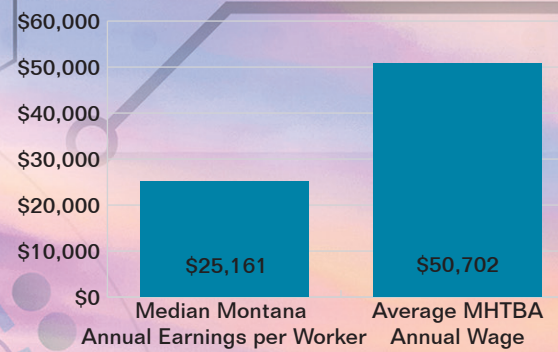


Figure 1
Montana High-Tech Jobs are
High Paying Jobs



Sources: Bureau of Business and Economic Research, University of Montana; American Community Survey, U.S. Census.

High Growth

Fast-Track Output

Patrick

Montana is quietly increasing its footprint in high-tech businesses, with growth projected to vastly exceed the average statewide economic growth. Unbeknownst to many, there are a number of high-tech companies scattered across Montana that are creating high-paying jobs and challenging the older stereotypes about our economic base.

From rural areas of Montana, companies like Spika Welding and Manufacturing are doing business around the world. President and founder Tom Spika started his Lewistown business as a two-person shop and has grown it into a multi-million-dollar company that designs and manufactures equipment for technicians working on military

equipment, tactical vehicles, and satellites (see article on Spika Welding and central Montana's manufacturing center, page 10). Perhaps one of the most well-known success stories is that of RightNow Technologies, which launched in 1997 in Bozeman and employed more than 1,100 people (half based in Montana) with average wages of \$86,000. RightNow sold to Oracle in 2012 for \$1.8 billion.

Also in Bozeman is Workiva, an Iowa-based software-as-a-service (SaaS) company whose platform allows companies to submit business reports, such as SEC filings, digitally (see sidebar, page 5). Workiva's customers include more than 65 percent of Fortune 500 companies. The company has grown to nearly 1,000 employees since its launch in 2008 and went



Growth for High-Tech

Growing, High-Paying Industry Cluster is Boosting Other Sectors of Montana's Economy

by

M. Barkey, John Baldrige, Christina Henderson, and Shannon Furniss

public in December 2014. Workiva's CTO, Jeff Trom, and its second-largest development office are located in Bozeman, with around 70 employees.

In Missoula, Education Logistics (EDULOG) created the first school bus scheduling and routing software for school districts more than 35 years ago and has stayed ahead of the curve with GPS and student tracking solutions, including mobile apps. Edulog has contracted with the Saudi Arabian government on a project to improve the efficiency of the country's school bus system and help females – who are not allowed to drive or go out in public unaccompanied – get to school. The privately held company has more than 150 employees and plans to grow significantly in 2015 (see sidebar on page 7).

This article summarizes a Bureau study on Montana's high-tech industry, which is the first of its kind. The Montana High Tech Business Alliance (MHTBA) – a newly formed, member-driven group of 200 high-tech businesses – asked the Bureau 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. The Alliance members include businesses 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, as well as other organizations statewide. The research findings serve as a benchmark and an important assessment of one of Montana's fastest-growing and highest-paying industry clusters.

Key Findings

By almost any measure, growth in high-tech businesses is outpacing that of other sectors of the state’s economy, with employment and revenues expecting growth rates that are 8-10 times of statewide growth.

Jobs at high-tech businesses pay considerably more than jobs elsewhere in the economy. Average wages are at about \$50,000 – twice the median earnings per Montana worker

(Figure 1, page 2). One example of a business that pays its employees well for their hard work is Advanced Technology Group Missoula Solutions Center (ATG), located in downtown Missoula (see sidebar, page 8).

Tom Stergios, vice president of ATG’s Missoula Solutions Center, started the business in his basement and has now grown it to 60+ employees. The Missoula company delivers

Figure 2
Locations of Montana High Tech Business Alliance Members

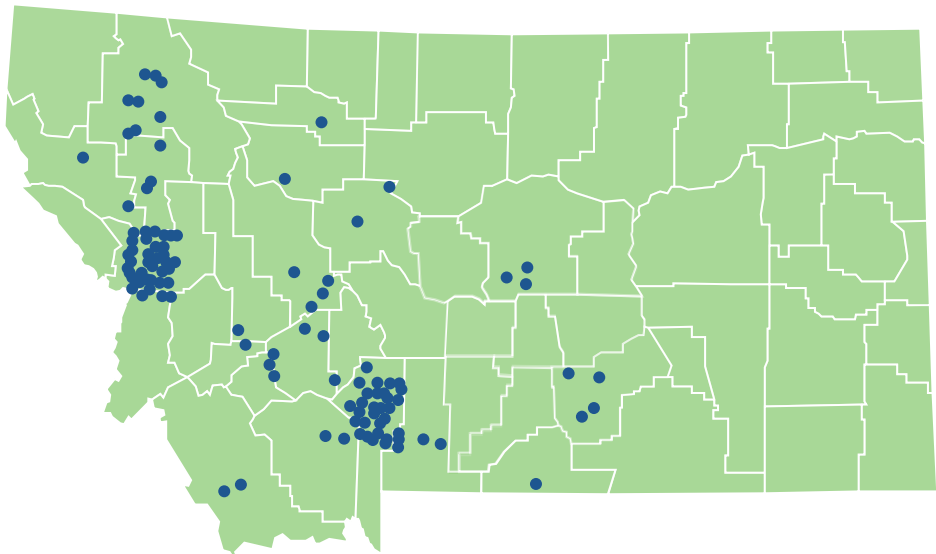
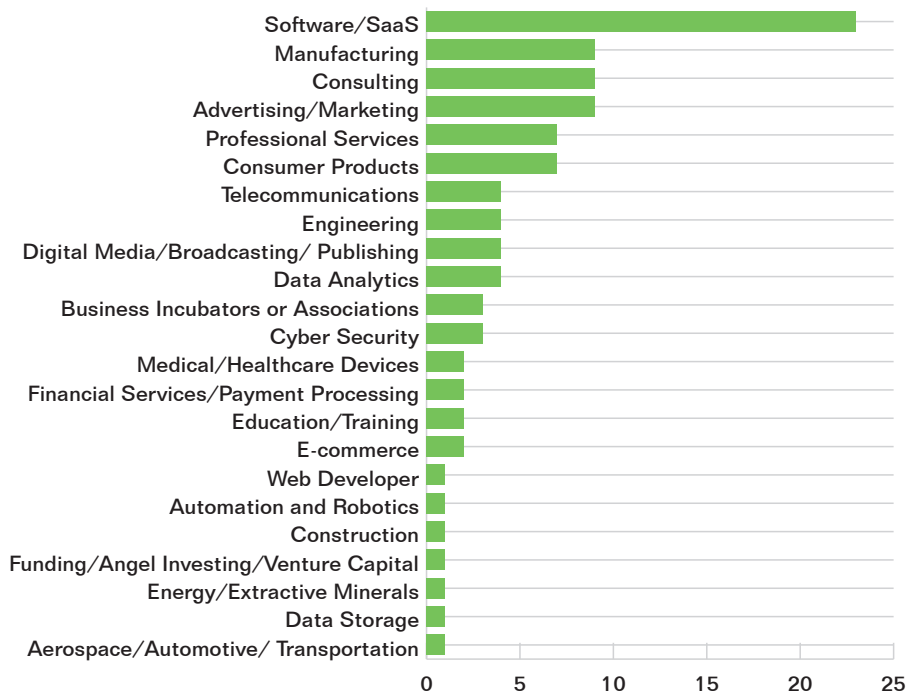


Figure 3
High-Tech Business Types



Source: Bureau of Business and Economic Research, University of Montana.

strategy, implementation, and managed services for Fortune 1000 companies that have revenues ranging from \$160 million to \$16 billion per year. The average consultant salary is more than \$75,000, with senior consultants earning more than \$100,000.

While members of the Montana High Tech Business Alliance are located throughout the state, there is a more

prominent concentration found in Gallatin and Missoula counties (Figure 2). Montana's high-tech firms are diverse, but software/software-as-a-service (SaaS) is by far the largest industry sub-group (Figure 3). Another interesting fact that emerges is that on average, the state's high-tech companies are smaller, younger, and more growth focused.



IN WAKE OF IPO, WORKIVA CTO REVEALS SECRETS OF HIS COMPANY'S SUCCESS

When Workiva had its initial public offering on the New York Stock Exchange in December 2014, Jeff Trom had been there before. The Chief Technology Officer and six members of Workiva's founding management team took a previous company, Engineering Animation, public in the 1990s.

But the second time around, the IPO was easier and less costly thanks to Workiva's proprietary Wdesk platform, which automated the process of filing with the Securities and Exchange Commission (SEC).

"It was fun to use our software for what it was designed for," Trom said, acknowledging the irony in the team's unique situation.

Founded in 2008, Workiva is a software-as-a-service company that helps enterprise clients manage large quantities of data. Workiva counts more than 65 percent of the Fortune 500 as customers, including Walmart, United Airlines, and Ford.

Headquartered in Ames, Iowa, Workiva has about 1,000 full-time employees in 15 locations, from New York City to Los Altos, California.

The company opened a Bozeman office in 2012 and expanded to Missoula in April 2014. Workiva's second-largest development office is in Bozeman with about 70 employees. CTO Jeff Trom leads Workiva's entire development team from his home base in Bozeman.

Workiva got its start when a former colleague approached Trom and other former business partners about finding a solution to the pain involved in filing with the SEC. There are around 270 types of filings with the SEC, and business documents can be enormous, ranging upwards of 20,000 pages.

The challenge, according to Trom, is keeping data throughout these documents consistent. "If you change a number and it's referenced 50 times, you must make sure the number is reflected in all locations accurately, whether in text, a table, graph, or chart."

The software also helps companies deal with collaboration and permissioning, setting limits on who can read, edit, or own sections of a document. This combination of features allows for tremendous efficiencies and peace of mind.

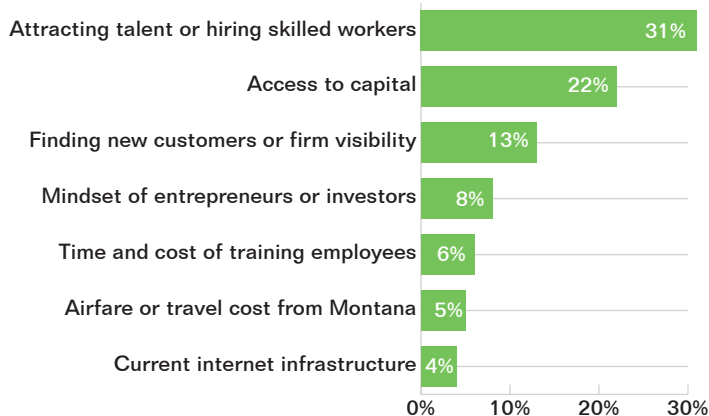
"[Managing and filing these documents] is very stressful," Trom said. "We take the stress out of the system. People send our teams flowers and candy because we've made the process so much easier."

Formerly known as WebFilings, Workiva re-branded itself in 2014 and has expanded beyond SEC filings into other data-intensive functions like Sarbanes-Oxley regulations and risk management.

According to Trom, things are different than they were even five years ago as Montana becomes a center of excellence for software development, particularly in Bozeman and Missoula.



Figure 4
Largest Impediment to MHTBA Member Growth



Source: Bureau of Business and Economic Research, University of Montana.

Other key findings about the high-tech businesses that are members of the Alliance include:

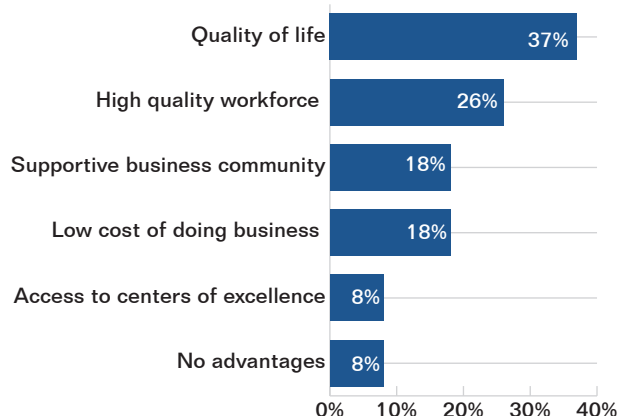
- MHTBA businesses collectively paid more than \$139 million in payroll in 2014. Other data sources suggest that the actual payroll paid by all high-tech businesses (including nonmember businesses) was much larger;
- The Montana-based activities of MHTBA members were responsible for \$632 million in gross sales in 2014;
- High-tech companies that are MHTBA regular members will raise wage rates by 7 percent in 2015, significantly faster than the 1.4 percent rate of growth realized in wage rates at Montana private sector employers in the most recent data;
- Alliance members expect to add more than 400 net new jobs in 2015, a 15 percent increase, a much stronger job growth than has occurred in the overall economy; and,
- The high-tech businesses that are members of MHTBA expect to make at least \$35 million in capital expenditures at their Montana facilities in 2015.

Barriers to Growth

Recruiting and hiring skilled workers is the largest impediment to growth for high-tech companies (Figure 4). Whether hiring software developers, machinists, or lawyers, employers face challenges. Many employers find it difficult to convince outsiders (or their spouses) to relocate to Montana. Access to capital also can be challenging.

When asked about barriers to growth for high-tech firms, survey respondents mentioned the following:

Figure 5
Advantages Montana Gives MHTBA Members



Source: Bureau of Business and Economic Research, University of Montana.

- “Experienced workers deeply skilled in software engineering and building and scaling software startups. Many of the highly skilled workers flee the state for higher salaries in metro markets.”
- “Our largest impediment is access to working capital in order to fund expansion. We are actively marketing our services to out-of-state clients. If we had access to working capital, we could compete at a much higher level.”
- “Available skilled workers. I either need to train from the ground up or import workers into the state. The burden is on me to teach an apprentice. I’ve looked into the Montana apprentice program, but I have to invent my own program because it’s so out-of-date. It’s very, very time-consuming.”

Within the past year, a number of high-tech companies have come together to find solutions to address workforce shortages and other issues. One group, the Central Montana Manufacturing Alliance, has made major strides in addressing these challenges by collaborating with each other and partnering with higher education to strengthen the workforce (see article on page 10).

The Quality of Life Advantage

Montana’s quality of life – the lifestyle, the work/life balance available, the recreational opportunities, and the beauty of the landscape – provides significant advantages for high-tech businesses that are located in the state. As Figure 5 illustrates, 37 percent of survey respondents cited Montana’s quality of life as a major advantage. According to

Tom Spika of Spika Welding, people are drawn to Montana by the lifestyle – hunting, fishing, the outdoors, skiing, snowmobiling. Jeff Trom of Workiva recruits people from inside and outside of Montana. “Winter or summer, anybody who enjoys the outdoors will love it in Montana,” he says.

MHTBA members also most frequently mentioned Montana’s high-quality workforce (26 percent), Montana’s supportive business community (18 percent), and the low cost of doing business in Montana (18 percent). A somewhat lower proportion (8 percent) said that access to centers of

excellence like universities gives them an advantage. Eight percent said that Montana actually provides them few, if any advantages.

When asked about the advantages of doing business in Montana, survey respondents commented as follows:

- “Great place to live, recreate, and raise families, which is attractive both to employees and customers.”
- “Fantastic location – employees who live here love it and the work/life balance we offer.”

...Continued on page 9

EDULOG

EDULOG’S TECHNOLOGY HELPS GET SAUDI ARABIAN GIRLS TO SCHOOL, PROVIDES 130+ JOBS IN MISSOULA

Getting female students and teachers to school in Saudi Arabia – a country where women are prohibited from driving and must be accompanied while in public – can sometimes be challenging. If a chaperone or driver is unavailable, females are unable to get to school. A Montana company with leading-edge technology has spent the past two years working on a project involving 2 million students (most of whom are girls) and 30,000 school buses to ensure that these young women have the opportunity to get an education.

In recent years, the Saudi Arabian government has made substantial investments in education, with a special emphasis on getting girls educated and into the workforce, according to Jason Corbally, president of Missoula’s Education Logistics, Inc. (Edulog). Developing a dedicated school bus system will help solve some of these transportation challenges for females and help all students get to school safely and efficiently, he said. It also will help reduce traffic congestion, he said, adding that “the latest statistics tell us that one school bus takes 50 cars off the road.”

With nearly 40 years in pupil transportation systems, Edulog has contracted with the Saudi Arabian government on a project to improve the efficiency of the country’s school bus system. Edulog serves as the technology arm, helping with school bus routing, scheduling, GPS tracking, and student tracking. A number of other consulting firms from around the world are working on the infrastructural and operational needs of Saudi school buses.

Located in a renovated sugar beet plant behind Target in Missoula, Edulog began in 1977 when school districts were determining bus routes by putting pins on maps and trying to string them together. Today, Edulog uses sophisticated software that it has developed to help clients in at least 1,000 school districts across the U.S. and Canada to route 150,000+ school buses every day. Finding more efficient bus routes saves millions of dollars, said Corbally, citing recent projects in Miami, Toronto, Toledo, Atlanta, and Memphis.

In addition to routing and scheduling software, Edulog’s product line includes boundary planning, enrollment projection, driver payroll, vehicle inspection, field trip management, fleet maintenance, GPS tracking, student tracking, and consulting services.

In the past month, Corbally has hired 10 new employees who are working in software development, project management, quality control/quality assurance, support, and training. Most of these new hires will be based in Atlanta, a major transportation hub where Edulog is building another office that will work with the Missoula operation.





Many of ATG's employees at the Missoula Solutions Center are recent University of Montana graduates.

ATG: MISSOULA HIGH-TECH FIRM FINDS MONTANA LIFESTYLE ATTRACTS TALENT, FORTUNE 1000 CLIENTS

Last summer, Tom Stergios sat on the deck of Finn and Porter in Missoula with some of his clients, watching people fly fishing on the Clark Fork River and listening to the legendary Paul McCartney who was performing across the river at the University of Montana's Washington-Grizzly Stadium. The next day, Stergios, vice president of Advanced Technology Group Missoula Solutions Center, took the C-level executives from a Fortune 1000 company fishing on Flathead Lake and for a helicopter ride in Glacier Park.

"They fell in love with Montana," said Stergios. It was a "magical" week in Missoula, and it's likely his clients will be visiting again.

Tucked away next to the Shack restaurant on Missoula's Main Street is the Advanced Technology Group, or ATG, a high-tech firm that does business with multi-million to multi-billion

dollar companies throughout the world. ATG has more than 60 employees who work in a cubicle-free, shared space with a refrigerator that's well-stocked with Rockstar energy drinks. "It's insane how much caffeine we go through," said Stergios.

ATG has grown rapidly since Stergios opened the Missoula office in 2011 with a couple of employees. Of the 60-plus employees, more than half are fairly recent graduates from the University of Montana's business school and computer science department.

Before opening ATG's Missoula Solutions Center, Stergios was a remote worker, consulting with the Kansas City-based ATG from his basement office in Missoula. A native Missoulian who grew up in a house near Grizzly Grocery, he returned home after working as a consultant for Accenture, Axiom, IBM, Cygent, and Convergyt.

"I worked internationally on six continents and got a lot of exposure to enterprise IT," said Stergios. "Then I found myself living in Washington, D.C., with young kids. Our kids were born

three months before 9/11, followed by snipers and anthrax. My wife and I said, 'What are we doing here?' It was a no-brainer to come back to Montana."

ATG works in an industry that is highly competitive and constantly changing, with Fortune 1000 companies that have revenues ranging from \$160 million to \$16 billion per year. ATG's clients include some of the fastest-growing companies: Centurylink, Trimble, Yodle, Concur, Constant Contact, InterCall, and many others.

The Missoula tech company delivers strategy, implementation, and managed services for clients. They also provide strategic consulting – particularly around billing and accounts receivable, Customer Relationship Management, and complex quoting and contracting processes. Collectively, these areas are called "quote to cash." In addition, they offer Software-as-a-Service implementation and flexible managed service offerings. ATG's headquarters are in Kansas City, with offices in Missoula, Denver, Cincinnati, St. Louis, and Dallas. Missoula is now ATG's largest office.

Energetic, bright students are vital to ATG's operation, said Stergios, and the company recruits and hires graduates from the Montana University System.

Employees work hard, but they also have fun together, said Stergios. Every week, the "Kitchen Czar"—a rotating position – is given a budget and is responsible for stocking the company refrigerator with snacks and hosting "Club MSC" where employees play games like Jeopardy or whatever the Czar chooses. The Golden Rockstar (a can of Rockstar that is spray-painted gold) is awarded each Friday for someone who has "done something above and beyond" for ATG's clients during the week.

ATG consultants also are paid well for their hard work. The average consultant salary is more than \$75,000, with entry level positions starting in the low \$40,000s plus bonuses. Raises are aggressive, with the original team of consultants from 2011 more than doubling their salaries. Senior consultants (with 10-plus years of experience) routinely earn well over \$100,000. Stergios plans to grow his business and hopes to employ 150 or more in Missoula over the next few years.

- "A bit of panache of working in the Rockies, very attractive to technical talent."
- "High-quality workforce that understands what a work ethic is all about."
- "Quality, ethical people in Montana."
- "Doing business in Montana is unique in that there is always a community supporting you – regardless of industry you can count on the people to back you up."
- "Access – meaning that you can get help with an email or phone call away, even up to senators, governors, etc. where in other states you are more anonymous. The professional network with successful entrepreneurs and mentors is phenomenal."
- "Low cost of doing business is a positive aspect of doing business in Montana."

For Jeff Trom, CTO of Workiva, it was the outdoors that drew him to Montana. After vacationing in Montana for 20-plus years and always wanting to move to the state, he decided to pack up and move to Bozeman with his wife and kids.

"It's a secret that Montana is this good," Trom said. □

Patrick M. Barkey is the director of the Bureau of Business and Economic Research, University of Montana. John Baldrige is BBER's director of survey development; Christina Henderson is the executive director of the Montana High Tech Business Alliance; and, Shannon Furniss is BBER's communications director.

For the full report on the Montana High Tech Business Alliance survey, go to <http://www.bber.umt.edu/pubs/econ/HighTechBusAlliance.pdf>.