62 distinct job titles. The most frequently cited job title was Software Engineer, which comprised 17.2% of the 262 total answers (see Figure 9). Sales Executive was next most often mentioned (11.5%), followed by Engineer (6.9%), and Marketing Specialist (6.1%). Nonmembers most often hired Sales Executives (10.5%), Software Engineers (8.9%), and Engineers (5.6%).

**Figure 9: Most Often Hired Occupations**



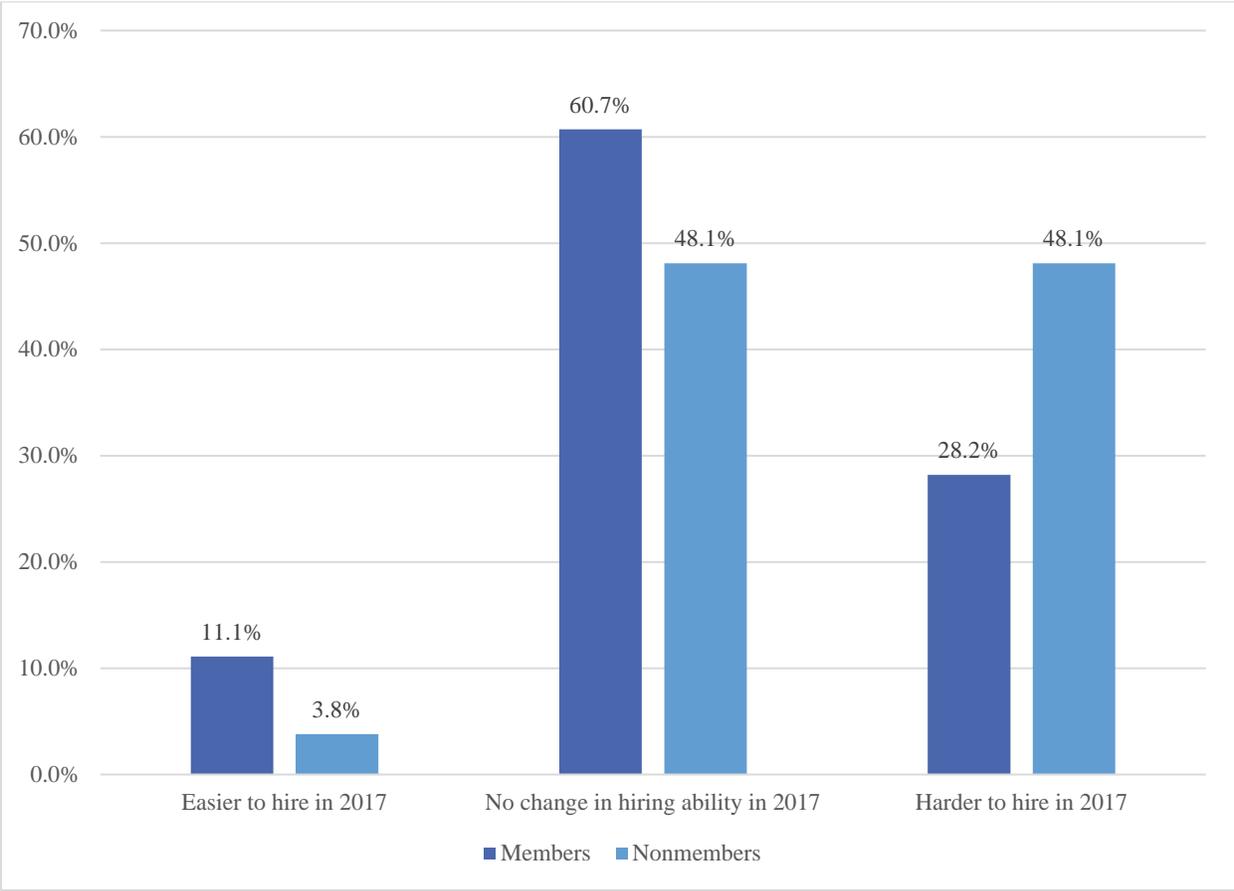
All answers to this question were coded by U.S. Bureau of Labor Statistics 2018 Standard Occupational Classification (SOC).<sup>4</sup> The complete table presenting the frequency of responses by 2018 SOC may be found in Appendix 4.

<sup>4</sup> The 2018 direct match file may be found here: [https://www.bls.gov/soc/2018/soc\\_2018\\_direct\\_match\\_title\\_file.pdf](https://www.bls.gov/soc/2018/soc_2018_direct_match_title_file.pdf)

**Q9. Some Montana employers say that it is hard for their firm to find qualified new employees. Other Montana employers say that it isn't hard for their firm. Over the course of calendar year 2017 would you say that for your firm it has become easier, there has been no change, or it is harder to hire qualified new employees?**

Almost three of every 10 Alliance employers (28.2%) reported that it became harder for their firm to hire qualified workers over the course of 2017 (see Figure 10). Nearly half of nonmember firms (48.1%) said that hiring got harder during 2017. A majority of Alliance members (60.7%) observed no change in hiring ease or difficulty. About 1 in ten Alliance employers (11.1%) said hiring qualified workers became easier during 2017.

**Figure 10: 2017 Ease or Difficulty of Hiring Qualified Employees**

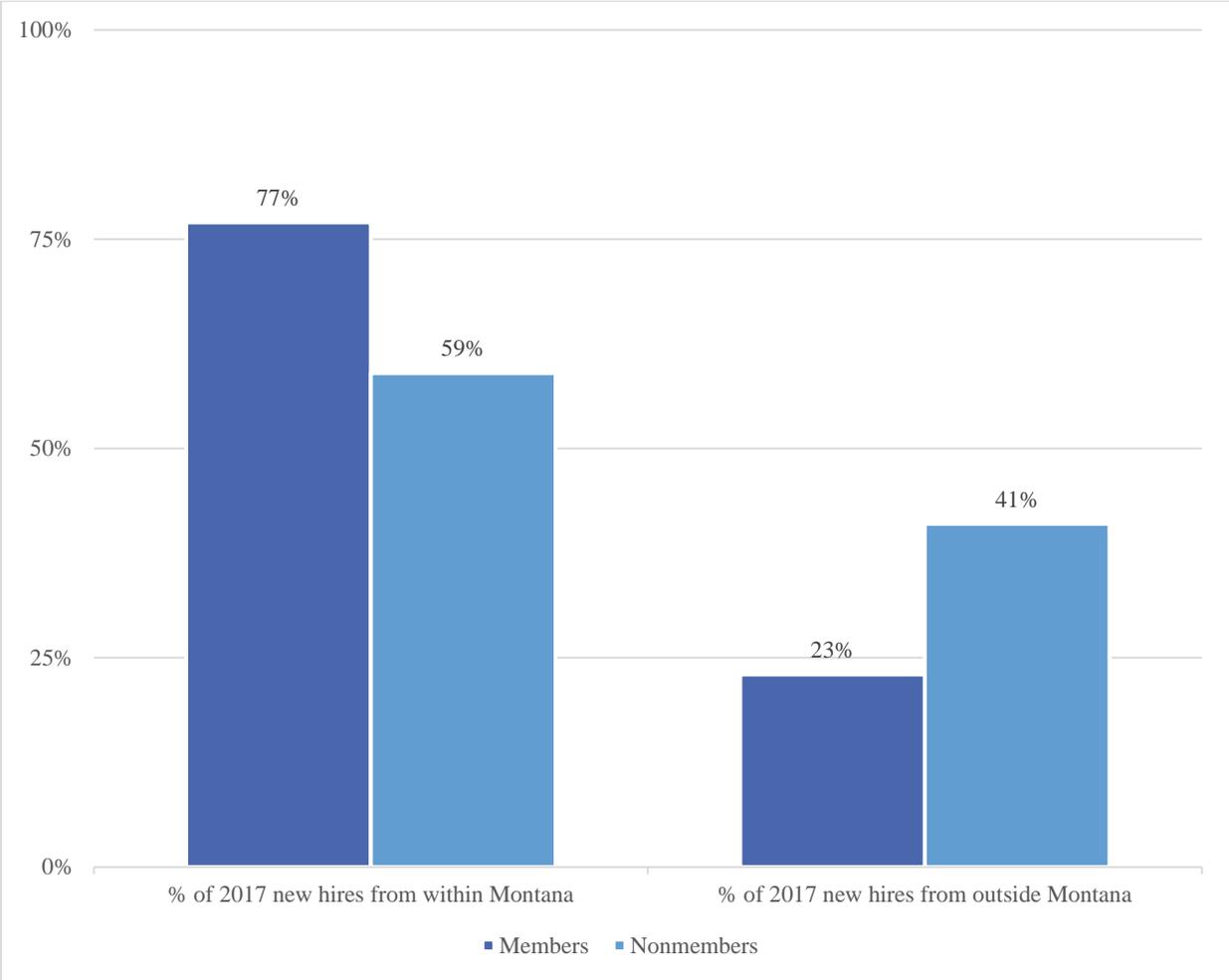


A rigorous analysis of the characteristics of Alliance members that experienced more ease or hardship in hiring during 2017 was conducted by Dr. Yasuyuki Motoyama of the University of Kansas. Dr. Motoyama found that Alliance firms with higher annual revenue were more likely to report that it was harder to hire in 2017 than firms with lower revenue. This relationship held true even when holding the firm's average annual wage paid and number of Montana employees constant.

**Q10. Over the course of calendar year 2017 what percentage of your firm's new hires came from within Montana and what percentage came from out of state?**

Alliance firms reported hiring 77% of their new employees from within Montana during 2017 (see Figure 11). About 23% of new Alliance company employees came from outside Montana. Nonmember firms reported a lower within Montana hiring rate, 59%. This survey result represents one of the first attempts to measure state of origin for new hires among Montana businesses. This will provide an important benchmark as efforts within Montana to develop the state’s workforce progress.

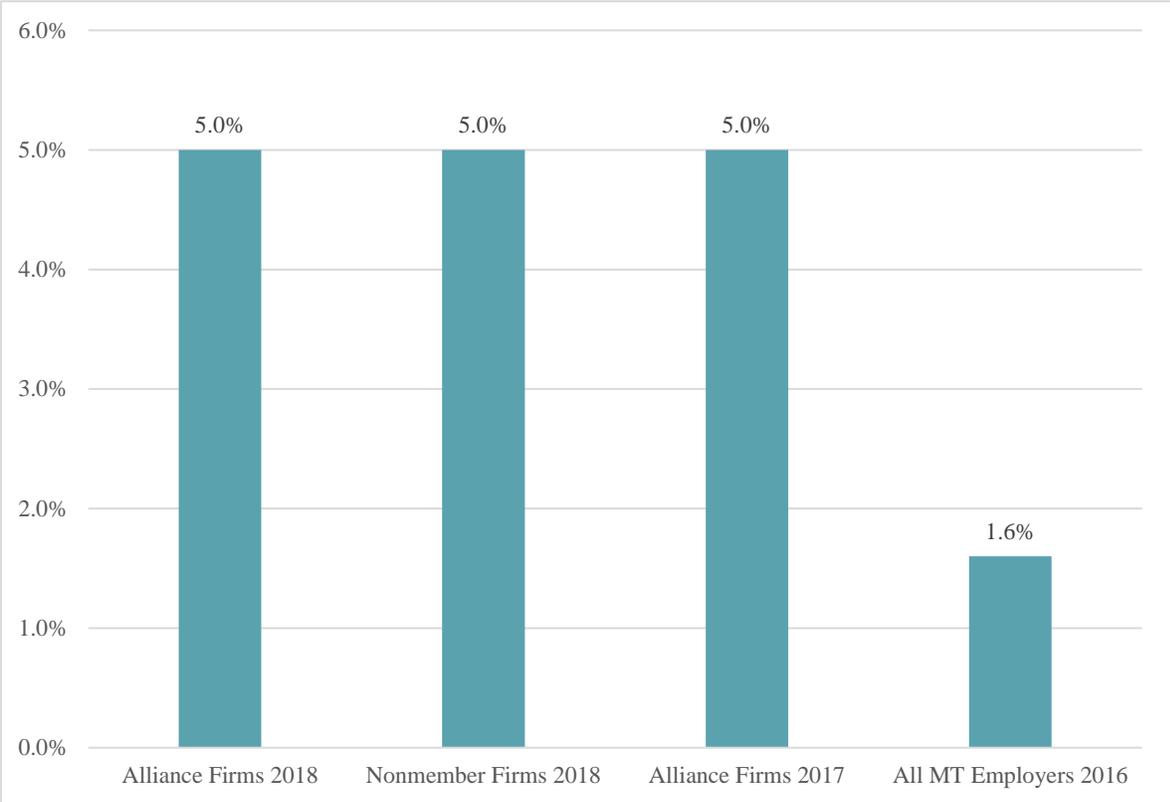
**Figure 11: 2017 Hiring from within Montana**



**Q11. By what percentage do you estimate your company’s annual Montana wages may increase or decrease next year (2018)?**

The annual pay of Montana’s HTBA employees and nonmember firm employees in 2018 is projected to grow significantly faster than that of all Montanans. Figure 12 shows that HTBA and nonmember tech firm wages are projected to grow by 5% in 2018 while in 2016 Montana annual wages grew 1.6%.

Figure 12: Annual Pay Growth Rate

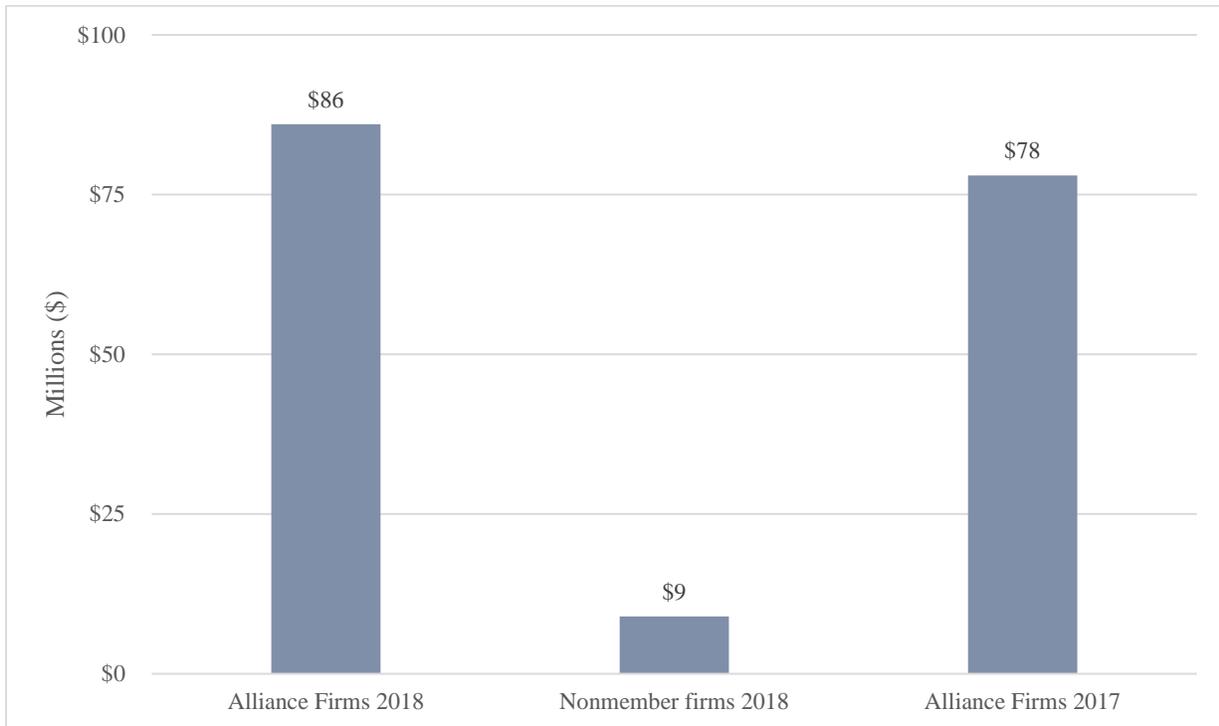


**2017 Changes.** 2018 projected Alliance annual wage growth per firm is the same as 2017 projected wage growth.

**Q12. About how much money do you anticipate your company will invest in major capital expenditures in Montana next year (2018)?**

HTBA companies plan to make more than \$86 million in major capital investments in Montana in 2018, which will add a significant number of additional construction and support jobs in the state (see Figure 13). The 55 responding nonmember firms reported plans to spend an additional \$9 million in major capital investments in Montana in 2018.

**Figure 13: 2017 Planned Capital Investments in Montana**

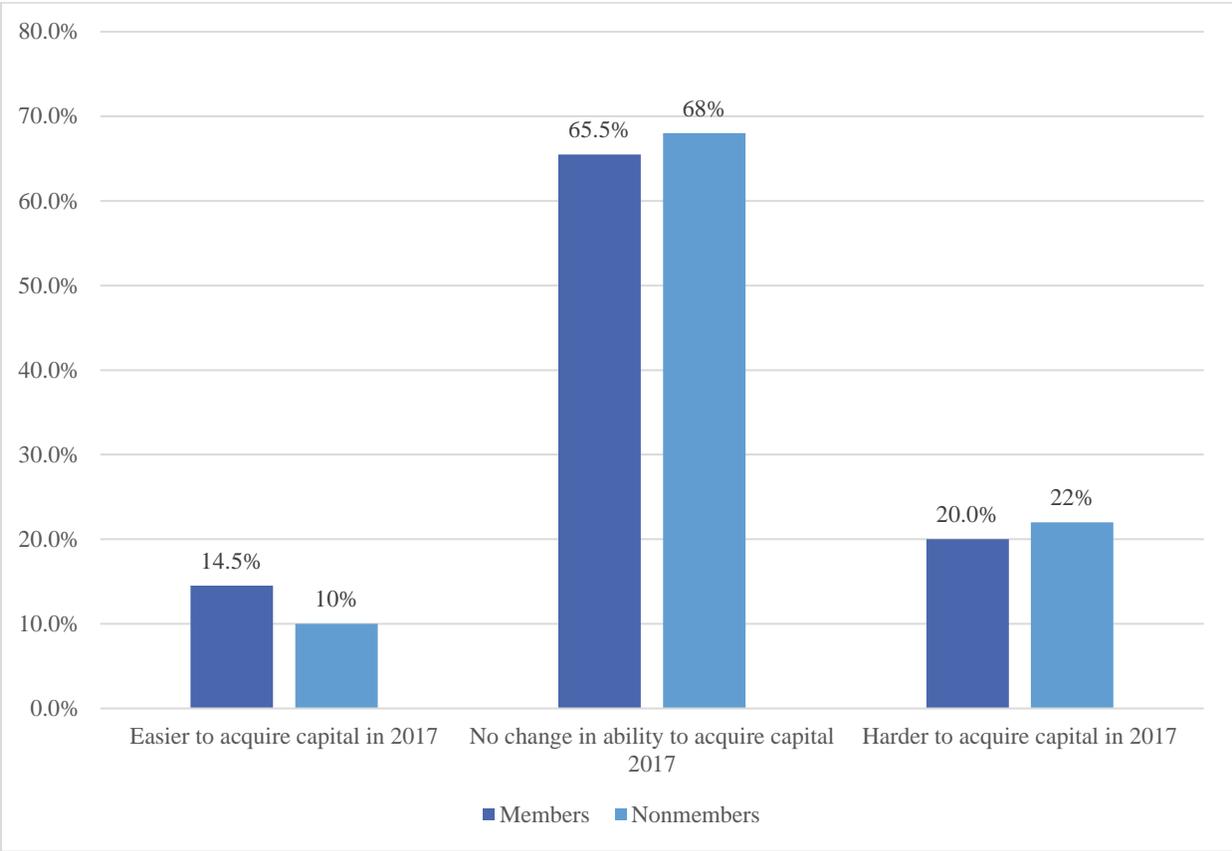


**2017 Changes.** 2018 anticipated Alliance major capital expenditures (\$86 million) increased over 2017 anticipated major capital expenditures (\$78 million).

**Q13. Some Montana employers say that it is hard for their firm to acquire new capital. Other Montana employers say that it isn't hard for their firm. Over the course of calendar year 2017 would you say that for your firm it has become easier, there has been no change, or it is harder to acquire new capital?**

Over the four replications of the annual survey of Alliance members much effort has been devoted to exploring the ability of and methods of obtaining new capital. This year the Alliance added a question that will allow on-going monitoring of changes in the ease or difficulty of obtaining new capital. In 2017, one in five Alliance firms (20%) reported that it was more difficult for their firm to obtain new capital in 2017 (see Figure 14). A majority (65.5%) observed no change in the ease or difficulty of obtaining capital. About 14.5% said that obtaining new capital was easier in 2017. Nonmember reports on the ease or difficulty of obtaining capital in 2017 were remarkably similar to Alliance member reports.

**Figure 14: 2017 Ease of Difficulty in Obtaining New Capital**

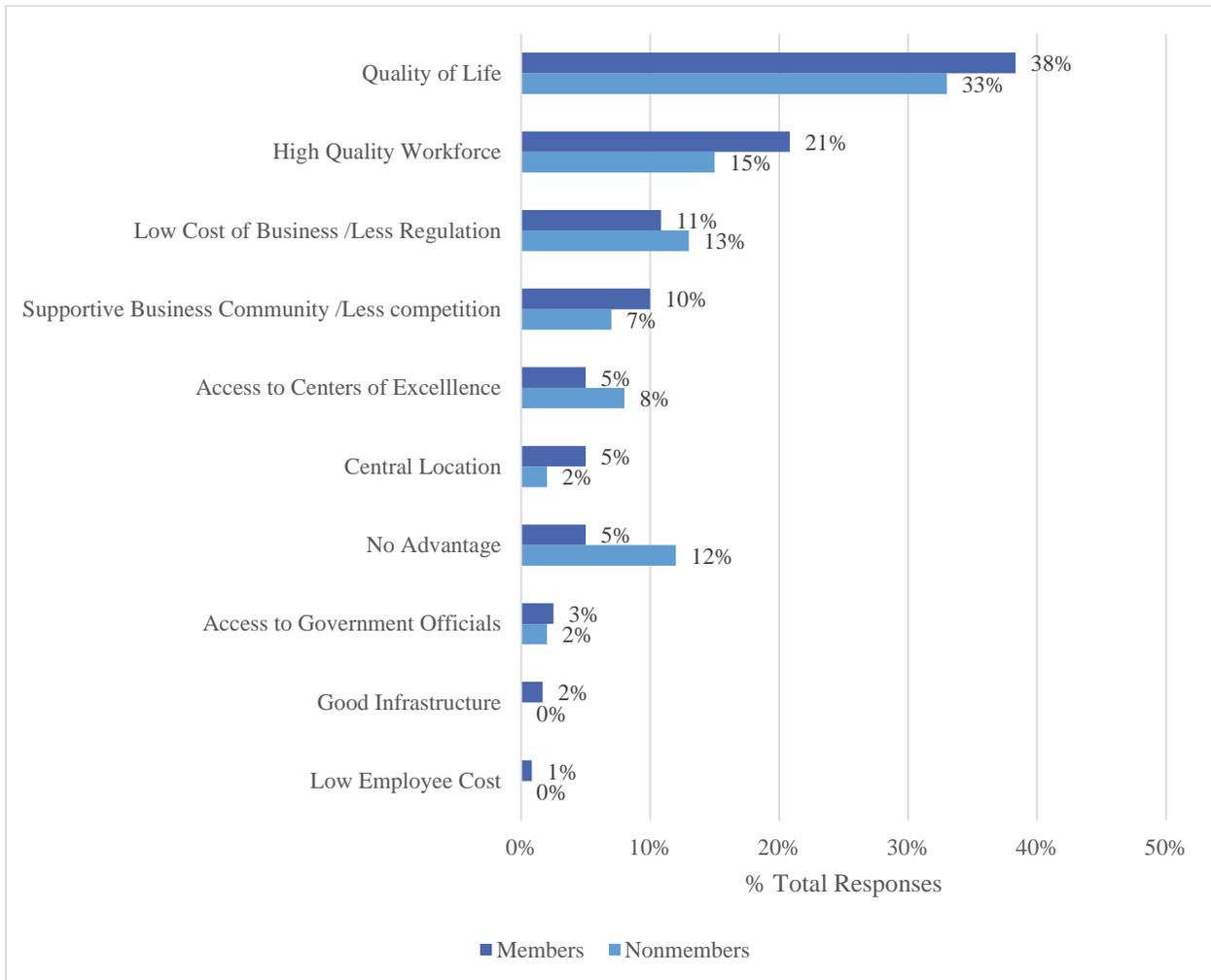


A rigorous analysis of the characteristics of Alliance members that experienced more ease or hardship in obtaining new capital during 2017 was conducted by Dr. Yasuyuki Motoyama of the University of Kansas. Dr. Motoyama found that very small, start-up companies were more likely than other companies to observe that it was harder to obtain capital in 2017. Dr. Motoyama notes that this may be due to the unique characteristics of these businesses and not due to an overall change in the availability of new capital.

#### Q14. What advantage does Montana give you in business?

HTBA members and nonmember high tech firms most often reported (38% of total Alliance member responses and 33% of nonmember responses) that quality of life in Montana gives them an advantage (see Figure 15). Montana’s high quality workforce was next most frequently cited by both groups, followed by the low cost of business in Montana and Montana’s supportive business community.

Figure 15: Advantages Montana Gives Firms



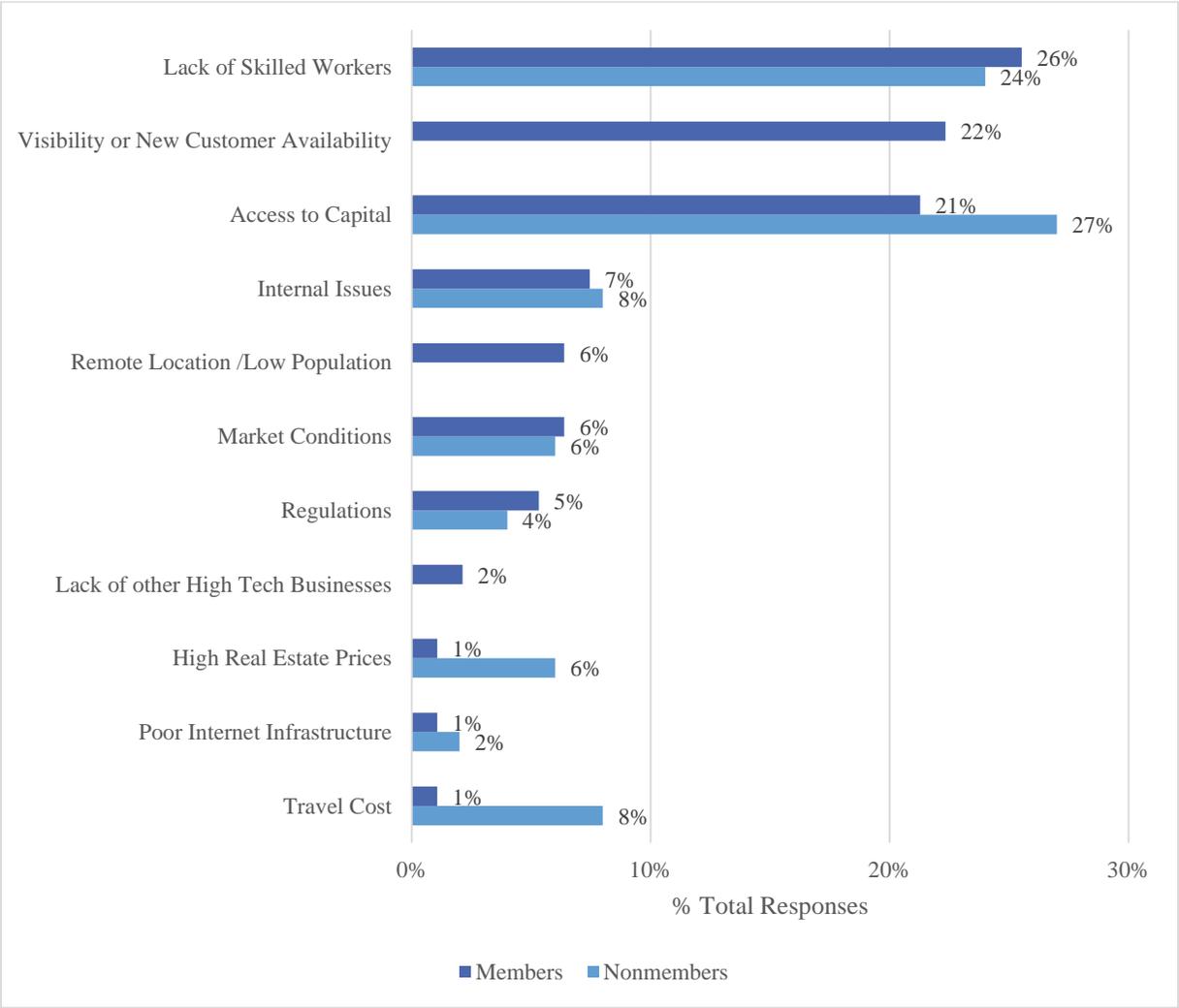
The following are selected comments that provide the reader additional insight into HTBA members’ opinions.

- “Great place to live. High quality workers.”
- “As business owners, this is where we want to live.... it is near family and in a less densely populated part of the country.”
- “Devoted, hard-working employees and strong corporate culture.”
- “A growing, positive business climate with many additional resources available for start-ups and established businesses alike.”

**Q15. What is your largest impediment to faster growth?**

HTBA members most often reported that a lack of skilled workers (26% of total responses) was their firm’s largest impediment to growth (see Figure 16). Poor firm visibility or a lack of new customer availability was next most commonly cited (22%), followed by a lack of access to capital (21%). Nonmembers most often reported lack of access to capital (27%) and lack of skilled workers (24%).

**Figure 16: Largest Impediment to Firm Growth**



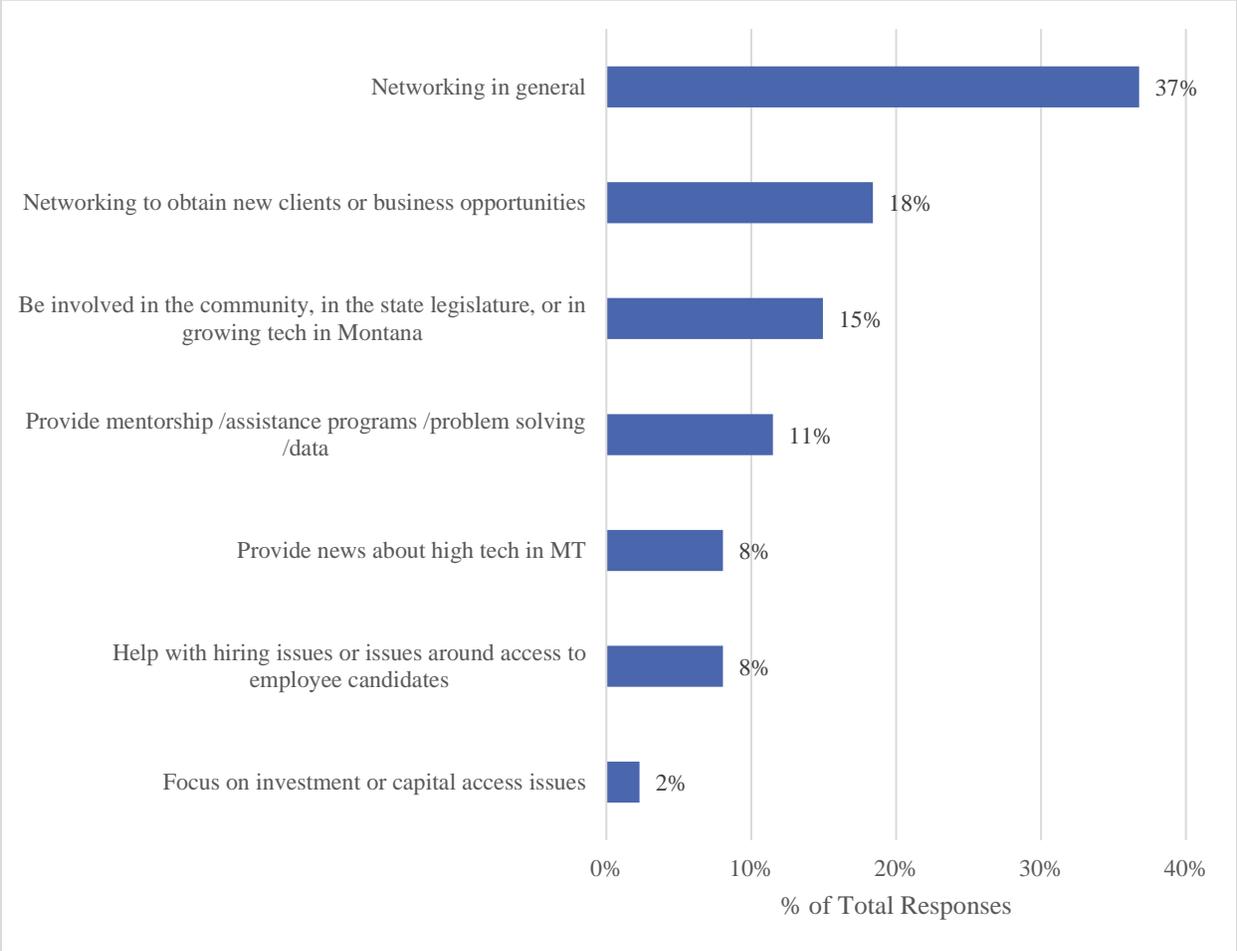
The comments displayed below give more perspective on HTBA members’ opinions.

- “Anxiety about hiring qualified, capable employees.”
- “Hiring qualified good employees.”
- “Limited amount of time and not enough qualified employees for the specific types of positions that we offer.”
- “Access to qualified clients inside of Montana. We make the majority of our revenue by working with clients outside of Montana.”
- “Capital to grow content for our platform and marketing for potential users.”

**Q16. What is the one most important thing you would like to get out of your Montana High Tech Business Alliance membership?**

This question was asked of Alliance members only. Alliance members most often said that they want networking opportunities (37% of total responses) or specifically networking to obtain new clients or new business opportunities (18%) (see Figure 17). About 15% of Alliance members said that they want the Alliance to be involved in the community, the state legislature, or in growing tech businesses in Montana.

Figure 17: Most Important Membership Benefit



The comments below illustrate members’ opinions.

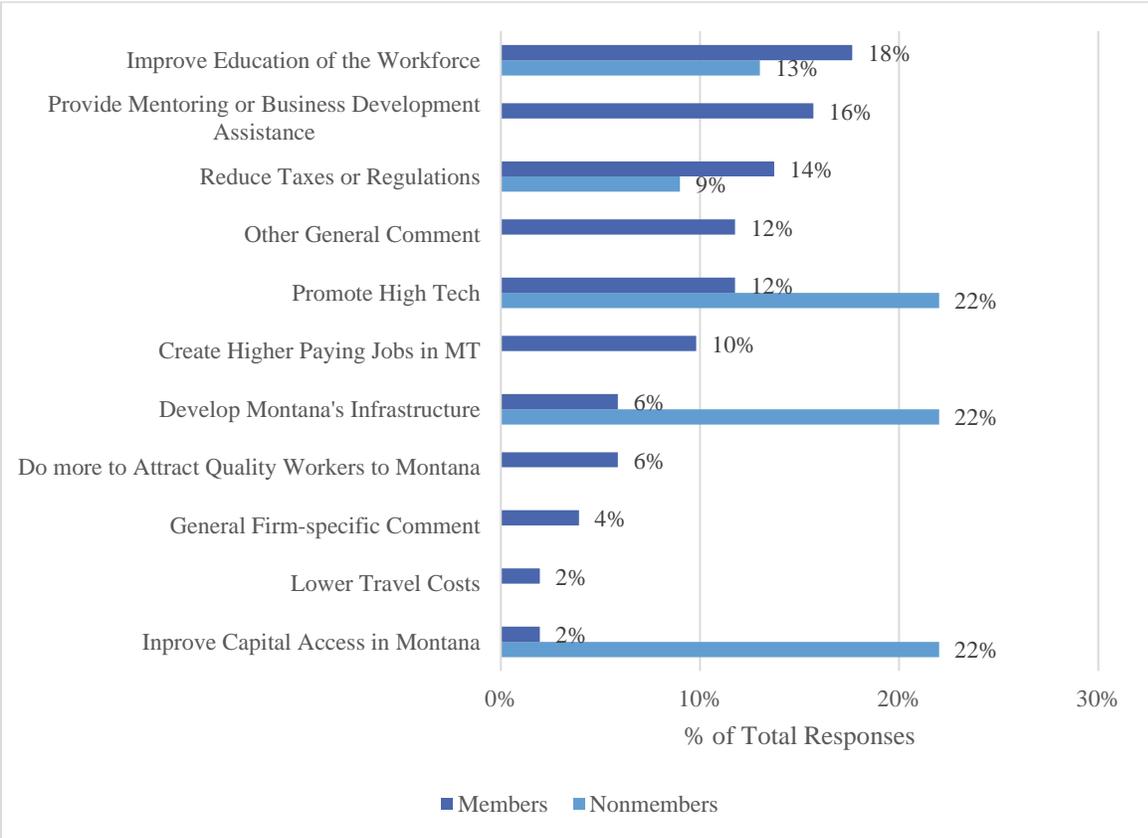
- “Network and connect with others in the Montana technology ecosystem, from other executives to government leaders to industry experts.”
- “The networking opportunities are great. We’ll try to attend more, and more frequent meeting opportunities with fellow members would be beneficial.”
- “Networking opportunities to find suppliers and new clients along with exposure of my business to other tech companies.”
- “Continued PR and outbound communications about the benefits of locating and starting businesses in Montana. The more tech companies we have in Montana the easier it become for relocating and securing future qualified candidates.”

**Q17. What additional comments do you have? The Montana High Tech Business Alliance is particularly interested in your observations about improving Montana's business climate and creating new Montana jobs.**

HTBA members most often directed their summary comments regarding improving Montana’s business climate to improving the education of the workforce (18% of total responses), providing business mentoring or business development assistance (16%), or reducing taxes and regulations (14%).

Nonmembers generally provided fewer additional comments. Their most frequent comments called to improve access to capital, promote high tech, and develop Montana’s infrastructure. Please see Figure 18 for a summary of the respondents’ observations.

**Figure 18: Additional Respondent Observations**



The following comments illustrate respondents’ opinions in more detail. For an in-depth look at all of the responses to open-ended questions, please see Appendix 4.

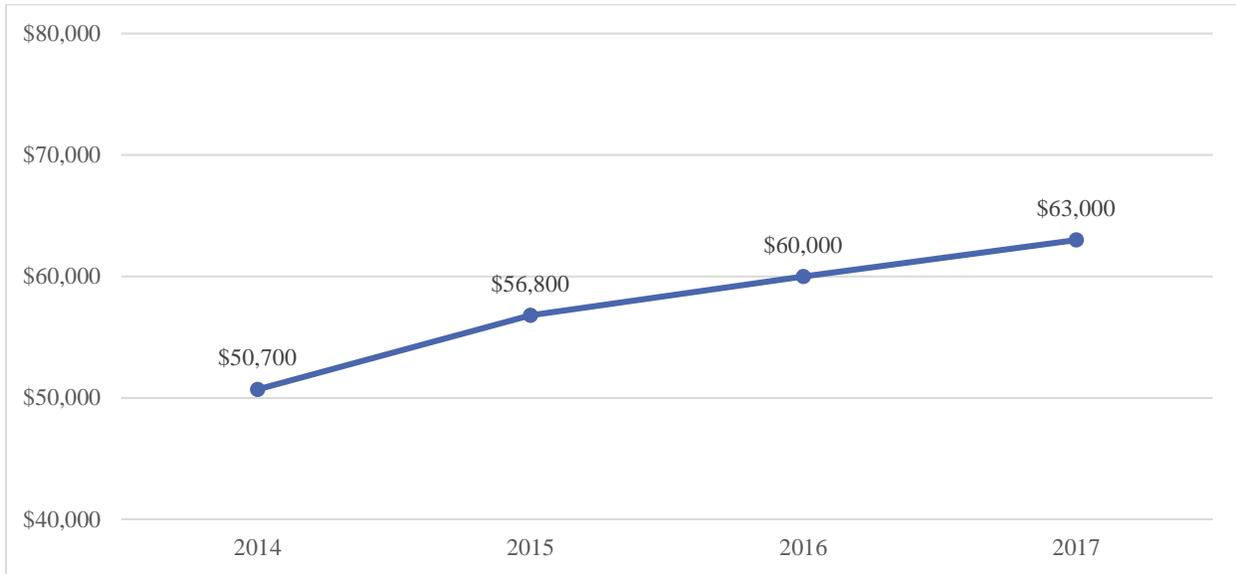
- “It would be nice to have an easy way to reach compatible students before graduation. It would be nice to have an easy way to reach educators for collaboration on component development projects.”
- “We have more jobs to fill than we do interested applicants and will only increase in demand. I am working on closer relationships with UM but would like to also better engage MSU and other Montana Universities. We were not able to attend the job conference, but maybe a virtual high-tech / Montana University job fair would be helpful.”

## Alliance Member Firm Trends

### Annual Wage

Median annual wages paid by Alliance members have increased each year since the annual survey first started.

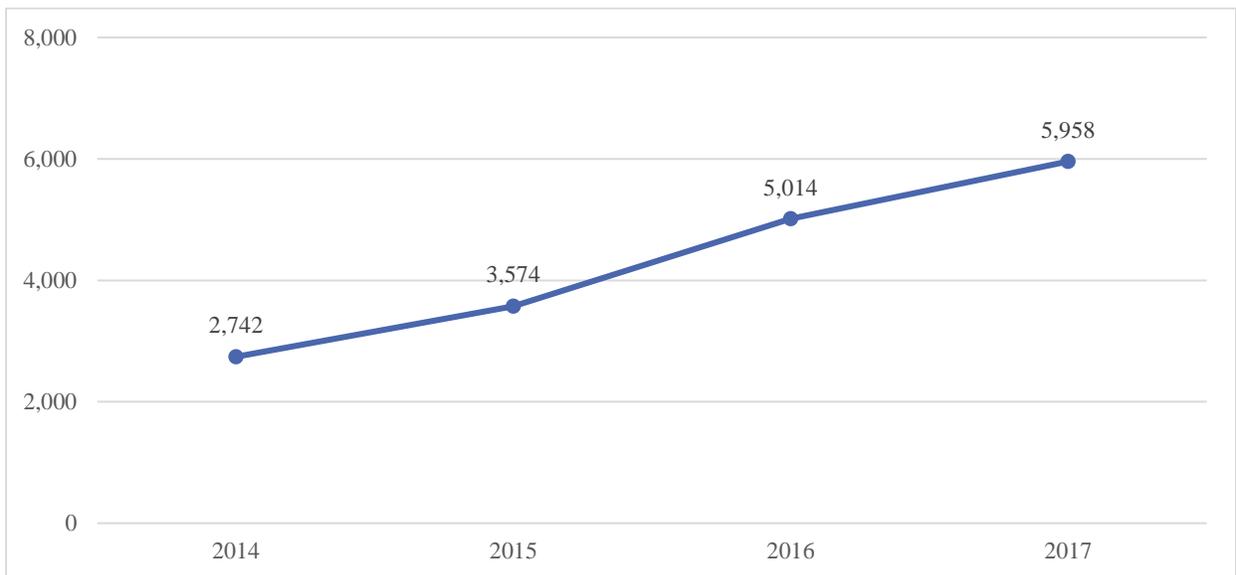
Figure 19: Median Annual Wages Paid by Alliance Member Firms



### Montana Employment

Total Montana employment of all Alliance firms has also increased each year. It is important to note that the total number of Alliance firms also increased each year.

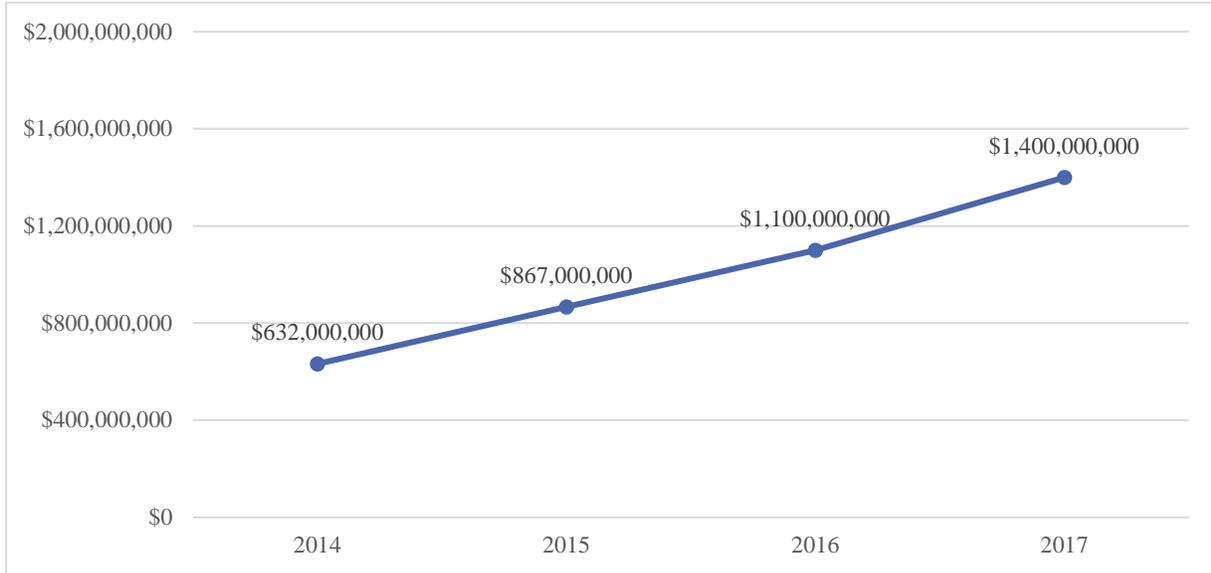
Figure 20: Total Montana Employment by Alliance Firms



## Total Annual Montana-Generated Revenue

Revenue generated in Montana by Alliance member firms grew steadily each year the survey was administered.

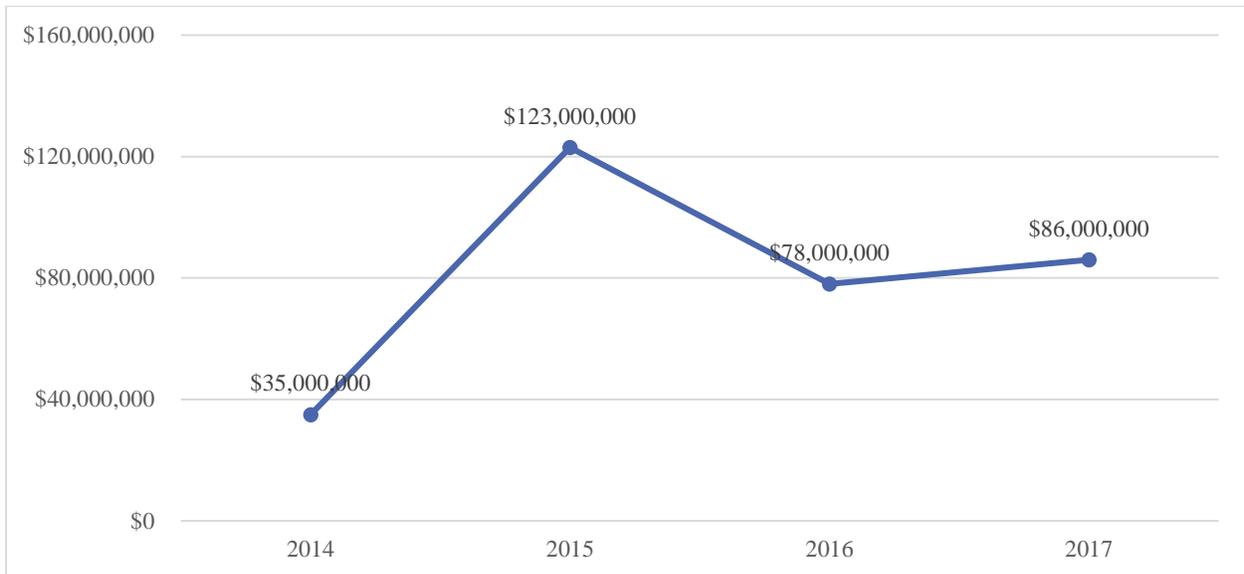
Figure 21: Total Annual Revenue



## Total Capital Expenditures in Montana

Major capital expenditures in Montana by Alliance firms have been more volatile than annual wages or employment.

Figure 22: Total Major Capital Expenditures in Montana



## References

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## Appendix 1: Questionnaire and Topline Results

N = 134 members      N = 55 nonmembers

**Q1 Which high tech sub industry best represents your company?** *Please click only one response.*

	Members	Nonmembers
<input type="radio"/> Advertising/Marketing (1)	9.1%	7.3%
<input type="radio"/> Aerospace/Automotive/Transportation (2)	2.3%	3.6%
<input type="radio"/> Biotechnology (3)	1.1%	14.5%
<input type="radio"/> Consulting (4)	11.0%	3.6%
<input type="radio"/> Consumer Products (5)	1.9%	0.0%
<input type="radio"/> Cyber Security (6)	3.0%	1.8%
<input type="radio"/> Data Analytics (7)	1.5%	0.0%
<input type="radio"/> Data Storage (8)	0.4%	0.0%
<input type="radio"/> Digital Media/Broadcasting/Publishing (9)	4.2%	5.5%
<input type="radio"/> Ecommerce (10)	3.4%	1.8%
<input type="radio"/> Education/Training (11)	1.9%	0.0%
<input type="radio"/> Energy/Extractive Minerals (12)	0.8%	0.0%
<input type="radio"/> Engineering (13)	3.4%	0.0%
<input type="radio"/> Financial Services/Payment Processing (14)	2.3%	0.0%
<input type="radio"/> Funding/Angel Investing/Venture Capital (15)	2.3%	0.0%
<input type="radio"/> Manufacturing (16)	7.6%	18.2%
<input type="radio"/> Medical/Healthcare Devices (17)	1.1%	1.8%
<input type="radio"/> Nanotechnology (18)	0.0%	0.0%
<input type="radio"/> Professional Services (19)	6.8%	7.3%
<input type="radio"/> Software/SaaS (20)	26.6%	10.9%
<input type="radio"/> Telecommunications (21)	3.8%	1.8%
<input type="radio"/> Other (please specify below:) (22)	4.2%	16.4%
<input type="radio"/> Construction (23)	1.1%	3.6%

**Q2 How many employees does your company have total?** *Please include all states and countries. If self-employed, indicate one employee. Your best guess is ok.*

- Total number of employees (1) \_\_\_\_\_  
 Median: members 6 employees, nonmembers 9 employees

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**Q3 How many employees does your company have in Montana?**

- Number of Montana employees (1) \_\_\_\_\_  
Median: members 5 employees, nonmembers 6 employees
- 

**Q4 What is your company's average annual Montana wage?**

- Average annual wage (\$) (1) \_\_\_\_\_  
Median: members \$63,000, nonmembers \$54,800
- 

**Q5 What were your company's annual revenues in 2017? *Your best guess is ok.***

- Annual 2017 revenues (\$) (1) \_\_\_\_\_  
Median: Members \$700,000, nonmembers \$775,000
- 

**Q6 By what percentage do you estimate your company's annual revenues will increase or decrease next year (2018)? *Your best guess is ok.***

- Expected 2018 revenue increase (%) (1)      Median: members 23%, nonmembers 10%  
 Expected 2018 revenue decrease (%) (2)      Median: members 0%, nonmembers 0%
- 

**Q7 About how many new jobs do you expect your company will create in Montana next year (2018)? *Your best guess is ok.***

- Number of new jobs (1) \_\_\_\_\_  
Median: members 2, nonmembers 2
- 

**Q8 What are the job titles of the three job types that your firm most often hires?**

- Job title 1 (1)    See Figure 9, see also Appendix 4.  
 Job title 2 (2)  
 Job title 3 (3)
-

**Q9 Some Montana employers say that it is hard for their firm to find qualified new employees. Other Montana employers say that it isn't hard for their firm. Over the course of calendar year 2017 would you say that for your firm it has become?**

	Members	Non
<input type="radio"/> Easier to hire qualified new employees	11.1%	3.8%
<input type="radio"/> There has been no change in my firm's ability to hire new employees	60.7%	48.1%
<input type="radio"/> Harder to hire qualified new employees	28.2%	48.1%

**Q10 Over the course of calendar year 2017 what percentage of your firm's new hires came from within Montana and what percentage came from out of state? Your best guess is ok. The total should add to 100.**

	Members	Nonmembers
% of new hires who came from within Montana: _____ (1)	77%	59%
% of new hires who came from out of state: _____ (2)	23%	41%
Total: _____		

**Q11 By what percentage do you estimate your company's annual Montana wages may increase or decrease next year (2018)? Your best guess is ok.**

- Expected 2018 wage increase (%) (1) Median: members 5.0%, nonmembers 5%
- Expected 2018 wage decrease (%) (2) Median: members 0.0%, nonmembers 0.0%

**Q12 About how much money do you anticipate your company will invest in major capital expenditures in Montana next year (2018)? Your best guess is ok.**

- Major capital expenditures (\$) (1) \_\_\_\_\_  
Median: members \$25,000, nonmembers \$25,000

**Q13 Some Montana employers say that it is hard for their firm to acquire new capital. Other Montana employers say that it isn't hard for their firm. Over the course of calendar year 2017 would you say that for your firm it has become?**

	Members	Non
<input type="radio"/> Easier to acquire new capital	14.5%	10%
<input type="radio"/> There has been no change in my firm's ability to acquire new capital	65.5%	68%
<input type="radio"/> Harder to acquire new capital	20.0%	22%

**Q14 What advantage does Montana give you in business?**

See Figure 15 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Q15 What is your largest impediment to faster growth?**

See Figure 16 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Q16 (MHTBA members only): What is the one most important thing you would like to get out of your Montana High Tech Business Alliance membership?**

See Figure 17 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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**Q17 What additional comments do you have?** *The Montana High Tech Business Alliance is particularly interested in your observations about creating new, high-paying Montana jobs.*

See Figure 18 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Appendix 2: Survey Methods

### Data Collection Methods

The data for this survey were collected by administering a questionnaire via the Internet to a list of HTBA members provided by the Alliance. The Alliance invited 270 of its members to participate. This represents only those Alliance members that work in high tech or manufacturing industries, out of a total membership of some 320 companies. The Alliance also chose to invite 270 nonmember tech firms to participate. BBER used Qualtrics survey research software to manage this survey. The questionnaire invitation was transmitted by email and respondents are asked to click on a hyperlink to access the online questionnaire. The questionnaire was developed by the HTBA. Data was collected during the period from December 2017 through February 2018. Ms. Christina Henderson, executive director of HTBA, assisted significantly by conducting additional non-respondent prompts and helping to manage the respondent list.

### Data Collection Outcomes

BBER received 134 responses from HTBA members out of 270 asked to participate. Another 7 member firms were unreachable, yielding an effective Alliance study population of 263. The response rate for the Alliance survey was 51%.<sup>5</sup> BBER received 55 nonmember responses out of 290 asked to participate. An additional 23 nonmember firms were unreachable, yielding an effective nonmember study population of 267. The response rate for the nonmember survey was 21%.

### Data Processing and Analysis

Following receipt of the survey responses, the data entered were inspected to ensure no duplicate cases were included and to correct any obvious typos made by respondents. Appropriate variable and value labels were added to the data set. Appropriate composite variables and flags were added to the data set to facilitate the analysis process.

BBER conducted a statistical analysis of the survey data using statistical analysis computer software (SPSS version 25, Copyright 2017, IBM Corporation). BBER analyzed the data collected using frequencies, cross-tabulations, standard measures of central tendency (mean, median, and mode), sums and ratios.

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<sup>5</sup> Using American Association for Public Opinion Research response rate formula 1.

## Appendix 3: UM Bureau of Business and Economic Research and the Researchers

The **Bureau of Business and Economic Research** is a research department within the School of Business Administration at the University of Montana, Missoula. We produce a variety of economic and industry data including annual economic forecasts for the United States as well as Montana, its industries, and counties. Six functional areas make up the Bureau of Business and Economic Research:

- Economic Analysis tracks the economic performance of all geographic areas in Montana.
- Manufacturing Research and Forest Industry Research focus special attention on these important industries in Montana and surrounding states.
- Health Care Industry Research examines markets, trends, industry structure, costs, and other high visibility topics to monitor the health status of Montanans.
- Publications, such as the Montana Business Quarterly, the Outlook Book, and other reports, include research and data that help Montanans better understand the state's economic climate.
- The Survey Research Division regularly conducts research to gather local, state, tribal, and national economic data for both public and private sector studies.
- The Natural Resources and Energy Research program is devoted to understanding and tracking the growth and importance of Montana's energy and natural resources sector.

In addition to these six areas, the Bureau also houses the Montana Kids Count Program, a collaborative effort to collect data concerning Montana's children and families. The Bureau was founded in 1948 to monitor the state's economic and business conditions. Over the years we have expanded from a staff of four to a research department of 18 full-time employees and more than a dozen part-time workers. Bureau data assists businesses, government agencies, and individuals across Montana.

The Bureau has over 35 years of experience providing a full range of survey services. With a staff of highly skilled researchers using advanced data collection systems and techniques, the Bureau offers broad-based survey services for public and private sector studies, including: survey development, data collection, and analysis and report writing.

Quality survey data are the foundation of thorough and reliable research and are critical to the success of our clients, which have included: City of Missoula, Missoula County, Confederated Salish and Kootenai Tribes, U.S. Congress, U.S. Department of Commerce, U.S. Department of Agriculture, USDA Forest Service, Montana Department of Labor and Industry, Montana Department of Public Health and Human Services, Montana Department of Transportation, NorthWestern Energy, and Blue Cross Blue Shield of Montana.

### Researchers

#### Principal Investigator

Patrick Barkey is director of the Bureau of Business and Economic Research at the University of Montana, a 60- year-old organization with a distinguished record of timely, relevant research and information on the state and regional economies. He has been involved with economic forecasting and

policy research for 27 years, both in the private and public sector. Before coming to Montana he served as director of the Bureau of Business Research at Ball State University in Indiana for 14 years. His recent research has been on the economic impact of higher educational attainment, the effect of alcohol abuse on the state's economy, and the economic impact of trade with Canada.

He attended the University of Michigan, receiving a B.A. ('79) and Ph.D. ('86) in economics. Dr. Barkey is a professor in the School of Business Administration at the University of Montana.

### **Senior Economist**

Brandon Bridge is a senior economist and the director of forecasting at the Bureau. His responsibilities include regional demographic analysis and forecasting. Other research interests of his include energy poverty, economic development, cryptocurrencies, and sports economics. He grew up in Montana, and before returning home to join the BBER team, Mr. Bridge studied economics at Brigham Young University (BA, 2010) and the University of New Mexico (MA, 2015; PhD, 2017).

### **Director of Survey Research**

John Baldrige is BBER's director of Survey Research. Mr. Baldrige has an extensive background in survey research. His experiences were gained as an independent contractor in Montana and while in the employ of the University of Chicago's National Opinion Research Center, the nation's foremost non-profit, academically-based, survey research center. Mr. Baldrige is a graduate of the Irving B. Harris Graduate School of Public Policy Studies at the University of Chicago ('92), Simpson College ('90), and recently retired from the United States Army Reserve as a Sergeant Major.

## Appendix 4: Detailed Responses to Open-Ended Questions

### Alliance Member Responses

#### Q8. What are the job titles of the three job types that your firm most often hires?

2018_SOC	Description	Total Jobs	% of Jobs
15-1252	Software Engineer	45	17.2%
11-2022	Sales Executive	30	11.5%
11-9041	Engineer	18	6.9%
13-1161	Marketing Specialist	16	6.1%
62	Consultant	10	3.8%
11-3012	Administration	9	3.4%
11-3021	Project Manager	9	3.4%
63	Partner	8	3.1%
15-1251	Programmer	8	3.1%
61	Technician	7	2.7%
15-1232	Customer Success	7	2.7%
66	Developer	6	2.3%
51-2092	Assembly workers	5	1.9%
51-4041	Machine Operator	5	1.9%
51-4121	Welder	5	1.9%
64	Analyst	4	1.5%
17-2141	Mechanical Engineer	4	1.5%
27-3042	Technical Writer	4	1.5%
27-3099	Media production services	3	1.1%
27-4031	Videographer	3	1.1%
49-2097	Technician/Installer/Cable	3	1.1%
65	Intern	2	0.8%
11-9033	Director	2	0.8%
11-31-31	Business Dev Specialist	2	0.8%
13-2011	CPA	2	0.8%
15-1011	Manufacturing Operator	2	0.8%
15-1255	Digital Engineer/Designer	2	0.8%
17-2112	Industrial designer	2	0.8%
27-1024	Graphic Designer	2	0.8%
27-4032	Video Editor	2	0.8%
49-1011	Mechanic	2	0.8%
51-5112	Printing Engineer	2	0.8%
53-7062	Laborer	2	0.8%

11-1021	Project Manager	1	0.4%
15-1221	Bioinformatician/Scientist	1	0.4%
15-1242	Data Services Specialist	1	0.4%
15-1244	Network Technician	1	0.4%
15-1299	Computer Operator	1	0.4%
17-2031	Chemical Engineer	1	0.4%
17-2072	Telecom Technician	1	0.4%
17-2199	Photonics Engineer	1	0.4%
17-3019	Designer/drafter	1	0.4%
17-3xxx	Composites technician	1	0.4%
19-1021	Research scientist	1	0.4%
19-2012	Physicist	1	0.4%
19-xxxx	Scientist	1	0.4%
25-1194	Instructor	1	0.4%
25-4022	Edu production services	1	0.4%
25-9042	Teaching Assistant	1	0.4%
27-2041	Composer	1	0.4%
27-3041	Editor	1	0.4%
41-3011	Ad Operations Lead	1	0.4%
41-4011	Finance	1	0.4%
41-9041	inbound call center	1	0.4%
41-9099	Digital Sales	1	0.4%
43-9111	Data Analysis	1	0.4%
49-9063	Luthier	1	0.4%
51-2022	Electronics Assembler	1	0.4%
51-9061	Quality control	1	0.4%
53-2011	Pilot	1	0.4%
53-1042	Warehouse Associate	1	0.4%
55-2013	Cyber Security Engineer	1	0.4%
<b>Total</b>		<b>262</b>	

Please note that in a few cases respondent answers were too vague to assign a SOC. In these cases codes 61-65 were assigned.

#### **Q14. What advantage does Montana give you in business?**

1 - employee retention, 2 - clients and partners love the vibe, non-traditional location, 3 - State grants, 4 - Montana work ethic, 5 - out of rat race, gives time to think and be a thought leader

A growing, positive business climate with many additional resources available for start-ups and established businesses alike.

Access to good, quality, high character people as employees The opportunity to live here

Allows us to not be in urban center.

Appreciation for personal services.

As business owners, this is where we want to live.... It is near family and in a less densely populated part of the country.

Bozeman is a great area for attracting new tech talent.

Cheaper to do business

Closer to my banker and mentors and policy makers

Community and lifestyle

Community involvement and appreciation

Consistent with our company - outdoors (camping), founded here, tradition, etc.

Customers like visiting xxxxxx here in Montana

Desirable lifestyle and good work ethic.

Devoted, hardworking employees and strong corporate culture.

Doing business in Montana allows for easy access to a talented network and many valuable mentors.

Easier to carve out a niche.

Employment rules are much better than in California where we started, and there is little competition for consultants that help nonprofits use sales force.

Favorable branding image, low regulatory burden, quality of life, culture of customer service.

Generally, Montana is a tough place to do business in our field. The advantage that we do have is quality of life for all of our employees.

Geographical proximity to large industry markets.

Good access to state and federal representations and organizations. The state is like one large small town so it's easy to coordinate between businesses and support one another. Good hard working people are in the state who can help make our great team

Good living environment. Employees typically have an excellent work ethic.

Good quality of life, solid values

Great company culture and employee retention

Great ecosystem for technology businesses to recruit and retain top talent and to base corporate operations.

Great employees, work environment

Great location with hard working people. Work ethic seems to be better while rates are lower than Bay Area and other locations when looking at outsourcing.

Great place to do business. Networking and access to whoever you need to talk to is easy

Great place to live

Great place to live. High quality workers.

Great workforce, employee focus, less competition for employees. Desirable place to live.

Growing economy, increased capital from companies, and potential clients looking for my company's work is trending up

High level thinkers who love connecting and collaborating.

I am close to both WA, CA, NV, Montana makes a good distribution hub, lower operational costs than other states, and it is not over saturated with manufacturers.

If there is one key one I believe it's a combination of Life Style and Tech. Typically if you want to be in the "high-tech businesses" you had to work in a major market like (NY, San Francisco, Chicago, Texas, etc. But now with the refocus of Life Style and Tech we are seeing people opting to have it both ways. Which is great for us.

Intelligent, hardworking employees. Nations best quality of life. Grounded, well rounded people to work around.

Large demand for high speed internet in rapidly expanding rural areas

Less competition for assistance when compared to a state like California. Tend to find people who want to stay and make a home here, rather than flash-in-the-pan workers.

Less competition for resources.

Less competition, trust with clients, WOM referrals, flat hierarchy

Lifestyle

Lifestyle compensation, self-sufficient workforce, physical isolation, perception of unique attributes, less influence from unhealthy business attitudes and practices.

Little competition

Local business to work with local businesses engenders trust

Location for the types of products we are focused on designing. Outdoor activities year round make it easier to draw talent

Low cost of living

Low rent and low overall overhead expenses

Lower cost of doing business

Montana has many small business owners that are becoming more mobile due to advances in infrastructure

Montana is small in terms of people. We have strong community support and it's easy to get to know and meet leaders in different tech companies here. That is definitely an advantage.

No sales tax

None

None - it is very difficult to do business in Montana - Montana is not a business friendly state! Montana is a natural resource state . . . If you are not harvesting a natural resource you are faced with high freight rates, a long distance from the high density market places and fierce competition from foreign manufacturers. Plus high taxes and high cost of living and a shortage of qualified workers.

None Really other than maybe being unique and strong work ethic

Not many, but we want to be here, so that's where we'll probably stay.

Nothing. High tax rates, Adverse business legal system, little economic development and far reaching local governments trying to fund it's out of control spending. Great place to live, which can attract quality workers. Difficult to own a business in Montana.

Ok property taxes are becoming a problem

Our human networks are very supportive.

Outdoor recreational activities; life style

Platform HQ which production is already in less than a year spanning through a global market.

Proximity to MSU, Lifestyle, Good workers

Quality of life

Quality of life

Quality of life

Quality of Life and the growth of the Bozeman area

Quality of life for employees some customers like to visit

Quality of Life Lower pay scale

Quality of life, culture of customer service, low cost of living, good internet/phone service from Triangle cooperative, relatively low bureaucracy, good support from Helena government staff.

Quality of life, low cost of living, no sale tax, working with state and local government is good

Quality of life.

Quality of life. Affordability

Quality of life. It is easy to attract talent to an area that people want to live.

Quality of life. Access to high wealth individuals and elected representatives.

Recruit and retain good people

Remotely located drives down cost of living and increases quality of life for those who desire our area

Selling a lifestyle

Some loyalty from customers, decent work ethic from employees I've had

Stable, predictable economy. Strong fiscal management in State government. Invested citizens who generally work hard and care at a variety of levels. Quality of life: low crime, lots of recreation/social opportunities, priorities in balance.

State Department of Commerce and SBA have provide grants for trade-shows and translation services to help gain new international (and domestic) business.

Strong culture, outdoor lifestyle, life/work balance. Employees here also underpay, so attracting talent by paying marketing wages makes getting great talent much easier.

Talented people wanting to either stay in MT or move here from other larger cities.

The people

The story. Quality of life.

Theoretically, lower cost, but highly qualified labor. Unfortunately labor laws tilt field against employers more than in other states like Colorado, so we hire there. Would prefer to hire in MT, but the risks do not outweigh the potential gains.

There are highly educated people in Montana who value the quality of life here and who want to see it preserved. We all also want to see renewable energy increase in our state so that we can reduce pollution and our fossil fuel energy usage. This brings innovative technologies to the fore; without this, Montana will not succeed in becoming part of the new energy transitions, so vital to our state and nation.

There is a perception in the US that Montanans are good honest hard working people (and we are) and that perception has been an asset. Our employees have happy healthy lifestyles and that lifestyle makes them good employees. Happy people are more productive and more likely to stay with their jobs.

Unique market with a network of people who know each other and who can help them locally versus have to go out of state

Work / life balance

Work/life balance, great place to live.

## Q15. What is your largest impediment to faster growth?

# Of people in the state. It's hard to grow in a rural area. It is also hard to find qualified instructors as well.

Absolutely unaffordable care act

Access to capital

Access to capital, qualified workforce, lack of on demand regional mobility for small groups (next gen aviation)

Access to capital.

Access to capital. Access to motivated & qualified talent.

Access to healthcare subject matter expertise

Access to qualified clients inside of Montana. We make the majority of our revenue by working with clients outside of Montana.

Acquiring new customers given our distance from prospects

Age discrimination (unfortunately it is very real among tech firms here in Montana)

Airfare

Airline costs/frequency of flights out of MSO

Anxiety about hiring qualified, capable employees.

Business opportunity

Can't build buildings fast enough or find space to rent in Bozeman to support growth

Capital - right type of capital

Capital to grow content for our platform and marketing for potential users.

Capital, but that is my choice (bootstrapping)

Capital.

Cash. Our projects tie up a lot of our capital making the cost of growth difficult if not timed correctly and spread out over the correct time frame.

Client knowledge and acceptance of new behavior trends

Consistent revenue

Continuity of Gov't revenue/contracts

Customer access, capital

Distance from major markets

Eco system of analytics companies is still under developed

Education and understanding of the growing risk to local organizations, facing cyber-attacks.

Employee hiring and onboarding

Experienced inside sales force.

Fear

Finding experienced developers

Finding qualified people who want to work.

Funding

Funding or sufficient capital for budget planning and expansion.

Government regulations

Hiring and training for the technical positions.

Hiring enough talented Business Development resources knowledgeable and connected in our key markets.

Hiring good people

Hiring qualified employees

Hiring qualified good employees.

I'm weak in sales and seeking out new customers to grow my customer base and increase workload to warrant hiring and bringing new equipment on.

Ideals for new market.

In development

Industry regulation.

Labor rules. We just had a totally false claim against us for age discrimination. The assumed retaliation rules make the process of fighting a disingenuous claim too risky and expensive. We don't want to set ourselves up for that fun again.

Lack of coordinated public policy supporting a clear strategy for growth

Lack of defined services.

Lack of early-stage investment.

Lack of focus on our sales pipeline

Lack of long term projects. Lack of Mid-Level projects from a technical standpoint. We aren't ready to bid on the large state projects yet and are looking for more small business opportunities for work.

Lack of qualified individuals, no business incentives offered from the state.

Lack of qualified, educated customers/clients

Learning curve of teams to expand rapidly enough to capitalize on their existing market opportunity.

Legacy thinking

Limited amount of time and not enough qualified employees for the specific types of positions that we offer

Limited working capital, limited skilled workforce

Local government, access to reasonable capital.

Locating companies willing to hire "telecommuters"!

Logistical difficulty of acquiring business planning knowledge, lack of capital funds.

Management is too timid.

Market forces

Marketplace acceptance of our solution

My retirement plans

Need more good managers

New products and clients

No

Not much

Nothing. We don't want to grow faster than we are at present

Our ability to scale quickly when needed

Our leadership capacity. But we are running as hard as we choose to.

Our own thought process and focus to do so.

Poor internet, at least from the publicly available perspective. In Missoula, I have close to the same speed (30-60mbps) that was available to me 10 years ago in Columbia Falls. Perhaps it's something else, but the perception is that Helena (public utilities commission) or cable/internet semi-monopolies or the sheer cost of entry is keeping real internet from being widely available outside of a very tiny core of locations in large MT cities. In the Flathead, there has been high speed fiber for years but they won't even tell you where you can get it. You have to buy or lease space before they will tell you anything about it. A distant 2nd is the cost of airfare in and out of the state (Missoula, in my case)

Poor national economy

Product, execution,

Public attitudes do not strongly support innovation and educational excellence. Montanans have a hard time imagining a shift from extractive to a value-added economy; especially given equities in the former.

Qualified employees

Qualified employees who know how to scale a tech company

Raising money without too much dilution.

Reality of true compensation for the Software Engineering space, our Board of Directors still sees us as a startup and we are most certainly well beyond that now.

Sales

Sales

Sales process

Securing capital

Size of business economy being too small in Montana

Skilled labor workforce.

Slow adoption of disruptive technology and a long sales cycle in our target market.

Small market.

Stable, predictable economy. We are focused on the Montana small business market. Not on an outside market. Montana is pretty limited given its growth rate, population and geographic disparity. This is changing in Missoula, Bozeman and Kalispell in the Western parts of the state but lots of Montana isn't growing as you know.

The fact that many Montana small business are less inclined to invest in the business infrastructure as a way to gain an advantage

Time to focus on sales and business development Finding the right people to hire into key positions

Training employees. We have an excellent training and ramp up program but it still takes us up to a year to really get our employees 100% productive. Retention is a huge priority with our company investment in training employees.

Transportation costs / proximity to OEM manufactures - customers

Trouble finding mentors and partners. The pool for such people is just smaller.

Wanting to be cautious in growing

We are a small business and it is hard for us to afford the employee resources needed to grow as quickly as we would like (we need more employees than we can afford).

We're in a weird niche market

**Q16. (MHTBA members only:) What is the one most important thing you would like to get out of your Montana High Tech Business Alliance membership?**

A good network with companies who seek highly professional technical writing and editing for communications and internal procedures.

A mentor

A place to discuss hiring problems

Access to early stage investment opportunities

Access to networks

Awareness of other tech happenings in MT

Better connections to job candidates

Better knowledge of local business assistance resources. Better knowledge of what other manufacturing resources are in Montana.

Business opportunity

Business planning support

Can't think of anything

Community involvement and support high tech business, legislative involvement

Connection with other MT High tech business leaders resulting in a stronger high tech business sector in MT.

Connections and ideas

Connections to generate additional clients

Connections with other successful companies, or entrepreneurs, with a common goal of building successful, community-minded companies across Montana

Connections within Tech Community, and network for how problems are being addressed/overcome

Connections, environment for good work force

Connections. Shared experiences.

Continued networking with business leaders and talent in the community.

Continued PR and outbound communications about the benefits of locating and starting businesses in Montana. The more tech companies we have in Montana the easier it become for relocating and securing future qualified candidates.

Continued support and partnership

Data. Benchmarking.

Developing educational opportunities to train the right workforce

Direct interactions with other executives in the Montana high tech economy.

Events in Bozeman Montana. Most of the events seem to be in Missoula or Whitefish area.

Experience, networking, and I have an open mind so anything.

Exposure to more quality potential hires.

Exposure. The vast majority of our clients are from out of state. Sometimes it take a while to convince businesses that Montana does have the talent to develop high tech products.

Exposure/networking

Free beer

General Education and awareness about what is happening in our state.

Having something set up where I could seek out/ talk to a mentor type person or business

Help establishing a local rotating credit facility to help with short term cash needs during high growth time periods

I have no idea at this point. I only became a member at the Congressman's request.

I wish to grow tech jobs in Montana

I would like to get more connected with the membership.

I'm not sure my membership adds any value so I will likely withdraw

Information on technical resources in Montana. Access to additional financial resources.

Insight to new and changing technologies that will affect my business. In addition the hope that Systems can play a part in the advancement of such technologies in some way.

Interaction with other members

Introductions to Business Contacts

Like to be able to do some additional network and determine any synergies with other Montana companies.

Linkage to forward-thinking entrepreneurs.

Lobby to change Montana to an at-will state

Making connections with other member companies.

Meet people and discuss business politics

More exposure and contact to customers who buy in china etc. Without comparing landed local costs

More interaction and the ability communicate on a larger scale

More networking opportunities with other member companies.

More news about what's happening in the state - success stories, company profiles, etc.

More qualified spotlights on companies that have a business, not just hype, so we have a realistic understanding of the startup environment.

National visibility of the MT tech ecosystem in support of business building activities; recruiting, capital, business development, brand building, etc.

Network

Network and connect with others in the Montana technology ecosystem, from other executives to government leaders to industry experts.

Networking

Networking

Networking and help with recruiting.

Networking and new employee applications

Networking for mutually beneficial causes

Networking opportunities

Networking opportunities

Networking opportunities to find suppliers and new clients along with exposure of my business to other tech companies

Networking opportunities with key subject matter experts

Networking publicity

Networking with new companies

Networking with other businesses and possibly pursuing other business opportunities with them.

Networking.

News on hiring trends within Montana.

No expectations. I really have never engaged but those who do knock down barriers for all progressive employers in the state. At some point when my companies and family don't have to rely on me so heavily day to day I would like to help lead the charge to make Montana a great place to do business as the employer which will have a direct correlation to benefit the employees

Not sure this year.

Nothing at this time... You are doing a great job, but discounts to highly exposed job boards would be helpful.

Opportunity to connect with other business owners and chances to form mutually beneficial agreements

Other connections to high tech businesses

Press for Montana high tech

Promoting Montana as a great place to work and live; letting larger metropolitan areas know that we've advanced beyond the 1950's.

Promotion to change all levels of government to become a business friendly state and encouragement for Montanan's to trade with Montana Companies!

Relationships with other members

Sales lead generation opportunities.

Sales leads, and MHTBA use our calendar

Showcase of consulting companies able to provide professional services to other members with larger memberships.

Strategic partnership

The chance for business mentoring.

The connections that are already provided through networking is what is and will continue to be the most valuable thing for my company now and into the foreseeable future.

The networking opportunities are great. We'll try to attend more, and more frequent meeting opportunities with fellow members would be beneficial.

Two perspectives: First, networking and marketing to expose MT cos to our services. Second, for us to develop a larger MT presence, help reforming labor laws.

We are considering leaving the Alliance next year as it has not added much value to our business. It currently seems like more of a social organization oriented around hosting events around the state but not to adding real business value to its members. We would like to see business value-add activities next year that revolve around growing businesses, acquiring new customers, access to capital, etc. Rather than just meet ups.

We would benefit greatly if MTHBA developed a lobbying capability for smart public policy

**Q17. What additional comments do you have? The Montana High Tech Business Alliance is particularly interested in your observations about creating new, high-paying Montana jobs.**

Attract early stage capital partners.

Being based in Bozeman, getting the community to allow more business and high-density residential to be built downtown is important. People don't move to Bozeman wanting to live in Four Corners - They want to live downtown. Continuing to promote the downtown area is huge for attracting and retaining talent.

Besides the usual, we need to encourage more diversity, more diverse housing and transportation options in communities and a greater connection between the staff of high-tech businesses to foster community.

Creating new high-paying jobs is one thing, filling them is another and with unemployment so low really everyone who wants a job is working already. I think the focus needs to shift to facilitating the education of and getting qualified employees. Affordable housing is also a major issue in Gallatin county.

Engage with organizations like Missoula Economic Partnership to bring high tech companies to Missoula versus just Bozeman.

Focus on success, not so much on 'entrepreneurship'. Put the spotlight on successful companies, not companies that are successful in 'starting'. Be able to articulate the value of companies that hire Montanans but have customers out of Montana - the economic multiplier. We appreciate the Alliance

Give CEO roundtable access to startup CEO's - they need the mentoring.

Great job promoting Montana business and creating high paying jobs in the state

Great organization. Keep up the good work!

Help to minimize impediments to growth from local and state governments.

I am also interested in this. We have not figured out a successful model to sell our software yet. Until we do, this will be a continued challenge.

I am not sure at this time

I have shared suggestions with Christina over coffee recently, but here's a synopsis: Bring down the cost of healthcare premiums for small businesses and their employees, bring down airline travel costs for Montana residents, continue to build and invest in a strong private and public educational system to prepare graduates for information-age careers, and work to reduce the property and income tax burden on MT residents before we become non-competitive with other states' cost of living.

I need mentoring/support in developing business plans.

I notice that most areas are not necessarily business friendly when it comes to commercial taxes and property taxes. As I am looking for land to build new facilities it is very challenging to find un-zoned, no covenant land in areas that I want to be located. Taxes are the biggest drawback to businesses and I hear that from many business owners.

I think MHTBBA should continue to brand Montana as a high-tech destination, creating demand among the best and brightest people across the US. Doing this will, in the long term, grow the economy here and create more opportunities for Montana residents and graduates.

I think we are doing a great job. Things have changed dramatically in the last 4 years

I would like to continue the efforts to cultivate talent in our rural communities to help revive youth, commerce, and overall energy to these dying communities.

It would be nice to have an easy way to reach compatible students before graduation. It would be nice to have an easy way to reach educators for collaboration on component development projects.

Keep up the fantastic work

Keep up the good work!

MHTBA is a great resource for growing tech jobs in the state. I think an office representative in Bozeman would help. Also some specific veteran focused job placement would be great

More needs to be done with the Legislature and the city governments in key cities (or at least in Bozeman) to help the startup ecosystem. I didn't see pressure from MHTBA to pass the angel investor tax credit this past session - that should have been a slam dunk. Bozeman is having trouble with growth, and I think some pressure to think about the kinds of housing and amenities that would be attractive to people in these kinds of jobs would be helpful.

Need more support from the University, need to push for more software engineering related course work

New member looking for more ways to use membership.

No comments

None

None at this time

Not being a Right to Work state - the HR costs are higher than other states with excellent technology centers

Our 2017 was a waiting year. Upon startup capitalization, our plan calls for ten or more new jobs per year.

Our business as a custom plastic part producer is a gateway to other larger customers so support to reach out to other manufacturers within a 500 mile radius is key. Many times we hear that "we didn't know we could get these products made locally "

Please encourage local and federal representatives to enact and support policies that enable small high tech companies to start and thrive, especially affordable health care (EVERYONE needs it) and net neutrality (killing net neutrality would be disastrous).

Right to work

So far I am seeing wonderful thoughtful work by the organization in helping start-up and business growth.

Thank you for your organization, for your outreach, and for attracting companies to Montana. We can "have it all!" We can have innovative companies who want to provide high-paying jobs and we can retain our quality of life without resorting to extracting minerals and fossil fuels.

The challenge in Billings for High-Tech jobs is that it is a fairly closed market. There are a few development firms in town, who often need talent, but, none have a "Hire Everyone" policy. This creates a chicken and egg problem. Developers (or other High Tech roles) can't come here with the hope to work - there aren't enough jobs, yet when the companies have jobs, there aren't a lot of developers on the bench.... Catch 22.

The key is growth, attracting and supporting your existing businesses is the first step. Then you need education to start playing a key role in our key areas, once you have industry and education on the same path and support it through government sponsored programs - you will only succeed. You have the fundamental structure to really make a difference, plus we need to see more businesses move into this market from where they are today

These kinds of alliances are an asset. Promoting the mentality of growth and high paying jobs will make a difference. The alliance is a good idea; keep up the great work.

To create more high tech jobs we have to have more young people going into computer science and doing real projects. To do this we have to fund stronger high school and college computer science programs. Neither are well-developed in Montana.

Two or three years ago I was very high on the possibility of moving some of our development staff to Montana because of the quality grads at MSU and the ability to hire them at slightly lower pay rates compared to Denver where we are headquartered. After our recent adventure with the labor laws, most likely I will keep the development staff in Denver. It is just too risky here compared to labor environments in Colorado. I don't see how MT can create relatively more jobs without serious labor rule reform.

We anticipate a push this year to add 7-10 employees to service our clients. Any help in identifying great candidates in or out of Montana would be helpful.

We could use more conversation about the "art of the possible" in Montana to stimulate energy and ideas. There is emerging literature, such as the Chamber of Commerce and Arts Council visions, but public conversation (such as the Energy Summits) are dominated by conversation about legacy (extractive) economy versus envisioning how we will achieve our future (value-added) economy.

We have more jobs to fill than we do interested applicants and will only increase in demand. I am working on closer relationships with UM but would like to also better engage MSU and other Montana Universities. We were not able to attend the job conference, but maybe a virtual high-tech / Montana University job fair would be helpful.

What have you actually done other than cocktail parties?

When a few falsely sound like many it creates a smoke in mirror effect and wastes resources of the Alliance. Simply put many of the MT companies need to figure out how to recognize good people then get good at training them how to be a valuable employee, not expect ready to work high level day one. When members can help themselves then the collective group can commit real resources to making Montana Companies and wages better. Just being honest, that song and dance turns me off. I want to be a part of making a difference not starting a movement to make the weak strong. I say gain strength then sit at the table. It's not a right to be heard, having a voice heard is a privilege... Respectfully

When xxxx invited me to his house last July to become a member he had mention that I would be invited to attend round table meetings. Ever since he said that I have the most curious fascination about what that even means. To tell you the truth, I am so engrossed in developing my ever expanding organization that I haven't had time to investigate nor spar expense to put an aid of doing the research for me. So, it's all new territory for me. I am to say the least honored. I will be traveling to xxxxxxx at the end of next month on locations for a documentary film. Perhaps after I return from the Upper Amazon Rainforest expedition, I can get together with someone who represents the Alliance whom can give me more understanding as to why xxxx, highly recommend me to get on board your organization. Thank you kindly, xxxxxx, President

While we aren't creating direct jobs in our organization, our work indirectly creates sales force admin positions within many of our client organizations. This is enhancing the ways that nonprofits use information as well as increasing the technological abilities of those nonprofits. I've been hosting a local sales force user group for about 3 years and am looking to see several other groups form across Montana which can focus on needed skills for entry level admins.

You may not want to use data for xxxx as it will skew results.

## Nonmember Member Responses

### Q8. What are the job titles of the three job types that your firm most often hires?

2018_SOC	Description	Total Jobs	% of Jobs
11-2022	Sales Managers	13	10.5%
15-1252	Software Developers	11	8.9%
19-1021	Biochemists and Biophysicists	11	8.9%
61	Technician	8	6.5%
11-9041	Architectural and Engineering Managers	7	5.6%
11-3012	Administrative Services Managers	6	4.8%
11-2021	Marketing Managers	4	3.2%
51-4041	Machinists	4	3.2%
15-1232	Computer User Support Specialists	3	2.4%
15-1254	Web Developers	3	2.4%
27-1024	Graphic Designers	3	2.4%
51-2099	Assemblers and Fabricators, All Other	3	2.4%
65	Internship	3	2.4%
15-1212	Information Security Analysts	2	1.6%
15-1251	Computer Programmers	2	1.6%
15-1253	Software Quality Assurance Analysts and Testers	2	1.6%
17-2141	Mechanical Engineers	2	1.6%
19-xxxx	Scientist	2	1.6%
49-xxxx	Mechanic	2	1.6%
51-4121	Welders, Cutters, Solderers, and Brazers	2	1.6%
51-7011	Cabinetmakers and Bench Carpenters	2	1.6%
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	2	1.6%
62	Consultant	2	1.6%
11-2011	Advertising and Promotions Managers	1	0.8%
11-3021	Computer and Information Systems Managers	1	0.8%
11-xxxx	Managers	1	0.8%
15-1231	Computer Network Support Specialists	1	0.8%
15-1243	Database Architects	1	0.8%
17-1011	Architects, Except Landscape and Naval	1	0.8%
17-2061	Computer Hardware Engineers	1	0.8%
17-2071	Electrical Engineers	1	0.8%
17-2112	Industrial Engineers	1	0.8%
17-2199	Engineers, All Other	1	0.8%
17-3011	Architectural and Civil Drafters	1	0.8%
19-4021	Biological Technicians	1	0.8%
27-1011	Art Directors	1	0.8%
27-1014	Special Effects Artists and Animators	1	0.8%

27-3043	Writers and Authors	1	0.8%
27-3099	Media and Communication Workers, All Other	1	0.8%
27-4032	Film and Video Editors	1	0.8%
41-1011	First-Line Supervisors of Retail Sales Workers	1	0.8%
43-3031	Bookkeeping, Accounting, and Auditing Clerks	1	0.8%
43-4051	Customer Service Representatives	1	0.8%
45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals	1	0.8%
51-4194	Tool Grinders, Filers, and Sharpeners	1	0.8%
51-6031	Sewing Machine Operators	1	0.8%
51-9061	Inspectors, Testers, Sorters, Samplers, and	1	0.8%
66	Developer	1	0.8%
		124	

Please note that in a few cases respondent answers were too vague to assign a SOC. In these cases codes 61-65 were assigned.

#### Q14. What advantage does Montana give you in business?

'- Great employees who are committed to our firm - great story to tell our clients (global firms and teams who love the idea of MT)

A great place to live

Ability to hire applicants looking for the "Montana life style".

Access to whitefish mountain resort and back country snowboarding. Tourism.

Attraction to the recreational and quality of life

Being able to balance work with a healthy outdoor lifestyle.

Bozeman area in general has significant growth

Cache for product marketing quality of living

Cost of living/doing business and labor oriented workers

Ease of lifestyle, less traffic

Employees want to live here so there is little to no employee turnover. Strong public/private partnership with the university of Montana is a big advantage for our business.

Environment

Generally there's a good work ethic for employees (when they can be found). For international sales, Montana has a mystique and a good reputation--not everyone could find it on a map, and they're split on whether it's all mountains or prairies, but either way it seems people have a very positive impression of the state.

Geographically unique in the clinical research business

Hiring and keeping highly qualified people. The outdoor and community amenities provide a sought after place to live.

Home

I support many other small businesses. Montana is welcoming to many small businesses like these, so I succeed in providing it service to many of these flourishing businesses.

In my business, absolutely nothing. I get to pay more for airfare, which is critical to our success.

Innovative location, lower cost of operations, easy access to elected officials

Lack of competition

Lifestyle

Location to technology center

Low cost. Once you get an employee they tend to loyal. Lots of niches to go after without too much competition.

Low wage scale

Lower average wages than many states.

Lower overall operating costs, qualified and highly motivated workforce, stable and non-transitory workforce

No business advantage, I just like to live here and today's global workforce makes it possible.

None - we can be anywhere there is an airport. We choose to locate in MT.

Not sure there is an advantage.

Not sure yet

Our company's narrative shapes around our ability to manufacture dwellings for the intermountain west using materials sourced as close to home as possible, while providing full time employment with living wages. The talent and materials to produce quality buildings with sustainable products exists in Montana, and Montana's labor force, when respected for its skill, is fiercely loyal.

Outdoor activities for active people

Pro manufacturing companies

Quality of life lower business operating cost access to MSU

Quality of life, open space, natural beauty, relatively low crime rate, proximity to skiing fishing hiking climbing mountain biking

Skilled workers with superior work ethic. Favorable tax environment. Stunning views that help with promotion. Very accommodating city gov't (Bozeman)

Small town feel where employees take more pride in the organizations they work for.

Snow and agriculture. These are the two focuses of our company. There is a lot of both here in Montana.

Specifically, none.

The BSFT has been a huge help in providing grants to our business to create jobs and to develop our business plan.

The mystique of "Montana".

The people who work here want to be here. We have easy access to government and government programs.

There is no real advantage doing business in MT except wanting to live in MT. Travel is extremely expensive. Local government in MT does not want to do business with MT companies.

Very few; per capita income is generally lower for Montanans (and ours is an expensive technology) and our legislators are not particularly friendly to support renewable energy technologies.

We are able to offer a very attractive lifestyle option compared to NYC or bay area (depending on candidate's preferences). The fact employees can ski/hike/camp/fish after work or on weekends resonates well.

Zero due to the need of investment.

## Q15. What is your largest impediment to faster growth?

' - Hiring enough of the right employees - Developing meaningful connections with individuals who can serve in an advisory relationship (would be great to have some MT-based relationships like this)

Access to capital, borders on the impossible.

Access to specialized knowledge and training.

Access to venture capital markets.

Banks won't lend because they don't understand online businesses.

Being an idiot

Big companies like google and Facebook give away too many things for free so we can never raise prices.

Building cost

Capital

Cash flow, access to wide pool of talented labor, and needing to build new facilities for growth.

Declining quality of Higher education in the sciences in Montana makes it difficult to recruit from MSU as was possible in the past.

Economy

Employees

Finances

Finding world class sales people who can sell a technical product

Geographic Isolation for Travel

Getting people to loan us money

Good question! Our own business model

Government over regulation

Hiring and training. It can take a year for a new hire to be productive. This great cost means that we hire more slowly than demand for our services merit.

Improving strategy

Investment capital.

Lack of capital

Lack of Infrastructure going on.

Lack of qualified sales leads.

Limited time and expertise/experience needed to handcraft a snowboard

Market growth, US research funding in our technology arena

Montana State University is taking all the available laboratory space. There is no biotech infrastructure in Bozeman.

No access to USF which our competitors have free access to and squander.

No suitable facilities for synthesis laboratory, therefore company has essentially closed down when MSU Foundation re-purposed our leased space

Our largest impediment to growth is finding the right sources of capital. We are currently in a Research and Development phase and finding funding to support the development has been difficult.

Poor internet access for rural areas.

Qualified and talented people and the price of airfare in and out of Missoula.

Qualified employees

Quality employees

Raw material acquisition and transportation costs.

Regulatory requirements for medical devices. For international sales, there will be major revisions to ISO necessary in 2018, and these are happening at the same time as Canada's all-new MDSAP program. In the USA, the FDA has implemented a new UDI requirement, in addition to their annual registration fee (which increases each year) and the likely return in January of the medical device excise tax. There are no exclusions for small companies with limited product lines so the (rapidly-increasing) number of fees and requirements are extremely expensive and burdensome for most Montana companies.

Suitable office space as we grow

Taxes

Time

Time and willing to accept the risk to go full-time

Tough to find decent employees with the experience necessary to work fluently in the industry.

Travel out of Missoula. We need to attend shows around the world and the cost of flights out of Missoula are horrible.

**Q17. What additional comments do you have? The Montana High Tech Business Alliance is particularly interested in your observations about creating new, high-paying Montana jobs.**

- We would love to see more reporting (particularly by the Bozeman Daily Chronicle) about businesses that are creating compelling employment opportunities and benefiting the communities in which they are based. Our local reporting in BZN tends to either 1) share stories of consternation and drama around growth (e.g. The 'Black/Olive' debate), or 2) share stories of new businesses with massive growth projections riding in on a white horse... Which often fall far short of expectations down the line. There's very little reporting about firms already in existence that have crossed the start-up hump and are making meaningful progress at their companies and a meaningful impact in their communities.

A \$65K salary is no longer sufficient to afford housing in Bozeman. Lots of building going on here that is affordable for out of staters but little to no affordable housing for local people who work at small tech companies.

Apprenticeships and certificate programs like the construction program at Missoula College are critical for training a construction labor force that's flexible to manufacturing, and imbued with Montana values.

Bozeman appears to have become a center for tech-related businesses and I'd be interested to know how this was done. I'm just guessing, but I assume it was because the local government actively courted key companies, offering them incentives, and working similar or complementary companies that were then interested in moving to the area. In Missoula, the business climate would need to change 180 degrees for this to happen, as the focus is on service-related businesses (which can only provide high-paying jobs if living wage requirements are tacked on). The current climate is very unfriendly towards private businesses (consider Eko Compost or the water company) so until this changes, I am not optimistic that anything but more hotels, restaurants, and casinos will come to town.

Cutting taxes hurts most businesses because it leads to cutting infrastructure. Small companies need good infrastructure more than low taxes.

Easier ways to be able to borrow money.

Feels to me like the problem is infrastructure to attract and support outside development teams of large corporations to the tech centers.

I think being careful with political ties (while necessary) is key. The perception among our peer group of tech entrepreneurs is MHTB is very right-leaning and used for PR purposes by our political candidates.

If there were better choices for internet access for rural areas, we would increase Montana hiring exponentially.

Missoula College needs to offer classes in computer design and production. Not the Code program but design, creativity, solving design problems with a creative flair. Illustrators and Code people are a dime a dozen, but actual creative designers and writers are rare.

Montana needs to shed its perception of being a vacation/hobby state. Capital is very difficult to raise in Montana.

Our business essentially ceased operation as of May 1, 2017 when MSU Foundation ended our lease for synthesis and office space and no suitable substitute space was available within a 50 mile radius.

Skilled workers are better here than any other state I've employed in. Highly recommend a focus on bringing more high tech manufacturing to MT.

Tax breaks for new high-tech business would help create more jobs in Montana. Expand SBIR/STTR cost-matching programs provided by State.

Understanding that the ability to add new job will likely drive to high-paying jobs but understanding the reasons to be in MT are multi-faceted but lower operating costs is one of them. Generally, wage growth will get closer to national averages but I would focus on factors outside of wages like fiber internet, fast track office spaces/developments and tax reform to maintain the over operating advantages so wage growth is easier overall.

We have the jobs today. Get us some capital and help us train a work force and there is more available. The energy tech program at Missoula College should have stayed open in our opinion.

We need investors that are willing to get involved with unproven hard science.

We need political representation that supports and funds high tech research and development on national and state levels.

We use MMEC for assistance. They have been very helpful.