

# STATE OF THE WORKFORCE



2017

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Following its mission of connecting businesses to the programs and resources needed to succeed, The Missoula Economic Partnership (MEP) sought to develop a comprehensive understanding of the state of the local workforce, and procured the services of Thomas P. Miller & Associates (TPMA) to conduct a State of the Workforce Report.

The report provides a representation of the state of the workforce in Missoula culled from a myriad of activities conducted over a 6-month period in 2017: a desktop review, workforce development survey, focus groups, interviews, trainings inventory, skills gaps analysis, comparable communities analysis, and a Missoula Workforce Dashboard. Each section of the report provides a unique insight into the workforce, illustrating an interwoven landscape that Missoula business and industry can traverse to reach their goals, culminating in a comprehensive State of the Workforce Report.



Missoula has weathered challenges attracting talent in recent years, despite offering a community with increasing opportunities and high quality of life indicators.

### Population

Increasing tourism associated with Glacier National Park near Missoula and high quality of life measures associated with the Greater Missoula region have been unable to combat the decrease in population growth from 2015-2016 (from 1.33% to 0.68%). With job growth in Missoula maintaining a steady increase, the population is not keeping up with business demands. One barrier to talent attraction is cost of living. Missoula's median home value is higher than both Montana and U.S. averages at \$239,000 (as of 2015), while median household income in the same year hovered below both Montana and U.S. average at \$46,164.

### Education

Since its peak enrollment in 2011 of 12,136 students, the University of Montana has experienced a 21.6% decrease in enrollment. Furthermore, only 66% of their 2014-2015 graduates were employed in Montana within a year of graduation, which provides businesses an opportunity to utilize unemployed graduates.

### Current Initiatives and Opportunities

Only 44.3% of employers indicated they use the workforce system to recruit employees, and only 57.1% said they typically recruit from educational institutions. The Montana Registered Apprenticeship program and other similar programs can build on Missoula's community collaboration to drive talent attraction. Initiatives such as Destination Missoula and sustained business involvement in education are vital to address the barriers to talent attraction in Missoula.

\*Data utilized are from the American Community Survey (2015), EMSI 2017.1 Q1, and MUS Data Warehouse.

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# TALENT RETENTION

Businesses throughout Missoula reported greater employee retention in recent years. However, as a region Missoula has experienced challenges to retaining university graduates in high-demand occupations, perhaps due to suppressed wages, a high poverty rate, and a passive approach to recruiting graduates.

## Living in Missoula

Only 13% of Montanans would like to move out of the state – the lowest rate in the country. But despite the attractive state amenities, Missoula is making it hard to stay. Missoula has a higher poverty rate (16%) than Bozeman (13.2%) and Billings (11.6%). In addition, Missoula’s living adjusted average earnings of \$40,500 is just 73% of the U.S. average, contrasting with a high median home value of \$239,000 in 2015. When considered together, these factors create challenges for the population working in lower-paying occupations, potentially causing outward migration and slowed population growth.

## University Graduates

84.3% of Missoula College graduates are employed in Montana within one year of graduation, while University of Montana graduates only achieve 66.1% Montana employment in that timeframe. Although these statistics are largely explained by the population of non-residents who attend the University of Montana, they highlight an opportunity to expand the workforce among the 33.91% of those graduates who did not attain employment in Montana. Even those who did attain employment face adversity. Average starting salaries are \$26,780 for University of Montana graduates and \$26,714 for Missoula College graduates – and both are a barrier to staying afloat in the Missoula housing market.

\*Data utilized are from the American Community Survey (2015), EMSI 2017.1 Q1, MUS Data Warehouse, and Gallup.



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Missoula has a highly educated population, and has over 1,100 training programs available to residents for talent and skills development in a multitude of sectors.

### Education

Educational Attainment in Missoula is concentrated in college attainment with more reporting bachelor's degree (25%) and graduate degrees (16%) as their highest attainment than both Montana and the US by wide margins. Fewer of Missoula's residents have high school, some college, or associates degrees as their highest educational attainment than Montana and the US. With graduation rates of 89%, 100%, 86%, and 92% from the four area high schools and the development of career skill academies, the K-12 system is engaged in developing talented graduates.

### Industry Needs

A key to talent development is aligning industry and occupational needs. While employability skills were comparatively viewed as not as difficult to find, 31% of employers indicated it was very difficult to find candidates with industry-specific technical skills. In Missoula, the top industries based upon employment numbers are Government, Health Care and Social Assistance, Retail Trade, Accommodation and Food Services, Construction, and Professional, Scientific, and Technical Services. The occupations with the greatest number of annual openings are Registered Nurses, Real Estate Sales Agents, First-Line Supervisors of Retail Sales Workers, Managers, Postsecondary Teachers, and Nursing Assistants. The University of Montana is producing many graduates in these fields: 35 Registered Nurse associates degrees, 76 Education bachelor's degrees, and 254 Business Administration bachelor's degrees for business-related occupations.

\*Data utilized from the American Community Survey (2015), EMSI 2017.1 Q1, Advanced Placement, and MUS Data Warehouse,.

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Complimenting, and in response to the progress made in the State of the Workforce Report, MEP has identified 4 strategic goals shaped to engage in actions and solutions to the issues the Missoula workforce system faces. A product of an MEP strategic planning session facilitated by TPMA, the following goals provide guidance and a set of actionable strategies to improve the state of the workforce in Missoula.

**Goal 1:** Establish Missoula as a premier destination for diverse talent and opportunities at all levels.

**Goal 2:** Position the Missoula Economic Partnership as a hub for workforce development within the Missoula Region, linking the private sector to service providers

**Goal 3:** Develop, implement, and scale comprehensive career pathway programs for students at all levels through Missoula's talent development system (K-12, post-secondary schools, and adult education).

**Goal 4:** Diversify and expand resources available for talent development among employers, educators, and talent development system partners throughout the Missoula Region.

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## ACKNOWLEDGEMENTS

The Missoula Economic Partnership (MEP) would like to extend its sincere gratitude to Missoula County and the Montana Department of Commerce, as well as the multitude of organizations and individuals that were integral to developing this 2017 Missoula State of the Workforce Report. Over 100 community stakeholders from workforce development, economic development, business and industry, and education took part in focus groups, interviews, and a workforce development survey to give vital insight. We'd like to give special consideration to the many organizations who contributed to the training inventory, and to the Montana Department of Labor & Industry for providing data.

The Missoula Economic Partnership is a strategic collaboration of Missoula businesses, individuals, and government investors who share the vision of a vibrant, growing, and diversified regional economy. Extraordinary thanks to the MEP steering committee members listed below lead by MEP President and CEO James Grunke and Grants Manager Nicole Rush. The contributions and participation of the committee was integral to the success and accuracy of the project.



Clint Reading, Missoula College

Margaret McManus, Allegiance Benefit Plan Management

Karyn Trainor, Providence Health & Services

Robert Farmer, Missoula Federal Credit Union

Wolf Ametsbichler, Missoula Job Service

Sam Sill, Missoula Organization of Realtors

Leanne McManus, ikuw Solutions, Missoula Chamber of Commerce  
Workforce Development Committee Chair

Linda Abreu, LC Staffing

Wendy Koster, Diversified Plastics

Carey Davis, Advanced Technology Group

Jodie L. Rasmussen, Missoula County Public Schools, President-elect of Big Sky  
Society of Human Resource Managers

Kim Latrielle, President and CEO, Missoula Chamber of Commerce

Kimberly Hannon, Director of Operations, Missoula Chamber of Commerce

Missoula Chamber of Commerce Workforce Development, Education and Recruitment Committee

Special thanks to the many organizations that participated in the focus groups and interviews, as well as the MEP Board of Directors for their leadership, vision, and important input to ensure a comprehensive and useful final report.

With financial assistance from Missoula County and the Montana Department of Commerce Big Sky Economic Development Trust Fund planning grant program, MEP is pleased to present this 2017 Missoula State of the Workforce Report. MEP, in partnership with consulting firm Thomas P. Miller & Associates, developed the report to assist businesses in identifying the key workforce knowledge and dynamics that serve as barriers to finding adequate talent. With the goals of the MEP planning session found on page 24, this report can serve as a tool for the community's use in making strategic decisions about the local workforce and economy.

## METHODOLOGY

The State of the Workforce Report was developed through a six-month process that included primary and secondary research, engagement with local stakeholders, and collaboration with the MEP.

The following methodology was designed and implemented to provide Missoula with a comprehensive understanding of the conditions of their workforce and identify opportunities to strengthen and further develop the regional talent.

### *Focus Groups*

TPMA conducted multiple in-person focus groups over two days (May 2-3, 2017) with approximately 30 stakeholders in the Missoula region. The focus groups were conducted at Garlington Lohn & Robinson, 350 Ryman St, Missoula, MT 59802. TPMA centered sessions around collecting unique input on a general list of themes ascertained from desktop research. Although questions were constructed prior to the group meetings, the session's questions were tailored to the audience, ensuring unique input from each session. Attendants ranged from business owners and leaders, human resource and hiring managers, workforce and economic development leaders, education representatives, and community partners.

### *Interviews*

To collect qualitative data, interviews were organized to provide local perspectives of industry and community leaders in Missoula. After a review of existing materials, TPMA developed a list of standard guiding questions for the interviews to ensure input was collected consistently across all stakeholders. With assistance from MEP, TPMA contacted and facilitated 24 interviews with key stakeholders, on-site when possible, but primarily by phone.

### *Missoula Economic Partnership Workforce Development Survey*

As an essential part of Missoula Economic Partnership's State of the Workforce Report, a survey of regional businesses and organizations was developed and distributed to area employers. The questions explored aspects of workforce challenges, talent attraction and retention, and skills gaps. There were 111 unique responses to the 21-question survey, which was open for 29 days and closed on July 5, 2017.

### *Skills Gaps Analysis & Trainings Inventory*

To conduct a comprehensive Skills Gaps Analysis, TPMA catalogued 1,167 training programs available to the Missoula county population. In addition, we developed the Missoula Economic Partnership Workforce Development Survey, a University of Montana & Missoula College Completions v. Occupational Analysis, and a Soft Skills Best Practices Report. Each component represents an integral piece of the Skills Gaps Analysis, which illustrates skills needs in Missoula and ultimately identifies occupations where gaps exist in supply and demand.

### *Workforce Indicators & Comparable Communities Report*

Through desktop research, stakeholder engagement, and best practice knowledge, a list of workforce indicators was compiled. The indicators served as a measure of Missoula's workforce, and were collected for several relevant comparable communities as well to provide points of comparison. Metrics such as unemployment, labor force participation, and employment by industry and occupation were used in evaluation of the community's workforce.

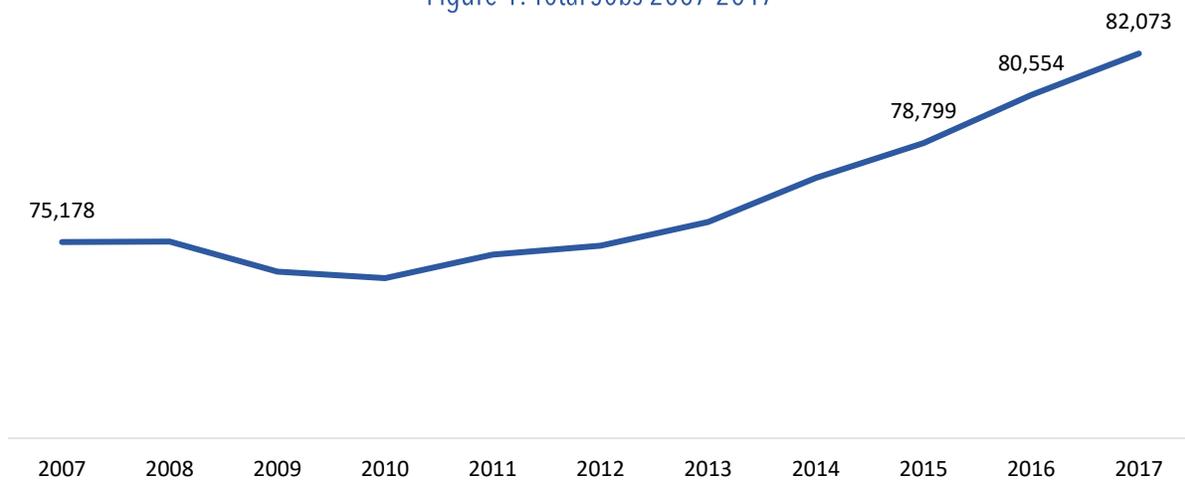
# 2017

## MISSOULA STATE OF THE WORKFORCE

## OVERVIEW

Missoula County continues to experience economic growth, as validated by metrics such as the Gross Regional Production (GRP)<sup>1</sup> and total jobs, while unemployment maintains a suppressing trajectory. While business and industry continue to flourish with the uptick in the national and regional economy (\$524.8M increase in total sales in Missoula County from 2015 to 2016), and total employment continues to rise at a steady rate (Figure 1), the composition of the workforce needs flexibility to fulfill industry demand. In response to these growth patterns, MEP endeavored to express the talent needs of Missoula County employers.

Figure 1: Total Jobs 2007-2017



Source: EMSI 2017.1 Q1

Figure 2: GRP 2015 & 2016



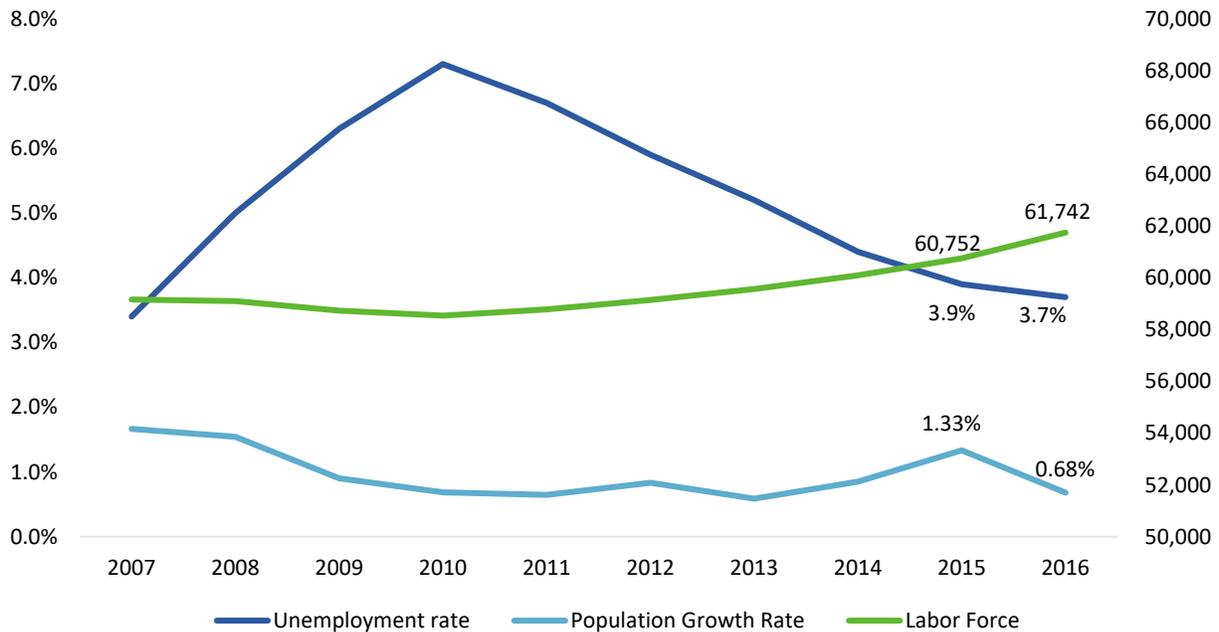
Figures above are in millions. For 2016 it was \$5,222.4M

Source: EMSI 2017.1 Q1

<sup>1</sup> Gross Regional Product measures the final market value of all goods and services produced in a region. This figure is the sum of earnings, property income, and taxes on production.

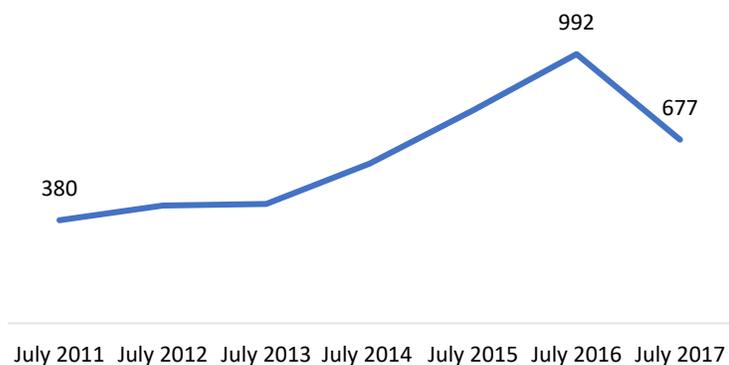
Talent supply has continued to shrink, as indicated by a dropping unemployment rate combined with increased demand for qualified applicants from growing business. As illustrated in the chart below, the labor force has continued growing since 2010, and gained 990 workers from 2015 to 2016. However, with the decline in population growth and the population of unemployed jobseekers at the lowest mark since 2007, stress has fallen heavily on the availability of talent. Talent scarcity has now become an issue, placing challenges on employers to find qualified talent to fill vital open positions.

Figure 3: Talent Supply Dynamics 2007 - 2016



Source: LAUS

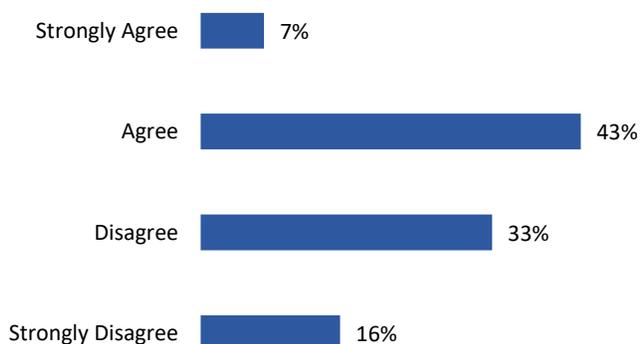
The trends seen within the three key metrics in the graph above indicate an environment in which industry has to pull from a shrinking pool of applicants. The response from employers has been to post job positions more frequently. Starting in July 2013, a steep increase in unique job postings has been recorded, with only the past year providing a moderate drop in unique job postings. This trend indicates that over the last few years, the intensity of employers' search for workers has increased, along with the length of time necessary to find qualified applicants (corroborated by survey results). However, this scenario is not unique to Missoula County. In completing an analysis of comparable communities, this shows that other areas within Montana and the United States are also experiencing concerns with a shallow talent pool.



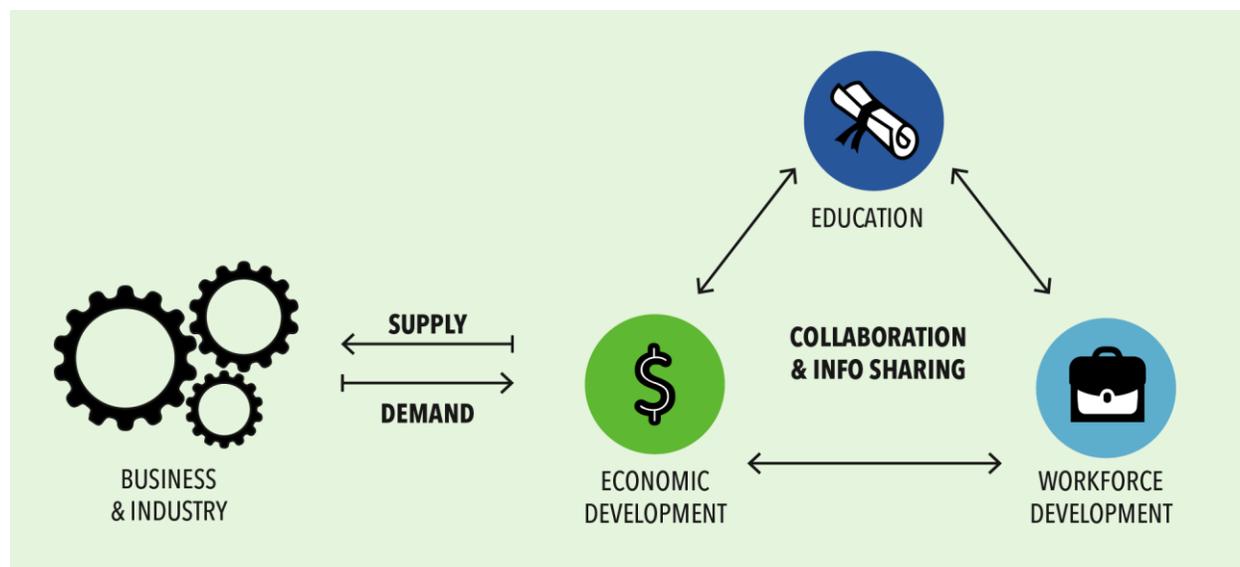
Source: EMSI 2017.1 Q1

49% of the employers responding to the MEP Workforce Development Survey either disagreed or strongly disagreed that they are confident in the quality of the workforce, indicating businesses' concern with present talent. Talent development is key to Missoula, a community that is trending towards additional industrial growth in the coming years through business development. This development will weigh Missoula's ability to expand or attract talent within the area based on the quality of talent present. In this sense, talent development is one of a community's primary responsibilities.

Figure 5: I am confident in the overall quality of the workforce that is present in Missoula County.



No single agency or entity can be solely responsible for talent development. Successful talent development requires collaboration and coordination to supply the demands of industry via three major community institutions.



**Education.** Primarily through formal institutions such as K-12 systems and universities, education can help train and provide employability skills<sup>2</sup>, and technical skills.

**Workforce Development.** Comprised of public and private entities such as Workforce Development Boards, Workforce Innovation and Opportunity Act (WIOA) Title 1 programs, Temporary Assistance for Needy Families (TANF), the Supplemental Nutrition Assistance Program (SNAP), and community partners (faith based organizations, food banks, etc.), workforce development entities provide support services,

<sup>2</sup> Employability skills are a set of skills and behaviors that are necessary for any employment. They are sometimes called soft skills, foundational skills, work-readiness skills, or job-readiness skills.

job search skills, employability skill development, and employer services to connect businesses to qualified job seekers.

**Economic Development.** Lastly, economic development is essential to talent attraction. By understanding the needs of industry (i.e. what businesses need to do to grow and what the community needs to do to attract new businesses in terms of talent needs), economic development entities can convene community stakeholders to address barriers to growth.

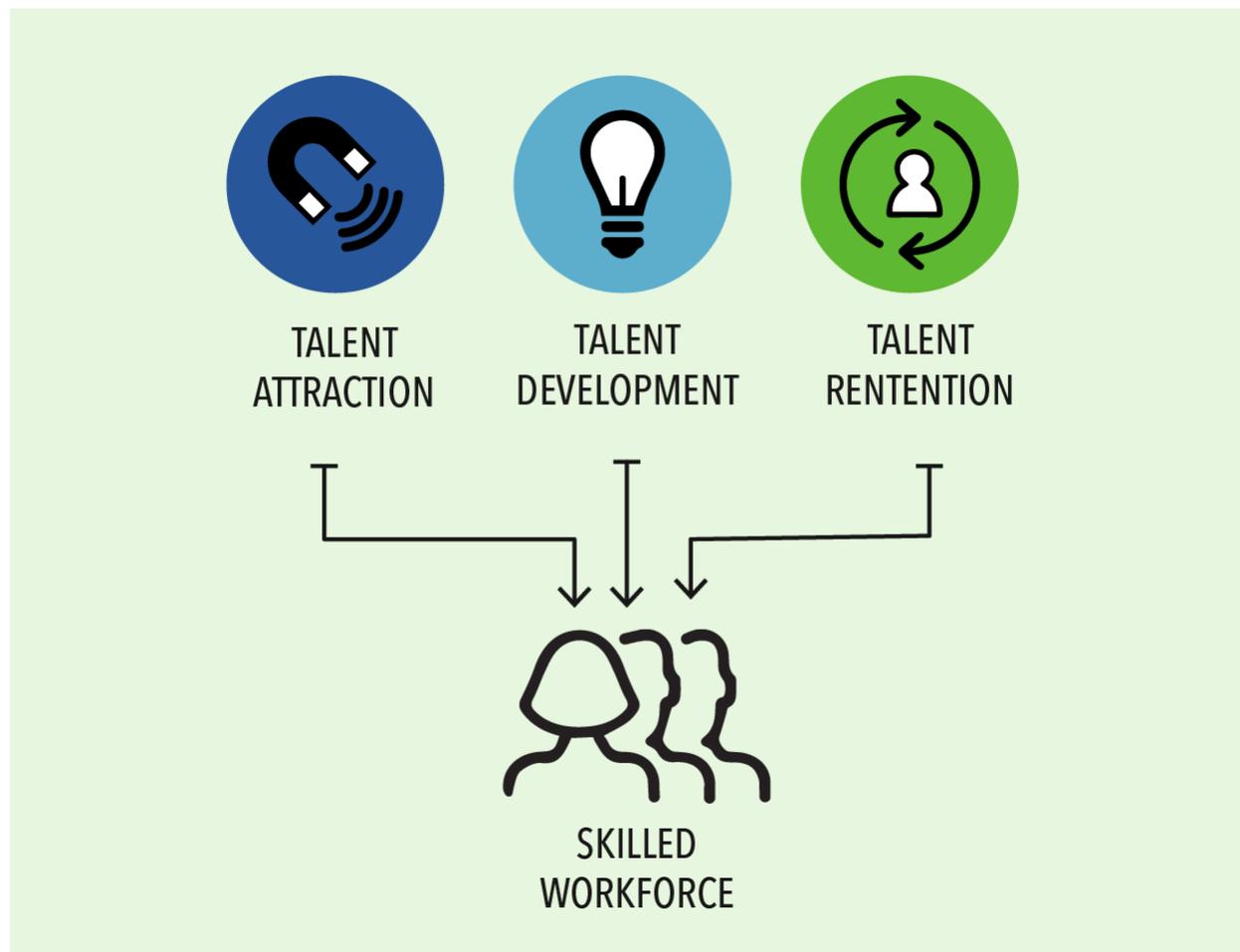
For the talent development ecosystem to function at the highest capacity, all entities need to be coordinating efforts in the same direction sharing a common mission and vision. Without unity, the ecosystem will be disconnected and talent development efforts are likely to function at a sub-optimal level.

With the three key pillars of the Talent Development Ecosystem functioning collaboratively and optimally, Missoula can comprehensively address its talent needs. From the qualitative data collected through focus groups and interviews, it is clear that Missoula has the foundation necessary for an effective talent development ecosystem. However, cultivating talent involves more than just talent development; it involves talent attraction and retention as well. Through the data collected on these three keys to cultivating a skilled workforce, the goal of MEP's State of the Workforce Report is to provide an analysis on the conditions of the workforce not only for the benefit of the MEP Board, but for the county as a whole.

## FINDINGS

Through the methodologies outlined in the previous section, TPMA collected rich data and findings relative to the workforce talent model. Here, the key findings and insights into the local and regional economy and workforce will be assembled into a model consisting of three layers of a skilled workforce: talent attraction, talent retention, and talent development.

Each of the facets of the interweave in their effect on the workforce system. Talent development builds up the skills of the workforce, ultimately leading to companies having a higher instance of retention, as well as giving businesses a larger pool from which to attract qualified talent. An improvement in talent retention allows businesses the time to further develop the talent of their employee pool, as well as promoting efficient employee investment, improving production and stimulating the economy, eventually leading to external talent attraction. In turn, talent attraction through the right workforce development channels can enhance retention by providing the best match possible between jobseekers and businesses. Meanwhile, attraction of external talent to the community does all the work of talent development, and can add to the overall quality of the workforce.



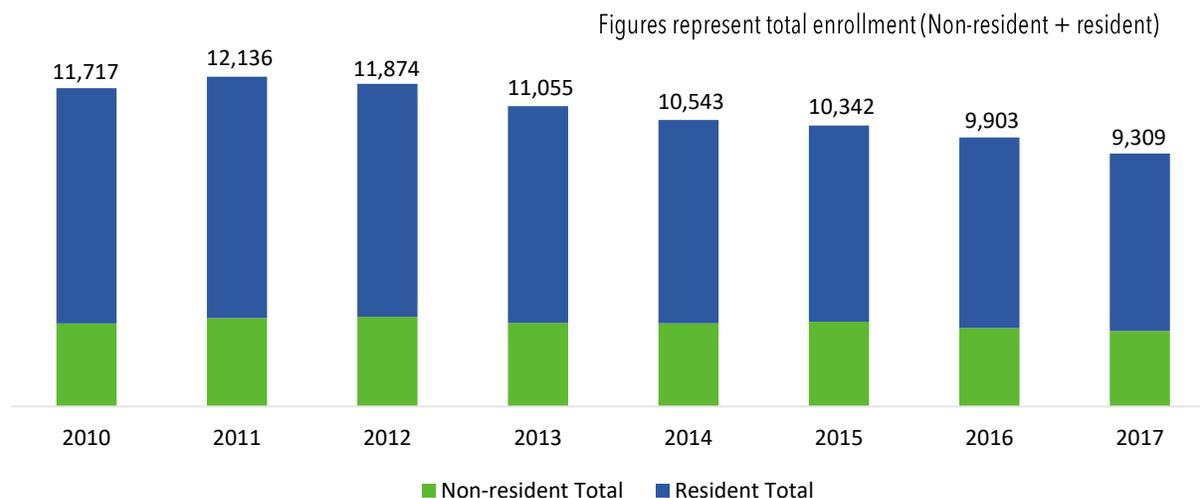
## Talent Attraction

### Definition

Talent attraction can be thought of at the macro and micro levels. It generally refers to **the ability of a community to draw in external talent**, but can also be considered **an organization's ability to draw in talent from within or external to their community**.

Population growth in Missoula is declining. A 0.65% decrease in the population growth rate from 2015 to 2016 brought the growth rate down to 0.68%. Substantiating this trend, 62.9% of respondents in the survey indicated that they were recruiting talent outside of Missoula. Many of these included free responses explaining a lack of skills or general lack of applicants within the local workforce. The educational system has also faced a talent attraction issue, weathering current problems attracting resident and non-resident enrollment. Since hitting an enrollment peak in 2011, the University of Montana has experienced a 21.6% decrease in enrollment to the current year.

Figure 6: University of Montana Enrollment



Source: MUS Data Warehouse; MT Dept. of Labor & Industry

There are a number of challenges and opportunities concerning talent attraction, which are evident when exploring quality of life, cost of living, business and industry, and current initiatives and attraction successes.

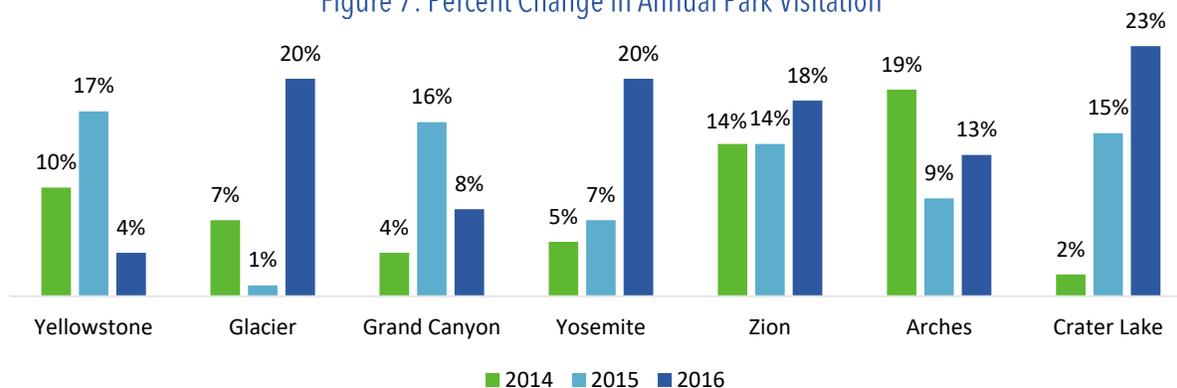
### Quality of Life

Montanans are satisfied with the quality of life where they live, reporting the 6<sup>th</sup> highest quality of life rank<sup>3</sup>. In agreement with this qualitative data, stakeholders throughout focus groups and interviews voiced the numerous activities and advantages of living in a flourishing community with great physical assets. Tourism has continued to be a strength for Montana as a whole, as illustrated in Figure 7 below. Every major park destination for Montana has shown substantial growth, including Glacier National

<sup>3</sup> Albouy, David (2012). "Are Big Cities Bad Places to Live? Estimating Quality of Life Across Metropolitan Areas."

Park's visitation growth of 20% in 2016 – a location just a 2.5 hour drive from the Missoula metropolitan area.

Figure 7: Percent Change in Annual Park Visitation



Source: National Park Service Stats

The stakeholder engagement document (Appendix III) details the recreational and educational features that were common themes when talking to engaged businesses in the community. Many referred to a quality of life bolstered by the activities such as finding great recreational winter sports to the extent that it was mentioned as a contributing factor to the high cost of living, indicated as the 'Mountain Tax'<sup>4</sup>.

### Cost of Living

The high cost of living in Missoula is creating a difficulty for the labor force, especially those in search of attaining employment. Jobs still exist, as illustrated by a growth in Gross Regional Product of \$143 million and a total jobs increase of 1,519 for the county. In contrast to this growth, the slow population growth in 2016 in combination with only 66%<sup>5</sup> of University of Montana graduates attaining employment in Montana in the 2014-2015 academic year in at least one quarter, conditions are indicating that open positions do not have an available workforce to fill the gaps.

Figure 8: Median Home Value



Source: US Census Bureau, American Community Survey (2015)

To compound the issue, the cost of searching for employment is abnormally high in Missoula. While median home values in Missoula superseded both Montana and United States averages at \$239,000 in 2015, the gap has only grown as Missoula's median home value has climbed to \$275,000<sup>6</sup> in 2017. In combination with a 2015 median household income that falls short of both Montana and United States averages at \$46,164 in 2015, the cost of living becomes a barrier to allowing time to find employment. A noteworthy population adversely affected by this phenomenon are graduates from the University of

<sup>4</sup> Mountain tax was a term heard from multiple stakeholders, suggesting a premium on housing due to the desirable mountainous landscape found surrounding Missoula.

<sup>5</sup> MUS Data Warehouse; MT Dept. of Labor & Industry; MUS graduates matched to Unemployment Insurance Wage Database.

<sup>6</sup> Measured by Missoula Organization of Realtors (2017)

Montana without direct employment after graduation. Talent attraction from businesses can minimize this issue by ensuring employment within the first quarter of graduating, a strategy addressed below.

### Business Involvement in Talent Development System

An essential factor of any talent attraction strategies for businesses is collaborating with talent development entities such as the University of Montana, Missoula Job Service, and Missoula area high schools. Maximizing presence amongst individuals that potentially could be candidates promotes efficiency in the labor market, and battles against the harsh cost of living during the search for employment. Further, business collaboration with these institutions promotes inclusion of the most relevant skills to help individuals find meaningful employment.

The Montana Registered Apprenticeship model setup via the Montana Department of Labor & Industry is a good example of the link between business and talent development, where businesses assume all responsibility for talent development. Fifteen apprenticeships were catalogued in the trainings inventory, and while reports of success in the programs have been common, some issues with the model have been recorded. Sharpening this model would strengthen talent development specific to businesses.

Furthermore, knowing the right channels for attraction is imperative to enhancing business attraction. Although collaboration was commonly cited as a strength in Missoula by stakeholders, collaboration without being involved in the proper workforce (One-stop centers) and education (K-12, universities) channels ultimately can lead to less effective attraction strategies. The below survey results exemplify the channels employers are commonly traversing when attracting talent.

Figure 9: From what avenues do you typically recruit employees? Please check all that apply.

Answer Options	Response Percent
Educational institutions (including specific programs and internships/apprenticeships)	57.1%
Employee referrals	71.4%
Workforce system (e.g., referrals and career/job fairs)	44.3%
Temp agencies	18.6%
Online job postings (e.g., company websites, online state employment portals, Monster, Indeed, etc.)	87.1%
Other (please specify)	17.1%

The survey results illustrate that employers are primarily using job postings and employee referrals as methods to recruit employees. A majority of employers utilize educational institutions, indicating more often than not business attraction practices are in effect in education; although, this also presents an opportunity for improvement.

### Current Attraction Successes

With business and industry collaborating with institutions within the education and workforce systems, skilled individuals can be optimally pointed to occupations. While there are many opportunities to improve talent attraction in Missoula, some current initiatives serve as examples of particular success. The Advanced Technology Group (ATG) has collaborated with the University of Montana to teach a Salesforce course at the university. The coursework, in combination with a presence on campus, works

to bolster student knowledge of the company.<sup>7</sup> Not only does this class increase exposure and name recognition of the company among those that will soon be a part of the labor force, but also helps ATG equip students with the skills that they are demanding from the workforce. In addition, the Relocation Guide<sup>8</sup> from the Missoula Chamber of Commerce and Destination Missoula serves as a talent attraction tool for other populations, combatting the declining population matter. With further development and the quality of Missoula's community and recreational assets, the potential for improvement of talent attraction in Missoula is high.

### Talent Retention

#### Definition

Talent retention is a dual-defined term. The more common, micro-level definition refers to an **organization's ability to retain its talent**; on a macro-level it is **the ability of a community to retain its talent**. Both senses of talent retention are vital to a thriving workforce.

Retention plays a crucial role in the quality of talent; whether it be retention of talent within a region or within a company, both have effects on the community. By all indicators, retention of individuals within a company (micro) has remained unchanged. Survey results shown to the right indicate that retention has either not changed or improved, with all of respondents most common answers for each position falling under 'No change'. In disparity, retention of graduates (macro) was a common issue brought up by stakeholders during interviews and focus groups, and was corroborated quantitatively by the results shown below; suggesting an opportunity for community action to address the talent supply through initiatives with retention.

Figure 10: Compared to 2016, has employee retention improved?

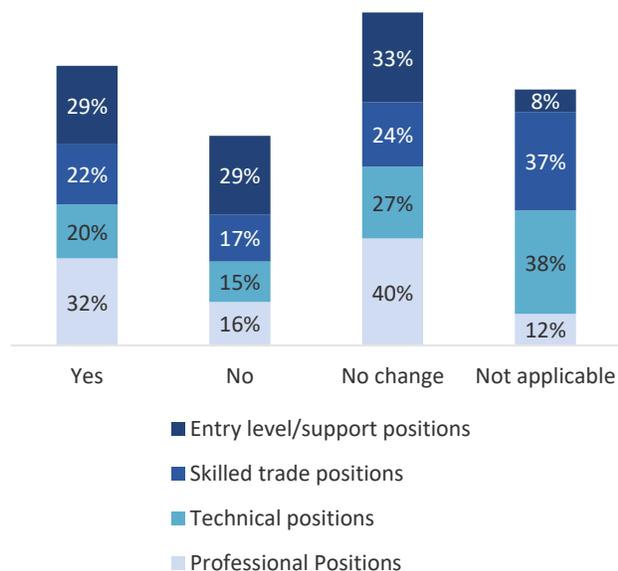
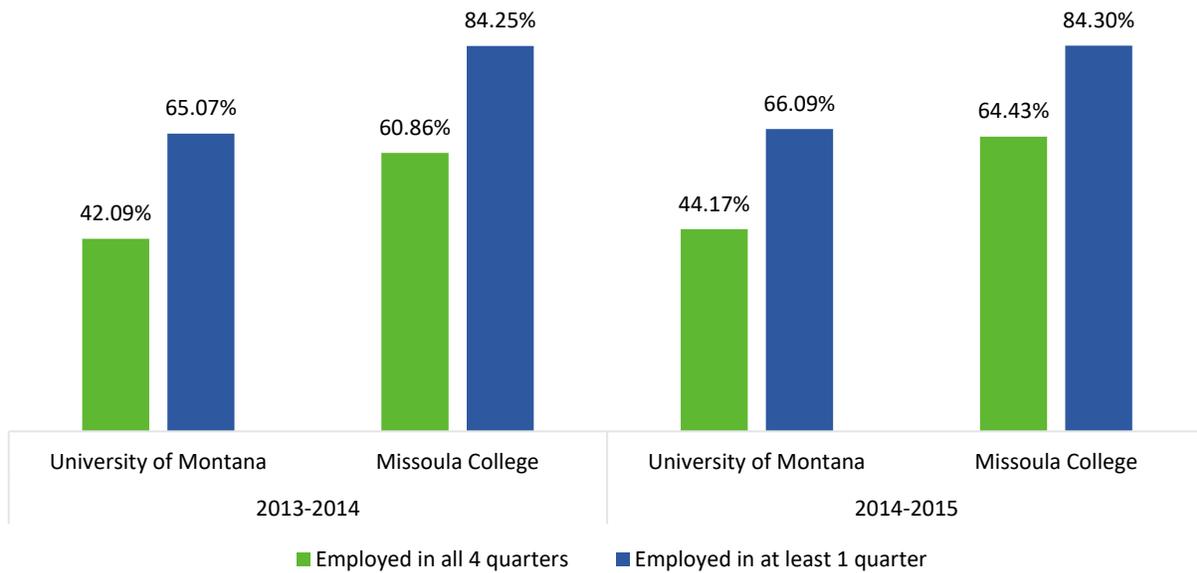


Figure 11: Employment of University graduates in their first year post-graduation.  
(In Montana)

<sup>7</sup> <https://news.umt.edu/2015/09/092915atgv.php>; <https://atginfo.com/atg-partners-with-university-of-montana-to-teach-salesforce-class/>

<sup>8</sup> <http://www.missoulacurrent.com/business/2017/06/missoula-chamber-destination-guide/>



Source: MUS Data Warehouse; MT Dept. of Labor & Industry

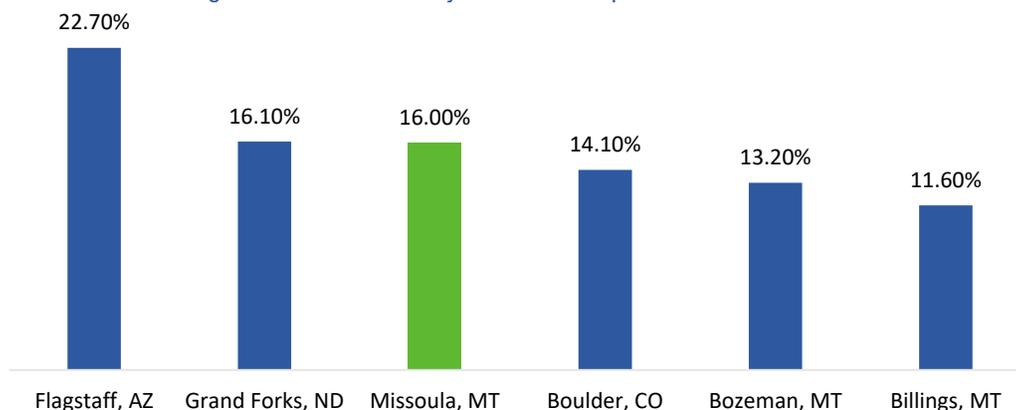
Retention is trending upwards, with both Missoula College and the University of Montana more commonly having their graduates employed in Missoula in 2014-2015, than 2013-2014. Missoula College appears to be displaying good placement, with 84.3% of graduates employed in at least 1 quarter of the year following graduation in Missoula. This number drops to 66.09% for the University of Montana, which has a higher population of non-residents. This presents incredible opportunity for Missoula to expand the workforce; 33.91% of graduates of the University of Montana were not employed within a year of graduation, potentially creating circumstances for non-resident graduates to return home (a population of 666 graduates), and creating difficulty for resident graduates (a population of 1,770 graduates). With these results in mind, retention supports quality of life, cost of living, and retaining university outputs are analyzed below to gain a full view of talent retention in Missoula.

### Quality of Life

In a Gallup poll, found within *The High Wage Jobs Puzzle* by the Bureau for Business and Economic Research, Montanans were least likely to want to move away, with only 13% of the population indicating they would like to move. Those who have carved out a permanent spot in Missoula and Montana are very fond of the quality of life, which is a positive for retaining talent.

A concern for retention is the higher poverty rate in Missoula.

Figure 12: 2015 Poverty Rates of Comparable Communities



Source: US Census Bureau, American Community Survey (2015)

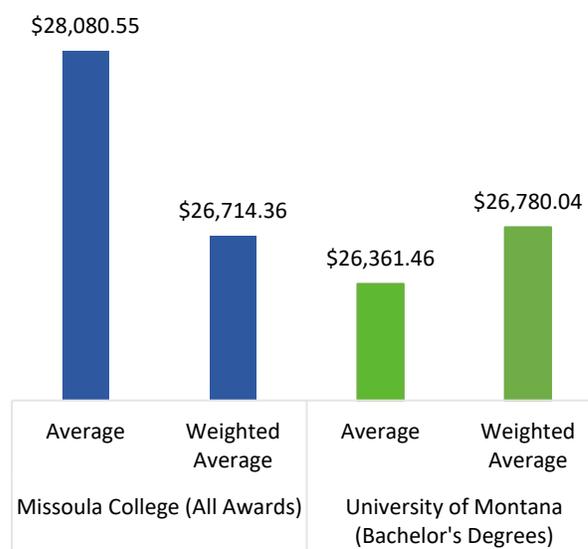
Partially due to the high cost of living discussed in the next section, the poverty rate in Missoula is 16.0%, which is higher than both Montana (15.2%) and the United States (15.5%). In comparison to other similar communities, Missoula has the third highest poverty rate out of the six total communities; Missoula’s poverty rate was considerably higher than the other two Montana communities, Bozeman (13.2%) and Billings (11.6%).

Despite polls indicating that Montanans love where they live, and focus groups and interviews corroborating this mentality in Missoula, and growing tourism discussed in the quality of life section under *Talent Attraction*, Missoula’s residents fiscally cannot afford to be retained in the region.

### Cost of Living

Cost of living is a determining factor in retention. Two cases in particular are those skill-equipped graduates of the University of Montana, and workers whose wages are not high enough to support staying in Missoula. For University of Montana Bachelor’s Degree earners hitting the job market in the 2014-2015 academic year, the average starting salary across all majors was \$26,361. When weighting each starting salary by population of graduates from each major, this starting salary jumped to \$26,780, still well below median home value. Performing the same analysis for Missoula College, the average across all majors unweighted for graduates produced a \$28,080 starting salary. Assigning weight to degrees by proportion of graduates brought this starting salary down to \$26,714, comparable to University of Montana

Figure 13: Graduates’ Starting Salary in the 2014-2015 Academic Year Time Span

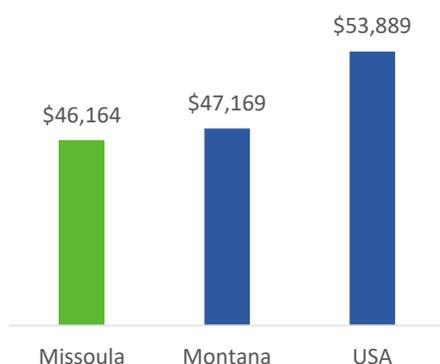


Source: MUS Data Warehouse; MT Dept. of Labor & Industry

graduates, and still relatively low when measuring against housing prices in the area.

Retention among graduates is incredibly important because of the importance of the educational institutions in talent development. While quantitative data can only quantify student retention, starting salary, and cost of living, qualitative data collected shows the loss of college graduates is potentially happening due to the cost of living.

Figure 14: Median Household Income



Source: US Census Bureau, American Community Survey (2015)

For employers, 53% of them ranked 'Pay' as the number one barrier to workforce retention, and 27% ranked it second. Housing was just behind in the rankings, indicating that the cost of living has been an obstacle for them. With a 2015 median household income of \$46,164, and a median home value of \$239,000, the expensive nature of Missoula's economy is evident. In fact, EMSI's generated COL Adjusted Average Earnings<sup>9</sup> statistic puts them at \$40,500, just 73% of the United States average. From every view, it is clear wages are a barrier to retaining university graduates and the general population as a whole.

### Proactive Business Retention: Retaining University Outputs

The University is commonly producing talent to accommodate a large portion of annual openings in the region<sup>10</sup>. For Missoula's top occupation in annual openings, Registered Nursing, University of Montana and Missoula College are producing over half the number of openings in graduates (53%). This number is much greater for occupations like Post-secondary Teacher and many business related occupations. Industry-University collaboration is a common practice, and many examples in forming and executing such a relationship exist<sup>11</sup>. Businesses should continue to be proactive in attracting talent straight out of educational institutions, in order to avoid a post-graduation cost of living dilemma, which could force the exit of talented individuals.

### Talent Development

#### Definition

Talent development is generally thought of as "an educational process which involves the sharpening of skills, concepts, changing of attitude and gaining more knowledge to enhance the performance of employees"<sup>12</sup>. While this definition encompasses a lot, it can be simply thought of as training, or **using**

<sup>9</sup> Cost of Living Adjusted Average Earnings is average earnings adjusted according to the regional cost of living in comparison to the national average cost of living.

<sup>10</sup> Found within the 'University of Montana & Missoula College | Completions v. Occupational Analysis' on page 90.

<sup>11</sup> <https://www-03.ibm.com/press/us/en/pressrelease/36486.wss>

<sup>12</sup> <https://kashmirobservers.net/2016/opinions/benefits-training-development-organization-3983>

### mechanisms within the talent development ecosystem to improve the ‘skills’ of individuals in the workforce.

With the presence of an educational institution as large and influential as the University of Montana, Missoula possesses an inclination for stronger talent development. This capacity for higher education provides opportunities for growth without the addition or subtraction of talent such as in attraction and retention. As displayed earlier in this section, enrollment has declined at the University of Montana, and thus stress is put upon the rest of Missoula for talent development. Development is about improving the skills of individuals for the careers that are demanding talent.

#### Current Training Opportunities Partners

The Talent Development culture is vibrant in Missoula, with over 1,100 programs and numerous providers available to the job-seeking workforce. Opportunities exist in various fields with trainings from cosmetology to law and public safety; and range from direct company training in the form of apprenticeships or workshops, to formal credit earning programs from accredited educational institutions. The University of Montana was catalogued as the largest training provider in Missoula with 268 programs listed. Other most-notable training providers were Missoula County Public Schools Adult Education (308 programs), Missoula College at the University of Montana (60 programs), Montana Code School (2 programs; Full-time and Part-time), ikuw Solutions (123 programs), and Flathead Community College (102 programs)<sup>13</sup>.

Other providers such as the Montana Rail Link and Sage Truck Driving School were listed in smaller quantities for their similarly integral programs in the trades; Montana Rail Link offers apprenticeships to train on-the-job skills, while Sage Truck Driving School offers certifications for industry-specific training.

#### Education system

According to community stakeholders, Missoula is fortunate to be home to a “fantastic” K-12 educational system. Graduation rates of 89% for Hellgate High School, 100% for Seeley-Swan High School, 86% for Big Sky High School, and 92% for Sentinel High School, demonstrate that this conjecture holds true.<sup>14</sup> As an example of the effect the Missoula County Public School System can have on business and industry needs, local high schools have led the charge in talent development by constructing academies. Hellgate’s Finance Academy and Big Sky’s Health Science Academy provide opportunities for students to become trained in important career pathways, in some cases even resulting in certification.

The University of Montana similarly is also an asset in talent development. The creation of a summer Certified Nursing Assistant program exemplifies the talent development flexibility the university can have when it tends to the demands of business and industry.



Taking into account all of the educational institutions, the following education options are available to individuals for post-secondary training:

- University of Montana
- ikuw Apprentice Hive Code School

<sup>13</sup> While Flathead Community College lies outside of Missoula County, it was counted in the trainings inventory due to its commutable distance from Missoula County borders, and significant amount of training programs offered.

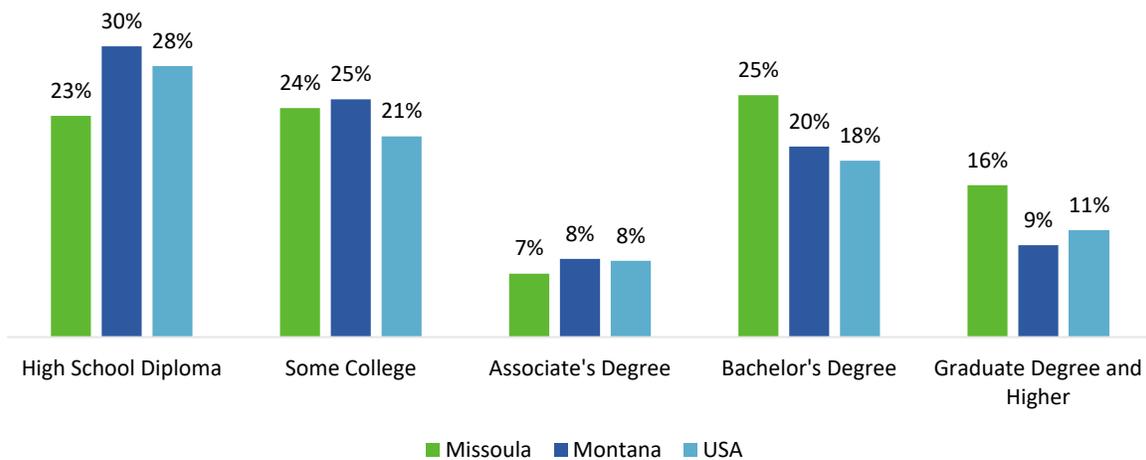
<sup>14</sup> According to *USNews* that utilizes Advanced Placement (AP) data.

- Missoula College at the University of Montana
- Montana Code School
- Big Sky Code Academy
- Flathead Community College
- The Lifelong Learning Center

Viable online options are always available through Arizona State University, University of Phoenix, or the University of Central Florida.

Because of the strong K-12 system and availability of quality post-secondary education, Missoula’s educational attainment is extremely top-heavy. This is illustrated in the chart below.

Figure 15: 2016 Educational Attainment for Adults Aged 25 and Older



Source: EMSI 2017.1 Q1

The graduate degree and higher population in Missoula outweighs the rest of Montana by 7%, and the rest of the United States by 5%. While this could indicate a higher rate of degree continuance by bachelor's completers, this does not appear to be the case; Missoula's population of bachelor's degree holders (25%) as their highest level of educational attainment is superior to both Montana and the United States as well. While this proves a highly educated population in Missoula, traversing to lower levels of educational attainment shows the population proportion is smaller compared to Montana and the United States. For example, Missoula's portion of the population with high school diplomas as their highest level of attainment is 7% lower than the rest of Montana, and 5% less than the United States average.

### Business and Industry Needs

A key to efficient talent development is being aware of what industry and occupational needs are in demand.

Figure 16: Employment by Industry

Industry Description	2016 Jobs in Missoula	Avg. Earnings in Missoula	2016 Jobs in Montana	Avg. Montana Earnings
Government	11,405	\$56,742	97,682	\$57,017
Health Care and Social Assistance	10,324	\$53,204	69,064	\$53,004
Retail Trade	8,549	\$32,608	62,067	\$32,763
Accommodation and Food Services	6,852	\$19,251	52,911	\$19,915
Construction	3,675	\$46,413	38,774	\$47,584
Professional, Scientific, and Technical Services	3,657	\$60,485	26,103	\$64,089

Source: EMSI 2017.1 Q1

Aligning development to the industry trends optimizes efficiency of the labor market by minimizing over-training in industries and occupations that are saturated with skilled labor. By being mindful of in-demand industries and occupations when creating initiatives, stakeholders can cultivate stronger results with more beneficial implications.

### Employability Skills

Employability skills are a concern for communities across the country. Missoula's community leaders indicated a lack of employability skills amongst entry-level applicants in the workforce. 56% of employer survey respondents said it was difficult to find applicants with critical thinking skills. In response to this concern, Appendix V found on page 80 contains a collection of best practices in programming for employability skills, located within the appendix. The section highlights the ACT Work Ready Communities framework, the Wonderlic Soft Skills Training Bootcamp, and the CASAS Workforce Skills Certification System.

Figure 17: Please rate how difficult it is to find candidates with the following employability skills:

Answer Options	Very Difficult	Difficult	Easy	Very Easy	Not Applicable
Critical thinking	21%	56%	20%	3%	0%
Dependability & reliability	22%	46%	27%	4%	0%
Problem solving	18%	52%	27%	3%	0%
Decision making	17%	55%	24%	3%	2%

### Skills Gaps Analysis

In Appendix V found on page 80, a Skills Gaps Analysis Report detailing qualitative and quantitative observations of the matching between the trainings available, skills demanded, and skills supplied by individuals in the workforce, can be found. To analyze trainings available, a trainings inventory of 1167 Training programs was compiled. The inventory was largely comprised of trainings in Computer IT and Healthcare, two industries in which many trainings were found. Welding, Engineering, and Automotive were among the bottom 3 categories. Of all trainings, unaccredited professional trainings accounted for 57% of the programs; a lot of these programs were housed in the Computer and IT training which had 92% of its programs professional trainings<sup>15</sup>. Soft skills were generally not difficult to find, but intangibles such as ‘dependability and reliability’ which 22% of employers found very difficult to find, stood out. 31% of employers found industry-specific technical skills very difficult to find, and 40% found them just difficult, illustrating the trouble employers are having with specific technical skills. It then analyzed the below table of occupations<sup>16</sup>, along with degree graduations that potentially matched with occupations (page 79).

Figure 18: Top five-digit SOC Occupations in Missoula for Annual Openings:

Description	Annual Openings
Registered Nurses	66
Real Estate Sales Agents	44
First-Line Supervisors of Retail Sales Workers	35
Managers, All Other	35
Postsecondary Teachers	33
Nursing Assistants	33
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	32
Property, Real Estate, and Community Association Managers	31
General and Operations Managers	29
Cooks, Restaurant	28
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	25
First-Line Supervisors of Food Preparation and Serving Workers	24
Accountants and Auditors	23
Licensed Practical and Licensed Vocational Nurses	21
Teacher Assistants	19

Source: EMSI 2017.1 Q1

<sup>15</sup> Computer and IT Industry unlike many trades industries largely does not rely upon certifications and therefore professional trainings are commonly used.

<sup>16</sup> The table displays occupational growth at a five-digit Standard Occupation Classification (SOC).

Primary findings include that Registered Nursing and Nursing Assistants<sup>17</sup> are two occupations whose training programs were not providing enough completers. A bevy of the in-demand occupations were covered by the high number of completers in business disciplines from the University of Montana and Missoula College. Education was also an area with two in-demand occupations, but with 76 bachelor's graduates in 2015, it was enough to cover Postsecondary Teachers and Teacher Assistants.

### Industry-specific technical skills

31% of employers in the survey indicated it was very difficult to find candidates with industry-specific technical skills. Survey results showed that the manufacturing industry had the most respondents indicate a decrease in qualified entry-level applicants, while Health Services showed similar trends for professional and skilled positions. Both industries rely on industry-specific certifications for technical skills such as CNS and RN for Health Services, and HACCP and Lean certifications for Manufacturing. In many of the top growing industries displayed in the table below<sup>18</sup>, industry specific skills are integral to succeed in the occupations.

Figure 19: Employment by Occupation

Occupation Description	2016 Jobs	% of Workforce	Annual Openings	Median Hourly Earnings
Office and Administrative Support	10,823	16.4%	381	\$13.59
Sales and Related	7,401	11.2%	342	\$13.91
Food Preparation and Serving Related	7,153	10.9%	376	\$9.51
Healthcare Practitioners and Technical	4,352	6.6%	202	\$34.96
Education, Training, and Library	3,423	5.2%	137	\$18.70

Source: EMSI 2017.1 Q1

The University of Montana and Missoula College are providing a substantial amount of occupation credentialing and skills in Healthcare Practitioners, Office and Administrative Support, Education Training and Library, and Sales and related occupation; however, there is a gap in Nursing Assistants and other trades occupations.

<sup>17</sup> Missoula College has begun doing summer training sessions for Nursing Assistant certifications, but it has yet to check completers of that certification.

<sup>18</sup> The table displays occupational growth at a two-digit Standard Occupation Classification (SOC).

## GOALS & RECOMMENDATIONS

Considering the workforce issues identified in this State of the Workforce report, MEP and its partner organizations can respond by taking a proactive approach through implementation of goals and strategies, and leveraging the strengths of the Missoula community. Missoula business can address the challenges brought to light by the evidence in this report. These strategies will take a collaborative effort, in combination with short and long-term planning, and champions responsible for action steps towards realizing the goals. The goals outlined below and strategies featured in the following infographic are products of the vision MEP has for the future of workforce development in Missoula.

**Goal 1: Establish Missoula as a premier destination for diverse talent and opportunities at all levels** is an effort to directly address talent attraction and talent retention. Through the metrics of falling population and university attendance, the high rate at which companies are recruiting outside of Missoula, and the rising cost of housing, Missoula is in need of addressing its ability to attract and retain talent. Therefore, it is imperative that Missoula orients itself as an attractive community for talent of all levels, to build upon the total population and university population. Through the information collected on tourism and resident contentedness, Missoula is a proven attractive destination to those who know about it, but valuations of housing and cost of living in Missoula are serving as a barrier to adequate talent. Establishing a wider presence through technology and utilizing pipelines from the resident educational institutions, as well as improving housing affordability, will prove integral tools to the success of attraction in this regard.

**Goal 2: Position the Missoula Economic Partnership as a hub for workforce development within the Missoula Region** challenges MEP and community stakeholders to identify key workforce development agents in Missoula; an issue the qualitative data collected indicates was a common issue for stakeholders. As Missoula continues to cultivate talent through education and trainings, organizational structure will be important to manage, support, and voice issues with the workforce. With directive as a workforce hub, MEP in partnership with stakeholders such as the Missoula Chamber of Commerce and Missoula Job Service can effectively address the talent barriers that face Missoula businesses through coordinated action and programs.

**Goal 3 – Develop, implement, and scale comprehensive career pathway programs for students at all levels through Missoula’s talent development system (K-12, post-secondary schools, and adult education)** aims to galvanize the talent development system in Missoula into an organized and attractive staple of the community. By bringing major community partners to the table, Missoula can utilize the report as a means to detect occupations of great opportunity, and build the means of gaining employment in these occupations via clear and concise constructed pathways.

**Goal 4 – Diversify and expand resources available for talent development among employers, educators, and talent development system partners throughout the Missoula Region** will drive employers and the workforce development system to employ all the resources at their disposals to gain the qualified talent they are in search of. Primarily, the strategy will focus around digging out funding for further workforce development activities to take place, and to convene the many important stakeholders that it would take for improved workforce development to materialize.

## **Goal 1 – Establish Missoula as a premier destination for diverse talent and opportunities at all levels.**

**Strategy 1.1** – Develop and promote a talent recruitment and retention brand for Missoula that draws upon the natural beauty, recreational and cultural offerings, and quality of life available within the region.

**Strategy 1.2** – Develop and implement a website that serves a portal for career opportunities available within Missoula and markets the quality of life of the region.

**Strategy 1.3** – Establish a “welcoming concierge” system that connects out-of-town job applicants, new hires, and recent graduates with housing, cultural, and other community-based opportunities within Missoula.

**Strategy 1.4** – Proactively support the recommendations of the Missoula Organization of Realtors’ Attainable Housing Study, as well as assist the City of Missoula’s Affordable Housing Committee in the development of strategies to address the cost of housing in Missoula.

## **Goal 2 – Position the Missoula Economic Partnership as a hub for workforce development within the Missoula Region.**

**Strategy 2.1** – Establish and coordinate roles, activities, and responsibilities among the Missoula Economic Partnership and partners and key players in Missoula’s talent development system.

**Strategy 2.2** – Lay the foundation for the Missoula Economic Partnership to serve as the primary voice for talent development information and issues.

**Strategy 2.3** – Promote talent development opportunities and issues within the Missoula Region.

## **Goal 3 – Develop, implement, and scale comprehensive career pathway programs for students at all levels through Missoula’s talent development system (K-12, post-secondary schools, and adult education).**

**Strategy 3.1** – Convene talent development system partners (K-12, Missoula College, University of Montana, and Adult Education) and key employers to lead career pathway efforts and ensure alignment between education and training offerings and workforce demand.

**Strategy 3.2** – Publicize the primary occupational opportunities within Missoula to students, parents, and educators.

**Strategy 3.3** – Expand “Learn and Earn” opportunities among employers and students.

**Strategy 3.4** – Explore the feasibility of “inter-sector” career pathways, linking retail and hospitality occupations and industries with high wage industries as a method for developing employability skills among the entry-level workforce.

**Strategy 3.5** – Leverage and scale entrepreneurship programs, activities, and opportunities throughout the K-12 system, Missoula College, and the University of Montana.

## **Goal 4 – Diversify and expand resources available for talent development among employers, educators, and talent development system partners throughout the Missoula Region.**

**Strategy 4.1** – Develop and launch a campaign to pool local funding for talent development activities amongst regional employers and talent development system partners.

**Strategy 4.2** – Implement a platform for Missoula’s talent development system partners to collaborate on the pursuit of additional funding for talent development activities through competitive grant competitions, foundation funding, and other opportunities.

# APPENDIX

## MISSOULA WORKFORCE DEVELOPMENT DASHBOARD: MISSOULA AT A GLANCE

Through the depth of insight collected from MEP and Missoula stakeholders, TPMA and MEP are proud to present the 2017 Missoula Workforce Development Dashboard titled “Missoula at a Glance.”

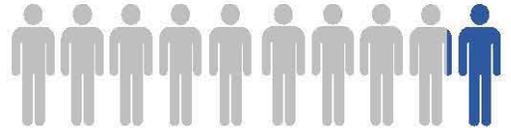
Missoula at a Glance’s purpose is to provide an easily updatable workforce development dashboard to articulate talent strengths, challenges, and needs in Missoula County. Although the dashboard does not represent the state workforce talent in entirety, it illustrates a picture of the condition of talent in Missoula by highlighting major indicators.

The following nine indicators comprising Missoula at a Glance were strategically chosen based on relevance to explaining the state of the workforce: population growth, top five industries by employment, average monthly job postings, average monthly hires, educational attainment, unemployment rate, labor force participation rate, median household income, and median home price.

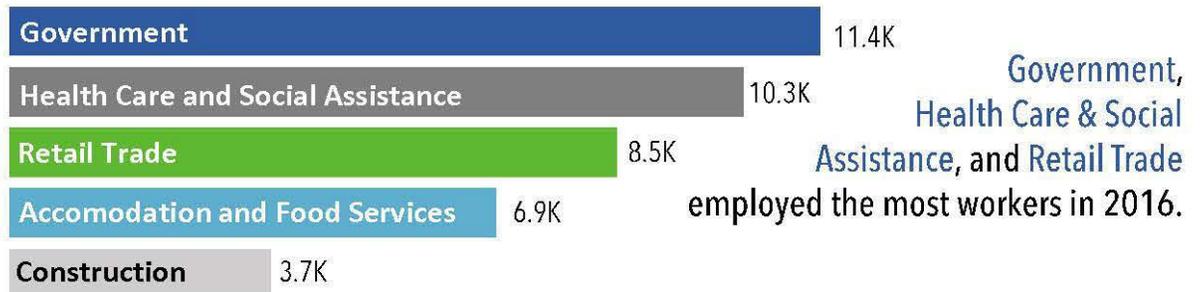
Although these indicators exemplify an analysis of the talent in Missoula, in the following pages the Missoula Workforce Indicators & Comparable Communities Report further builds out the workforce knowledge through further indicators to track progress. With Missoula at a Glance and the Workforce Indicators & Comparable Communities report, MEP hopes Missoula businesses may attain further clarity on the state of the workforce, and are educated in their participation in strategically planning the future of Missoula industry.

## Missoula at a Glance

By 2017, Missoula is projected to have gained 11,457 residents since 2006, an overall projected growth of 11%.



### Employment, Largest Industries

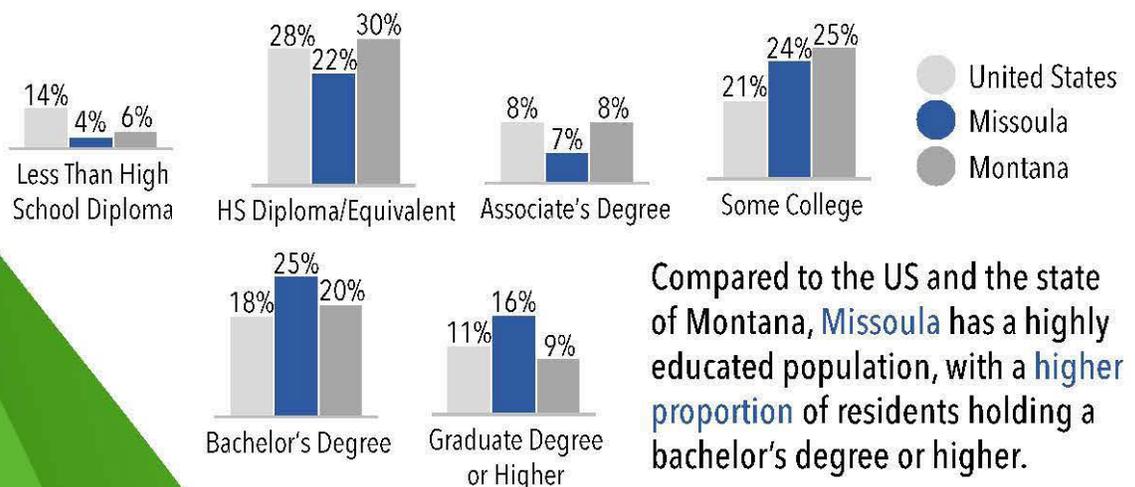


Healthcare Practitioners and Technical Occupations as well as Transportation and Material Moving Occupations have far more average monthly job postings than hired candidates.

### Average Monthly Job Posts and Hires

Occupation	Posts	Hires
Healthcare Practitioners and Technical	611	159
Transportation and Material Moving	553	214
Sales and Related	487	477
Office and Administrative Support	255	600
Food Preparation and Serving Related	133	684
TOTAL (all occupations)	2,990	4,062

### Educational Attainment, Adults age 25 and older

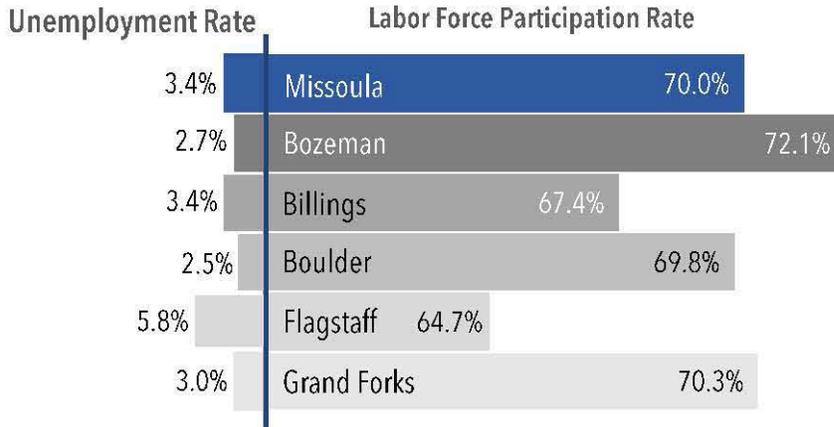


# Missoula by Comparison

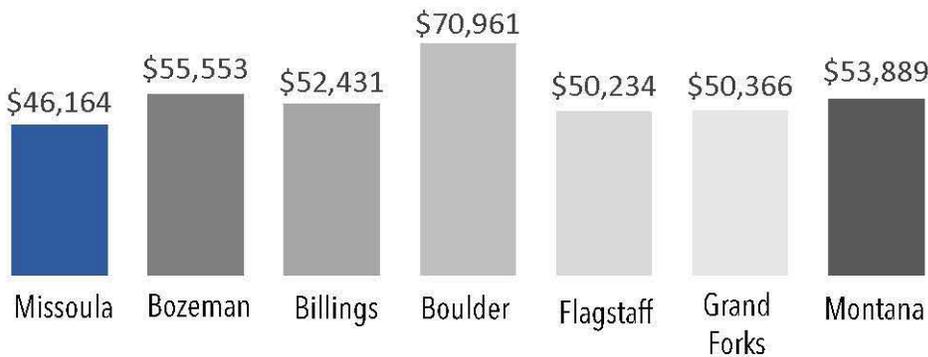
Comparable communities include:

Bozeman, Montana  
 Billings, Montana  
 Boulder, Colorado  
 Flagstaff, Arizona  
 Grand Forks, North Dakota

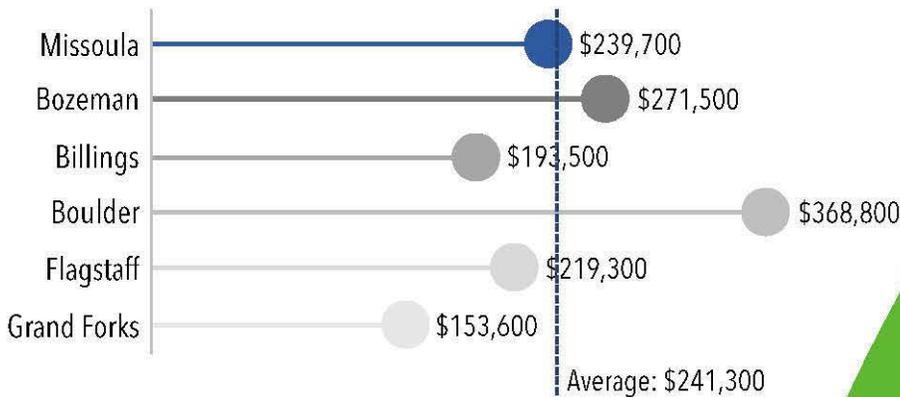
With the exception of Flagstaff, Missoula's unemployment and labor force participation rates resemble other comparable communities.



Missoula's median household income is lower than other comparable communities, as well as the state of Montana. The highest median household income is Boulder.



Missoula's median home price is slightly lower than the average of the comparable communities.



Compiled by:



THOMAS P. MILLER & ASSOCIATES

Sources: US Census Bureau, American Community Survey 5-Year Estimates, 2015 Bureau of Labor Statistics, 2017, and Emsi 2017.1 Dataset.

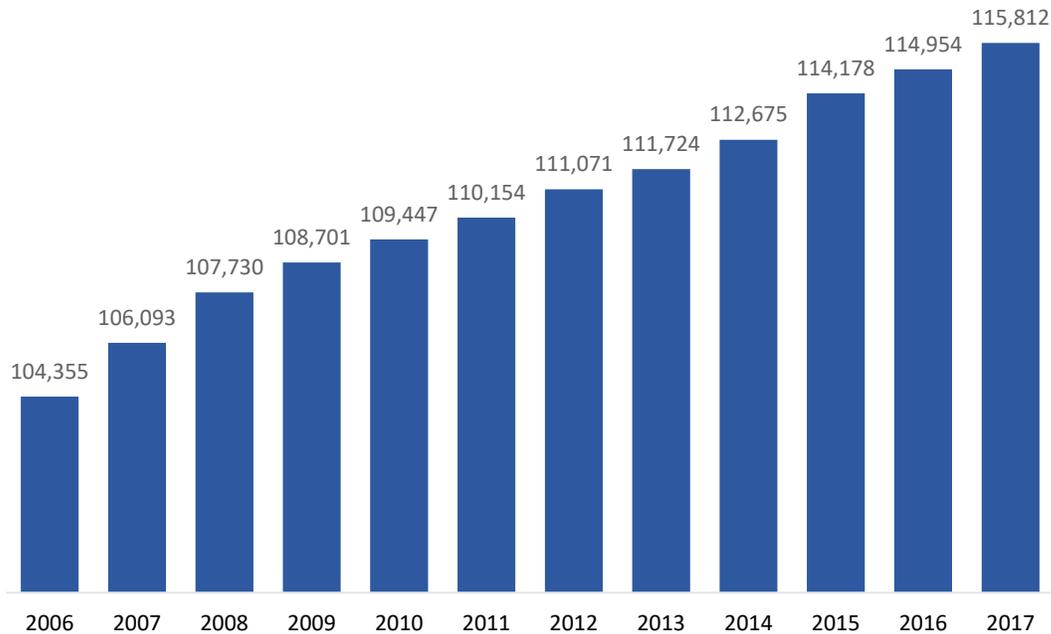
## II. WORKFORCE INDICATORS & COMPARABLE COMMUNITIES

### Demographic Indicators

#### Population Growth<sup>19</sup>

The population of Missoula, MT has grown from 104,355 in 2006 to a projected population of 115,812 in 2017. The total population growth represents a nearly 11% increase in the metropolitan statistical area (MSA) over the last decade.

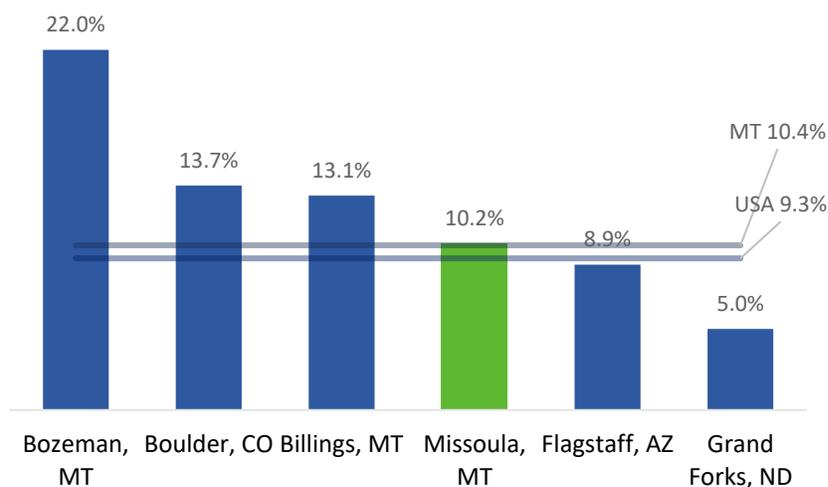
Missoula MSA Population Change, 2006-2017



Source: EMSI 2017.1 Q1

<sup>19</sup> Unless otherwise indicated, data is summarized for the metropolitan statistical area. For Missoula, this also represents Missoula County. EMSI is an acronym for Economic Modeling Specialist International and the 2017.1 dataset was used for this report.

### 2006-2016 Population Change in Comparable Communities



From 2006 through 2016, Missoula’s population has grown by 10.2%. This is slightly less than Montana’s 10-year growth of 10.4% but higher than the United States with a growth of 9.3%.

Of the comparable communities, Missoula has grown faster than Flagstaff, AZ and Grand Forks, ND metropolitan statistical areas.

Source: EMSI 2017.1 Q1

### Population by Age

The largest age cohort in Missoula includes adults between 20 and 34 years of age and this group has grown by 8.2% over the last decade. This cohort also comprises the largest percent of the 2016 population and is likely influenced by the presence of the University of Montana in the region. On the other hand, adults between 35 and 54 years of age have declined in recent years while those 65 and older have experienced the largest percent growth increase at nearly 63%. The “silver tide” of an aging population is not entirely unique to Missoula, as many communities across the United States are experiencing this aging trend.

Demographic	2006 Population	2016 Population	% Change	Current % of Population
Under 5 years	5,847	6,266	7.0%	5.5%
5-19 Years	20,018	20,069	0.3%	17.8%
20-34 Years	27,915	30,212	8.2%	26.7%
35-54 Years	28,453	26,964	-5.2%	23.9%
55-64 Years	11,368	14,496	27.5%	12.8%
65+ Years	9,237	15,025	62.7%	13.3%

Source: EMSI 2017.1 Q1

### Population by Ethnicity

The majority of Missoula's population is White and has remained the largest in the MSA, representing approximately 89% of the population in 2016. While a smaller demographic, there has been a significant proportional growth in the area's Asian (61.7%) and Hispanic (56.9%) populations over the last 10 years.

Race/Ethnicity	2006 Population	2016 Population	% Change	2016 % of Pop.
White	95,870	102,597	7.0%	89.3%
Black	378	572	51.3%	0.5%
American Indian or Alaskan Native, Non-Hispanic	2,418	2,973	23.0%	2.6%
Asian	1,135	1,835	61.7%	1.6%
Native Hawaiian or Pacific Islander, Non-Hispanic	110	114	3.6%	0.1%
Two or More Races	1,996	3,021	51.4%	2.6%
Hispanic	2,448	3,841	56.9%	3.3%

Source: EMSI 2017.1 Q1

### Unemployment

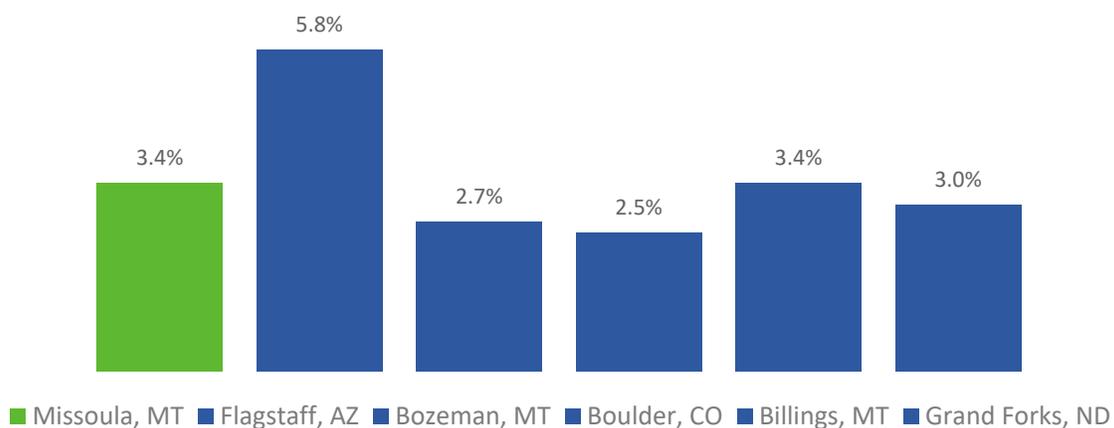
Missoula's unemployment rate is lower than the state (3.9%) and national rates (4.7%)

Indicator	Missoula	Montana	USA
Unemployment Rates	3.4%	3.9%	4.7%

Source: Source: Bureau of Labor Statistics, 2017

Of the comparable communities, Flagstaff, AZ has the highest unemployment rate in 2017. Missoula's unemployment (3.4%) rate is on par with Billings, MT (3.4%) and Grand Forks, ND (3.0%), but higher than Bozeman, MT (2.7%) and Boulder, CO (2.5%).

### 2017 Unemployment Rates in Comparable Communities



Source: Source: Bureau of Labor Statistics, 2017

### Labor Force Participation

Missoula has a working age population of 92,198 and a total labor force rate of 70.0% in 2015. Missoula’s labor force participation rate is higher than Montana’s (64.0%) and national (63.7%) rates, indicating that Missoula’s workforce is more engaged than broader trends.

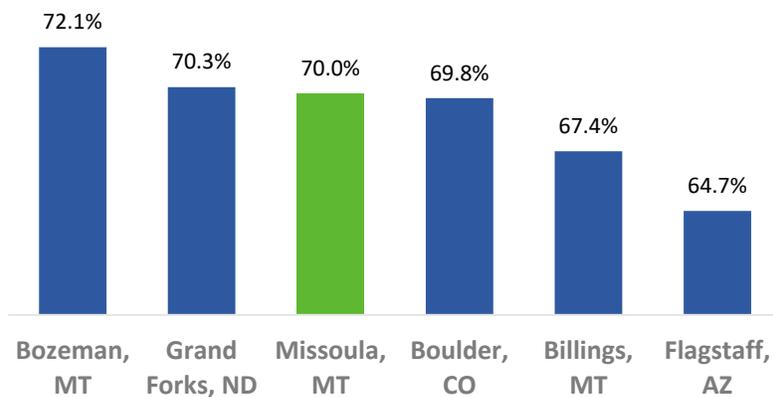
Indicator	Missoula, MT	Montana	USA
Total Pop. age 16 and over	92,198	814,661	251,221,309
Population 16 and over, Employment Ratio	64.1%	59.6%	58.0%
Labor Force Participation Rate	70.0%	64.0%	63.7%

Source: US Census Bureau, American Community Survey, 2015 5-Year Estimates

### 2015 Labor Force Participation in Comparable Communities

Missoula is about average when compared to the labor force participation rates in comparable communities.

All six communities had a labor force participation rate higher than the nation (63.7%) and Montana (64.0%)



Source: US Census Bureau, American Community Survey, 2015 5-Year Estimates

### Per Capita Income and Poverty Rate

Missoula has a per capita income of \$26,779, which is slightly higher than Montana’s but lower than national levels. Median and mean household income are lower than state and national levels. With a 2015 poverty rate of 16.0%, Missoula’s also trends slightly higher than both the state (15.2%) and nation (15.5%).

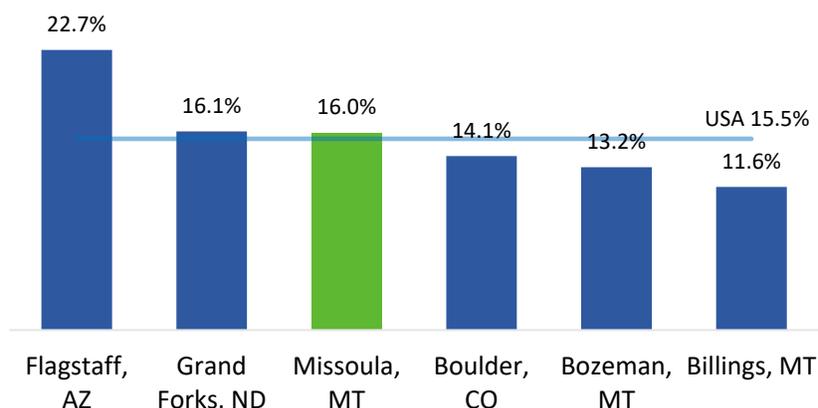
Indicator	Missoula	Montana	USA
Per Capita Income	\$26,779	\$26,381	\$28,930
Median Household Income	\$46,164	\$47,169	\$53,889
Mean Household Income	\$62,703	\$63,139	\$75,558
Poverty Rate	16.0%	15.2%	15.5%

Source: US Census Bureau, American Community Survey (2015)

### 2015 Poverty Rates of Comparable Communities

Missoula’s poverty rate is higher than three of the comparable communities, but lower than Flagstaff, AZ and Grand Forks, ND.

Missoula has a slightly higher poverty rate than the national (15.5%) and state (15.2%) rates.



Source: US Census Bureau, American Community Survey (2015)



#### Educational Indicators

- Educational Attainment Level
- Program Completions

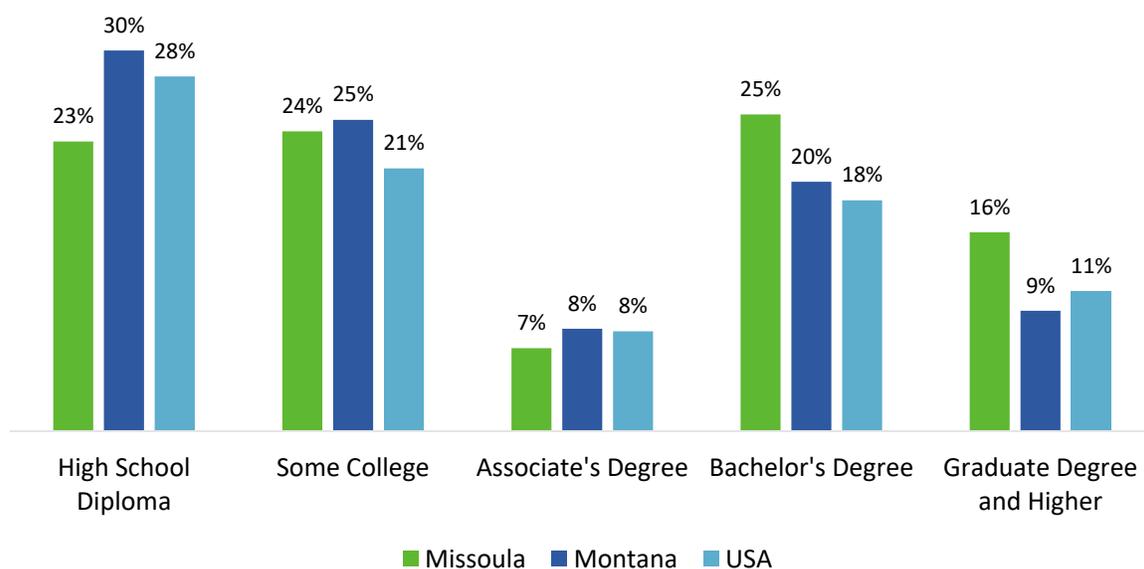
#### Educational Attainment

Missoula has high levels of educational attainment compared to the state and nation. For adults age 25 and older, 25% of Missoula’s population holds a 4-year degree. This is 5% higher than the state’s population and 7% higher than the nation. Missoula’s residents also have a higher percentage of graduate degree earners, likely due to the presence of the University of Montana.

2016 Education Level	Missoula	Montana	USA
Less Than 9th Grade	2%	3%	7%
9th Grade to 12th Grade	5%	5%	7%
High School Diploma	23%	30%	28%
Some College	24%	25%	21%
Associate's Degree	7%	8%	8%
Bachelor's Degree	25%	20%	18%
Graduate Degree and Higher	16%	9%	11%

Source: EMSI 2017 Q1

## 2016 Educational Attainment for Adults Aged 25 and Older



Source: EMSI 2017 Q1

*Program Completions*

The table below details the top twenty program completions in the Missoula area, which includes students/graduates completing a specific course of study. Business Administration and Management, General was the most popular degree in 2015 with 295 completions, followed by Physical Therapy/Therapist (183) and Psychology, General (174).

Program of Study	Regional Completions (2015)
Business Administration and Management, General	295
Physical Therapy/Therapist	183
Psychology, General	174
Anthropology	106
Sociology	100
Physical Education Teaching and Coaching	87
Social Work	87
Law	84
Speech Communication and Rhetoric	84
Journalism	83
Accounting	79
English Language and Literature, General	78
Education, General	76
Wildlife, Fish and Wildlands Science and Management	76

Natural Resources/Conservation, General	67
Pharmacy	62
Biology/Biological Sciences, General	62
Business, Management, Marketing, and Related Support Services, Other	61
Environmental Studies	60
History, General	59
Political Science and Government, General	55
Forestry, General	54
Music, Other	48
Cinematography and Film/Video Production	46

Source: EMSI 2017 Q1



### *Housing Indicators*

- Owner and Rental-Occupied Housing Rates
- Housing Costs

#### *Owner-Occupied Housing Rate vs. Rental-Occupied Housing Rate*

Missoula's renter-occupied housing rate (41.8%) is higher than both the state (32.8%) and national (36.1%) rates. Housing costs may be a prohibitive factor in the decision to purchase a home and in Missoula's case, this may be a factor. Additionally, "college towns" often have higher renter-occupied housing rates.

Indicator	Missoula	Montana	USA
Owner-Occupied Housing Rate	58.4%	67.2%	63.9%
Renter-occupied Housing Rate	41.6%	32.8%	36.1%

Source: ACS 5-Year Estimates (2015)

### *Housing Costs*

On average, the cost of owning a home in Missoula was higher than Montana and the United States in 2015. The median home value in Missoula was \$45,500 higher than the median home value in Montana and \$60,400 higher than the median home value in the United States. Despite already superseding Montana and the United States in median home value, Missoula's median home value has continued to increase to \$270,000 in 2017, a \$36,000 spike in two years. These high home prices can be prohibitive when trying to recruit certain types of workers, especially when recruiting workers in industries that have lower pay.

The Selected Monthly Owner Costs (SMOC) is an indicator that combines mortgage payments, insurance payments and all other home-ownership associated costs. In Missoula, it costs \$177 more a month to own a home in than it does elsewhere in the state. However, Missoula's SMOC is slightly lower than the National SMOC. This is similar to median home value as it can create barriers to maintaining talent bases in certain lower paying industries. Missoula's median gross rent is \$58 higher than Montana's but \$159 lower than the US.

Indicator	Missoula	Montana	USA
Median Home Value	\$239,000	\$193,500	178,600
Median Selected Monthly Owner Costs (w/ Mortgage)	\$1,471	\$1,294	\$1,492
Median Gross Rent	\$769	\$711	\$928

Source: ACS 5-Year Estimates (2015)

Indicator	Missoula
Median Home Value (2017)	\$275,000

Source: Missoula Organization of Realtors

### Employment by Industry

At the two-digit NAICS<sup>20</sup> level, Missoula's largest industries employing workers include Government (11,405 jobs), Health Care and Social Assistance (10,324) and Retail Trade (8,549). These trends mirror the state's top employment sectors, although average earnings tend to be slightly lower.

Industry Description	2016 Jobs in Missoula	Avg. Earnings in Missoula	2016 Jobs in Montana	Avg. Montana Earnings
Government	11,405	\$56,742	97,682	\$57,017
Health Care and Social Assistance	10,324	\$53,204	69,064	\$53,004
Retail Trade	8,549	\$32,608	62,067	\$32,763
Accommodation and Food Services	6,852	\$19,251	52,911	\$19,915
Construction	3,675	\$46,413	38,774	\$47,584
Professional, Scientific, and Technical Services	3,657	\$60,485	26,103	\$64,089
Other Services (except Public Administration)	3,618	\$28,577	26,110	\$28,700
Administrative and Support and Waste Management and Remediation Services	3,592	\$36,870	20,856	\$34,349
Manufacturing	2,192	\$49,662	20,553	\$60,179
Wholesale Trade	2,093	\$63,091	17,851	\$64,519
Finance and Insurance	2,018	\$73,817	16,185	\$71,392
Transportation and Warehousing	1,928	\$53,736	16,716	\$56,707
Arts, Entertainment, and Recreation	1,852	\$21,502	13,844	\$24,391
Real Estate and Rental and Leasing	1,029	\$38,177	7,364	\$37,384
Information	1,014	\$63,960	6,917	\$60,682
Crop and Animal Production	788	\$55,314	16,926	\$30,365
Educational Services	759	\$26,049	6,628	\$31,336
Management of Companies and Enterprises	276	\$106,495	2,079	\$90,854
Utilities	158	\$116,222	3,066	\$113,917
Mining, Quarrying, and Oil and Gas Extraction	26	\$50,227	7,102	\$102,461

Source: EMSI 2017 Q1

<sup>20</sup> NAICS, or North American Industry Classification System, codes are the standard used by Federal statistical agencies.

### *Employment by Occupation*

It is also important to examine the occupations of workers employed in Missoula. At the two-digit SOC<sup>21</sup> level, Office and Administrative Support Occupations supports approximately 16% of Missoula's workforce, followed by Sales and Related Occupations (11.2%) and Food Preparation and Serving Related (10.9%). Healthcare Practitioners and Technical workers is the fourth largest occupation with the highest median earnings at \$34.96 per hour. Annual openings reflect

Occupation Description	2016 Jobs	% of Workforce	Annual Openings	Median Hourly Earnings
Office and Administrative Support	10,823	16.4%	381	\$13.59
Sales and Related	7,401	11.2%	342	\$13.91
Food Preparation and Serving Related	7,153	10.9%	376	\$9.51
Healthcare Practitioners and Technical	4,352	6.6%	202	\$34.96
Education, Training, and Library	3,423	5.2%	137	\$18.70
Personal Care and Service	3,221	4.9%	194	\$10.64
Transportation and Material Moving	3,203	4.9%	142	\$15.25
Construction and Extraction	3,132	4.8%	133	\$19.02
Building and Grounds Cleaning and Maintenance	2,937	4.5%	135	\$10.45
Management	2,761	4.2%	114	\$32.96
Installation, Maintenance, and Repair	2,604	4.0%	110	\$17.29
Business and Financial Operations	2,557	3.9%	100	\$24.52
Production	1,790	2.7%	104	\$15.12
Healthcare Support	1,629	2.5%	79	\$12.46
Community and Social Service	1,557	2.4%	81	\$15.85
Arts, Design, Entertainment, Sports, and Media	1,489	2.3%	95	\$15.85
Computer and Mathematical Occupations	1,335	2.0%	47	\$23.60
Life, Physical, and Social Science	1,096	1.7%	61	\$22.19
Protective Service	873	1.3%	47	\$17.63
Legal	775	1.2%	31	\$31.41
Architecture and Engineering	747	1.1%	36	\$28.97
Military	526	0.8%	18	\$18.19
Farming, Fishing, and Forestry	423	0.6%	30	\$15.69

Source: EMSI 2017 Q1

<sup>21</sup> SOC stands for Standard Occupational Classification

### III. STAKEHOLDER ENGAGEMENT THEMES

#### *Interviews*

In order to ascertain qualitative data, interviews were planned to inform us on the local perspectives of industry and community leaders in Missoula. After the kick-off meeting and review existing materials, TPMA developed a list of standard guiding questions for the interviews to ensure input was collected consistently across all stakeholders. With assistance from MEP, TPMA contacted and facilitated 24 interviews with key stakeholders, on-site when possible, and by phone. The following are the overall themes of the findings that we found consistent throughout most or all interviews.

#### Low Wages

A consensus was present that workers in Missoula are being offered low wages, especially relative to the cost of living. Many stakeholders held the belief that this low wage issue is contributing to the loss of talent. One theory is that due to the benefits and satisfaction levels of living in the Missoula community, workers have long been willing to work for lower wages. Employers are having trouble attracting talent externally due to a gap in what labor is used to receiving, and what the wages will be for the same work in Missoula.

#### Cost of Living

The cost of living dilemma is perceived to be a major deterrent for recruiting talent, and keeping low wage earners here for low skilled positions. Because of the high cost of housing, too large portions of low-income earners' paychecks are being consumed by property payments. Thus, low skilled labor is hard to keep, and the market for such workers is extremely competitive. With the lack of ability to expand the area of Missoula to increase demand, it is hard to forecast if prices will lower.

#### Community Collaboration

Collaboration is strong and happening in the community, displayed by the many community organizations and partnerships present: AHEC, Missoula Chamber of Commerce, Montana High Tech Alliance, Montana Contractors Alliance, and MEP. The community has adequately assessed the needs of Missoula and training programs as a result, but despite these collaborations, it appears the programs that have materialized as a result of this have been relatively low.

#### Montana has Assets

Stakeholders made it clear that Montana has a natural tendency to attract people, and give its civilian population high satisfaction of living. Reasons were primarily due to recreational activities, great community, and an educated population. All of these factors factor in to why Montana can appear to be a very attractive site for business.

#### Airline Prices

Unlike Bozeman, Missoula has yet to negotiate a revenue guarantee with airlines, or any similar type agreement to expand airline service (the Missoula Air Service Task Force is actively working to raise funds to provide a revenue guarantee in the near future). This affects not only businesses that often operate inter-state or even internationally, but also effects the workers themselves. Someone in the labor pool would be discouraged by expensive air costs for two reasons: difficult to accommodate a

remote working staff which has become incredibly popular in the tech industry, and difficulty travelling to visit friends or family out of state.

### Employability Skills

Primarily with some entry level and low-skill populations, soft skills are in short supply. All over the country, work ethic for the current unemployed is an issue. Communication and basic computer skills were some of the more commonly heard non-technical skills that were missing in the region's workforce.

### Clear Action Steps

Throughout stakeholder interviews, it was echoed that the ideal outcome of the workforce study is that there will be a clear actionable future as informed by the report. There appears to be a lack of leadership within the community, and thus a lack of action despite the prevalent partnerships. The community is ready to take tangible action to address the challenges of the community, and they are looking to the workforce study and MEP as the base for this action.

### Talent Need for High Growth Sectors

Confirming what the initial industrial data was illustrating, there is a strong need for healthcare and information technology workers in the field, and a strong willingness to hire anyone slimly qualified. RN's and some health technician occupations were most commonly heard, but overall, it was clear that there is a large demand in the healthcare industries for labor. With the continuing attractiveness for startups in Missoula, IT continues to see large demand for entry level and high skilled occupations. There seems to be some educational and collaborative support for these fields, but some programs are sparsely attended. Training is available in the community; word just needs to get out that there are jobs to be had in the field.

### State of Education Part I: K-12 system

The K-12 system in Missoula has a very good reputation within the community and across the country as being academically exceptional, while supporting the arts. The system appears willing to adapt to the needs of the community with the creation of academies designed to teach career skills in in-demand occupations. The health science academy is a prime example. Despite the presence of academies, there is some doubt within the community surrounding the willingness of the K-12 system to embrace the trades and non-traditional 4 year educational routes, as well as some concern that students are not exposed to useful programs offered by local businesses (i.e. apprenticeships, internship programs).

### State of Education Part II: 2-year and 4-year College & University

With the expansion of Missoula College, the capacity to increase student population and quality of education is possible. Unfortunately, it seems that both Missoula College and University of Montana's student populations are suffering. The programs are also built into a rigorous course/program approval process making it tough for administration to be proactive in catering to growing in-demand industries and occupations. With both colleges, as well as other post-secondary programs and institutions being vital for community and quality of labor pool, collaboration and growth is necessary.

### Apprenticeships

Apprenticeships had support throughout the interviews, with many business stakeholders indicating current participation or the need for such a program to exist for them. Many suggested no clear

pathways to currently creating apprenticeships, thus feel lost navigating the requirements of a program. It was a consensus among many employers that there should be a clear community defined pathway to creating apprenticeships for the good the labor quality.

### Missoula Job Service

Many employers indicated the importance of the Missoula Job Service within the community, both for the labor pool and employers. While restrictions by budget exist for this program, the Missoula Job Service is already a key piece in the workforce system puzzle, and should continue to be a leader in the community to equip workers with the skills and resources necessary.

### *Focus Group Notes and Themes*

TPMA conducted three in-person focus groups over two days (May 2-3, 2017) with approximately 30 key stakeholders in the Missoula region. The focus groups were conducted at Garlington Lohn & Robinson, 350 Ryman St, Missoula, MT 59802. Attendants ranged from business owners and leaders, human resource and hiring managers, workforce and economic development leaders, education representatives, and community partners.

### Focus Group #1

The first focus group began with a discussion on the lack of competitive salaries, and the effect of youth leaving the state. This has made it hard to attract talent. Many stated that salary might be so low because of the great environment; people are willing to accept lower wages to live in a better community. In order to attract better talent outside of Missoula, market the great community and natural resources.

Education, particularly the University of Montana and Missoula College, were discussed extensively because of declining enrollment and the large role that is playing in the local economy. The University of Montana is also benefitting the city largely in culture; many concerts, and breweries have rapidly been built, as well as new structures to hold conventions, etc. It was mentioned that the K-12 program in Missoula is excellent. There were some stakeholders voicing the resistance of high schools to allowing employers to advertise programs, as well as counselors not being as keen on career counseling. The consensus was that there was a stigma against 2-year degrees in Missoula that is hurting growth.

Specific trades were discussed, especially in-demand occupations such as healthcare and IT. Montana Code School and Missoula College have created plenty of skills programs, but it is not enough. There is a need for more apprenticeships in the community, in fact there was a tax incentive for apprenticeships just approved.

### Focus Group #2

The university system has always been the top priority in the region, but with declining enrollment businesses have now become the priority. The universities need support from the government and administration, because without them we are losing a cheap labor pool as well as skilled labor produced from the college. The problem is that the university has a reputation problem, both with the recent book *Missoula: Rape and the Justice System in a College Town* and its identity as a liberal arts school.

Healthcare and sciences are not able to fill positions, especially with local talent. Many have to recruit outside of the region. Healthcare industry is trying to partner with the colleges to create talent. There

does exist some assistance programs for workers and businesses: Missoula Pathways program, Incumbent Worker program, Dress for Success. Overall there is a soft skills gap, despite the fact that Montanans typically have a good work ethic.

When the topic of discussion switched to the workforce development system, it was said there is a split in political ideology, in ways to fund or improve workforce development, amongst community organizations responsible for workforce development. Furthermore, there was a lack of consensus on who the party or leader responsible of workforce development. There are key players in the system that are not at any of the community forums for discussion. The community is often described as “silo’d”.

Work based learning programs are thought of highly in the community, and the creation of academies supports this notion. The exposure to employers and the technical skills outcoming students have are very strong in academies. Although academies are accomplishing addressing career options, it seems the k-12 system does not generally do as well. Interface with business is missing with the school system, and no one person is responsible for interaction. Unfortunately, staff is somewhat constricted by time in their ability to do career counseling.

### Focus Group #3

There were numerous positive aspects discussed in the third focus group. Namely, Missoula has wonderful scenery and recreation activities, the community has culture and is engaged, the public school system is great in a conventional sense, and there is quick access to everything in the city. Negative aspects were also brought up, such as a culture that takes nice days off for recreation, and poor internet speed. Missoula has programs to equip the workforce, such as ikuw apprentices, RevUp, Big Sky Code Academy, and Montana Code School. These programs have been a nice changeup from the four-year system, and employers would like more two-year programs and on-the-job training (OJT).

With the Montana High Tech Business Alliance present, there was extensive discussion of the tech sector. There is a lack of qualified talent in this sector, especially for computer scientists, but institutions such as Montana Code School are working to adjust accordingly. These occupations tend to pay high wages, especially for the region. Currently, employers often attract talent from outside of the state for higher positions, but it is difficult to draw candidates in when they see housing prices and wages. Other cities have implemented successful swaths of boot camps and apprenticeships in the tech industry, but there may be a misunderstanding between what these programs are able to do and what the public thinks Missoula can do.

Education was discussed and, similar the other focus groups, the culture of “four-year or bust” was said to be having a negative effect. There is a split among university staff in how to attract students: whether to attract them solely on the basis of academics, or to including discussions of recreation and location. Unfortunately, there is not a lot of money available to support marketing efforts. A problem with the bureaucratic setup of the universities was also said to be inhibiting the reactivity of the system. Missoula College is a flagship under the University of Montana and thus is restricted to the same processes. It takes too long to set up classes and programs. There is also a lack of employer connections with the university. ATG appeared to have a good model to draw the university’s students into its program. Jackson Contractors have also managed to setup a good apprenticeship program with the high schools.

The question of “What is the most important the steering committee can do?” was proposed. Much of the answers centered around collecting usable and valid data to direct funds and decisions. Another point was to identify leaders of the workforce development system, and creating clear channels to access the system.

### *Common Themes and Key Takeaways*

#### Education

- Universities
  - Universities struggle with being flexible
  - College system is experiencing declining enrollment
  - Some Work Based Learning programs exist, but there is opportunity for more
- K-12
  - Little connection with businesses and industry, and a lack of work based learning
  - Great quality and reputation
  - Emphasis on traditional 4 year education pathway

#### Industry Needs

- Healthcare has workforce needs in quantity of workers, especially for RN’s and other skilled positions
- Tech industry is perceived as growing very quickly, paying high wages, and needing additional talent. There are efforts to provide programs for tech occupations.
- Skilled Trade positions seem to be hard to fill.

#### Missoula Assets

- Missoula is perceived as a great community by its residents
- Recreation and natural resources make it a tourist destination and a generally a great place to live.
- Artistic culture and diversity helped by the University of Montana
- Great public school system

#### Workforce System

- Many can recognize the players in the system, but few can identify who should/could be a leader of the system.
- Workforce system financially is under supported, but still being utilized often.

#### Collaboration

- Culture of collaboration is prevalent- many committees and organizations exist to partner and collaborate. However, it is not organized and there are communication challenges both internally and externally.
- There is a lack of action because of these collaborations.
- More structure for action needs to be facilitated, in addition to some leadership being arranged.

## IV. SURVEY RESULTS

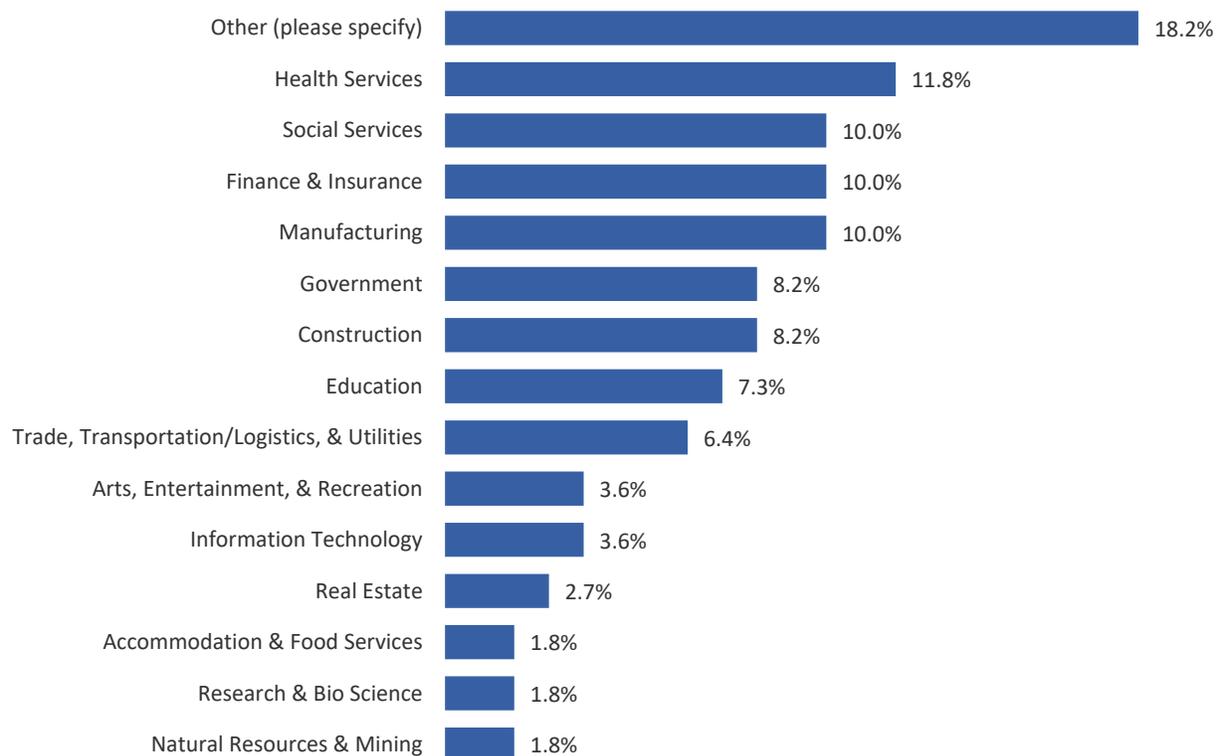
As an essential part of MEP's State of the Workforce Report, a survey of regional businesses and organizations was developed and distributed to area employers. The survey was created by Thomas P. Miller and Associates (TPMA) in collaboration with MEP. There were 111 unique responses to the 21-question survey, which was open for 29 days and closed on July 5, 2017.

### Q1. Organizations by Industry

Responses: 116 (There were 5 respondents that indicated more than one industry)

To get a sense of the industrial composition of the respondent group, TPMA began the survey by requesting respondents to identify as one of 14 industrial groups corresponding to federally designated 2-digit NAICS (North American Industry Classification System) code groups.

#### What industry best describes your company?



Of the options for industrial category, the Health Services industry had 11.8% of the total response count followed by Manufacturing; Finance & Insurance; and Social Services - all of which had 10% of the response count. This forms a cumulative 41.8% of the total response count made up by the top four industries. Government and Construction both comprise 8.2% of the response total, respectively. The largest portion of responses was in 'Other (please specify),' with 17.2%. When specified, those responses include:

- News Publishing Media
- Staffing Service
- Auto Body Repair
- Barbering/Men's Fashion
- Telecommunications
- Labor organization

## *Q2. Time to Fill Job Openings*

Responses: 78

Difference in skill can affect job opening duration for different companies. The following definitions were used to differentiate positions of differing skill level:

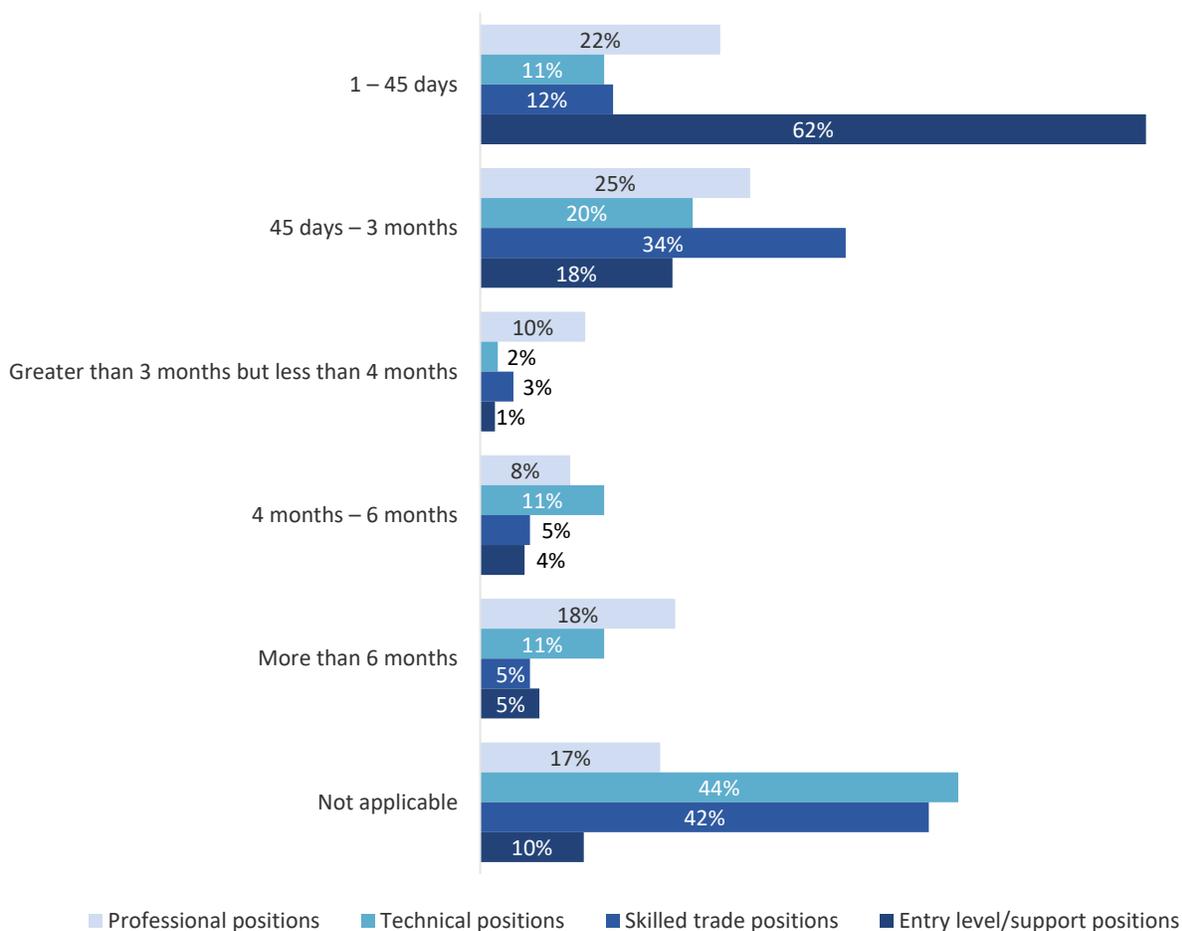
**Professional Positions:** A considerable amount of work-related skill, knowledge, or experience is needed for these positions. Employees may need some on-the-job training, but most of these occupations assume that the person will already have the required skills, knowledge, work-related experience, and/or training. Most of these positions require a bachelor's degree or higher.

**Technical Positions:** Most occupations in this category require an industry-recognized credential, licensure, or associate's degree. Some previous work-related skill, knowledge, or experience is required for these occupations.

**Skilled Trade Positions:** Most occupations in this category require training in an apprenticeship program, technical schools, or related on-the-job experience. Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

**Entry-level and Support Positions:** Little or no previous work-related skill, knowledge, or experience is needed for these occupations. These occupations usually require a high school diploma or less. Employees in these occupations need anywhere from a few days to a few months of on-the-job training.

On average over the last year, how many months has it taken to fill job openings in each of the following job categories?



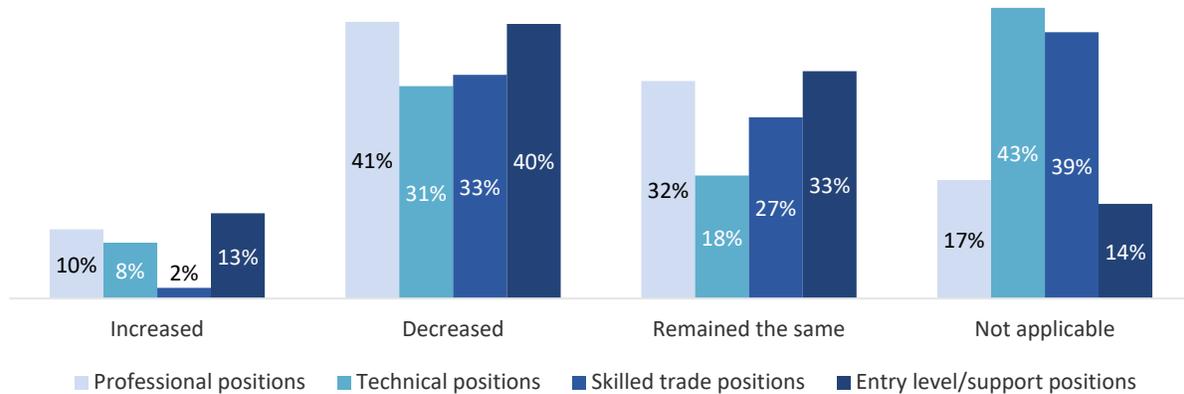
The chart demonstrates that entry level/support positions were most likely to be filled within 45 days. Entry level/support positions were also the least likely to be filled after 3 months with only 20% of these positions being filled after the 3<sup>rd</sup> month. Professional positions, despite being the second most commonly filled position within 45 days, and from 45 days to 3 months, it was the most common position to be filled after more than 6 months searching (18%). This indicates a scarcity of qualified candidates able to fill Professional positions. Technical positions were most often found within 45 days to 3 months, and Skilled Trade positions were similar in that 45 days to 3 months was the most popular time frame to fill job openings in these positions (20%).

### Q3. Supply of Qualified Applicants

Responses: 77

Maintaining the same definitions for positions, the survey then tried to get a sense of the supply of a qualified workforce in the different skill levels over the last year.

Compared to 2016, has the number of qualified job applicants increased, decreased, or remained the same for the following types of positions?



Entry level/support positions had the largest portion of respondents claim that they perceived an increase in qualified job applicants with 13%. Despite this figure, respondents overall indicated that the number of qualified job applicants for Entry level/support positions had decreased. Both Technical and Skilled Trade positions were concentrated in the decreased column (indicating that the number of qualified applicants for these positions has decreased) or in the not applicable column. For the number of qualified applicants in Professional positions, a minority of respondents experienced an increase, but an overall majority portion of respondents experienced a decrease. Professional positions had the largest proportion of respondents that experienced a decrease in qualified applicants.

Utilizing the responses to question one, TPMA was able to categorize responses by industry. The following table identifies the responses received to this question broken out by industry category for Professional positions:

Compared to 2016, has the number of qualified job applicants increased, decreased, or remained the same for the following types of positions?

Industry	Increased	Decreased	Remained the same	Not Applicable	Grand Total
Accommodation & Food Services	-	-	1	1	2
Arts, Entertainment, & Recreation	-	1	-	2	3
Construction	-	1	2	1	4
Education	1	2	2	-	5
Finance & Insurance	-	3	1	1	5
Government	1	2	2	1	6
Health Services	1	3	2	-	6
Information Technology	1	-	-	-	1
Manufacturing	-	2	2	3	7
Natural Resources & Mining	1	-	-	-	1
Other	1	11	7	2	21
Real Estate	-	-	1	-	1
Research & Bio Science	-	1	-	-	1
Social Services	1	1	1	1	4
Trade, Transportation/Logistics, & Utilities	-	1	1	-	2
<b>Grand Total</b>	<b>7</b>	<b>28</b>	<b>22</b>	<b>12</b>	<b>69</b>

Seven different industries perceived an increase in qualified job applicants. Amongst these industries, no single industry had more than 1 response in the increase column. Besides 'Other,' which was made up of a collection of different industries, Health Services and Finance & Insurance were the two industries that had 3 respondents voice a decrease in qualified applicants. Manufacturing reported no increases in qualified applicants and 7 total responses among Not applicable, Remained the same, and Decreased.

By reviewing the same responses for Entry level/support positions, a more detailed insight is provided into the lower-skilled opportunities and workforce, as shown below.

Industry	Increased	Decreased	Remained the same	Not applicable	Grand Total
Accommodation & Food Services	1	1	-	-	2
Arts, Entertainment, & Recreation	-	3	-	-	3
Construction	-	3	3	-	6
Education	-	1	2	1	4
Finance & Insurance	-	-	3	2	5
Government	2	4	1	-	7
Health Services	2	1	2	1	6
Information Technology	-	-	-	1	1
Manufacturing	-	6	1	-	7
Natural Resources & Mining	1	-	-	-	1
Other	-	7	10	4	21
Real Estate	-	-	1	-	1
Research & Bio Science	-	1	-	-	1
Social Services	2	1	1	1	5
Trade, Transportation/Logistics, & Utilities	1	1	-	-	2
<b>Grand Total</b>	<b>9</b>	<b>29</b>	<b>24</b>	<b>10</b>	<b>72</b>

According to survey responses, Accommodation & Food Services; Government; Health Services; Natural Resources & Mining; Social Services; and Trade, Transportation/Logistics, & Utilities have all seen an increase in the quantity of qualified applicants. However, Manufacturing had 6 respondents claim to have perceived a decrease in the quality of applicants over the last year. In similar fashion, Arts, Entertainment, & Recreation; Construction; and Government all indicated that they experienced a significant decrease in qualified applicants. The largest concentration of respondents was in the decrease column.

Shown below are the results for Skilled Trade positions:

Industry	Increased	Decreased	Remained the same	Not applicable	Grand Total
Accommodation & Food Services	-	-	-	2	<b>2</b>
Arts, Entertainment, & Recreation	-	2	-	1	<b>3</b>
Construction	-	5	1	-	<b>6</b>
Education	-	-	1	2	<b>3</b>
Finance & Insurance	-	-	-	4	<b>4</b>
Government	1	2	2	1	<b>6</b>
Health Services	-	3	-	3	<b>6</b>
Information Technology	-	-	1	-	<b>1</b>
Manufacturing	-	2	1	4	<b>7</b>
Natural Resources & Mining	-	-	-	1	<b>1</b>
Other	-	6	9	4	<b>19</b>
Real Estate	-	-	1	-	<b>1</b>
Research & Bio Science	-	-	-	-	<b>-</b>
Social Services	-	-	-	3	<b>3</b>
Trade, Transportation/Logistics, & Utilities	-	1	1	-	<b>2</b>
<b>Grand Total</b>	<b>1</b>	<b>21</b>	<b>17</b>	<b>25</b>	<b>64</b>

According to the table, Government was the only industry that reported an increase in the quality of skilled trade applicants over the last year. Conversely, in the decrease column, five industries reported a decrease. Construction collected 5 respondents who reported a decrease, as well as 3 respondents in Health Services, a growing industry as illustrated in the data and heard in previous stakeholder engagement. Overall, the largest concentration was in the decrease column, followed closely by the remained the same column.

For Technical positions, the number of respondents who experienced an increase in qualified applicants jumped to 5:

Industry	Increased	Decreased	Remained the same	Not applicable	Grand Total
Accommodation & Food Services	-	-	-	2	2
Arts, Entertainment, & Recreation	-	1	-	2	3
Construction	-	3	-	-	3
Education	-	1	-	2	3
Finance & Insurance	-	-	1	3	4
Government	1	3	1	1	6
Health Services	1	1	1	3	6
Information Technology	-	-	1	-	1
Manufacturing	-	1	2	4	7
Natural Resources & Mining	1	-	-	-	1
Other	1	8	4	6	19
Real Estate	-	-	1	-	1
Research & Bio Science	-	-	-	-	0
Social Services	-	-	-	3	3
Trade, Transportation/Logistics, & Utilities	1	1	-	-	2
<b>Grand Total</b>	<b>5</b>	<b>19</b>	<b>11</b>	<b>26</b>	<b>61</b>

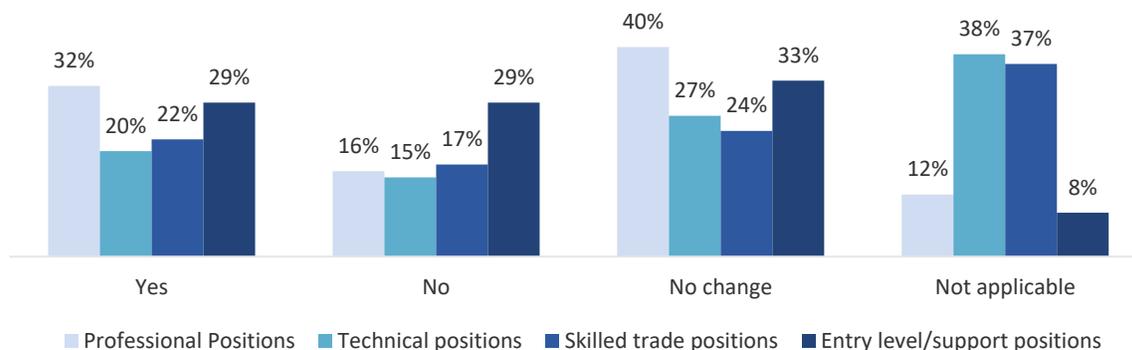
An increase in the number of qualified applicants was reported for Government and Health Services, two industries that reported an increase in other level positions as well. Natural Resources & Mining, along with Trade, Transportation/Logistics, & Utilities also had one respondent report an increase. Construction and Government, respectively, had 3 respondents report that the quality of applicants in technical positions has decreased. There was a concentration of respondents that were in the decrease column, indicating a general decrease in qualified applicants.

#### Q4. Employee Retention

Responses: 76

Employee retention plays a crucial role in the workforce development system. It can indicate a deficiency of skills for applicants initially perceived to be equipped, or can indicate a talent drain out of Missoula. In this question, the project team endeavored to gain a sense of the satisfaction of the employed workforce in Missoula.

#### Compared to 2016, has employee retention improved?



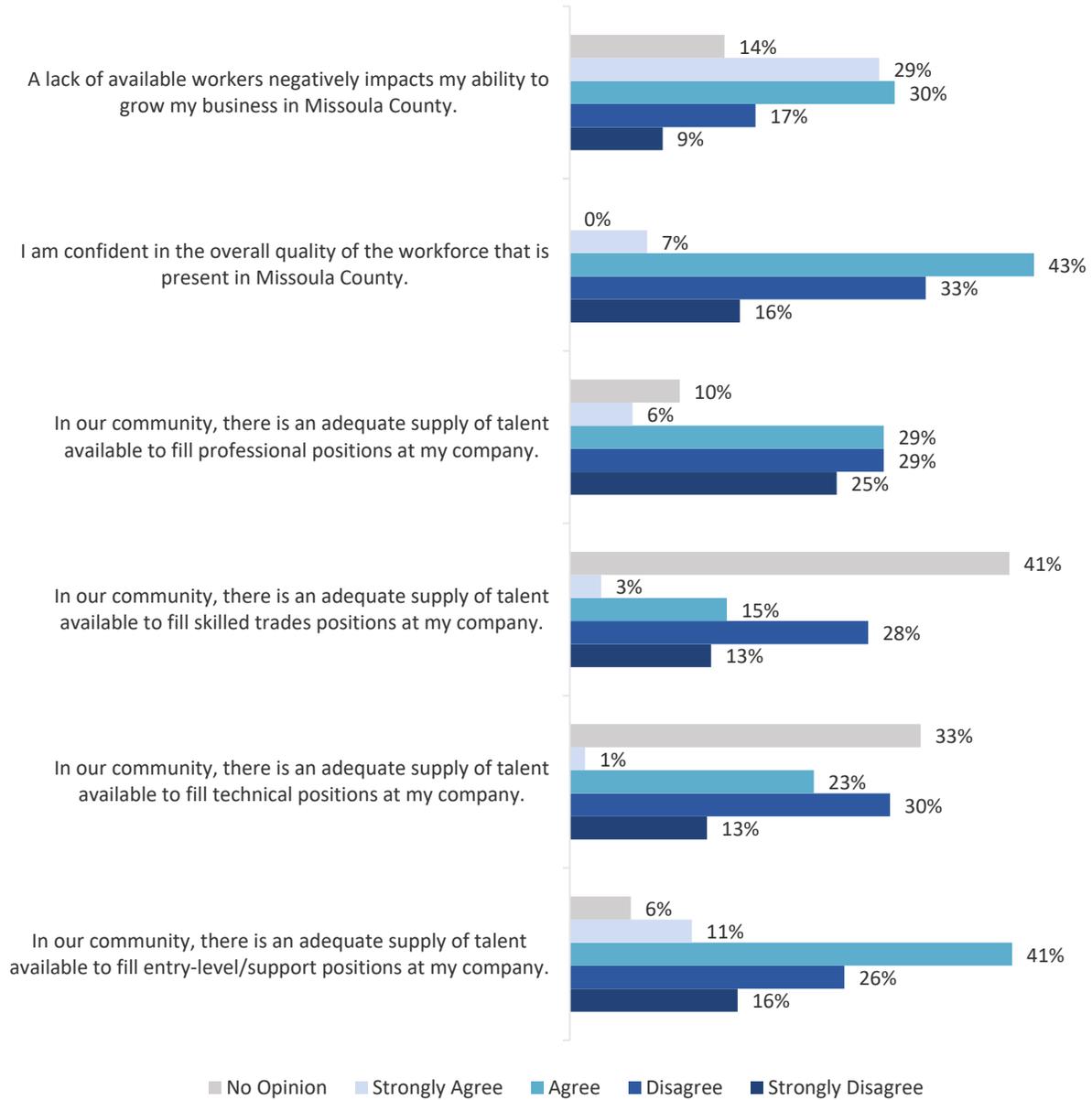
For Professional positions, the chart reveals that most respondents reported that employee retention has either improved (32%), or not changed (40%). This is also consistent with Technical and Skilled Trade positions as well. The anomaly for employee retention is Entry level/support positions, which had an even response rate for respondents saying *yes* and *no* to whether employee retention has improved. Despite this, these numbers for Entry level/support positions are slightly outweighed by respondents indicating there has not been a change in employee retention over the last year for the Entry level/support positions. For every position, the highest concentration of respondents was in 'No change' (not including 'Not applicable').

#### Q5. Talent Supply

Responses: 70

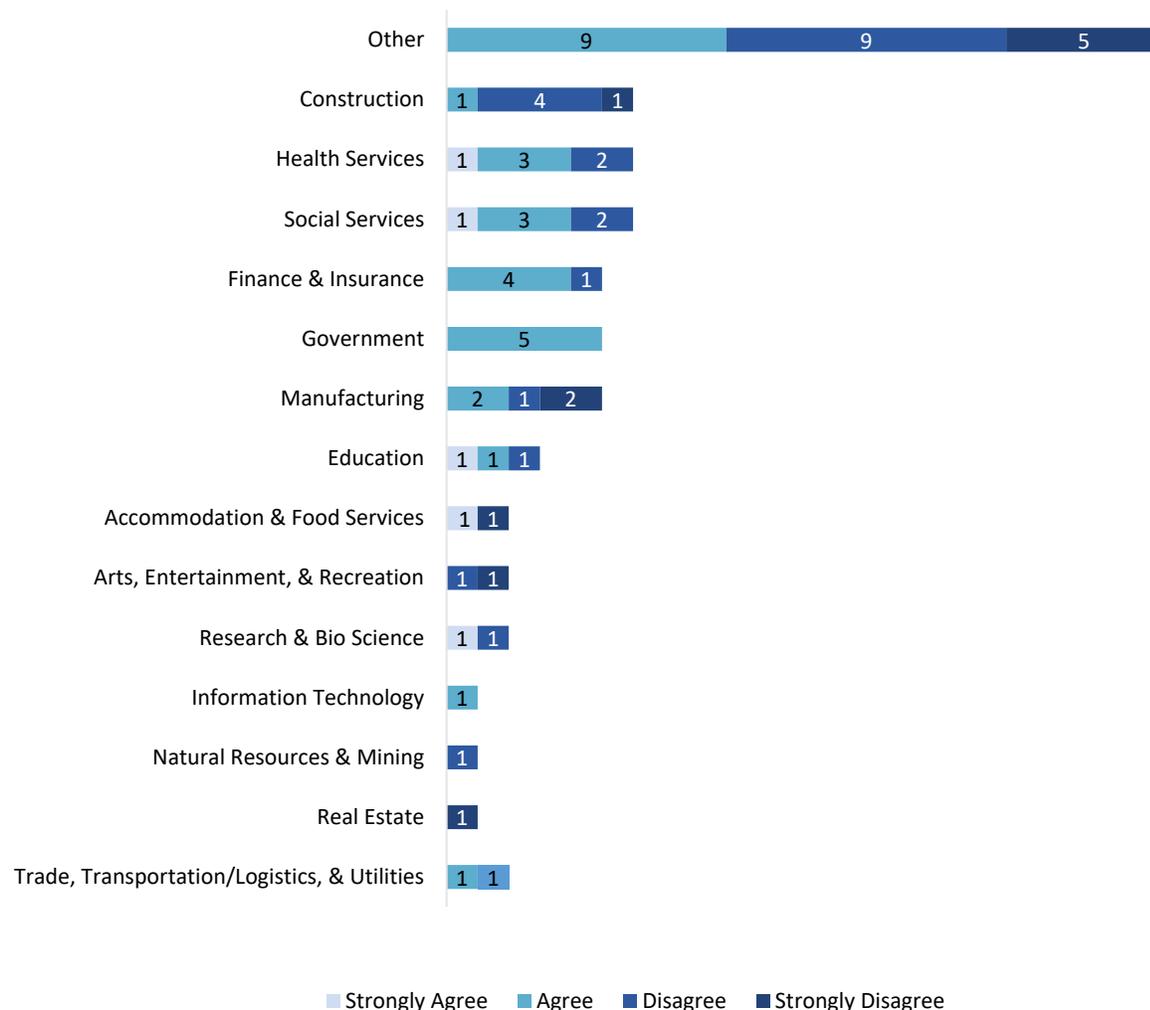
Now that workforce supply and retention has been investigated in Questions 2-4, Question 5 attempts to take a sample of the talent available for different skill levels within Missoula County. In addition to inquiring about the relative confidence of talent supply within Missoula, two questions were included to ascertain more general opinions about the overall state of the talent level within Missoula's workforce. The same definitions posed earlier apply to the following.

Please rate your level of agreement with the following statements:



The statement “A lack of available workers negatively impacts my ability to grow my business in Missoula County” was greeted with majority agreement from the respondent pool; conversely, only 26% of respondents either disagreed or strongly disagreed. 43% of respondents indicated that they agreed with the statement “I am confident in the overall quality of the workforce that is present in Missoula County”. Despite the large portion of respondents who agreed and are confident in the overall quality of the workforce, only a few respondents strongly agreed with the statement. Accompanying this, 49% of the respondent pool either disagreed or disagreed strongly, making it a nearly even balance in opinion on whether there is confidence in the workforce. The distribution of answers to the statement “In our community, there is an adequate supply of talent available to fill professional positions at my company” was denser towards disagreement, with an identical 29% agreeing and disagreeing respectively, and a slightly smaller portion strongly disagreeing. There was a strong presence of no opinion (41%) for the statement “In our community, there is an adequate supply of talent available to fill skilled trades positions at my company”. Of those respondents who did have an opinion, a majority of them disagreed with this statement indicating there is a scarcity of skilled trade talent. Using the same statement for “technical positions”, the ‘no opinion’ portion of respondents dropped to 33%, while there was an increase in agreement and disagreement. Lastly, for the statement “In our community, there is an adequate supply of talent available to fill entry-level/support positions at my company” the chart illustrates that a majority of respondents felt that there is in fact an adequate supply of entry level/support positions. A smaller portion of the respondent population disagreed with this statement.

Breaking the statement “I am confident in the overall quality of the workforce that is present in Missoula County” out by industrial group illustrates those industries that could be in most need of workforce system assistance. The following chart displays this.



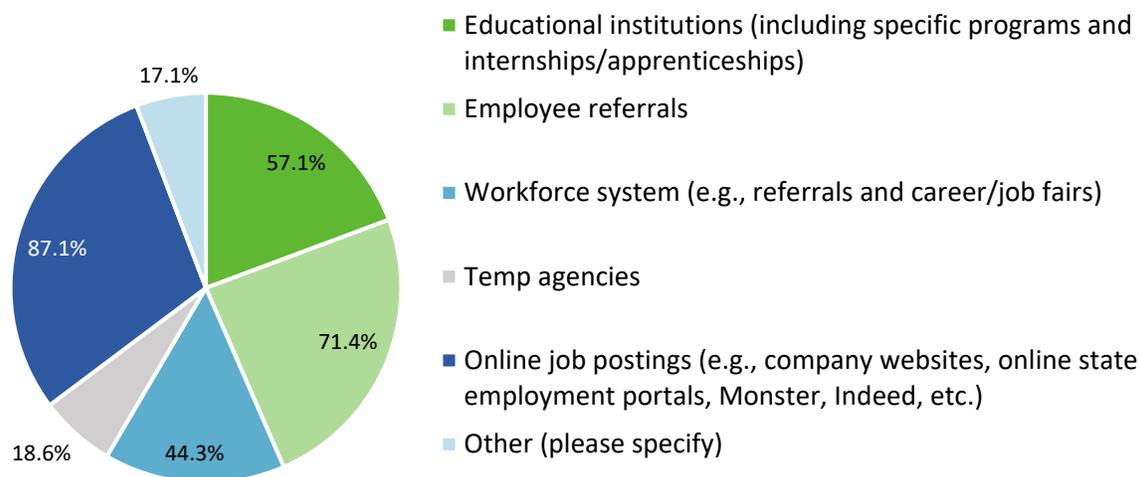
The primary industries that are confident in the overall quality of the workforce are Government; Finance & Insurance; Health Services; and Social Services. Agreement with this sort of statement would indicate that the state of the workforce for those industries may be better trained than industries whose responses reflected less favorably on the statement. Conversely, Construction and Manufacturing tended to have respondents who had little confidence in the overall quality of the workforce. These industries may be underserved in terms of a serviceable workforce.

### Q6. Employee Recruitment

Responses: 70

Recruiting methods can vary drastically from industry to industry, and even across businesses within the same industrial sector. Tapping into the overall trend in processes used by businesses to recruit workers in Missoula can serve as a testimony to the quality of workforce institutions and partners such as staffing agencies, educational institutions, one-stop career centers, etc. The survey provided respondents the opportunity to indicate the many avenues they often navigate to recruit talent, along with the option to indicate ‘Other’ methods not included in the answer options.

From what avenues do you typically recruit employees? Please check all that apply.



87.1% of respondents claimed online job postings were a method they typically used to recruit qualified applicants, which was the most popular answer. Employee referrals was also a common answer among respondents with 71.4% of respondents indicating they utilize this method. These two options were the most popular answers that would typically be indicative of the functioning effectiveness of the workforce system: Educational institutions and the Workforce System. Educational institutions were indicated as an avenue by 57.1% of respondents, with 44.3% of respondents identifying the Workforce system. Of the 12 responses that selected other methods, they include:

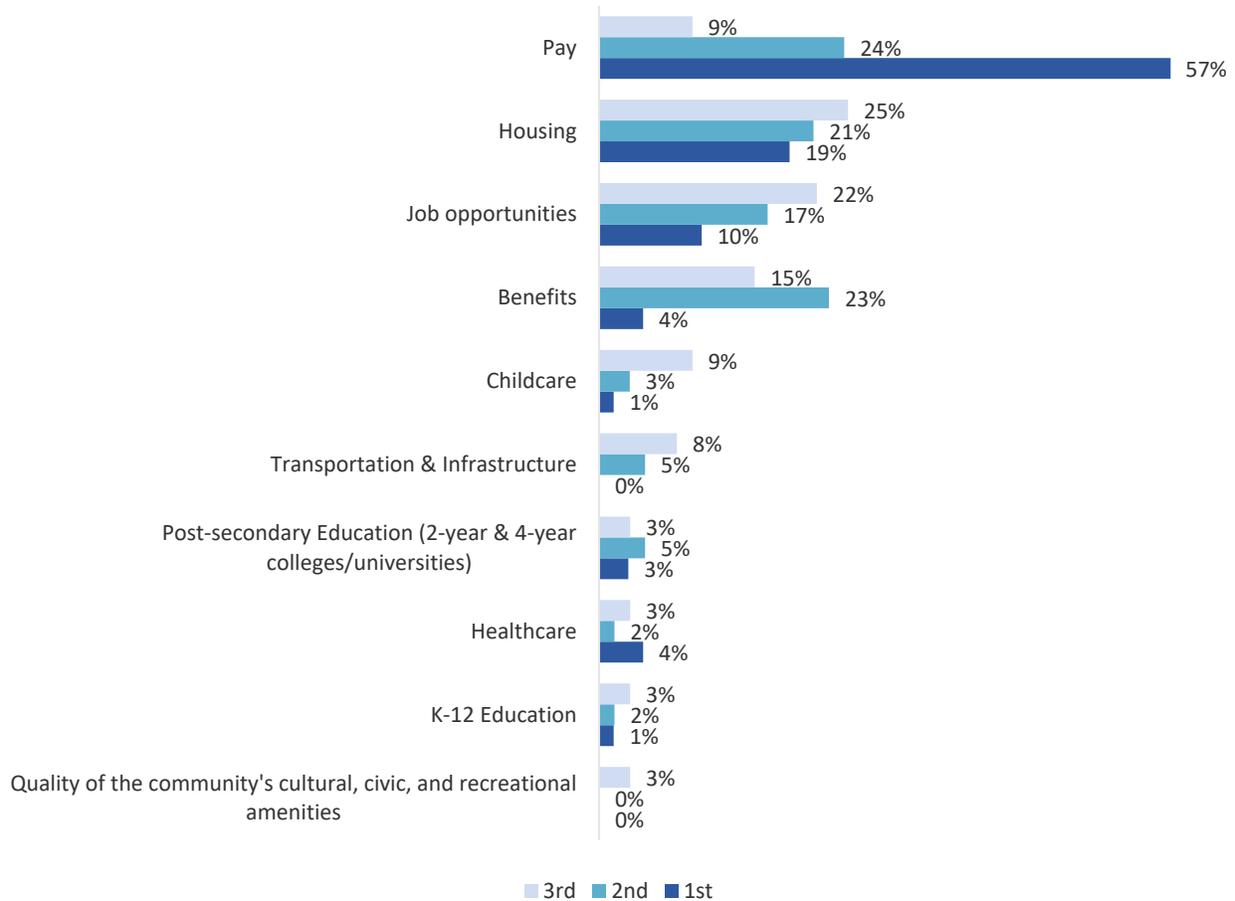
- LinkedIn
- Print Media, Missoulian, Independent
- MT High Tech Alliance Job Board

### Q7. Barriers to Workforce Attraction

Responses: 70

A key to any workforce development report or plan is to analyze the barriers to workforce attraction. Addressing challenges that businesses are facing in attracting the right talent is at the core of a high-functioning workforce development system. In Question 7, businesses are asked to rank their top barriers to talent attraction.

What do you view as the greatest barriers to workforce attraction? Please rank the top three barriers, with 1 representing the greatest barrier.



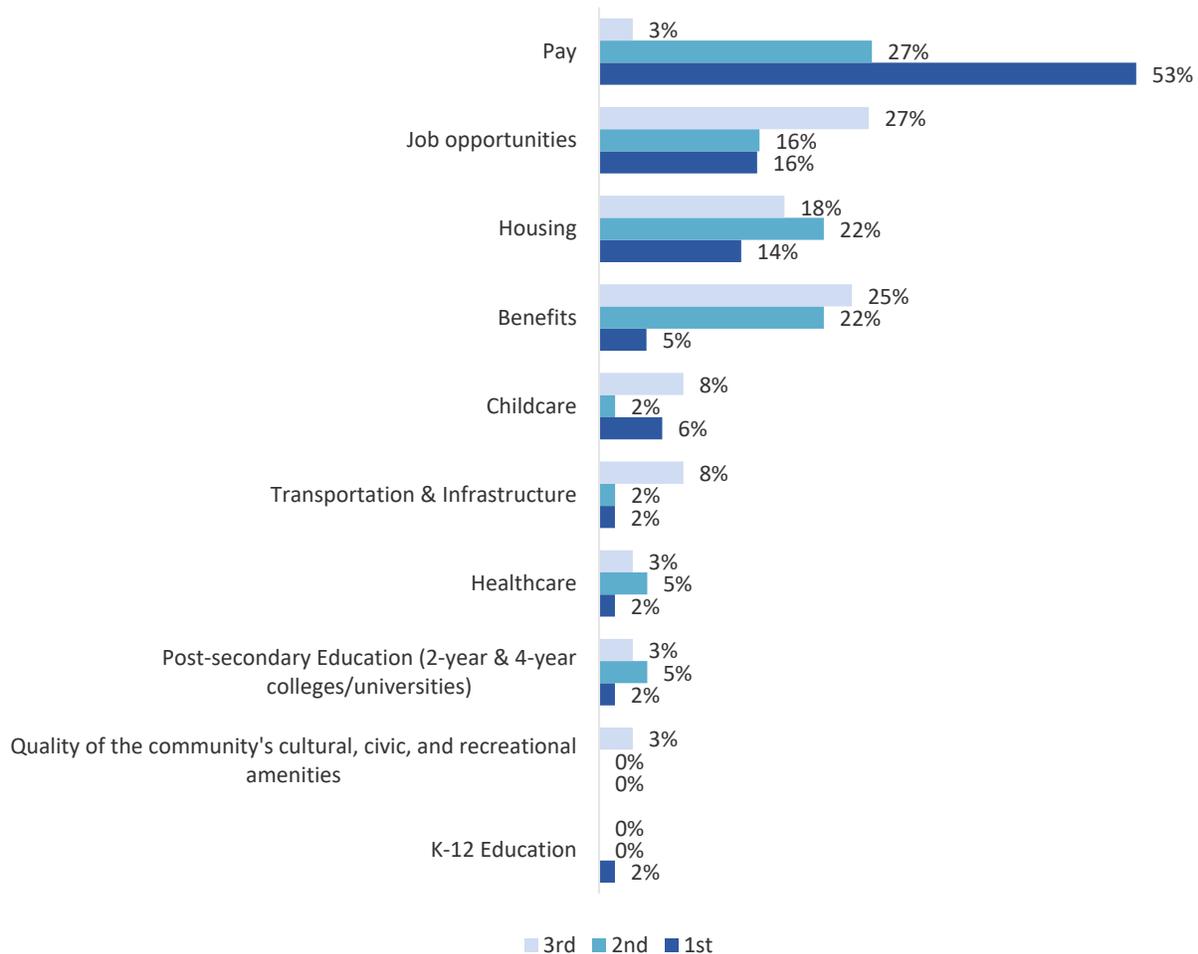
Pay was the greatest barrier to workforce attraction with the largest proportion of 1<sup>st</sup> and 2<sup>nd</sup> rankings in question 7. This indicates an employer’s difficulty in recruiting qualified talent given the current salaries being offered. Following Pay, Housing was the greatest barrier by ranking standard. The housing issue for workforce attraction was mentioned throughout stakeholder engagement, and appears to be a quantitatively valid conjecture according to the survey. This ultimately contributes to a high cost of living that deters populations outside of Missoula from moving to Missoula. Both job opportunities and benefits were also ranked as significant factors to workforce attraction. On the other side, the quality of the community’s cultural, civic, and recreational amenities was rarely ranked anywhere in the top 3 as a barrier, indicating that it is a strength. Similar things can be indicated for K-12 education, post-secondary education, and healthcare.

Q8. Barriers to Workforce Retention

Responses: 65

With the importance that retention plays in maintaining a healthy skilled workforce, the survey sought to explore the key facets that are at work in retaining or causing exits for employees. The question asked respondents to rank options that indicate barriers of most importance such as job opportunities, pay, and benefits.

What do you view as the greatest barriers to workforce retention? Please rank the top three barriers, with 1 representing the greatest barrier.



As the chart illustrates, Pay was the greatest barrier to workforce retention out of all the listed options. The same opinion was expressed in many of the interviews that TPMA conducted as part of the stakeholder engagement component. The barrier was similarly thought about in workforce attraction as in retention. Job opportunities was a greater barrier to retention than for attraction, implying that perhaps lateral movement of an employee amongst multiple companies may be a problem in Missoula for employers. After this, housing is once again among the top 3 in rankings at 1<sup>st</sup>. Similarly, benefits is another barrier that was significant in both attraction and retention. Childcare was ranked slightly more

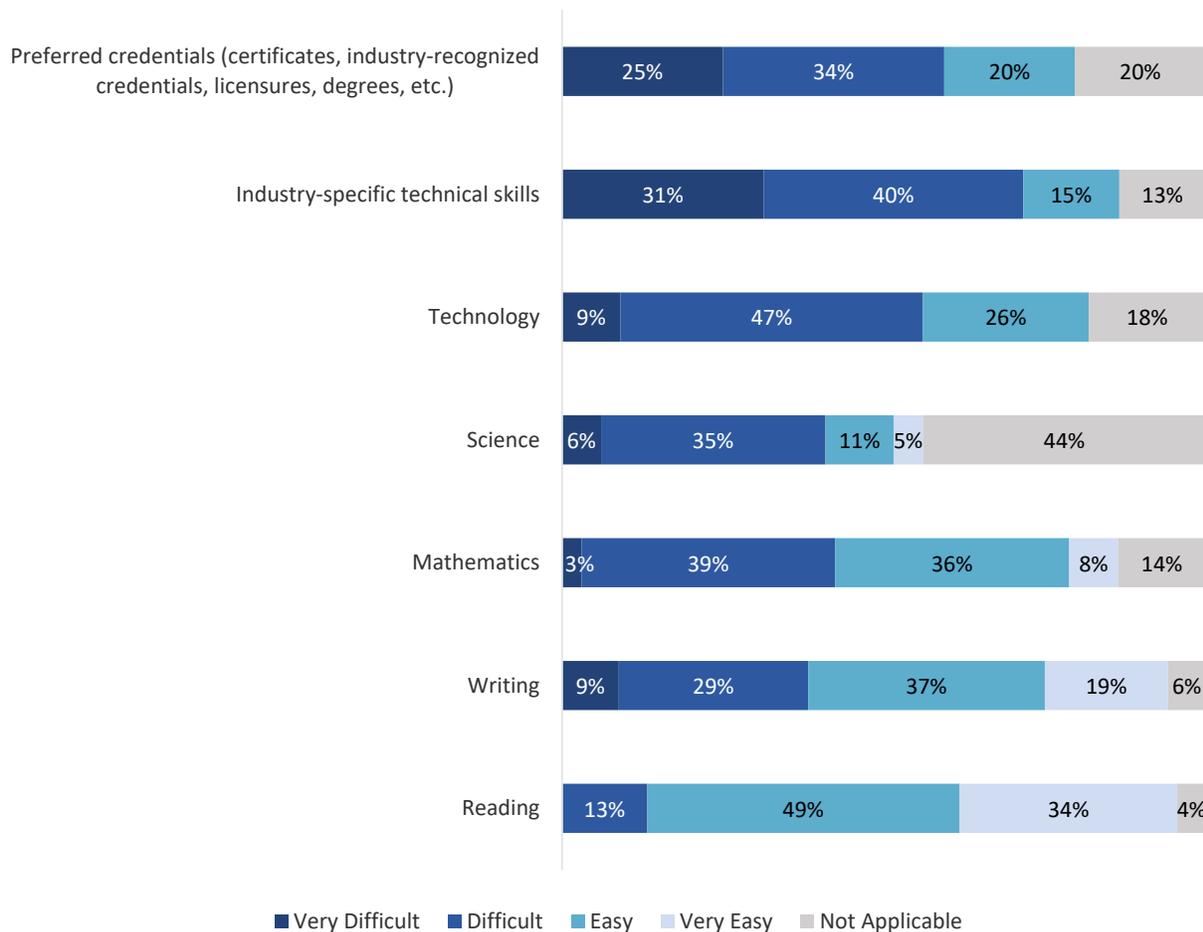
important as a barrier to workforce retention. Looking from a high-level perspective, barriers for attraction and retention are tremendously similar.

*Q9. Knowledge and Technical Skills*

Responses: 69

In Question 9, respondents were asked to rate how difficult it is to find candidates with knowledge and technical skills in specific knowledge areas. In addition, the survey asked respondents to provide any industry-specific technical skills that are difficult to find in the Missoula workforce. Here, the survey captures the skill areas in which employers perceive there to be gaps.

Please rate how difficult it is to find candidates with the following knowledge and technical skills:



The most difficult skills to find were the Industry-specific technical skills. A large majority of respondents found industry-specific technical skills either difficult or very difficult, and a very small portion found



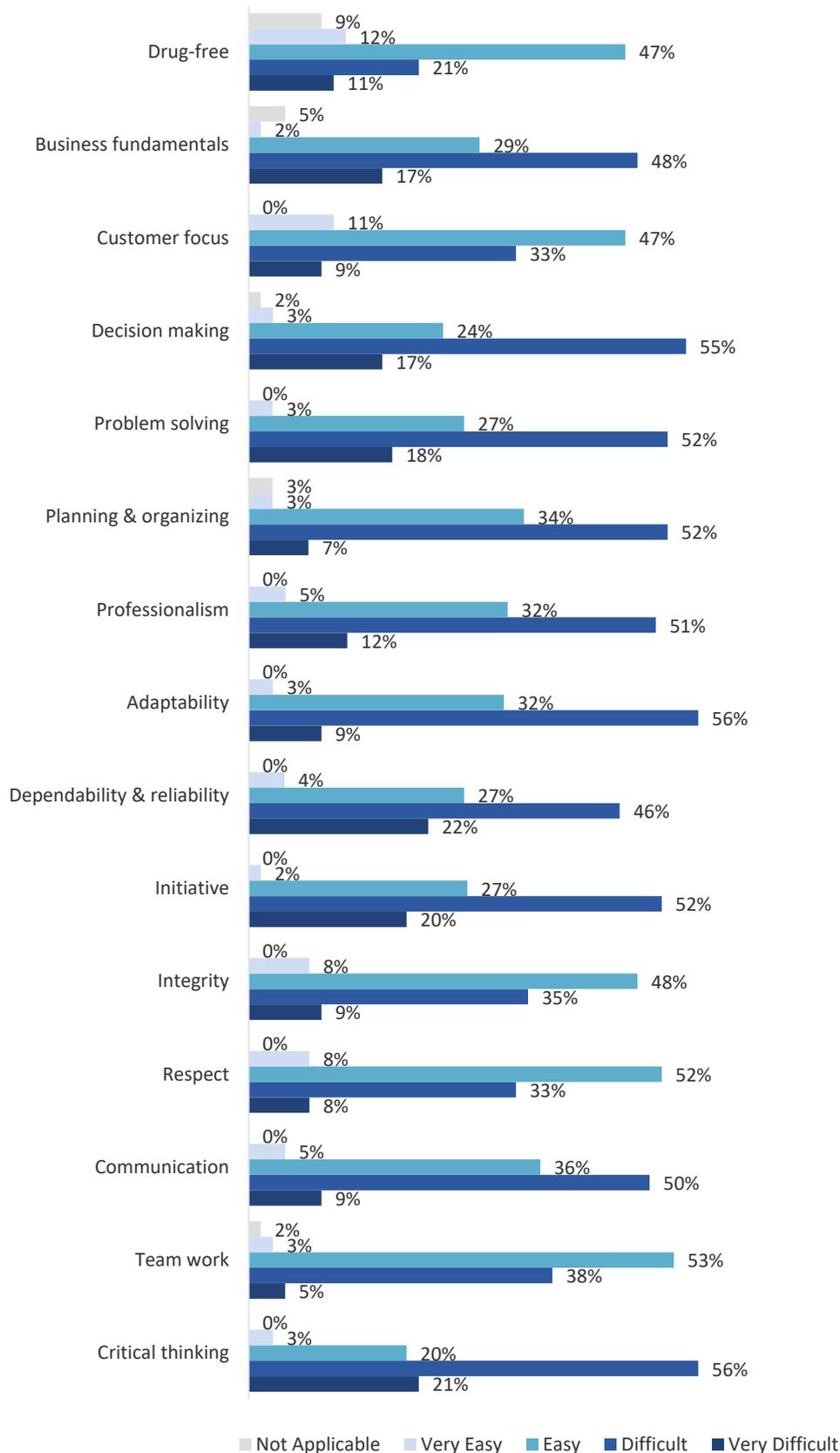
### Q10. *Employability Skills*

Responses: 67

In similar style and format to Question 9, Question 10 attempted to gain insights into soft or 'employability' skills. Employability skills play an integral part in a quality workforce, and a scarcity of these skills can become a great barrier to equilibrium employment for a region. By ranking responses from Very Difficult to Very Easy, the TPMA project team can prioritize areas of great need and link programs found in the Trainings Inventory. These kinds of linkages can be found in the Training Gaps Analysis Report.

The chart (shown on the following page) shows that critical thinking and adaptability were the two employability skills with the highest proportional very difficult response rate. Those two skills, along with decision-making, comprised the top three most difficult to find employability skills in candidates within Missoula. Many of the easier to find employability skills are more character defining traits, such as customer focus, integrity, and respect. These skills all had high rates of being very easy to find in candidates, along with team work and drug-free. The chart illustrates how some of the more cerebral employability skills are harder to find, while some of the intangible employability skills are inherently there.

Please rate how difficult it is to find candidates with the following employability skills:



### Q11. External Recruitment

Responses: 70

During stakeholder engagement in Missoula, numerous participants communicated a concern about recruiting outside of Missoula, both about the reason for it, and the difficulty in doing it with lower wages and high housing costs. A high incidence of external recruiting can sometimes be an indication of a lack of talent within the local region. For this reason, Question 11 delved into Missoula employer's practices in recruiting for talent outside of Missoula. The following tables identify the responses received:

#### Are you recruiting outside of Missoula?

Answer Options	Response Percent	Response Count
Yes	62.9%	44
No	37.1%	26
If so, why?		41

#### If so, why?

Response Category	Count
Lack of skills	6
General lack of applicants/workers	6
Need for Professional positions	6
Lack of talent	5
Lack of engineers	3
Lack of technical skills	2

The results illustrate a mixture of specific missing skills and talent, but also a lack of applicants and workers in general. Some examples of each of these categorical answers are listed below.

- Cannot find the skills necessary for our business
- Local availability not sufficient
- To find skilled talent for professional positions
- Broader talent pool of applicants
- No engineering program at University of Montana
- Difficult to fill all positions within Missoula due to lack of technical skills

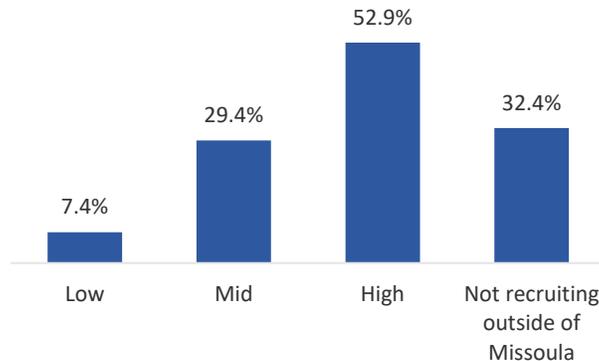
The most apparent theme throughout the free responses is a modest lack of talent. A lack of talent is omnipresent in any community, but the specific concerns are due to professional positions, as well as engineers and skilled trades. Overall, there appears to be some level of struggle to fill positions with Missoula talent in the areas aforementioned.

### Q12. External Recruiting Skill Level

Responses: 68

Equipped with the data that 62.9% of the response pool is recruiting talent outside of Missoula, it is useful to investigate the motivations behind the external recruitment. In Question 12, we looked to find the types of positions that companies are recruiting externally for, i.e., the type of position employers are recruiting outside of Missoula would indicate the type of talent that is not available locally.

What level of skill positions are you looking for outside of Missoula? (Check all that apply)



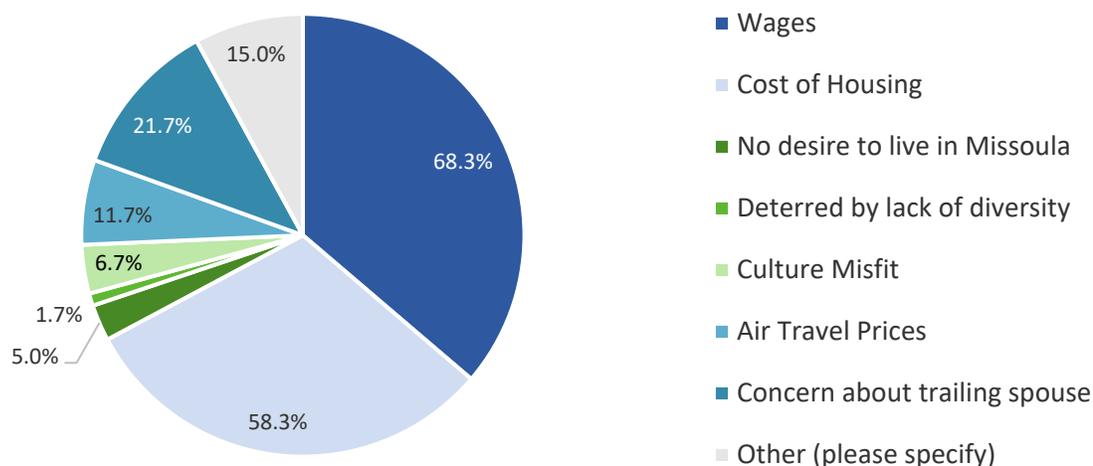
The trend is clear in the results of Question 12; the higher the skill level of the position, the greater difficulty employers are having finding local talent, and thus are forced to recruit outside of Missoula. Low skill level positions are only being recruited outside of Missoula for 7.4% of the respondents. When skill level jumps to the mid-level skills, respondent proportion recruiting externally jumps to 29.4%. Furthermore, when increasing the searched skill level to high skill levels, 52.9% of respondents are recruiting externally. As seen in previous questions under 'Professional Positions', Missoula is struggling to use local talent for higher skilled positions. Thus, employers are forced to recruit externally, which per stakeholder engagement and previous survey question analysis has proved a difficult task because of the cost of living (wages and housing).

### Q13. Recruiting Externally Barriers

Responses: 60

Rounding out the research on external recruiting, Question 13 listed options (inferred from stakeholder engagement) that were likely to be the common cause of unsuccessful recruiting. The results of responses to this question are shown below.

When unable to recruit a prospective worker to Missoula, what is usually the primary reason?  
(Check all that apply)



Commonly heard throughout focus groups and interviews were issues regarding wages vs. the cost of housing, as well as the trailing spouse concern. These worries proved true among the response population of the survey, as wages, cost of housing, and concern about trailing spouse were the three most popular responses. Wages received a response from 68.3% of respondents, while Cost of Housing received 58.3%. Rarely found was an indication that a desire to live in Missoula, or a mis-fit of community culture. Air travel prices and lack of diversity, heard through stakeholder engagement, did not prove as popular amongst the response pool. Air travel prices received 11.7% of responses, while Deterred by a lack of diversity was only marked by one respondent.

Some sample answers from 'Other' are listed below:

- Immigration restrictions
- Lack of motivation to work
- Background and education

#### Q14. Job Title of Hard-to-fill Positions

Responses: 65

Question 14 aimed to gain specific qualitative data into the types of job titles that are tough to fill across companies.



#### Engineer

- Project Manager/Civil Engineer
- Project Engineer

#### Hospitality

- Housekeeping
- Line Cook

#### Architect

- Project Architect

#### Transportation

- Bus Driver
- Trainmaster

#### Machinist

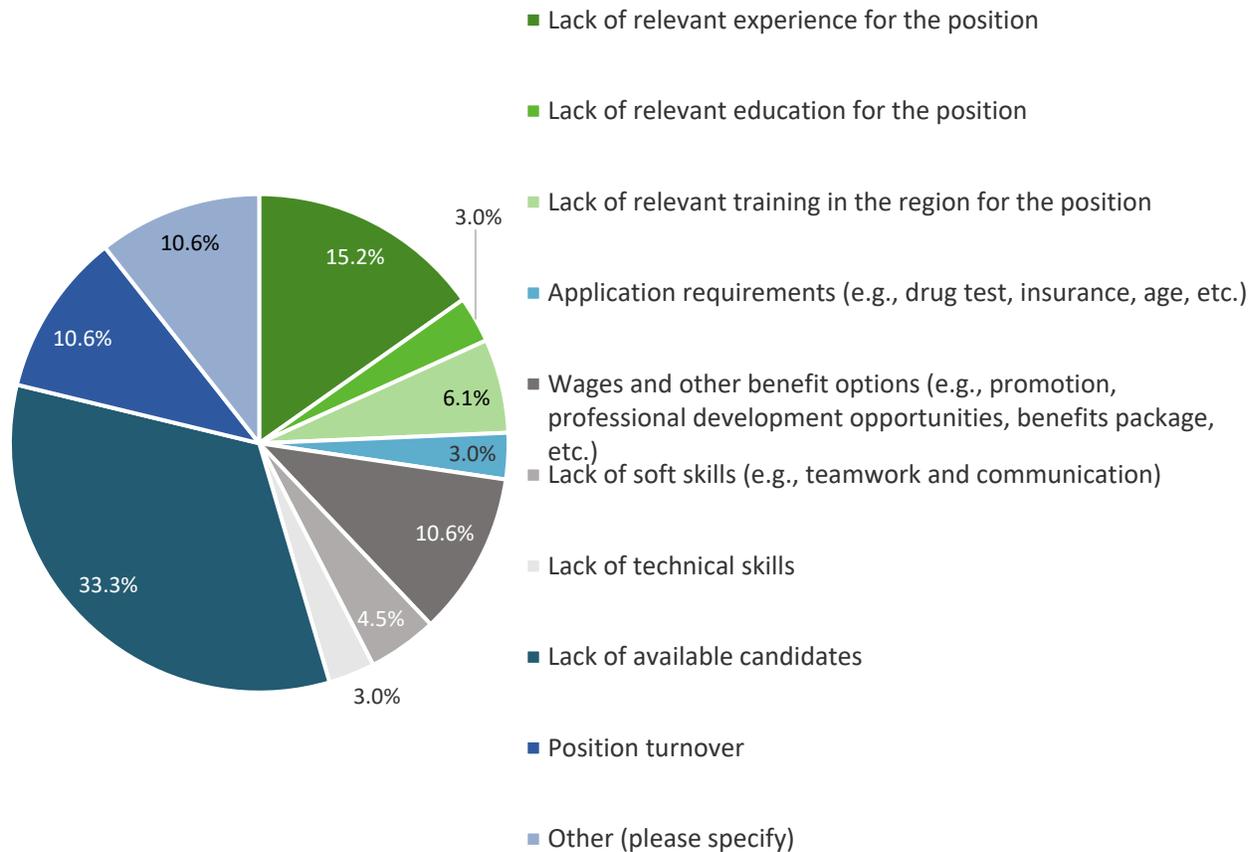
- Machinist

### *Q15. Job Title of Hard-to-fill Positions | Why?*

Responses: 66

After collecting data on difficult job titles and positions to fill, Question 15 presented options commonly found to inhibit hiring in order to narrow down reasons of greatest prevalence. Question 15 posed “Why do you think this position is hard to fill?” in reference to Question 14. The results are presented below.

Why do you think this position is hard to fill? Please check all that apply.



Lack of available candidates was the most popular response to Question 15, with 33.3% of respondents feeling as though that was a barrier. Lack of relevant experience for the position was the second most popular at 15.2%, nearly half that of the prior. After that, the most popular answers were wages and other benefit options, position turnover, and 'Other' which were at 10.6% respectively.

Sample answers from 'Other' were:

- Work ethic
- Hard to find people wanting to get into the trades and make a 3-5 year commitment
- Lack of established community relationships

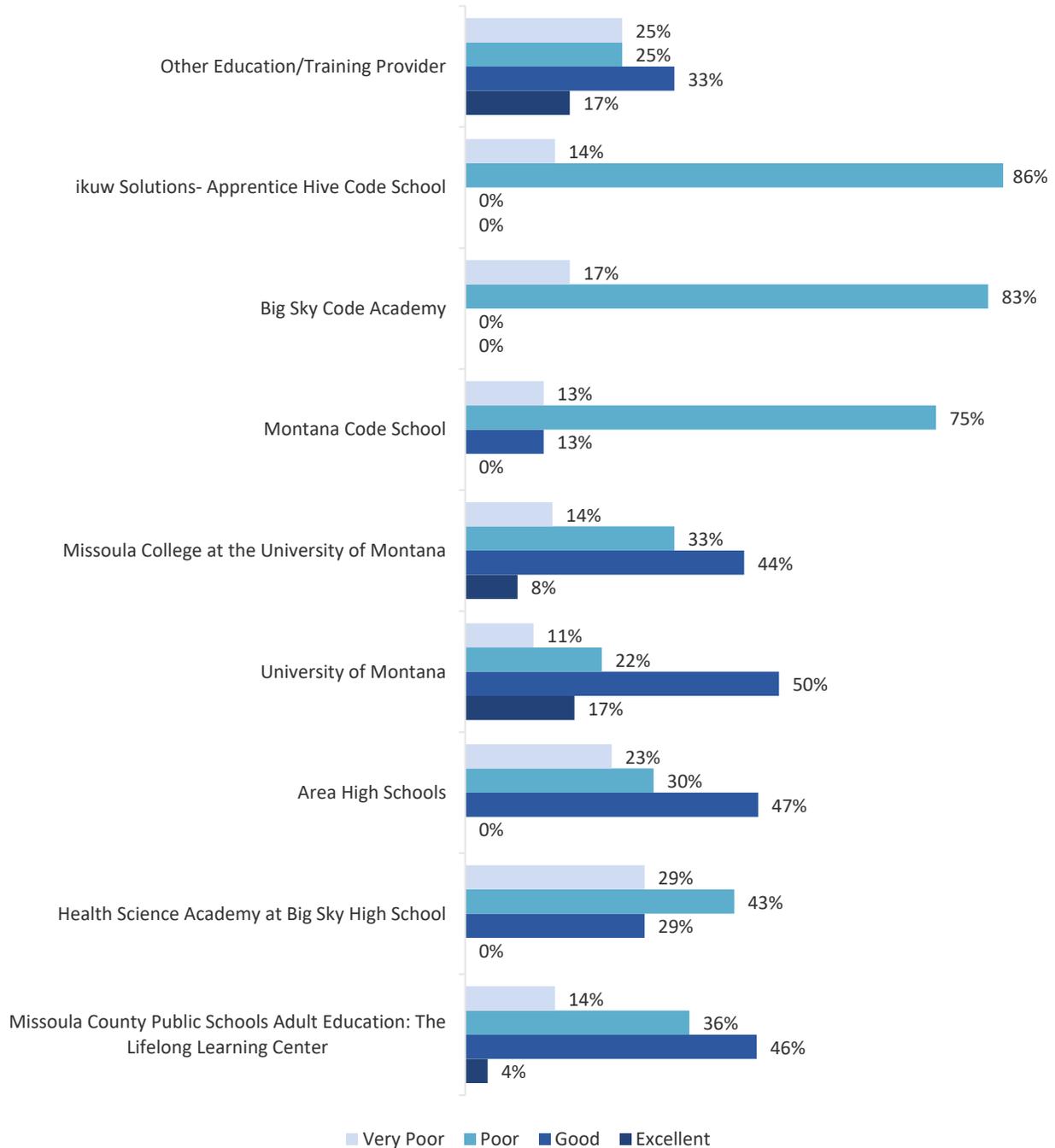
### Q16. Training Providers

Responses: 62

To assist in the Training Gaps Analysis Report, a collection of some of the most important training providers were listed which can provide some insights into the use of these institutions. These are not necessarily indicative of the quality of training providers, but rather an investigation into the programs being utilized by the respondent pool. To do this, the survey asked respondents to indicate their alignment with each institution via a rating scale from Excellent to Very Poor. It was expected that 'Not

Applicable' counts would be high accordingly with the specificity of industries and the wide distribution of businesses from different industries in the survey.

Please rate how well programs from the following education and training providers align to your workforce needs. Also, please indicate program(s) of study, if known.



The results generally tend to indicate an overall trend towards the Poor side of the scale, with only a few institutions as exceptions. University of Montana received the highest proportion of respondents indicating its alignment to workforce needs in both the good and excellent categories. Area High Schools received a strong majority of responses in the Good column, but in Poor and Very Poor it had a combined 16 respondents. The Lifelong Learning Center appeared to be precisely in the middle between Poor and Good. None of the tech institutions received favorable alignment views, although this could be due to limited exposure to employers. Only Montana Code School received a response in the Good column, and none of the selections scored in the Excellent.

Within these training providers, the survey asked respondents to report the programs they used within the institutions. The following are the programs that resulted.

#### Missoula County Public Schools Adult Education: The Lifelong Learning Center

- Computer skills
- CNA/PCA
- GED, Office Admin
- CNA
- Computer program classes, medical terminology
- Lifelong Learning Center is great for entry level positions and people that need to get their computer skills brushed up

#### Health Science Academy at Big Sky High School

- Social Services
- Job Shadowing
- CNA/Caregiver

#### Area High Schools

- High schools have very little technical skills offered
- Basic life and math skills
- Need more life skills and preparation for work etiquette
- For Culinary Services
- Shop classes, working with sheet metal, wood shop, auto shop

#### University of Montana

- Business Management
- Medical Assistant Program
- Speech and language, social work, education
- Social Services/Gerontology/Behavioral Health/Business/Finance/IT/Marketing
- No engineering programs
- Political Science
- Finance, Business
- Geography
- Nursing
- Counselor Education
- The majority of our admin staff attended University of Montana

- Early Childhood
- Finance, Management, etc.
- Social work, psychology, sociology, business administration, liberal arts, etc.
- Accounting - national recruiters take most of the talent. Kids want to leave town for a while and professors are encouraging them to do that.

#### Missoula College at the University of Montana

- Culinary School
- Social Services/Gerontology/Behavioral Health/Business/Finance/IT/Marketing
- Information Technology
- Nursing
- No HVAC program - the program they have is too broad and not focused on our industry”
- Maintenance certificate program
- Two-year program in accounting. Good source for our bookkeeping staff. They need to get the word out to more potential students though.

#### Montana Code School | Big Sky Code Academy | ikuw Solutions Apprentice Hive Code School

There were two program responses for three of these institutions, but all of those indicated that they were not aware of the programs offered by these training institutions.

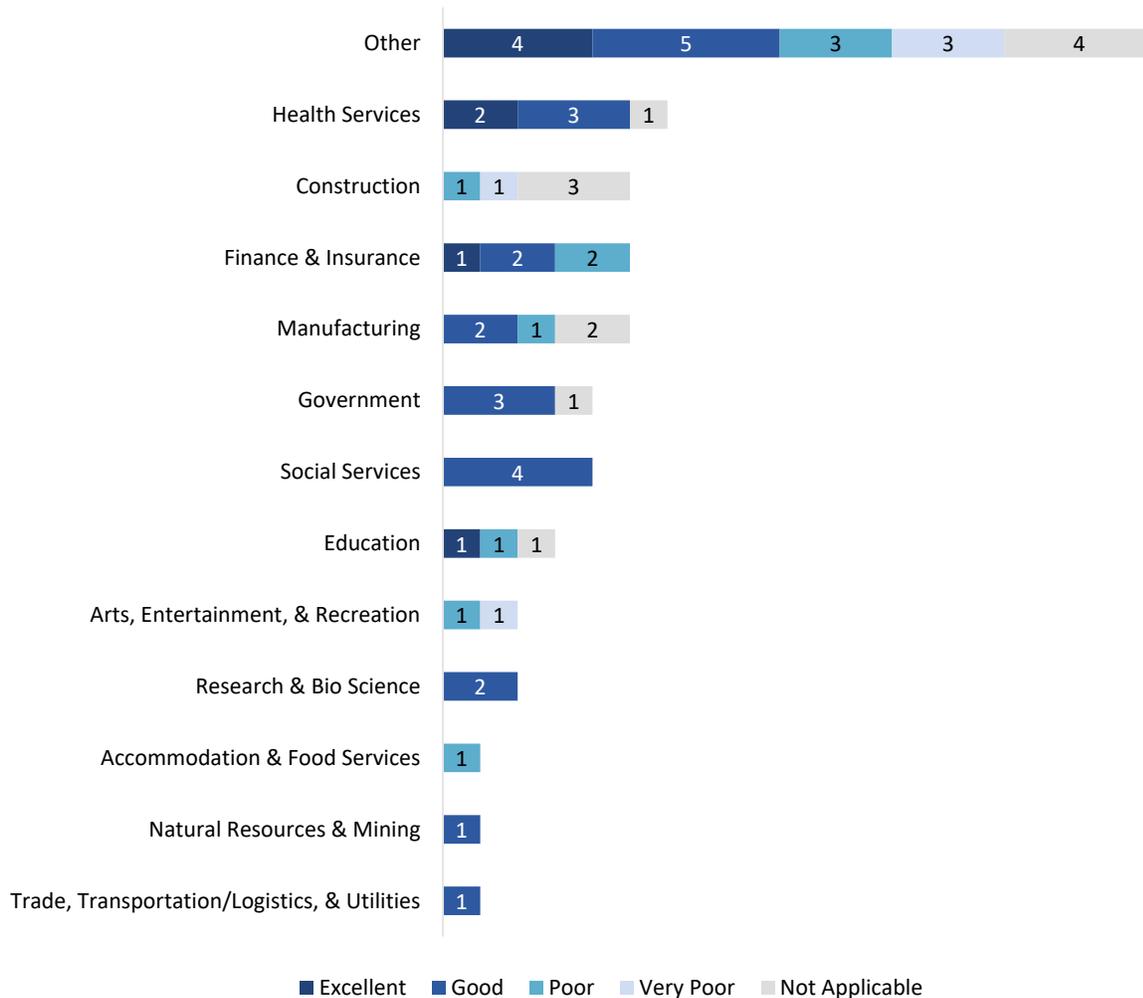
#### Other Education/Training Provider

- COT variable
- There are not any barber colleges in western Montana
- Most of our professional staff come from MSU- Bozeman or University of Montana-Missoula
- MSU

With the integral role that the University of Montana and Missoula College at the University of Montana play in the training and education of the local workforce, much of the efforts have been to estimate the alignment of their programs to the industrial needs of domestic businesses.

When broken down by industry, the information in Question 16 provides insight into this desired alignment. The data shown below refers to the question “Please rate how well programs from the following education and training providers align to your workforce needs”, and narrows in on the University of Montana, and then Missoula College at the University of Montana.

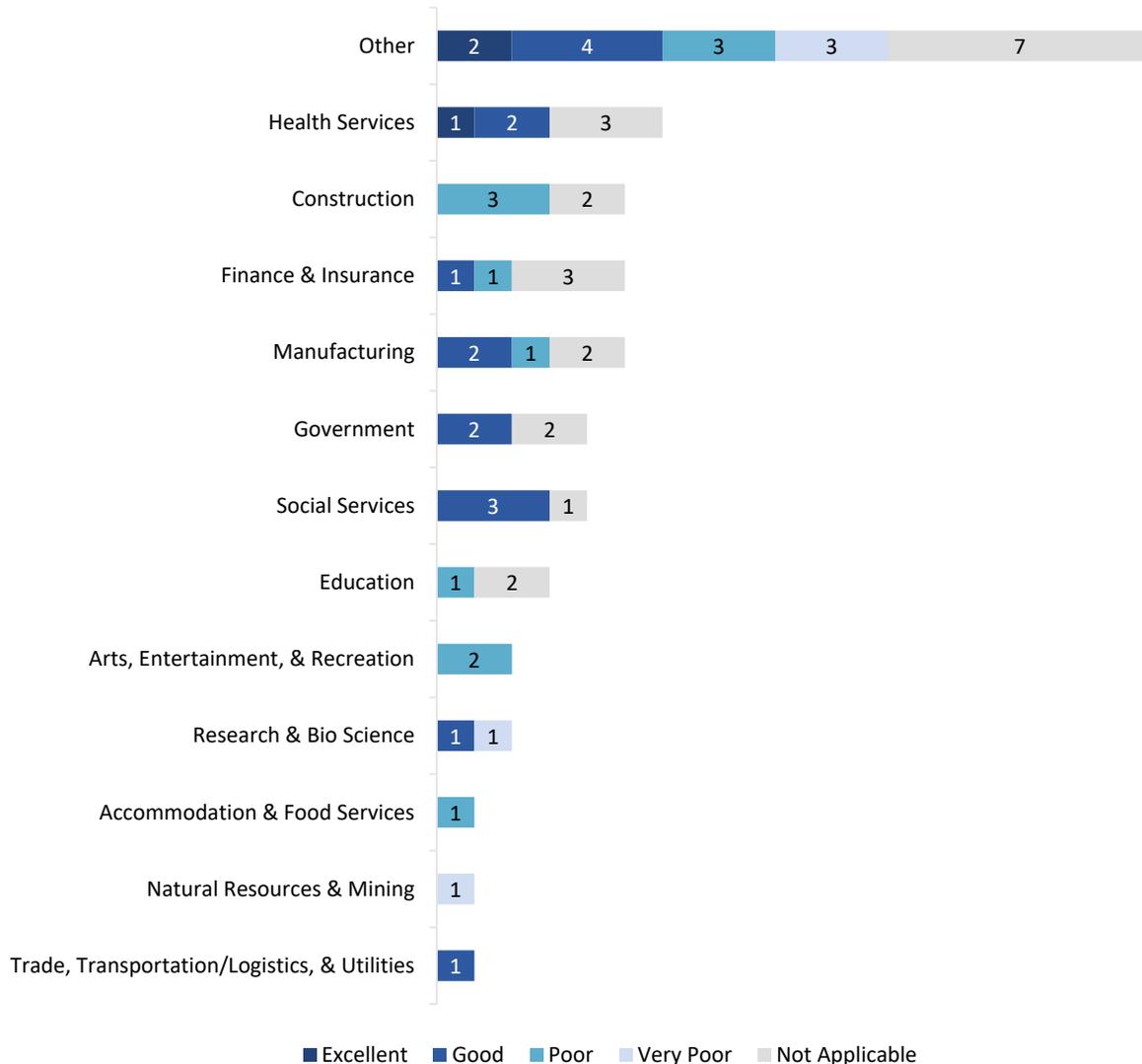
Responses: 58



Government and Health Services were two industries that tended to perceive the University of Montana’s programs having good alignment. Two respondents within the Health Services industry ranked UM as excellent while three ranked them as good. Research & Bio Science, as well as Social Services and Finance & Insurance tended to have a favorable opinion of the programs and their alignment. Very few industries thought the programs very poorly aligned with their industries, although Construction had one respondent with that ranking in combination with a poor ranking. Arts, Entertainment, & Recreation was the only other industry with a similar distribution.

Missoula College plays a similarly important role in training the workforce, with particular effect on some of the positions most vital to the Missoula economy.

Responses: 54



Comparable to the University of Montana results in the previous chart, Missoula College is favorable in some key industries: Government; Health Services; and Social Services. The Trade, Transportation/Logistics, & Utilities industry casted a response in the good column. Manufacturing also had two respondents rank the alignment as good, with only one respondent ranking them poor. Conversely, Construction continued to rank programs as poor, with three respondents ranking in this capacity. One respondent for Research & Bio Science ranked their programs as very poor, which contrasted University of Montana. Arts, Entertainment, & Recreation also had two respondents rank the alignment of their programs as poor.

### Q17. Training Needed but Not Provided

Responses: 21

As a supplement to the exploration of existing training providers, the survey asked respondents to identify areas where more training can exist. With this question, employers were able to directly express their needs in terms of training for the workforce to meet their demands. The free response answers were initially to be categorized, but responses were a bit haphazard and difficult to couple. This being the case, all the responses are directly cited in the below table.

Please indicate any education and training programs needed by your company which are not available currently in the area.

Fabric design and construction.
Personnel Management
I train all my people to do the job the way I want it done. I do not require experience just someone who is motivated and actually wants to work.
It's not education and training, it's raw talent. Brilliant minds that help solve client's problems in a creative manner.
Barber College
Architecture, technical drafting, Computer aided design/drafting
We go to MSU and MT Tech to recruit our engineers and FVCC or Oregon for Surveyors as there really aren't local programs. Locally, we could use a program for drafters (associates degree), but the number of these needed in our firm is fairly low. I'm sure other local agencies could use more local drafter as well though.
Soft skills
We need clinical rotations with nursing programs at our facility
It would be nice to see a vo-tech program for auto body repair put into place. This is a solid industry in Montana, and desperately needs more trained people
Landscape/ irrigation Technicians
The trades seem to take a back seat to higher education and it is getting to be a serious issue. Everyone is taught that they have to go to college to get a good job. Not everyone is suited
Education in making proper life decisions, i.e. getting a \$5-- I-phone versus putting money away for a vehicle
Carpentry, heavy equipment operation, welding,
Occupational medicine program
More training in the trades
In the Polson area we have very little training available
Trade school training, such as electricians, mechanical work, plumbers.
HUD specific training
Architectural Draftsperson
Schooling is available. Just need more students.

Although there is a wide array of programs that employers would find useful, almost all of the answers fall under a skilled trade type of training. Employers have indicated that they need engineers and other

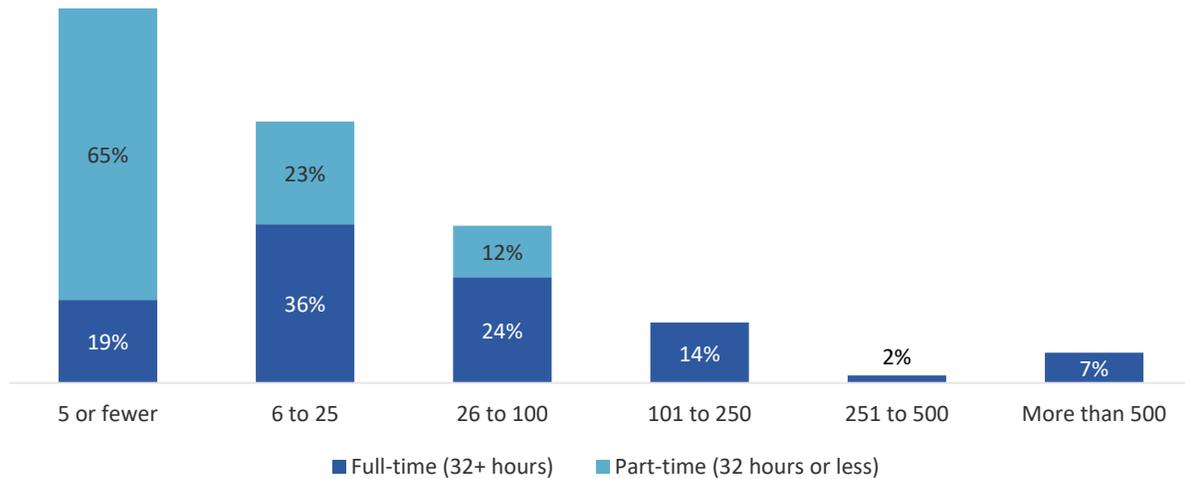
lower level trade positions like carpentry and construction, and a lack of training programs, or awareness of training programs is feeding into this.

*Q18. Workers Employed*

Responses: 61

To further the demographic knowledge of the survey respondents, the survey asked respondents to indicate their size by marking their employee count within certain boundaries. The results are displayed below.

How many workers are employed at your location?



Many companies have part-time workers, but the distribution is heavily concentrated within the 5 or fewer, or 6 to 25 ranges. In contrast, full-time workers are pretty fairly distributed with high observations in the 6 to 25 and 26 to 100 range. Missoula contains four businesses with More than 500 workers.

### Q19. Employment Growth

Responses: 61

In order to supplement employment information ascertained from the previous question, Question 19 attempted to attain information about future growth. Responses to this question can help illustrate the current state of businesses in Missoula County and can serve as a gauge for necessary workforce growth.

In the next year, is your business considering hiring new employees due to growth?

Answer Options	Response Percent	Response Count
Yes	60.7%	37
No	14.8%	9
Not sure	24.6%	15

Along with this, 22 employers also indicated planned employment growth numbers:

Range	Response Count
1 to 5	16
6 to 10	2
More than 10	4

Growth seems to be on the horizon for many employers in Missoula, even if it is in small increments as suggested by the above table. Missoula's workforce will need to grow and diversify to acclimate to the continued growth.

## V. SKILLS GAPS ANALYSIS

The Skills Gaps Analysis measures the trainings identified in the inventory with the relevant skills benchmarks in the aims of detecting areas where needs are being achieved, and identifies skills that are being under supplied.

### *Methodology*

The analysis document is comprised of four unique methods of assessing the skills gaps within the workforce.

### [Trainings Inventory](#)

With the completion of the trainings inventory, TPMA could understand the skills training landscape in Missoula in terms of abilities and capacities of programs. Within this document, TPMA dives deeper into analysis of this training landscape by outlining the output and categories most present within the trainings inventory.

### [Missoula Economic Partnership Workforce Development Survey](#)

As part of the Missoula Economic Partnership State of the Workforce Report, a 21-question survey was facilitated throughout Missoula County, and garnered 111 unique responses. Numerous questions from the Missoula Economic Partnership Workforce Development Survey were administered to investigate and gain insight into the skills that are available in the workforce. Questions investigating employers' needs in terms of employability skills, technical skills, and credential requirements were implemented and analyzed to gain a thorough understanding.

### [University of Montana & Missoula College | Completions v. Occupational Analysis](#)

Knowing the integral role that the University of Montana and Missoula College play in the talent ecosystem, TPMA sought to assess the level with which the university was supplying program completers in the occupational areas that are in greatest local need. Using National Center for Education Statistics (NCES) data in combination with Economic Modeling Systems Incorporated (EMSI) occupational growth patterns, openings and program graduations are compared to investigate whether the supply of trained individuals is meeting the demand for individuals from employers.

### [Soft Skills Best Practices](#)

Employability skills needs and development was commonly present throughout stakeholder engagement and survey results. Inherently, these skills are essential to a healthy workforce and often lacking in other similar workforce landscapes across the country, and therefore other communities have previously dealt with these issues. Consequently, TPMA constructed numerous soft skills best practice summaries for the purpose of simplifying the processes behind creating one.

### *Training Categories*

To understand the industrial categorizations of the trainings available in Missoula, trainings were coded into industrial categories

Training by Category	Number of Programs	Percent of Total
Computer and IT	449	38.5%
Healthcare	127	10.9%
Language, Writing, and Communication	88	7.5%
Mathematics and Science	65	5.6%
Business	63	5.4%
Environmental Studies	62	5.3%
Social Sciences	41	3.5%
Education	38	3.3%
Fine Arts and Design	28	2.4%
Marketing and Media	26	2.2%
Construction and Home Services	21	1.8%
Law and Public Safety	21	1.8%
Leadership and Management	20	1.7%
Electrical Technology	19	1.6%
Production and Manufacturing	16	1.4%
Cosmetology	15	1.3%
General	14	1.2%
Supply Chain and Logistics	12	1.0%
Accounting and Finance	9	0.8%
Human Resources	8	0.7%
Child and Family Services	7	0.6%
Food Service	5	0.4%
Welding	5	0.4%
Hospitality	4	0.3%
Engineering	3	0.3%
Automotive	1	0.1%
<b>Total</b>	<b>1167</b>	<b>100.00%</b>

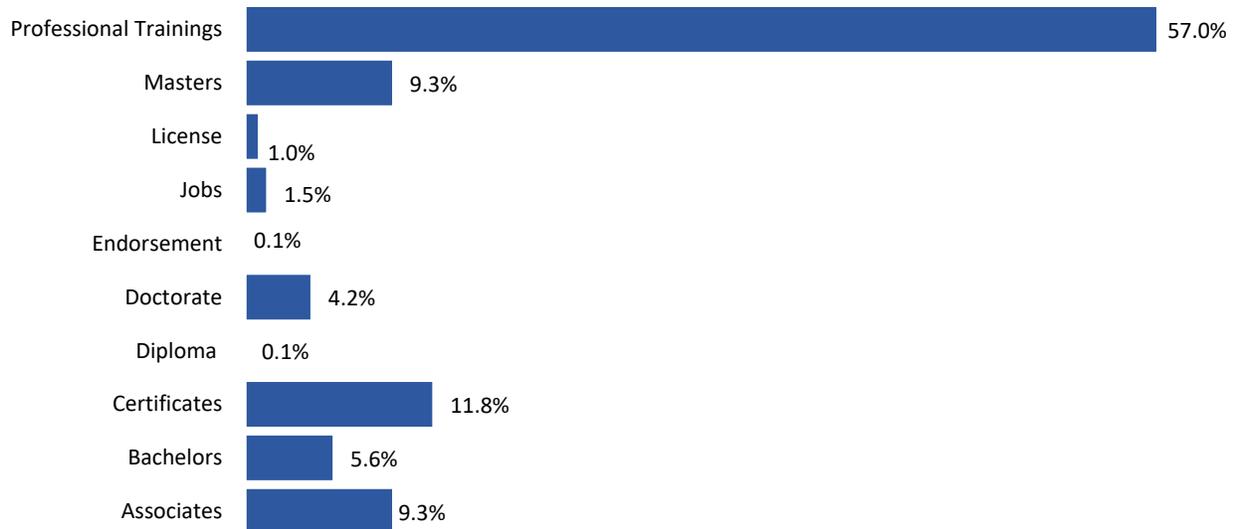
Computer and IT programs makeup 38.5% of the programs recorded, largely due to its diverse offerings in a multitude of languages and programs, as well as its largely online platform. The second largest collection of training programs existed within Healthcare with 10.9% of programs. Healthcare classes are vital to Missoula's economy given the importance inferred from regional industrial data. After these two categories, there was a nearly even distribution of programs. Some lesser present offerings seemed to be Engineering, Automotive, and Welding programs, areas that are often vital to a thriving economy. In total, there are 1,167 training programs available to the Missoula County<sup>22</sup>.

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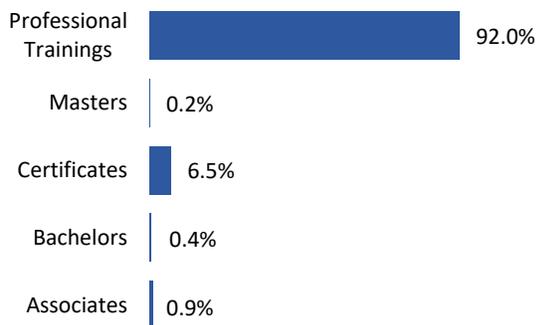
<sup>22</sup> Any trainings within 60 miles of the Missoula County borders were included in the inventory.

Category Output Profile

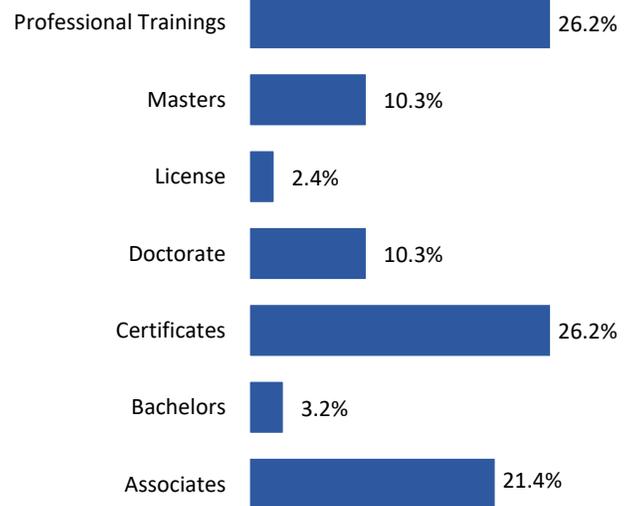
All Types



Computer and IT



Healthcare



Missoula's training programs are diverse but have a significant concentration in 'Professional Trainings'. These programs do not lead to a credential, but primarily exist as a means to improve specific skill(s). For example, the Lifelong Learning Center provides many courses on specific computer programs, such as Microsoft and Adobe programs, to give them usable skills in a number of occupations. Although the lack of credentialing can be a concern to enrolled participants, these programs can still be utilized to train individuals for employability and technical skills, and are often valuable without a credential. While Professional Trainings make up 57% of the total trainings available to Missoula residents, Certificates do comprise 11.8% of the training programs. Certificate programs provide a good way to signal technical skills to employers, and generally are viewed as a positive asset for the community. Following Certificate programs, 'Associates' and 'Masters' programs comprise 9.3% of training programs respectively.

For the Computer and IT training category, an anomalously large portion of the trainings are professional trainings, and unlike most other categories, these types of trainings tend to lack a tangible physical product of the knowledge gained to match the skill development attained from the programs. This pattern arises out of a large supply of online trainings that are available to teach skills without any certification or degree. TPMA restricted inclusion of these types of trainings (specifically in Computer and IT) from being included to the extent that they were relevant in resource to Missoula. Notable, is the relative unimportance of certificates, licenses, and degrees in the Computer and IT industry compared to other industries in the current corporate climate.

The Healthcare trainings category had a diverse output makeup. Associates, Bachelors, and Masters Degrees comprise over a third of the total trainings while certifications comprise over a quarter. In an industry where licenses and certificates serve as important signals to employers, this would indicate an appropriate level of trainings for the workforce to be properly trained. For employers, this would lead to an increase in recognizable outputs that they can use to gauge skill and competency of candidates. The strength of a strong Healthcare trainings base is important considering the strength of occupational growth within the industry in Missoula.

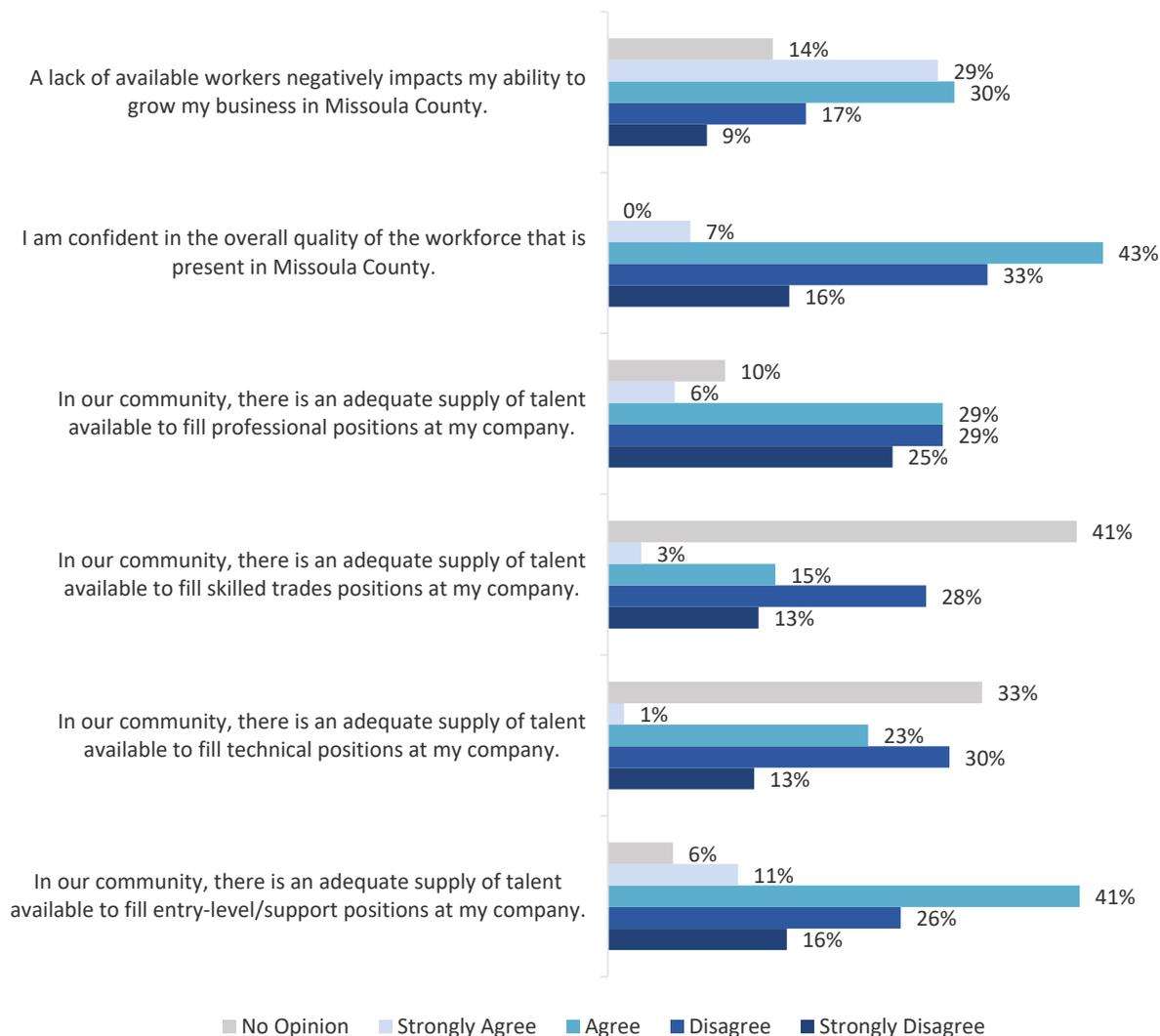
### *Survey Insights*

The survey gained qualitative information on perceptions of talent, skills, and overall quality of the workforce.

### *Primary Findings*

The survey presented the project team with some over-arching information about training needs; insights that can be incorporated with our training inventory data. Most training programs in Missoula, and across the country, are concentrated in skills that will get workers into entry-level positions. Question 6 from the survey sought to find if this was the greatest need for area employers.

Please rate your level of agreement with the following statements:



To some extent, the answer to “are employers having trouble finding talent for entry-level positions” is yes, with 42% of respondents claiming that they either disagree or strongly disagree with the statement that there is an adequate supply. On the other side, especially relative to the statements about other skill-level positions, entry-level position talent holds a beneficial view with most respondents agreeing that there is an adequate supply. The major needs appear to be at ‘Trades positions’ or ‘Professional positions’. Trades positions are talent pools that can be addressed with specialized trainings and industry-specific credentialing. In this respect, the availability of an adequate workforce for these trade positions can be heavily influenced by the presence of specialized trainings. The availability of trainings in Automotive, Engineering, and Welding were low, indicating a level of scarcity in skilled trades training. Professional positions on the other hand, often come with experience and attraction of high demand individuals. This type of talent is more difficult to tend to simply with training programs.

Beyond this, respondents could choose the avenues they typically recruit employees from. The results are displayed below:

From what avenues do you typically recruit employees? Please check all that apply.

Answer Options	Response Percent	Response Count
Online job postings (e.g., company websites, online state employment portals, Monster, Indeed, etc.)	86.4%	57
Employee referrals	71.2%	47
Educational institutions (including specific programs and internships/apprenticeships)	56.1%	37
Workforce system (e.g., referrals and career/job fairs)	45.5%	30
Temp agencies	18.2%	12
Other (please specify)	18.2%	12

Educational institutions garnered a significant portion of responses, but the general consensus was more heavily concentrated online job postings as well as employee referrals. Educational institutions are among the most important place for employers to recruit candidates from.

#### Employability Skills Analysis

Stakeholder engagement conversations made it obvious there was a need for improved employability skills in the talent pool. One of the objectives of the survey, was to narrow down what employability skills employers were having the most difficulty finding in qualified candidates.

Please rate how difficult it is to find candidates with the following employability skills:

Answer Options	Very Difficult	Difficult	Easy	Very Easy	Not Applicable
Critical thinking	21%	56%	20%	3%	0%
Team work	5%	38%	53%	3%	2%
Communication	9%	50%	36%	5%	0%
Respect	8%	33%	52%	8%	0%
Integrity	9%	35%	48%	8%	0%
Initiative	20%	52%	27%	2%	0%
Dependability & reliability	22%	46%	27%	4%	0%
Adaptability	9%	56%	32%	3%	0%
Professionalism	12%	51%	32%	5%	0%
Planning & organizing	7%	52%	34%	3%	3%
Problem solving	18%	52%	27%	3%	0%

Decision making	17%	55%	24%	3%	2%
Customer focus	9%	33%	47%	11%	0%
Business fundamentals	17%	48%	29%	2%	5%
Drug-free	11%	21%	47%	12%	9%

Employers found it most difficult to find ‘dependability & reliability’, a quality that is not often shaped through the intended curriculum of training programs (i.e. not many training programs are called ‘Dependability and Reliability training’). However, undoubtedly, the process of succeeding in a training program with deadlines, consistent attendance, and project work develop an individual’s dependability and reliability; therefore, training programs fundamentally work on this skill. The following five most difficult skills are such that can be addressed directly through curriculum: Critical Thinking, Initiative, Problem Solving, Decisions Making, and Business Fundamentals.

Employability skills are not typically addressed in a specific manner in formal education/training institution, nor often taught at trade schools, although they remain an integral part of a talented workforce. Missoula is very similar, in that none of its major institutions address these needs, but other less centrally thought of training providers may be filling this need. The Missoula County Public Schools Adult Education; Lifelong Learning Center contains classes that could address local employer employability skills needs:

Leadership	Leadership and Management	Online	6 Weeks
Mastery of Business Fundamentals	Business	Online	6 Weeks
Project Management Fundamentals	Business	Online	6 Weeks
Writing Essentials	Language, Writing, and Communication	Online	6 Weeks
High Speed Project Management	Business	Online	6 Weeks
Fundamentals of Technical Writing	Language, Writing, and Communication	Online	6 Weeks
Fundamentals of Supervision and Management	Leadership and Management	Online	6 Weeks

For Leadership and Management, Missoula contained 19 programs (3 Associates, 2 Bachelors, 1 Certification, and 13 Professional Trainings). Although a number of these skills are difficult to teach, there are resources available to local employers to improve upon applicant’s skills in particular areas.

### Technical Skills Analysis

Building upwards from employability skills, looking to the results, technical skills are a larger issue for the present workforce. In fact, according to the survey table below, ‘industry-specific technical skills’ and ‘preferred credentials’ were by far the hardest skills to find in Missoula.

Please rate how difficult it is to find candidates with the following knowledge and technical skills:

Answer Options	Very Difficult	Difficult	Easy	Very Easy	Not Applicable
Reading	0%	13%	49%	34%	4%
Writing	9%	29%	37%	19%	6%
Mathematics	3%	39%	36%	8%	14%
Science	6%	35%	11%	5%	44%
Technology	9%	47%	26%	0%	18%
Industry-specific technical skills	31%	40%	15%	0%	13%
Preferred credentials (certificates, industry-recognized credentials, licensures, degrees, etc.)	25%	34%	20%	0%	20%

Some of the more basic skills, i.e., Reading and Writing, seemed to be primarily 'Easy' to 'Very Easy' to find. Despite this, there does exist programs for both skills to be taught within Missoula, with 88 programs in Missoula teaching Language, Writing, and Communication. Mathematics and Science were less commonly 'Very Easy' to find, but still were on the lower end of the overall difficulty to find distribution. There are 407 programs in Missoula dedicated to growth in the STEM (Science, Technology, Engineering, and Mathematics) fields, primarily within university settings. Technology, while being significantly less difficult to find than industry-specific or preferred credential skills, still received zero 'Very Easy' responses.

### Technology

The foundation for learning in technology is strong in Missoula; however, in contemporary platforms, learning can be done on technology from anywhere in the United States. Despite this caveat, Missoula contains many training programs for growth in technology skills: University of Montana, ikuw Solutions, Montana Codes School, etc. In total, there are 448 programs for Computer and IT, although 412 of those are Professional Trainings.

### Industry-Specific Technical Skills

According to survey respondents, industry-specific technical skills are in strong demand by employers and low supply amongst Missoula's workforce. Of the 54 respondents to that question, 44 of them found it 'Difficult' to 'Very Difficult' to find industry-specific technical skills. While the training for most industry specific skills is present in the training inventory, there is most likely a lack of awareness from the workforce of the skills in their desired field. The greater awareness for these types of programs, the greater the likelihood that industry specific skills becomes a more commonly found skill in workers.

### Preferred Credentials

Similar to industry-specific technical skills, preferred credentials were difficult for employers to find. From stakeholder engagement, it is known there is a need in healthcare for RN and other certifications, and there are training providers within the local area. Overall, there are a 137 Certificate programs in the Missoula area. Healthcare and Computer & IT made up 62 of those programs, with the rest being a mix between nearly every other category. Many popular certificates are accounted for in the list (CDL,

RN, CNC). Perhaps the most important factor for this discrepancy between programs and the workforce's perceived lack of credentials is a deficiency in awareness.

### *University of Montana & Missoula College | Completions v. Occupational Analysis*

In the following pages, TPMA will explore the important occupations listed below, and compare these statistics with program completions<sup>23</sup> through the University of Montana and Missoula College. This analysis will serve as a method of estimating the level to which Missoula's primary institution is addressing industry demand for talent.

To estimate the industry demand for talent, the top 15 occupations in terms of annual openings are present below. Standard Occupational Classifications<sup>24</sup> were used at a 5-digit level to ensure specificity and to avoid larger generalized occupational groups. More detailed descriptions of each of the following occupations are present in the subsequent pages.

SOC	Description	2017 - 2022 Change	2017 - 2022 % Change	Annual Openings
29-1141	Registered Nurses	139	9%	66
41-9022	Real Estate Sales Agents	140	7%	44
41-1011	First-Line Supervisors of Retail Sales Workers	43	4%	35
11-9199	Managers, All Other	83	11%	35
25-1099	Postsecondary Teachers	98	14%	33
31-1014	Nursing Assistants	72	9%	33
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	82	6%	32
11-9141	Property, Real Estate, and Community Association Managers	79	10%	31
11-1021	General and Operations Managers	50	7%	29
35-2014	Cooks, Restaurant	50	8%	28
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	54	8%	25
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	35	7%	24
13-2011	Accountants and Auditors	32	6%	23
29-2061	Licensed Practical and Licensed Vocational Nurses	44	10%	21
25-9041	Teacher Assistants	35	7%	19

2017.2 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

<sup>23</sup> All University of Montana program completion data was pulled from the National Center for Education Statistics through the Montana Department of Labor & Industry web domain. Completion data is annual for the 2015 year.

<sup>24</sup> The Standard Occupational Classification (SOC) System is a United States government system of classifying occupations. It is used by U.S. federal government agencies collecting occupational data.

The following table of occupations were omitted from analysis due to a lack of training necessary for those positions; although the occupations have openings, a credential is not required to gain employment. They are entry-level occupations that individuals can use to gain and build skills, attend further education or training, and progress up the latter:

SOC	Description	2017 - 2022 Change	2017 - 2022 % Change	Annual Openings
41-2031	Retail Salespersons	117	4%	121
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	153	8%	99
41-2011	Cashiers	35	2%	86
35-3031	Waiters and Waitresses	40	3%	74
43-9061	Office Clerks, General	86	4%	67
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	116	7%	58
43-4051	Customer Service Representatives	124	10%	56
37-2012	Maids and Housekeeping Cleaners	91	9%	44
39-9011	Childcare Workers	50	6%	39
35-3011	Bartenders	23	4%	27
49-9071	Maintenance and Repair Workers, General	46	7%	26
43-5081	Stock Clerks and Order Fillers	26	4%	25
43-4171	Receptionists and Information Clerks	42	7%	24
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	22	3%	24
35-2021	Food Preparation Workers	31	6%	22
47-2061	Construction Laborers	11	1%	20
37-3011	Landscaping and Grounds keeping Workers	40	9%	19

2017.2 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

### 1. 29-1141 Registered Nurses

Definition: Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Includes Clinical Nurse Specialists. Excludes "Nurse Anesthetists" (29-1151), "Nurse Midwives" (29-1161), and "Nurse Practitioners" (29-1171).

#### Number of Completers

Registered Nursing/Registered Nurse (Associate's Degree)  35

Growth: 9%

Annual Openings: 66

### 2. 41-9022 Real Estate Sales Agents

Definition: Rent, buy, or sell property for clients. Perform duties, such as study property listings, interview prospective clients, accompany clients to property site, discuss conditions of sale, and draw up real estate contracts. Includes agents who represent buyer.

#### Number of Completers

Business Administration and Management, General (Master's Degree)		41
Business, Management, Marketing, and Related Support Services, Other (Postsec. Awards/Cert./Diplomas; 2-4yrs.)		61
Business Administration and Management, General. (Bachelor's Degree)		254

Growth: 7%

Annual Openings: 44

### 3. 41-1011 First Line Supervisors of Retail Workers

Definition: Directly supervise and coordinate activities of retail sales workers in an establishment or department. Duties may include management functions, such as purchasing, budgeting, accounting, and personnel work, in addition to supervisory duties.

*Number of Completers*



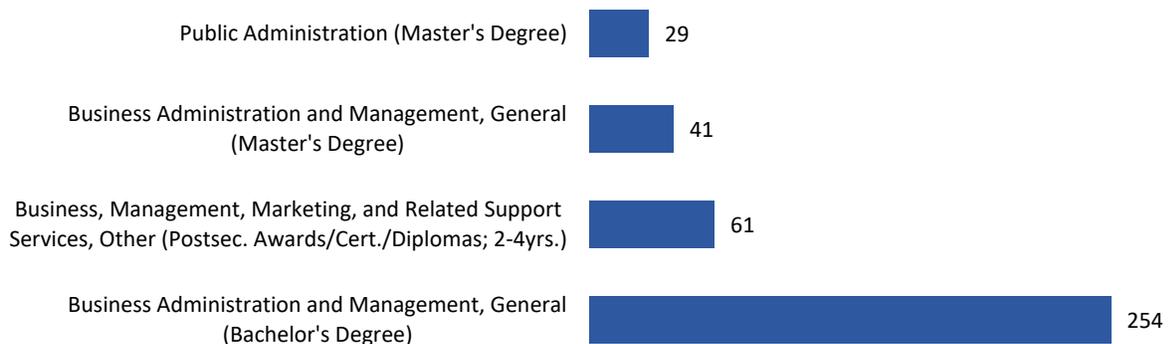
Growth: 4%

Annual Openings: 35

### 4. 11-9199 Managers, All Other

Definition: All managers not listed separately; Sample occupations that comprise this group are: Regulatory Affairs Managers, Compliance Managers, Investment Fund Managers, Supply Chain Managers, Loss Prevention Managers, Wind Energy Project Managers, etc.

*Number of Completers*



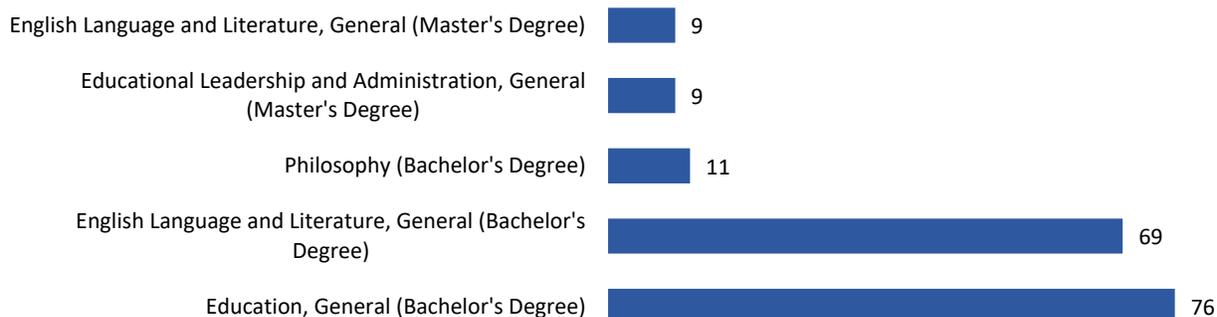
Growth: 11%

Annual Openings: 35

## 5. 25-1099 Postsecondary Teachers

Definition: Emsi uses a single aggregate code (25-1099) for all postsecondary teachers (of all academic disciplines), instead of the 38 detailed codes in standard SOC.

### Number of Completers



Growth: 14%

Annual Openings: 33

## 6. 31-1014 Nursing Assistants

Definition: Provide basic patient care under direction of nursing staff. Perform duties such as feed, bathe, dress, groom, or move patients, or change linens. May transfer or transport patients. Includes nursing care attendants, nursing aides, and nursing attendants.

In the *Labor Market Outcomes for Missoula College Report*,<sup>25</sup> Nursing Assistants was an occupation identified under the “High Demand, but no Program at Missoula College” category. Despite being non-accredited and therefore not tracked by the National Center for Education Statistics, Missoula College has begun offering summer Certified Nursing Assistant Trainings<sup>26</sup>. There is yet to be a specified accredited program within Missoula College, although alternatives exist.<sup>27</sup>

Growth: 9%

Annual Openings: 33

<sup>25</sup> Completed in 2016 by Montana University Systems, Montana Department of Labor & Industry, and Missoula College at the University of Montana.

<sup>26</sup> Degree Information found at [http://mc.umt.edu/health/medical\\_assisting/default.php](http://mc.umt.edu/health/medical_assisting/default.php)

<sup>27</sup> Big Sky High has offered CNA training to its students, as well as Flathead Community College in Kalispel.

**7. 43-6014 Secretaries and Administrative Assistants, Except Legal, Medical, and Executive**  
 Definition: Perform routine clerical and administrative functions such as drafting correspondence, scheduling appointments, organizing and maintaining paper and electronic files, or providing information to callers. Excludes legal, medical, and executive secretaries (43-6011 through 43-6013).

*Number of Completers*



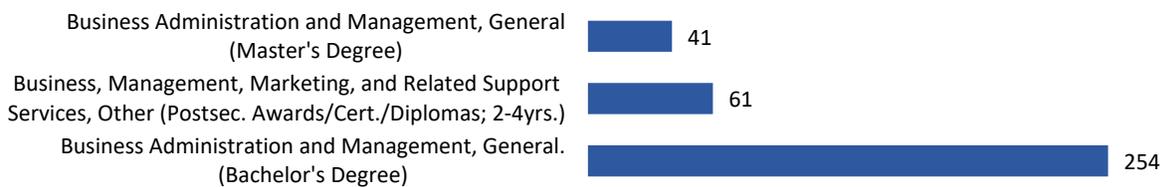
Growth: 6%

Annual Openings: 32

**8. 11-9141 Property, Real Estate, and Community Association Managers**

Definition: Plan, direct, or coordinate the selling, buying, leasing, or governance activities of commercial, industrial, or residential real estate properties. Includes managers of homeowner and condominium associations, rented or leased housing units, buildings, or land (including rights-of-way).

*Number of Completers*



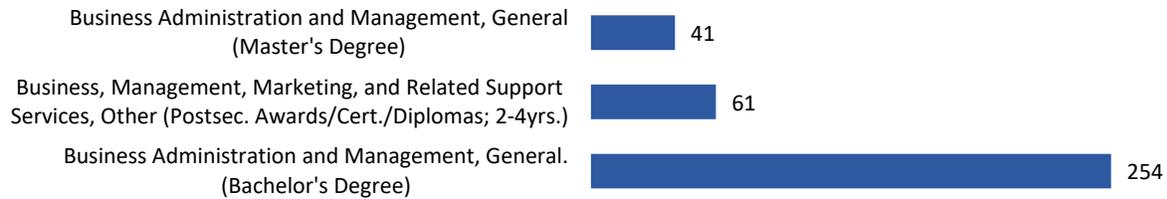
Growth: 10%

Annual Openings: 31

### 9. 11-1021 General and Operations Managers

Definition: Plan, direct, or coordinate the operations of public or private sector organizations. Duties and responsibilities include formulating policies, managing daily operations, and planning the use of materials and human resources, but are too diverse and general in nature to be classified in any one functional area of management or administration.

*Number of Completers*



Growth: 7%

Annual Openings: 29

### 10. 35-2014 Cooks, Restaurant

Definition: Prepare, season, and cook dishes such as soups, meats, vegetables, or desserts in restaurants. May order supplies, keep records and accounts, price items on menu, or plan menu.

*Number of Completers*



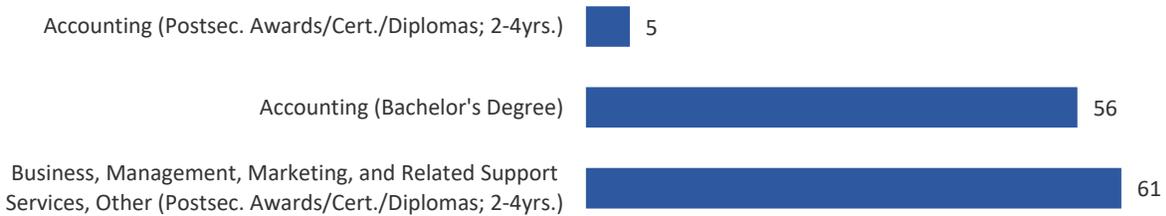
Growth: 8%

Annual Openings: 28

### 11. 41-4012 Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products

Definition: Sell goods for wholesalers or manufacturers to businesses or groups of individuals. Work requires substantial knowledge of items sold.<sup>28</sup>

*Number of Completers*



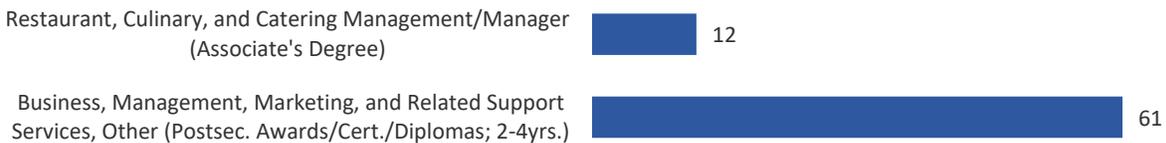
Growth: 8%

Annual Openings: 25

### 12. 35-1012 First-Line Supervisors of Food Preparation and Serving Workers

Definition: Directly supervise and coordinate activities of workers engaged in preparing and serving food.

*Number of Completers*



Growth: 7%

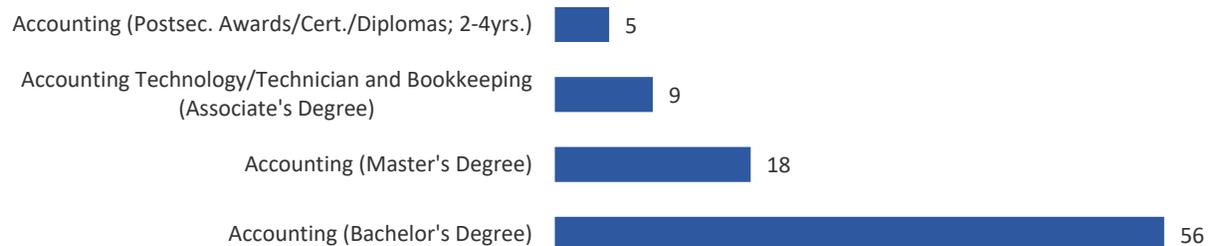
Annual Openings: 24

<sup>28</sup> Sample of reported job titles: Account Executive, Account Manager, Outside Sales

### 13. 13-2011 Accountants and Auditors

Definition: Examine, analyze, and interpret accounting records to prepare financial statements, give advice, or audit and evaluate statements prepared by others. Install or advise on systems of recording costs or other financial and budgetary data.

#### *Number of Completers*



Growth: 6%

Annual Openings: 23

### 14. 29-2061 Licensed Practical and Licensed Vocational Nurses

Definition: Care for ill, injured, or convalescing patients or persons with disabilities in hospitals, nursing homes, clinics, private homes, group homes, and similar institutions. May work under the supervision of a registered nurse. Licensing required.

#### *Number of Completers*



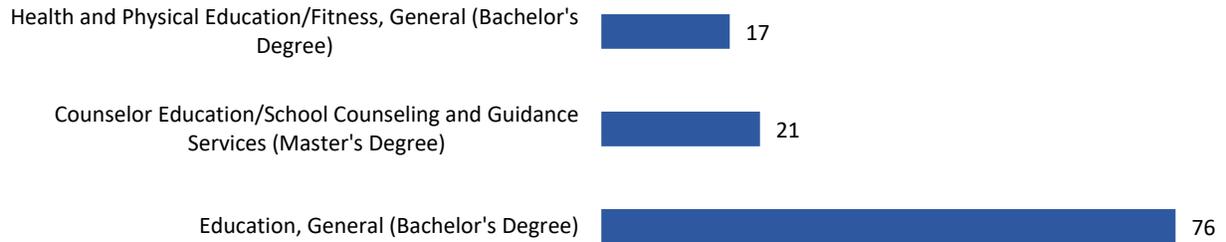
Growth: 10%

Annual Openings: 21

### 15. 25-9041 Teacher Assistants

Definition: Perform duties that are instructional in nature or deliver direct services to students or parents. Serve in a position for which a teacher has ultimate responsibility for the design and implementation of educational programs and services.

*Number of Completers*



Growth: 7%

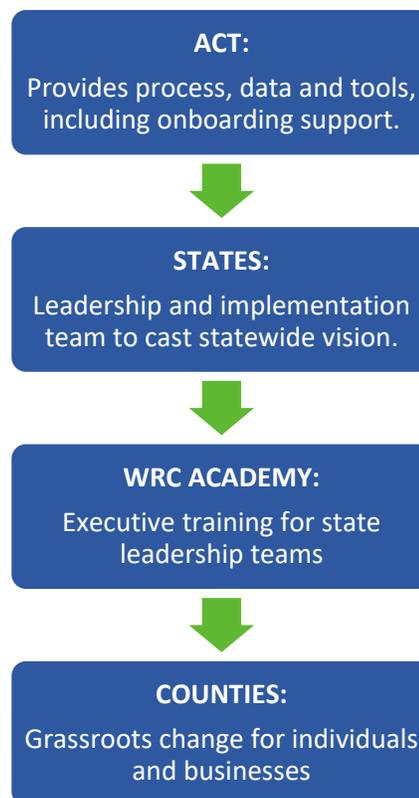
Annual Openings: 19

### *Best Practice Research on Soft Skill Development*

#### ACT Work Ready Communities – National Career Readiness Certificate

##### *The ACT Model:*

The ACT Work Ready Communities (WRC) framework engages with a data-driven approach enabling communities to demonstrate their skilled workforce, which employers value. ACT WRC engages with employers first, as they are the initial step to addressing workforce needs. Employers define soft skills that they require for success within a company. As employers define these required skills, ACT Job profiling analyzes the skill levels required within these positions and connects them to the skills measured by ACT WorkKeys® assessment. ACT Job Profiling and ACT WorkKeys® work together to provide employers confidence in hiring, training, and decisions surrounding advancement options. The ACT model utilizes research-based assessments to measure workforce skills. These skills include soft skills such as work behaviors, attitudes, and additional skills that provide success in the workplace. The assessments provide scores on applied math, locating information, and reading for information, which are used in determining of an individual qualified in earning the ACT National Career Readiness Certificate (ACT NCRC).



The ACT NCRC is key initiative for ACT WRC, as it is a reliable and accepted nation-wide credential that employers use to assess a potential employees' skills in math, reading for information, and locating information. The ACT NCRC is issued at four levels – bronze, silver, gold, and platinum – which streamlines employer's decisions in hiring, training, and promotions. Lastly, ACT WRC benefits individuals who need to improve their workplace skills. Through a series of interactive courses that connect learning with necessary skills required for the workforce, the ACT Career Curriculum seeks to close skills gaps and increase skillsets. The ACT work readiness model is secured through more than five decades of ACT research into college and career readiness providing communities with proven tools to build the skills necessary for their workforce.<sup>29</sup>

##### *What has ACT done and how has it helped communities:*

With the vision of building a more productive workforce, the ACT Work Ready Communities (ACT WRC) has implemented a series of evidence-based solutions through ACT Job Profiling, ACT WorkKeys®, The ACT National Career Readiness Certificate, ACT Career Curriculum, and ACT Research. ACT Job Profiling benefits employers as they are able define their workforce and the skills they require. ACT WorkKeys® is

<sup>29</sup><https://www.workreadycommunities.org/resources/The%20ACT%20Work%20Readiness%20System-Powering%20ACT%20Work%20Ready%20Communities.pdf>

assessment-based and provides professionals within the workforce trusted measures of work-ready skills. The ACT National Career Readiness Certificate provides economic developers with indication of a skilled workforce to attract various business and industries. The ACT Career Curriculum benefits educators as they are ensured students have necessary skillsets that employers require. Lastly, ACT Research benefits leadership through communities as they are able to understand their workforce through research into college and career readiness. Additionally, by focusing on the grassroots, the ACT WRC model links communities, workforce development, and education by aligning defined economic development needs. Further, it matches jobs required in jobs to individuals based on their skillsets.

One example of ACT WRCs near Montana is the initiative in Sweetwater County in Wyoming. Below is a visual of the ACT WorkKeys® certifications that have been earned within the community.

SWEETWATER COUNTY								
ACT WORKKEYS NATIONAL CAREER READINESS CERTIFICATE [NCRC]								
WORKFORCE		TOTAL NCRC	BRONZE NCRC	SILVER NCRC	GOLD NCRC	PLATINUM NCRC	NOT EARNED	NCRC PLUS
Emerging	High School	11	+	8	+	0	-	0
	College	36	+	21	14	0	-	5
Current	Private	359	17	217	124	+	-	30
	Public	157	22	98	37	0	-	23
Transitioning	Adult Education	8	+	4	+	0	-	0
	Unemployed	297	23	190	84	0	-	23
	Recent Veteran	4	+	+	+	0	-	0
	Workforce category not identified	0	0	0	0	0	-	0
	<b>Totals</b>	<b>872</b>	<b>68</b>	<b>540</b>	<b>263</b>	<b>+</b>	<b>-</b>	<b>81</b>

The table above is a detailed breakdown of the same ACT WorkKeys NCRC data presented in the upper right box on this page and represents ACT WorkKeys NCRCs earned or improved throughout the community. All ACT WorkKeys NCRC data is updated monthly.

Since ACT WRC has entered Sweetwater County, 85 employers have supported the training and certifications that the initiative provides. Industries in Sweetwater County recognizing the NCRC range from healthcare, dental, construction, finance, and community colleges.

### Wonderlic Soft Skills Training Bootcamp

#### *The Wonderlic Model:*

Through a series of modules, both secondary education providers and employers can train their prospective students and employees. For secondary education providers, Wonderlic offers their Wonderlic Soft Skills Training Bootcamp™. Within this boot camp, students can master ten (10) soft skills that are necessary in the workforce. This is done through soft skills training, assessment, and digital badges. The soft skills training is completed through competency-based eLearning. The interactive

learning experience is completed through ten (10) one-hour modules. These can be completed either self-paced online or through instructor-led coursework such as printable notes and activities. The soft skills assessment is also competency-based and mirrors real-life situations within the workplace, which can be completed within 1-2 hours. Lastly, the digital badges provide employer-approved credentials that highlight the mastered skills.

For businesses, many find themselves with a talent pool that lacks employability skills. Through Wonderlic, employers can train their employees in core skills such as interpersonal, communication, listening, professional, and self-management skills making their employees competitive and work ready. Much like the Wonderlic Soft Skills Training Bootcamp™, training can be completed either self-paced online or through instructor-led coursework for education providers. Earned digital badges will signal employees with an understanding of skills mastered through completing training and passing the assessment.

#### *What Has Wonderlic Done and How Has It Helped Communities:*

Wonderlic has recently launched their Soft Skills Training Scholarship that integrates the Soft Skills Training Bootcamp™, which five community colleges<sup>30</sup> participated in during the spring 2017 semester. Each community college completed the application process outlining their programs and the specific needs they required to improve their soft skills. Among the top soft skills required were communication, leadership, professionalism, and the ability to take initiative.<sup>31</sup> One of the community colleges that was selected for Wonderlic's Soft Skills Training Scholarship was Mt. Hood Community College in Oregon. With scholarship funds of \$23,680 to launch the Soft Skills Bootcamp™, the 160 students enrolled in the Adult High School Diploma (AHSD) program were able to participate free of charge. Once the boot camp is completed successfully, students are eligible for Oregon high school diplomas as the program meets the career-related learning standards (CRLS).<sup>32</sup>

#### CASAS Workforce Skills Certification System:

##### *The CASAS Model:*

The Comprehensive Adult Student Assessment System (CASAS) Workforce Skills Certification provides employability skills training in a series of three steps once employers have identified a skillset gap; profiling skills, developing skills, and certifying skills. Through CASAS, candidates partake in assessments and receive a Workforce Skills Profile Report. Within this report, candidates can identify technical/soft skills they currently have and that are able to be placed on a resume. This is done through workforce readiness assessments (soft skills) covering topics as personal qualities and customer service. Employers value this information as they search for qualified applicants. Candidates that partook in the assessments can participate in classes and training designed for academic, work-related, and soft skills competencies that employers are looking for. By using QuickSearch Online, candidates are provided a database with 2,300+ material titles with the purpose of addressing a variety of skill levels. Employers

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<sup>30</sup> Eastern Iowa Community Colleges; Glen Oaks Community College; Iowa Western Community College; Mount Hood Community College; Southern Illinois University.

<sup>31</sup> <http://www.prweb.com/releases/2017/01/prweb13973355.htm>

<sup>32</sup> <https://www.mhcc.edu/03242017/>

and instructors can search for the training materials they require from their employees and order the materials through the QuickSearch Online tool.

Lastly, candidates are provided certification assessment components once they demonstrate competency in a skill (which can be added to the candidates Workforce Skills Profile Report). Candidates that achieve certification levels can present to employers their developed soft skills. The testing format for certifications are done through computer-driven testing that captures scores afterwards and are generated within the candidates Workforce Skills Profile. Testing sites can be through a statewide initiative or used by individual programs that are trained by CASAS.<sup>33</sup>

*What Has CASAS Done and How Has It Helped Communities:*

CASAS is a non-profit that offers a widely used system for assessing adult basic reading, math, listening, writing, and speaking skills. The Workforce Skills Certification System (WSCS) is utilized by youth and adults. The WSCS has aided in transitioning incumbent workers, dislocated workers, and students as these individuals enter the workforce.<sup>34</sup> Through performance tests, this has benefited communities because the real-world context provides a sense of confidence in students as they become aware of their work-based, employable soft skills.

To increase work readiness credentials, in Sacramento, five high school academies and one adult education program utilized the Workforce Skills Certification focusing on health care, manufacturing, and banking. By partnering with Sacramento's Linking Education and Economic Development (LEED) program, they were able to align education and workforce needs. Working with the education community, Sacramento was able to increase internships, job shadowing, and work-based learning focusing activities focusing on telecommunications, health care, and construction within the area. Over 40 Sacramento large businesses agreed to accept the WDCS certification provided by CASAS, and recognize that the student with these credentials had necessary skills for entry-level positions.<sup>35</sup>

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<sup>33</sup> <https://www.casas.org/product-overviews/assessments/WSCS>

<sup>34</sup> [https://edpolicy.stanford.edu/sites/default/files/publications/recognizing-college-and-career-readiness-california-school-accountability-system\\_1.pdf](https://edpolicy.stanford.edu/sites/default/files/publications/recognizing-college-and-career-readiness-california-school-accountability-system_1.pdf)