

Building a better Billings for Eastern Montana and Beyond

John Brewer - Billings Chamber of Commerce
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Billings Downtown
BATTLE OF THE PLANS
BUSINESS PLAN COMPETITION



Billings, Montana is the largest city within 500 miles, making it the logical hub in the northern mountain region and western Canada.

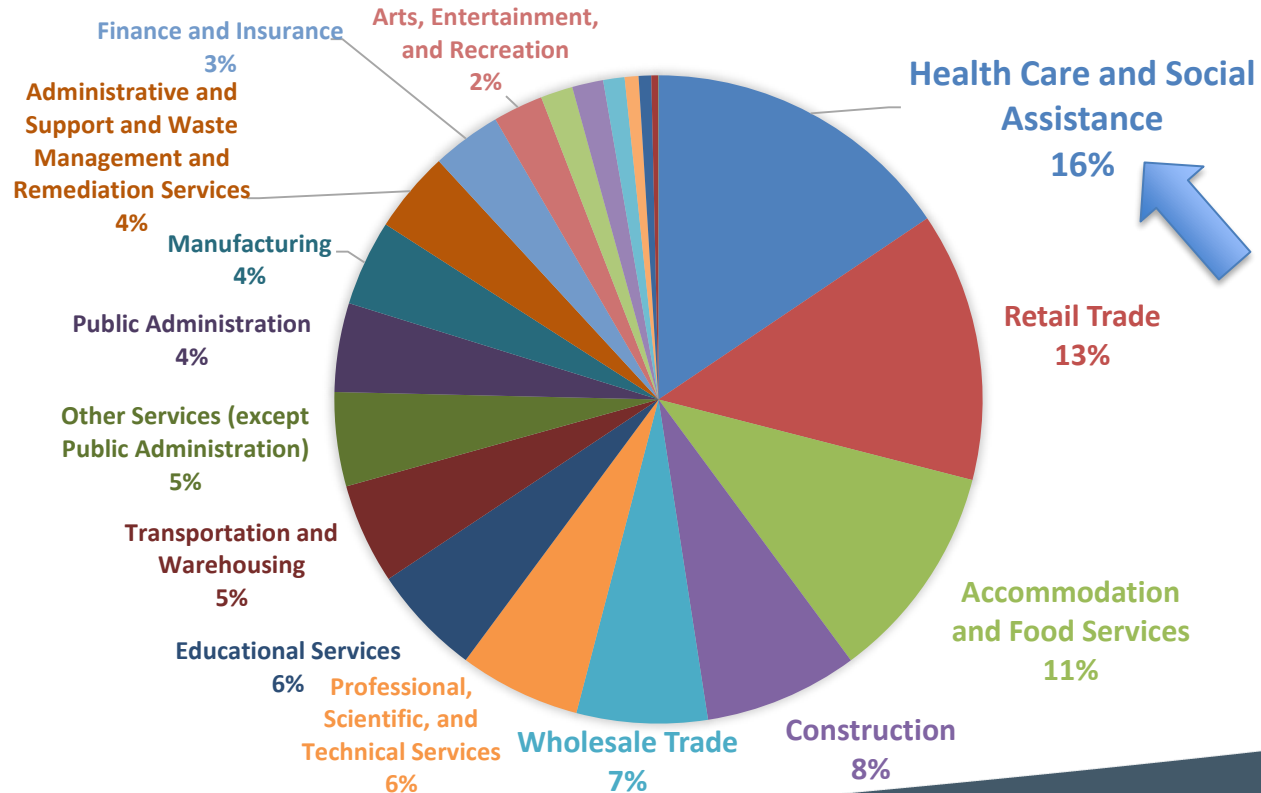


Billings is thriving

- 3.6% annual growth in GDP (2001-2014)
- Twice the GDP growth rate of the US economy
- 600,000 population healthcare catchment area

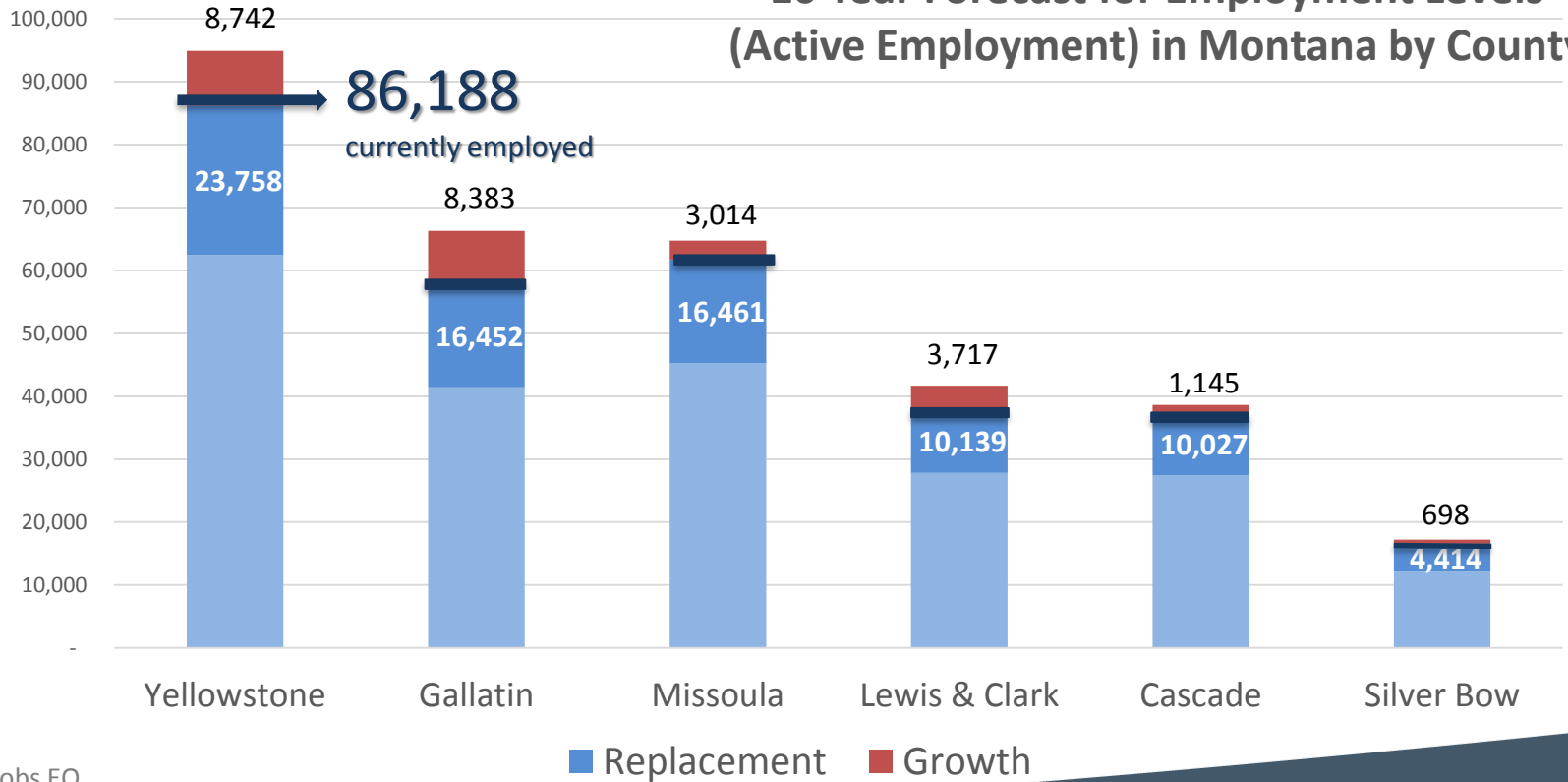
Yellowstone County has a diverse industry base

- Real Estate and Rental and Leasing 2%
- Information Technology 2%
- Agriculture, Forestry, Fishing and Hunting 1%
- Management of Companies and Enterprises 1%
- Mining, Quarrying, and Oil and Gas Extraction 1%
- Utilities 0.3%



Source: Jobs EQ
Chmura Economics & Analytics

10 Year Forecast for Employment Levels (Active Employment) in Montana by County




10 Year Forecast for Yellowstone County

32,500 total job openings

Source: Jobs EQ
Chmura Economics & Analytics

Challenge: Workforce

62% of Yellowstone County businesses report a lack of available workers negatively impacts business growth

Source: BillingsWorks
2016 Employer Survey 
2016 State of the Workforce Report

Data Driven, Business-led Solutions

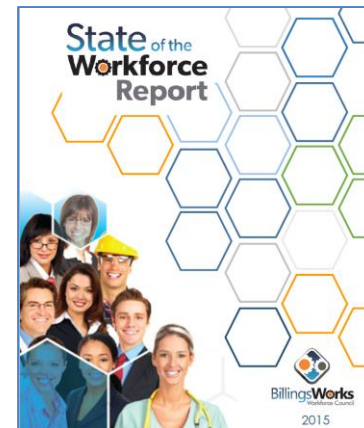
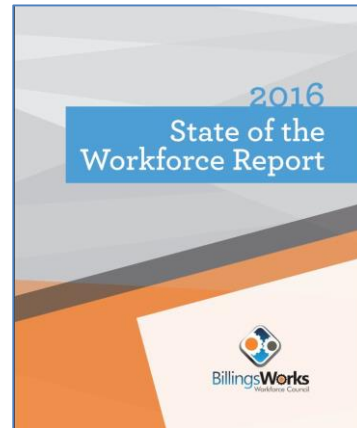


BillingsWorks
Workforce Council

BillingsWorks is a local workforce development collaboration hosted by Big Sky Economic Development and supported by the members of the Steering Committee who include:

- A&E Architects
- Best Western Clocktower Inn
- Billings Career Center
- Billings Adult Education
- Billings Chamber of Commerce
- Billings Clinic
- Billings Job Service
- Billings School District #2
- City of Billings
- Downtown Billings Alliance
- Elation
- Exxon Mobil
- MSU Billings and City College at MSUB
- MT Departments of Labor and Industry
- Northwestern Energy
- PayneWest Insurance
- Rocky Mountain College
- St. John's Lutheran Ministries
- St. Vincent's Healthcare
- Waddell & Reed Inc.
- Yellowstone County

www.BillingsWorks.org
www.YourDreamCareerIsHere.com



BillingsWorks Workforce Council Vision:

Cooperatively identify workforce issues, establish goals, develop and implement strategies, and monitor outcomes to address near and long term workforce needs to achieve our 2023 workforce vision.



BillingsWorks Goals

Workforce Council

- Goal 1: Collaboration
- Goal 2: Resources for Businesses
- Goal 3: Align Education with Workforce Demand
- Goal 4: Talent Attraction and Retention

2016
State of the
Workforce Report



YOUR
Dream
CAREER IS HERE 
Billings, MT







billings
now

NextGEN
Billings' Emerging Leaders

NextGen Links:

<http://www.billingsnextgen.com/mentor/>

<http://www.billingsnextgen.com/nextgen-mentors/>

2016

State of the Workforce Report



BillingsWorks
Workforce Council

Acknowledgements

This is the second year of the BillingsWorks State of the Workforce Report. The inaugural report in 2015 from Thomas P. Miller and Associates marked the first time in Montana a local community had pulled together a workforce development report focused on local data and direct employer input. It has become a trusted tool and resource for businesses, educators and government as they looked to make decisions based on local workforce needs. Moving forward, BillingsWorks has successfully replicated the process and is now proud to present the 2016 State of the Workforce Report.

The BillingsWorks Workforce Council would like to thank the many organizations and individuals that contributed to the development of this State of the Workforce Report, including the BillingsWorks Steering Committee, Goal-Committee Chairs and members of the BillingsWorks Workforce Council for their leadership, vision, and input throughout the strategic planning process. We also appreciate the time and insights shared by hundreds of stakeholders from business and industry, education, economic development, workforce development, and community-based organizations. These stakeholders participated in focus groups, interviews, and the BillingsWorks Employer Survey providing important information and feedback to shape the State of the Workforce Report.

We would also like to thank our partners who helped provide data for this report, including Billings School District 2, MSU Billings and City College, Rocky Mountain College, Montana University System and the Montana Department of Labor and Industry.

This project was funded by Big Sky Economic Development and the BillingsWorks MOU partners. It was carried out by Brittney Souza, Director of BillingsWorks with support from the Big Sky Development Team.



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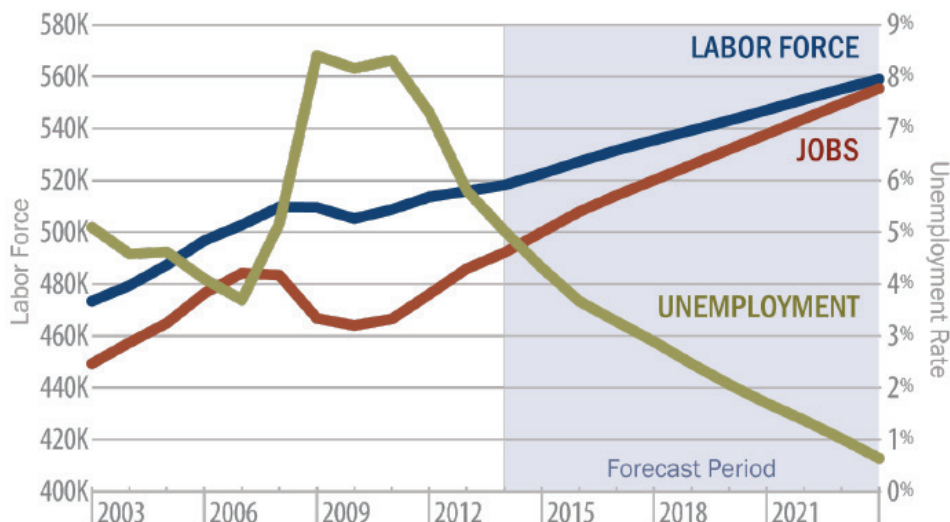
Introduction

Yellowstone County's issues with workforce shortages and lack of qualified applicants are echoed regionally, nationally and internationally. ManpowerGroup reports in its 10th annual Talent Shortage Survey "Talent Shortages are on the rise globally. Worldwide, the percentage of employers who are experiencing difficulties filling job vacancies continues to rise in 2015. When compared with 2014, the proportion increases from 36 to 38%." In the U.S. the survey reports 48% of employers say the talent shortage "is having either a high (16%) or medium (32%) impact on their ability to meet client needs."

Yellowstone County is at the forefront in Montana for creating innovative workforce development partnerships, like the BillingsWorks Initiative. However, other cities across Montana are now feeling increased pressure from talent shortages and are focusing on these issues as well. Data supports that talent shortages will affect the State of Montana drastically in the next 10 years. The Montana Department of Labor and Industry (MTDLI) reports "In the next 10 years, at least 130,000 working Montanans will retire. With an aging population, Montana's labor force will only grow by 4,100 workers per year for the next 10 years." The MTDLI projects that this will cause unemployment rates in Montana to reach levels of 1% – 2% within the next decade.

By 2024 the MTDLI predicts this will reach critical mass when job growth will outpace the labor force.

Labor force projections 2014–2024, with employment projections and unemployment rate



Source: Montana Department of Labor & Industry, Research and Analysis Bureau



Weighing this information it becomes of vital importance that BillingsWorks workforce development efforts in Yellowstone County continue. Implementation of solutions can most successfully be done at the local level when employers, educators and community organizations are working together. **Our collective effort towards workforce development solutions is essential to sustaining economic growth in our community.**

This is the reason the BillingsWorks Workforce Council exists: **To cooperatively identify workforce issues, establish goals, develop and implement strategies, and monitor outcomes to address near and long-term workforce needs. Through a collaborative approach that is informed by data, the Billings community will become the premier business-driven workforce development hub in the economic development region by 2023.**



Methodology

The State of the Workforce Report was developed through a four-month process that included primary and secondary research, engagement with local stakeholders, and the BillingsWorks Workforce Council. Specifically, this included the following elements:

Focus Groups

Four industry-based focus groups were held with participants from Information Technology (IT) and Communications; Healthcare; Retail and Hospitality; and Manufacturing, Engineering, and Energy industries. In addition, one focus group was held with young professionals to gather their perspectives on living and working in Yellowstone County.

BillingsWorks Employer Survey

As part of the BillingsWorks workforce planning and analysis process, over three thousand businesses in Yellowstone County were surveyed to gather insights on workforce development challenges and opportunities. A total of 371 respondents completed the sixteen question survey between January and February 2016. (See Appendix A for full survey data).

Workforce Indicators

With findings from focus groups, knowledge of best practices, and input from the BillingsWorks Workforce Council, workforce indicators and benchmarks were developed to measure progress on goals and strategies.



JobsEQ®

Provides economic, workforce, demographic, and training data and analysis. This tool was used to produce the data charts included in this report. The following are the data sources used by JobsEQ:

- American Community Survey
- Bureau of Economic Analysis
- Bureau of Labor Statistics
- Career Readiness Certificates
- Census Bureau
- Center for Transportation Analysis
- Characteristics of the Unemployed (ES-203) Employment and Wages
- CIP-SOC Crosswalk
- Council for Community and Economic Research
- Department of Agriculture
- Department of Defense
- Employment and Training Administration
- Foreign Labor Certifications
- National Center for Education Statistics
- O*Net™ (Occupational Information Network)
- Regional Occupation Employment Statistics and Projections
- Social Security Administration
- State Employment Agencies (coverage and availability vary by state)
- Chumura Economics & Analytics provides to advanced economic analysis that use the collected data (from the above sources) to create custom data figures, including:
 - Career Ladder Maps
 - Commuting Estimates
 - Cost-of-Living Index
 - Desirability Index
 - First-Time Worker Projections
 - Mobility Index
 - Occupation Gaps
 - Regional Employment Matrices
 - Regional Unemployment by Detailed Occupations
 - Training Concentration
 - Underemployment
 - What-If Scenario
 - Willing and Able Analysis

What We Have Learned

The information collected from the Industry Focus Groups and the 2016 Employer Survey uncovered valuable data and insights. However, this data must be looked at within the larger context of the economy in and around Yellowstone County.



1. The economic climate in Yellowstone County had changed over the last year.

Oil prices have fallen from a high of \$115 per barrel in June of 2014 to around \$40 per barrel in Spring of 2016. This has caused a number of changes in and around Yellowstone County.

The economic boom in the Bakken oil development region has slowed due to low oil prices:

- The City of Williston, North Dakota expects 23% less revenue this year than two years ago.
- Current estimates of operating drilling rigs across North Dakota are 46, compared with 190 two years ago.
- Williston area businesses are reporting substantial downturns in business. Business is down by 40 percent at restaurants that once had two-hour dinner lines.

Source: http://www.nytimes.com/2016/02/08/us/built-up-by-oil-boom-north-dakota-now-has-an-emptier-feeling.html?_r=0

The downturn in the demand for coal has also impacted our regional economy with layoffs now focused in Wyoming.

- Energy companies in Wyoming have cut their payrolls by 5,500 people since August of 2014.
Source: http://trib.com/business/energy/energy-downturn-works-its-way-across-the-wyoming-economy/article_786a48df-6982-5649-ab77-2b8c9a040c79.html
http://www.nytimes.com/2016/04/13/us/in-wyoming-hard-times-return-as-energy-prices-slump.html?_r=0

These issues are affecting Yellowstone County area businesses in different ways:

- In the industry focus groups hospitality and retail businesses reported a downturn in spending from businesses in the oil and gas industry, as well as businesses that supported those industries. Therefore, the hiring projections and workforce needs for the hospitality and retail industry have softened.
- Those employers who reported they were planning to hire more than 11 employees in the next year fell by 16%.
- The number of employers in the survey who reported hiring between 6 to 10 employees rose from 1% in 2015 to 14% in 2016.
- Overall that is a 29% shift in hiring trends from the 2015 to 2016 survey data.



Although there have been changes in the economic climate, this did not appear to carryover to changes in workforce issues, which continue to remain a challenge for employers:

- Employers reporting “there is an adequate supply of talent available to fill my positions” rose slightly from 44% in 2015 to 51% in 2016.
- The reported number of jobs filled within 3 months rose slightly, between 1% and 8%.



2. Yellowstone County businesses are still growing and need employees.

The overall number of projected hires for the next 12 months fell slightly from the previous year, but the total projected hiring is over 1000 new employees, suggesting there are still industries and businesses that are growing in Yellowstone County.

The talent pool continues to be very shallow in Yellowstone County with employers continuing to not find an adequate supply of talent. This year’s survey found:

- **62% of employers agree or strongly agree that a lack of available workers negatively impacts their ability to grow their business.**
- Only 46% of employers are confident in the overall quality of the workforce present in Yellowstone County.

SHALLOW TALENT POOL = CHURN WITHIN THE WORKFORCE

- Employers in the industry focus groups reported that local talent is highly mobile, meaning they are willing to move from company to company for nominal increases in pay, benefits, or opportunity.
- Entry level workers have the highest level of retention issues, with data showing 37% reported no retention improvement from last year. Employers in the focus group confirmed this issue, saying they can find entry level job candidates, but are faced with constant turnover issues.

ENTRY LEVEL VS EXPERIENCED JOB CANDIDATES

In each of the focus groups employers reported a less difficult time finding entry level candidates and a more difficult time finding experienced job candidates. However, there are constraints in hiring entry level candidates, such as the time and resources needed to bring them up to speed.

While focus group participants reported significant talent shortages across all positions, the skill-levels and positions which are hardest-to-fill are unique for each industry.

A RETIRING WORKFORCE

The aging of our workforce will further compound the issues of growth for area businesses.

- **30% of the workforce in Yellowstone County is over the age of 56.**
- In comparing the projected growth of occupations for the next 10 years, 22 out of 23 occupation categories (96%) will have larger replacement openings (from retiring workers) than growth openings (new positions).
- The average age of a person in Billings is 39 years old, Yellowstone County is 38.3 years old compared with the average of 37.2 years old in the United States.
- All industry focus groups reported the most difficult positions to fill are senior level, experienced workers.



TALENT ATTRACTION AND RETENTION CHALLENGES

In both the industry focus groups and the young professionals focus group, participants identified several talent attraction and retention challenges that were similar from last year. These include:

- **Pay** – Employers in the focus groups recognized that their ability to offer competitive wages impacts their talent attraction and retention success. When competing with other parts of the country for talent, Billings employers recognized their pay scales are often less competitive. These findings are consistent with results of the employer survey. The greatest barrier reported in the survey is pay, with 80% of respondent ranking pay as one of their top three barriers.
- **Housing** – Young professionals cited concerns about the availability of affordable housing when their peers may consider relocating or continuing their careers in Billings. The participants in the focus groups noted that it is difficult to find homes in the area under \$250,000 and/or in line with their preferences. Data confirmed that 76% of housing units in Yellowstone County have monthly mortgage costs over \$1000: 39% have cost between \$1,000 and \$1,499, while 37% cost more than \$1,500.
- **Safety** – In the industry focus groups and the young professionals group, individuals and business owners expressed continued concern about safety issues in the downtown area. A thriving downtown was strongly desired by all participants.

These focus group findings are consistent with results of the employer survey. The greatest barrier reported in the survey is pay (with 80% of respondent ranking pay as one of their top three barriers), followed by job opportunities (50%), benefits (41%) and housing (27%).



3. Alignment of training and education with business needs

In the 2015 Employer Survey, when asked to rate local education and training institutions on their alignment of education offerings and workforce needs, a high number of survey participants expressed they were unaware of the programs these institutions provided.

They also did not feel that answers such as "not applicable" correctly identified their opinions. Therefore the survey response "unknown" was added to the 2016 Employer Survey. This was the largest category of response for Adult Education, Career Center and other education/training providers. Area High Schools and City College at MSU Billings were almost even with their top scores of good and unknown. This indicates an important opportunity for area schools to educate the community about their programs.

Employers who participated in the industry focus groups reported that post-secondary education and training providers in the area offer quality programs, but the quantity of completers is not sufficient.

In general, employers noted in each industry focus group that the career exposure and awareness activities need to be increased in K-12 education. Employers expressed concerns that young people are not aware of the various career opportunities and specific companies providing jobs in their local community. Focus group participants suggested strategies that encourage business and industry representative to spend more time in the classroom, as well as strategies that provide opportunities for young people and school personnel to spend time in real-world work environments.

The BillingsWorks Training Profile and Gap Analysis included in Appendix B of this report provides an overview of the education and training systems in Yellowstone County, programs offered, and outcomes of their graduates. In comparing this data with employers' needs, several clear gaps emerge including:

- Additional capacity and new programs related to healthcare and IT occupations are needed.
- Expanded depth of knowledge for students completing existing 2-year programs in information technology.
- Increased graduates in engineering-related fields and skill trades programs.
- Embedded employability skills training throughout all levels of education.



- Increased retention of “talent in transition”:
 - Individuals who are transitioning from high school to post-secondary education or from post-secondary education to the labor market. Including better identification of “career pathways” for these individuals at a younger age.
 - Individuals who are from Billings but are attending colleges outside Billings, often for majors that are not offered locally. Current numbers show there are at least 1140 students from Billings in the Montana University System outside of City College and MSU Billings.

These gaps are explored in more detail in Appendix B.



Workforce Indicators

Based on the perspectives and insights shared by employers, young professionals, and community partners, BillingsWorks identified twenty (20) indicators of progress to represent the state of the area's workforce as well as to measure progress toward its strategic goals.

Indicators identified include demographic and cost of living indicators, education indicators, and job and workforce indicators. For some indicators, data is publically available to track changes and trends. For others, data was captured through the BillingsWorks Employer Survey and from partner organizations. BillingsWorks will update the data annually to identify trends and progress toward goals.

Of the twenty indicators that will be used to track progress, BillingsWorks has identified six indicators that comprise the Talent Dashboard, a brief snapshot of the state of Yellowstone County's workforce. These indicators are included on the following page and discussed further in the following section.

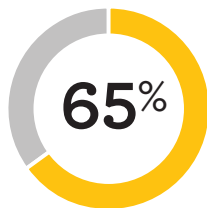


2016 BILLINGSWORKS TALENT DASHBOARD

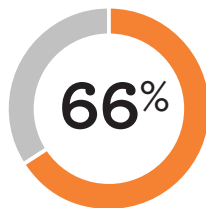


Job Postings Filled within 3 Months 2016

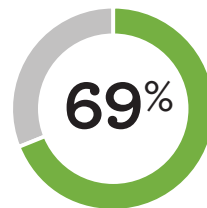
Professional positions



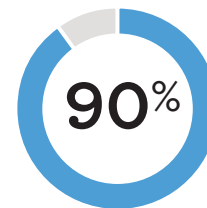
Technical positions



Skilled trade positions

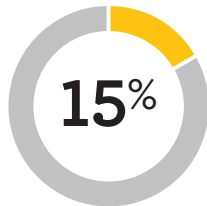


Entry level/support positions

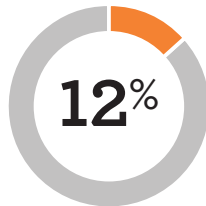


Reported increases in the number of qualified applicants

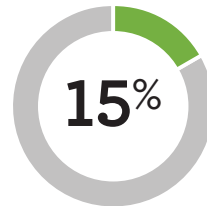
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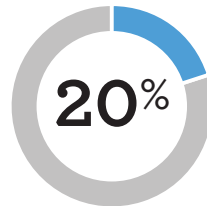
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Skilled trade positions



Entry level/support positions

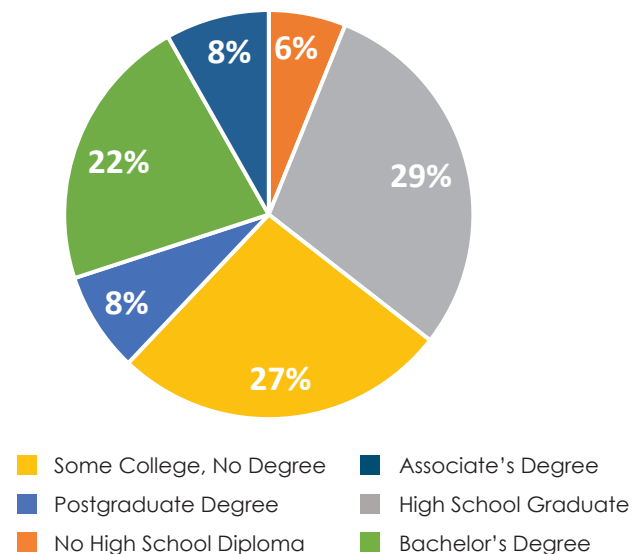


Employability Skills*

% Easy + Very Easy to find



2016 Education Attainment



* As reported in the BillingsWorks Employer Survey. Overall Confidence in the Workforce represents the percentage of employers who "Strongly Agree" or "Agree" with the following statement: I am confident in the overall quality of the workforce in Yellowstone County. Reported Increases in the Number of Job Applicants indicates the percentage of employers who reported increases in the number of qualified applicants over the past year. Percentages for Reported Increases in the Number of Job Applicants and Jobs Filled within 3 Months do not include employers who responded "Not Applicable."



HISTORICAL CHANGE

2015 to 2016 BillingsWorks Talent Dashboard

I am confident in the overall quality of the workforce that is present in Yellowstone County

	2015	2016	Difference
Strongly Agree	6%	5%	-1%
Agree	41%	41%	< -1%
No Opinion	4%	2%	-2%
Disagree	36%	42%	6%
Strongly Disagree	13%	11%	-2%

Population growth 2013–2015
Yellowstone County Population

	2010	2013	2015	Change
Total Population	147,972	150,156	157,048	4.59%

Job Postings Filled within 3 Months

	2015	2016	Change
Professional positions	59%	65%	6%
Technical positions	62%	66%	4%
Skilled trade positions	61%	69%	8%
Entry level/support positions	89%	90%	1%

Reported increases in the number of qualified applicants

	2015	2016	Change
Entry level/support positions	14%	20%	6%
Skilled trade positions	13%	15%	2%
Technical positions	11%	12%	1%
Professional positions	15%	15%	0%

Employability Skills:
% Very Easy + Easy to find

Answer Options	2015	2016	Change
Drug-free	48%	56%	8%
Team work	48%	50%	2%
Integrity	47%	48%	1%
Respect	48%	44%	-4%
Customer focus	40%	43%	3%
Adaptability	41%	40%	-1%
Communication	34%	40%	6%
Professionalism	36%	35%	-1%
Planning & organizing	31%	31%	0%
Decision making	21%	30%	9%
Dependability & reliability	29%	29%	0%
Problem solving	21%	28%	7%
Business fundamentals	23%	26%	3%
Initiative	21%	24%	3%
Critical thinking	16%	22%	6%

Educational Attainment, Age 25-64
Yellowstone County, Montana

	2015	2016	Change
No High School Diploma	7.6%	6.1%	-1.5%
High School Graduate	31.0%	29.4%	-1.6%
Some College, No Degree	25.4%	26.5%	1.1%
Associate's Degree	7.3%	7.9%	0.6%
Bachelor's Degree	20.5%	21.8%	1.3%
Postgraduate Degree	8.2%	8.2%	0.0%



DEMOGRAPHIC INDICATORS

In This Section...

Population – Population growth in key segments of the population indicates the universe of talent that is or will be available for employers in the community. Positive growth in the population aged 25 – 64 years suggests increases in the pool of workers.

Labor Force Participation – The community's labor force participation rate measures the percentage of the labor force (age 16 and over) who are either working or actively seeking employment. Labor force participation is an important indicator as it provides an idea of how engaged the available workforce is in the employment market.

Per Capita Personal Income – Increases in per capita personal income over time can indicate economic growth for Yellowstone County and can be used in comparison with peer communities and the state. Per capita personal income is calculated as the personal income of the residents of a given area divided by the resident population of the area.

Cost of Living – The amount of money needed to sustain a certain standard of living, including basic expenses such as housing, food, taxes, and healthcare. Cost of living is often used when comparing how expensive it is to live in one city versus another.

Population

The population in Yellowstone County grew by 0.98 percent or 1,414 individuals from 2014 to 2015.

Population Estimate (as of July 1, 2015)

	2010	2011	2012	2013	2014	2015
Yellowstone County, MT	148,406	149,865	151,917	154,040	155,634	157,048
Growth from previous year		0.98%	1.37%	1.40%	1.03%	0.91%

Source: http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=PEP_2014_PEPAGESEX&prodType=table#



Demographic Profile

Demographics	Yellowstone County, Montana				Montana	USA
	2010	2013	2014	% Change	2014	2014
Population	148398	154060	155,634	1.02%	1,023,579	318,857,056
Under 18 Years	35,094	36,315	36690	1.03%	223,563	74,181,467
18 to 24 Years	13,225	13,361	13,349	-0.09%	94,611	30,672,088
25 to 34 Years	20,193	21,340	21608	1.26%	122,864	41,063,948
35 to 44 Years	17,812	18,632	18908	1.48%	112,945	41,070,606
45 to 54 Years	22,145	20,528	20,143	-1.88%	149,832	45,006,716
55 to 64 Years	18,946	20,738	21,138	1.93%	138,858	36,482,729
65 years and older	20,983	23,146	23,798	2.82%	146,742	40,267,984

http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=PEP_2014_PEPAGESEX&prodType=table#

Source: JobsEQ®

1. Census 2010, unless noted otherwise
 2. Census 2014, annual average growth rate since 2004
 3. Median values for certain aggregate regions (such as MSAs) may be estimated as the weighted averages of the median values from the composing counties.
 4. American Community Survey 2010-2014
 5. 2014; Current Population Survey, unionstats.com, and Chmura
- Exported on: Sunday, March 6, 2016 7:25 PM

Average Workforce Age

	16 to 75 years old
Yellowstone County	44.1
U.S.A.	43.5

Source: U.S. Census Population Projections



Labor Force Participation

Yellowstone County has a higher labor force participation rate (68.3%) compared to the State of Montana and the rest of the country. At five percentage points higher than the national rate, this indicates that the workforce within Yellowstone County is active and engaged in the labor market.

Labor Force Participation

	Yellowstone County, Montana	Montana	USA
Labor Force Participation Rate and Size (civilian population 16 years and over)	68.3%	63.9%	63.5%
Population 16 years and over	155,634	1,023,579	318,857,056
Civilian Labor Force	81,785	516,403	157,940,014
Armed Forces Labor Force	241	3,411	1,025,497

Source: JobsEQ®

1. Census 2010, unless noted otherwise
 2. Census 2014, annual average growth rate since 2004
 3. Median values for certain aggregate regions (such as MSAs) may be estimated as the weighted averages of the median values from the composing counties.
 4. American Community Survey 2010-2014
 5. 2014; Current Population Survey, unionstats.com, and Chmura
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States Ranked by Labor Force Participation Rate: January 2016, Seasonally Adjusted

U.S. Rank: Montana #25

Labor Force Participation Rate: 63.9%

The labor force participation rate represents the proportion of the civilian non-institutional population that is in the labor force. Range is 70.5% to 53%.

States Ranked by Employment to Population Ratio: January 2016, Seasonally Adjusted

U.S. Rank: Montana #21

Employment to Population Ratio: 61.2%

The employment to population ratio represents the proportion of the civilian non-institutional population that is employed. Range is 68.3% to 49.7%.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics Program, in cooperation with State Workforce Agencies, Labor Market Information programs, released March 14, 2016.



Per Capita Personal Income

The per capita personal income in Yellowstone County is higher than the State of Montana, but lower than the nation. Per capita personal income is \$5,016 higher in Yellowstone County than the state. While national per capital personal income is higher than both Yellowstone County and Montana, both the state and county grew at a faster rate, suggesting more rapid growth at the state and county levels.

Average Annual Wages for Yellowstone County, Montana Private industry only (no government)

	2010	2011	2012	2013	2014	2015	% change
Yellowstone County, Montana	\$36,868	\$38,358	\$39,946	\$41,135	\$42,620	\$43,688	2.51%
Montana	\$33,244	\$34,518	\$35,987	\$36,499	\$37,862	\$38,672	2.14%
USA	\$46,455	\$47,815	\$49,200	\$49,700	\$51,295	\$52,293	1.95%

Cost of Living – Private only

	Annual Average Salary	Cost of Living Index (Base US)	US Purchasing Power	Cost of Living Index (Base Yellowstone County, Montana)	Yellowstone County, Montana Purchasing Power
Yellowstone County, Montana	\$43,688	96.7	\$45,166	100.0	\$43,688
Montana	\$38,672	101.4	\$38,132	104.8	\$36,884
USA	\$52,293	100.0	\$52,293	103.4	\$50,582

Source: JobsEQ®
Data as of 2015Q4
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HOUSING INDICATORS

In This Section...

Home Ownership – The homeownership rate is computed by dividing the number of owner-occupied housing units by the number of occupied housing units or households.

Median Monthly Housing Costs – Median monthly housing costs for occupied housing units are estimated by the American Community Survey.

Housing Units – A housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters.

Home Ownership and Housing Units

Housing and home ownership issues were cited numerous times in focus groups and in the BillingsWorks Employer Survey as a challenge in attracting and retaining talent. Reviewing data available on housing for the community uncovers that homeownership rates are actually on par with the rest of the state and exceed the nation's home ownership rate. Homeownership in the City of Billings is 5% lower than for Yellowstone County as a whole. This is explained when looking at renter-occupied units which are 5% higher than in Yellowstone County.

With 3,217 vacant housing units, Yellowstone County had a vacancy rate of 5.0 percent in 2013. Among its peer communities (see Appendix C), Yellowstone has the lowest vacancy rate.

Home ownership, Rental and Vacancy Rates 2014

	City of Billings		Yellowstone County		Montana		USA	
	# of units	%	# of units	%	# of units	%	# of units	%
Total housing units	46,674		65,103		486,782		132,741,033	
Occupied housing units	44,208	95%	61,936	95%	407,797	84%	116,211,092	88%
Owner-occupied	27,872	63%	41,888	68%	276,201	68%	74,787,460	64%
Renter-occupied	16,336	37%	20,048	32%	131,596	32%	41,423,632	36%
Vacant housing units	2,466	5%	3,718	6%	78,985	16%	16,529,941	12%

* Data not yet available for 2015

http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_14_1YR_S2502&prodType=table



Home Ownership Rate 2014

	2010		2013		2014*	
Total housing units	62,450		64,240		65,103	
Occupied housing units	62,275	99.7%	61,439	96%	61,936	95%
Owner-occupied housing units	43,381	70%	39,856	65%	41,888	68%
Renter-occupied housing units	18,894	30%	21,583	35%	20,048	32%
Vacant housing units	2,704	4%	3,217	5%	3,718	6%
Homeowner vacancy rate		5%		6%		7%
Rental vacancy rate		3%		4%		5%

* Data not yet available for 2015

http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_14_1YR_S2502&prodType=table

Average Owner Occupied Housing Unit Value Yellowstone County 2014 Data

Value	Number of Units	%
Owner-occupied units	42,037	
Less than \$50,000	4,138	10%
\$50,000 to \$99,999	2,370	6%
\$100,000 to \$149,999	6,111	15%
\$150,000 to \$199,999	11,132	27%
\$200,000 to \$299,999	11,563	28%
\$300,000 to \$499,999	5,206	12%
\$500,000 to \$999,999	1,206	3%
\$1,000,000 or more	311	1%
Median House Value (dollars)	186,500	



Selected Monthly Owner Costs (SMOC)* of housing units with a mortgage Yellowstone County 2014

	Number of Units	%
Housing units with a mortgage	27,313	
Less than \$300	58	0%
\$300 to \$499	498	2%
\$500 to \$699	1,684	6%
\$700 to \$999	4,437	16%
\$1,000 to \$1,499	10,578	39%
\$1,500 to \$1,999	5,833	21%
\$2,000 or more	4,225	16%
Median (dollars)	1,324	

* Selected monthly owner costs are calculated from the sum of payment for mortgages, real estate taxes, various insurances, utilities, fuels, mobile home costs, and condominium fees.

Rental Units Monthly Payments 2014 Yellowstone County

Gross Rent	Number of Units	%
Occupied units paying rent	18,668	
Less than \$200	412	2%
\$200 to \$299	602	3%
\$300 to \$499	2,115	11%
\$500 to \$749	6,627	36%
\$750 to \$999	4,870	26%
\$1,000 to \$1,499	2,849	15%
\$1,500 or more	1,193	6%
Median (dollars)	736	
No rent paid	680	

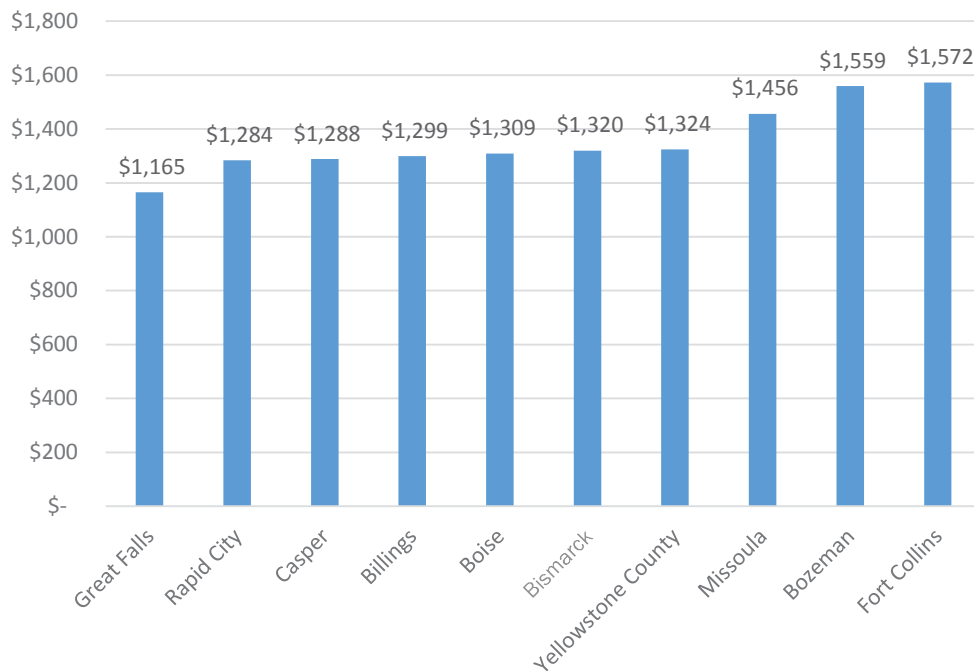
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Monthly Housing Costs

An analysis of housing costs using the SMOC (Selected Monthly Owner Costs) is more accurate and allows a better comparison of overall housing costs in a community. This amount is calculated from the sum of payment for mortgages, real estate taxes, and various insurances. Billings and Yellowstone County fall in the middle range of these peer cities.

2014 Selected Monthly Owner Costs (SMOC)* Housing units with a mortgage
Median Price



* Selected monthly owner costs are calculated from the sum of payment for mortgages, real estate taxes, various insurances, utilities, fuels, mobile home costs, and condominium fees.
http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_14_1YR_S2502&prodType=table#



EDUCATION INDICATORS

In This Section...

Educational Attainment – This indicator captures the highest degree of education an individual has completed. Educational attainment for the community's population can be indicative of the general knowledge and skill levels of the talent pool.

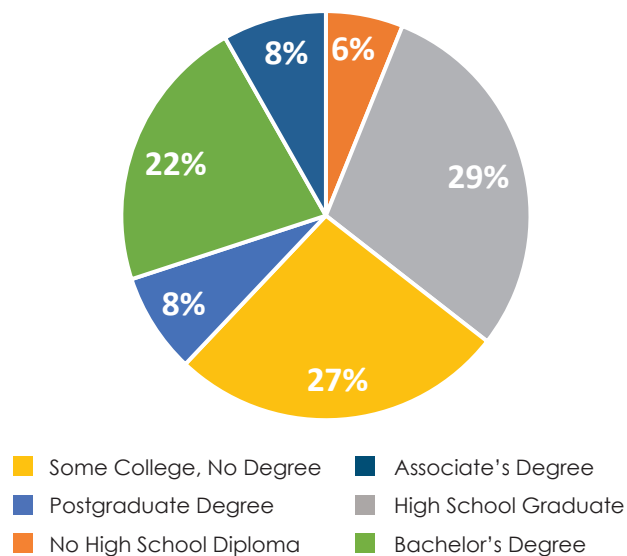
High School Graduation – High school graduation rates indicate the success of the K-12 education system and the basic preparedness of young people in the community.

Secondary Career and Technical Education Enrollment – Enrollment data for secondary career and technical education (CTE) is an indicator of career interest and/or career exploration for emerging talent in the community. CTE enrollments serve as a proxy indicator for the long-term talent pipeline; as enrollments in programs aligned to key industry sectors increase, the talent pipeline becomes more robust.

Educational Attainment

In Yellowstone County, educational attainment closely follows state and national trends. Yellowstone County has a slightly higher percentage of its population whose highest level of education is a high school diploma or the equivalent (29%) compared to Montana (28.2%) and the United States (26.5%). Additionally, Yellowstone County narrowly surpasses the state and U.S. in those with a Bachelor's degree (21.8%).

2016 Education Attainment





Educational Attainment, Age 25-64

	Yellowstone County, Montana	Montana	USA
No High School Diploma	6.1%	6.1%	12.0%
High School Graduate	29.4%	28.2%	26.5%
Some College, No Degree	26.5%	26.1%	21.9%
Associate's Degree	7.9%	9.4%	8.7%
Bachelor's Degree	21.8%	21.3%	19.7%
Postgraduate Degree	8.2%	9.0%	11.2%

Source: JobsEQ®

1. Census 2010, unless noted otherwise
 2. Census 2014, annual average growth rate since 2004
 3. Median values for certain aggregate regions (such as MSAs) may be estimated as the weighted averages of the median values from the composing counties.
 4. American Community Survey 2010-2014
 5. 2014; Current Population Survey, unionstats.com, and Chmura
- Exported on: Sunday, March 6, 2016 7:25 PM

Educational Attainment, Age 25-64

	Yellowstone County	MT	US
Percent high school graduate or higher	92.40%	92.40%	86.30%
Percent bachelor's degree or higher	28.70%	29.10%	29.30%
Population 25 to 34 years			
Population 25 to 34 years	20,896	125,660	42,310,182
High school graduate or higher	92.40%	92.70%	88.30%
Bachelor's degree or higher	28.20%	31.30%	32.40%
Population 35 to 44 years			
Population 35 to 44 years	18,412	113,403	40,723,040
High school graduate or higher	93.40%	94.70%	87.70%
Bachelor's degree or higher	30.70%	33.30%	32.80%
Population 45 to 64 years			
Population 45 to 64 years	41,356	286,713	82,844,946
High school graduate or higher	94.90%	94.10%	88.00%
Bachelor's degree or higher	30.80%	28.60%	29.10%
Population 65 years and over			
Population 65 years and over	22,343	158,184	43,177,961
High school graduate or higher	87.00%	87.50%	80.00%
Bachelor's degree or higher	23.60%	25.10%	23.20%

2014 data from American Fact Finder/US Census estimates



High School Graduation Rate

High school graduation rates for Yellowstone County range from 80% at Senior High School to 100% at Billings Central Catholic High School and Custer High School. Of the nine high schools in Yellowstone County, six schools exceed the graduation rate for the State of Montana.

High School Graduation Rate

2014 – 2015 High School Graduation Rate	Senior Class Enrollment	Rate
Billings Senior High School	391	80%
Billings West High School	458	83%
Billings Central Catholic High School	55	100%
Broadview High School	40	87.50%
Custer High School	27	100%
Huntley Project High School	247	96.20%
Laurel High Schools	662	90.70%
Skyview High School	342	83%
Shepherd High School	280	86.60%
State of Montana	41,816	86%

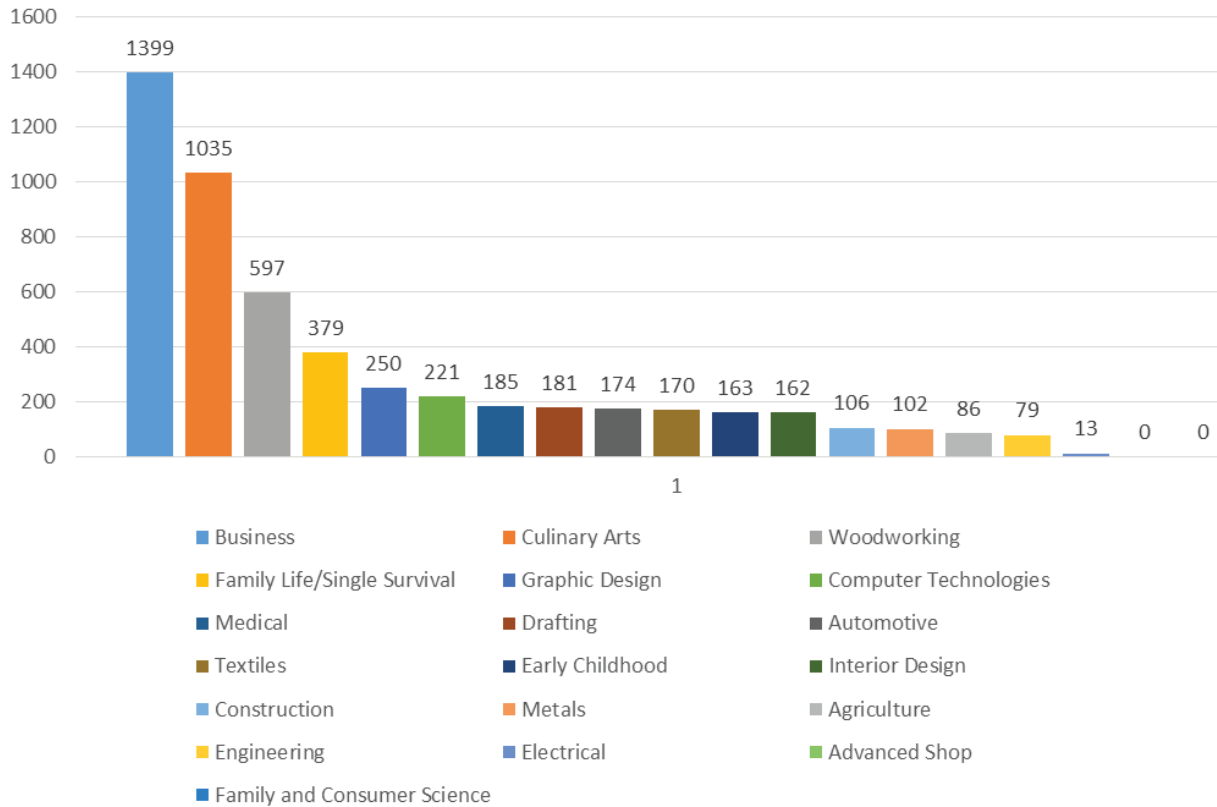
Source: Montana Office of Public Instruction



K-12 Career and Technical Education Enrollment

A total of 4,153 distinct students were enrolled in secondary career and technical education during the 2014 – 2015 school year. Of these students, 48% were females and 52% were male.

Billings School District 2 Junior High and High School Career and Technical Education Enrollment (2014–2015 School Year)



Billings Public Schools High School Career and Technical Education Enrollment (2014 – 2015 School Year)

Total Students	Males	Females	Total
Billings Public Schools	1863	1691	3554
Billings Central Catholic School	164	158	322
Shepherd High School	19	14	33
Huntley Project High School	128	116	244
Total	52%	48%	4153

* The previous year's calculations contained errors and were not counting total distinct students



JOB AND WORKFORCE INDICATORS

In This Section...

Employment by Industry – Employment by industry indicates the number of individuals employed in specific industry sectors within Yellowstone's economy. These data can indicate industry growth trends over time and can inform decision makers about in demand careers and skills.

Average Annual Wage – By reviewing data on the average annual wages offered by specific industry sectors, it is possible to understand the wage dynamics within the Yellowstone County economy. These data are helpful in identifying industries which offer higher wages across all related occupations and which will have the largest impact on economic growth.

Employment by Occupation – Employment by occupation data provides an estimate of occupational concentrations within Yellowstone County's workforce. These data can be useful in understanding occupational skills sets that are available within the workforce.

Job Orders – The Montana Job Service provides job posting and screening services to local employers. Job orders represent the active job openings that employers have posted with Job Service in Yellowstone County. This serves as a proxy indicator for hiring activity in the area, but does not include job openings that employers may have posted elsewhere.

Employer Reported Indicators – During the focus groups and interviews, employers were asked to identify measures that would indicate progress was being made on the talent gaps in Yellowstone County. These indicators included Overall Quality of the Workforce, Time to Fill Job Postings, Average Number of Qualified Applicants, Improvement in Employee Retention, and the Availability of Employability Skills. The BillingsWorks Employer Survey was designed to capture data on each of these indicators and will be updated annually.



Employment and Average Annual Wage by Industry

In Yellowstone County, Healthcare and Social Assistance (13,239), Retail Trade (11,546), and Accommodation and Food Services (9,081) sectors had the highest employment in 2015.

2015 Employment by Industry Sorted by Largest Employment in Yellowstone County

NAICS	Industry	Four Quarters Ending with 2015 Yellowstone County		Four Quarters Ending with 2015 Montana	
		Avg. Annual Employment	Wages	Avg. Annual Employment	Wages
62	Health Care and Social Assistance	13,239	\$54,245	70,945	\$44,113
44	Retail Trade	11,546	\$30,037	62,001	\$27,380
72	Accommodation and Food Services	9,081	\$17,740	52,140	\$17,059
23	Construction	6,466	\$49,695	35,815	\$44,027
42	Wholesale Trade	5,576	\$56,594	17,854	\$53,698
54	Professional, Scientific, and Technical Services	5,291	\$59,309	24,750	\$57,206
61	Educational Services	4,677	\$42,668	40,070	\$38,389
48	Transportation and Warehousing	4,188	\$50,181	18,520	\$49,274
81	Other Services (except Public Administration)	3,950	\$28,319	21,030	\$26,524
92	Public Administration	3,857	\$55,102	36,920	\$47,261
31	Manufacturing	3,685	\$62,631	20,870	\$45,413
56	Administrative and Support and Waste Management and Remediation Services	3,664	\$29,343	19,773	\$30,526
52	Finance and Insurance	3,038	\$68,614	16,134	\$60,006
71	Arts, Entertainment, and Recreation	2,145	\$19,343	13,721	\$22,109
51	Information	1,359	\$46,905	6,866	\$46,364
53	Real Estate and Rental and Leasing	1,338	\$45,848	7,689	\$38,230
11	Agriculture, Forestry, Fishing and Hunting	919	\$35,947	17,604	\$36,287
55	Management of Companies and Enterprises	606	\$73,026	2,044	\$74,167
21	Mining, Quarrying, and Oil and Gas Extraction	571	\$113,564	7,775	\$86,305
22	Utilities	322	\$101,218	3,461	\$80,236
99	Unclassified	10	\$14,106	168	\$73,845
	Total – All Industries	85,526	\$44,333	496,151	\$39,700
	Total Private Employment	71,904	\$43,688	366,466	\$38,672
	Total Government	8,478		82,913	
	Federal Government	1,689	\$72,566	13,033	\$63,956
	State Government	1,611	\$44,536	23,608	\$46,406
	Local Government	5,178	\$46,231	46,272	\$38,627

Source: JobsEQ®

Data as of 2015Q4

Note: Figures may not sum due to rounding.



For all industries, the average annual wage in Yellowstone County was \$44,333 dollars compared to \$39,700 for all of Montana. The Mining sectors offered the highest average annual wage by far (\$113,564), followed by Utilities (\$101,218) and Management of Companies and Enterprises (\$73,026). Accommodation and Food Service (\$17,740), and Arts Entertainment, and Recreation (\$19,343) provided a lower average annual wage.

2015 Employment by Industry Sorted by Largest Highest Average Annual Wages in Yellowstone County

NAICS	Industry	Four Quarters Ending with 2015 Yellowstone County		Four Quarters Ending with 2015t Montana	
		Avg. Annual Employment	Wages	Avg. Annual Employment	Wages
21	Mining, Quarrying, and Oil and Gas Extraction	571	\$113,564	7,775	\$86,305
22	Utilities	322	\$101,218	3,461	\$80,236
55	Management of Companies and Enterprises	606	\$73,026	2,044	\$74,167
52	Finance and Insurance	3,038	\$68,614	16,134	\$60,006
31	Manufacturing	3,685	\$62,631	20,870	\$45,413
54	Professional, Scientific, and Technical Services	5,291	\$59,309	24,750	\$57,206
42	Wholesale Trade	5,576	\$56,594	17,854	\$53,698
92	Public Administration	3,857	\$55,102	36,920	\$47,261
62	Health Care and Social Assistance	13,239	\$54,245	70,945	\$44,113
48	Transportation and Warehousing	4,188	\$50,181	18,520	\$49,274
23	Construction	6,466	\$49,695	35,815	\$44,027
51	Information	1,359	\$46,905	6,866	\$46,364
53	Real Estate and Rental and Leasing	1,338	\$45,848	7,689	\$38,230
61	Educational Services	4,677	\$42,668	40,070	\$38,389
11	Agriculture, Forestry, Fishing and Hunting	919	\$35,947	17,604	\$36,287
44	Retail Trade	11,546	\$30,037	62,001	\$27,380
56	Administrative and Support and Waste Management and Remediation Services	3,664	\$29,343	19,773	\$30,526
81	Other Services (except Public Administration)	3,950	\$28,319	21,030	\$26,524
71	Arts, Entertainment, and Recreation	2,145	\$19,343	13,721	\$22,109
72	Accommodation and Food Services	9,081	\$17,740	52,140	\$17,059
99	Unclassified	10	\$14,106	168	\$73,845

Source: JobsEQ®

Data as of 2015Q4

Note: Figures may not sum due to rounding.



Employment and Wages by Occupation

The largest occupational group in the Billings MSA by employment numbers is Office and Administrative Support Occupations which employs 12,944 individuals or 15% of the total employment. This is followed by Sales and Related Occupations (10,970), Food Preparation and Serving Related Occupations (9,064), and Healthcare Practitioners and Technical Occupations (5,514).

2015 Employment by Occupation Sorted by Largest Employment in Yellowstone County 2015 Employment by Occupation for Billings MSA

SOC	Title-Occupation	Empl.	Annual Mean Wage	Hourly Mean Wage	% of Total Empl.
43-0000	Office and Administrative Support Occupations	12,944	\$33,100	\$15.91	15%
41-0000	Sales and Related Occupations	10,970	\$35,100	\$16.87	12%
35-0000	Food Preparation and Serving Related Occupations	9,064	\$20,900	\$10.04	10%
53-0000	Transportation and Material Moving Occupations	6,727	\$36,800	\$17.69	8%
29-0000	Healthcare Practitioners and Technical Occupations	5,514	\$73,000	\$35.09	6%
11-0000	Management Occupations	5,320	\$89,300	\$42.93	6%
47-0000	Construction and Extraction Occupations	5,246	\$43,700	\$21.00	6%
49-0000	Installation, Maintenance, and Repair Occupations	4,194	\$44,000	\$21.15	5%
25-0000	Education, Training, and Library Occupations	3,678	\$45,200	\$21.73	4%
13-0000	Business and Financial Operations Occupations	3,674	\$63,800	\$30.67	4%
51-0000	Production Occupations	3,631	\$37,300	\$17.93	4%
39-0000	Personal Care and Service Occupations	3,326	\$24,900	\$11.97	4%
37-0000	Building and Grounds Cleaning and Maintenance Occupations	3,177	\$25,400	\$12.21	4%
31-0000	Healthcare Support Occupations	2,617	\$28,700	\$13.79	3%
15-0000	Computer and Mathematical Occupations	1,801	\$64,700	\$31.10	2%
33-0000	Protective Service Occupations	1,513	\$36,400	\$17.50	2%
17-0000	Architecture and Engineering Occupations	1,464	\$70,700	\$33.99	2%
21-0000	Community and Social Service Occupations	1,365	\$38,600	\$18.55	2%
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	1,271	\$38,300	\$18.41	1%
23-0000	Legal Occupations	618	\$64,100	\$30.81	1%
19-0000	Life, Physical, and Social Science Occupations	587	\$75,500	\$36.29	1%
45-0000	Farming, Fishing, and Forestry Occupations	366	\$23,800	\$11.44	0.4%
00-0000	Total – All Occupations	89,068	\$41,900	\$20.14	

Data as of 2015Q4 unless noted otherwise

Note: Figures may not sum due to rounding.

1. Occupation wages are as of 2014 and should be taken as the average for all Covered Employment



2015 Employment by Occupation
Sorted by Highest Annual Mean Wage in Yellowstone County
2015 Employment by Occupation for Billings MSA

SOC	Title-Occupation	Empl.	Annual Mean Wage	Hourly Mean Wage	% of Total Empl.
11-0000	Management Occupations	5,320	\$89,300	\$42.93	6%
19-0000	Life, Physical, and Social Science Occupations	587	\$75,500	\$36.29	1%
29-0000	Healthcare Practitioners and Technical Occupations	5,514	\$73,000	\$35.09	6%
17-0000	Architecture and Engineering Occupations	1,464	\$70,700	\$33.99	2%
15-0000	Computer and Mathematical Occupations	1,801	\$64,700	\$31.10	2%
23-0000	Legal Occupations	618	\$64,100	\$30.81	1%
13-0000	Business and Financial Operations Occupations	3,674	\$63,800	\$30.67	4%
25-0000	Education, Training, and Library Occupations	3,678	\$45,200	\$21.73	4%
49-0000	Installation, Maintenance, and Repair Occupations	4,194	\$44,000	\$21.15	5%
47-0000	Construction and Extraction Occupations	5,246	\$43,700	\$21.00	6%
21-0000	Community and Social Service Occupations	1,365	\$38,600	\$18.55	2%
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	1,271	\$38,300	\$18.41	1%
51-0000	Production Occupations	3,631	\$37,300	\$17.93	4%
53-0000	Transportation and Material Moving Occupations	6,727	\$36,800	\$17.69	8%
33-0000	Protective Service Occupations	1,513	\$36,400	\$17.50	2%
41-0000	Sales and Related Occupations	10,970	\$35,100	\$16.87	12%
43-0000	Office and Administrative Support Occupations	12,944	\$33,100	\$15.91	15%
31-0000	Healthcare Support Occupations	2,617	\$28,700	\$13.79	3%
37-0000	Building and Grounds Cleaning and Maintenance Occupations	3,177	\$25,400	\$12.21	4%
39-0000	Personal Care and Service Occupations	3,326	\$24,900	\$11.97	4%
45-0000	Farming, Fishing, and Forestry Occupations	366	\$23,800	\$11.44	0.4%
35-0000	Food Preparation and Serving Related Occupations	9,064	\$20,900	\$10.04	10%
00-0000	Total – All Occupations	89,068	\$41,900	\$20.14	

Source: JobsEQ®



Occupational Projections for Yellowstone County

The chart below shows occupation projections sorted by the largest total average annual openings. Of note is that in 22 out of 23 occupation categories (96%) had larger replacement openings (retirements) than growth openings (new positions). The exception was Computer and Mathematical Occupations which had slightly more growth openings (301) than replacement (287).

Occupations projected to have the highest growth percentages are Construction and Extraction Occupations (25% 1,851 total openings), Healthcare Support Occupations (23%, 1,182 total openings) and there were four occupations that tied for third place with 18% growth: Computer and Mathematical Occupations, Personal Care and Service Occupations, Healthcare Practitioners and Technical Occupations.

The occupations with the highest job growth openings were: Sales and Related Occupations (1,047 total growth openings, 3,694 replacement), Healthcare Practitioners and Technical Occupations (960 total growth openings, 2,214 replacement) and Construction and Extraction Occupations (1,031 total growth openings, 1,851 replacement).

The occupations projected to have the highest total employment in 2025 are Office and Administrative Support Occupations (13,551 total employment), Sales and Related Occupations (12,018 total employment) and Food Preparation and Serving Related Occupations (9,870 total employment).

**2014 – 2025 Occupation Projections for Yellowstone County
Sorted by Total Average Annual Openings over the Next 10 Years**

2014–2025 Occupational Projections for Billings, MT, MSA		Employment		Change		Average Annual Openings Over the Next 10 Years		
SOC	Occupation	2014	2025	#	%	Growth	Replace	Total
41-0000	Sales and Related Occupations	10,783	12,018	1,235	12%	1,047	3,694	4,471
35-0000	Food Preparation and Serving Related Occupations	8,735	9,870	1,135	13%	806	3,617	4,423
43-0000	Office and Administrative Support Occupations	12,718	13,551	833	7%	608	2,962	3,570
11-0000	Management Occupations	5,138	5,728	590	11%	408	1,884	2,292
53-0000	Transportation and Material Moving Occupations	6,625	7,219	594	9%	492	1,789	2,281
29-0000	Healthcare Practitioners and Technical Occupations	5,486	6,473	987	18%	960	1,254	2,214
47-0000	Construction and Extraction Occupations	4,863	6,067	1,204	25%	820	1,031	1,851
49-0000	Installation, Maintenance, and Repair Occupations	4,059	4,637	578	14%	443	1,064	1,507
39-0000	Personal Care and Service Occupations	3,231	3,822	591	18%	495	991	1,486
13-0000	Business and Financial Operations Occupations	3,586	4,117	531	15%	443	865	1,308
25-0000	Education, Training, and Library Occupations	3,744	4,080	336	9%	402	832	1,234
31-0000	Healthcare Support Occupations	2,596	3,204	608	23%	587	595	1,182

continued next page



2014 – 2025 Occupation Projections for Yellowstone County
 Sorted by Total Average Annual Openings over the Next 10 Years *(continued from previous page)*

2014–2025 Occupational Projections for Billings, MT, MSA		Employment		Change		Average Annual Openings Over the Next 10 Years		
SOC	Occupation	2014	2025	#	%	Growth	Replace	Total
51-0000	Production Occupations	3,585	3,760	175	5%	129	1,030	1,159
37-0000	Building and Grounds Cleaning and Maintenance Occupations	3,091	3,506	415	13%	329	752	1,081
15-0000	Computer and Mathematical Occupations	1,774	2,101	327	18%	301	287	588
21-0000	Community and Social Service Occupations	1,355	1,579	224	17%	215	311	526
17-0000	Architecture and Engineering Occupations	1,431	1,601	170	12%	138	376	514
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	1,248	1,307	59	5%	36	464	500
33-0000	Protective Service Occupations	1,484	1,618	134	9%	105	357	462
19-0000	Life, Physical, and Social Science Occupations	577	652	75	13%	65	190	255
45-0000	Farming, Fishing, and Forestry Occupations	330	367	37	11%	0	211	211
23-0000	Legal Occupations	604	678	74	12%	60	127	187
00-0000	Total – All Occupations	87,043	97,955	10,912	13%	8,887	24,685	33,572

Source: JobsEQ®

Data as of 2015Q2 unless noted otherwise Note: Figures may not sum due to rounding.

1. Occupation wages are as of 2014 and should be taken as the average for all Covered Employment



Job Orders

The Montana Job Service provides job posting and screening services to local employers. Job orders posted through Job Service averaged 1,186 orders per month in 2014 for a total of 14,252. According to anecdotal evidence, job orders within the system may represent approximately 25 percent of job openings in the current labor market.

Billings Job Service Job Postings for 2015

	2014	2015	
Total number of Job Orders	14,252	13,131	(1,121)
Average number of job orders per month	1,186	1094	(91.75)

EMPLOYER REPORTED INDICATOR

Overall Quality of the Workforce

According to the BillingsWork Workforce Survey, 46% of the businesses who responded reported they were confident in the overall quality of the workforce, while the other half cited the opposite opinion. Digging more deeply into workforce quality by industry, the top industries that were not confident in the overall quality of the workforce were: Information (IT, media, telecommunications), Accommodations and Food Service, Construction and Finance, insurance, and real estate.



Survey Question Segmented by Industry

I am confident in the overall quality of the workforce that is present in Yellowstone County.

Industry	Strongly Disagree + Disagree	Strongly Agree + Agree
Information (IT, media, telecommunications)	75%	25%
Accommodations and Food Service	74%	22%
Construction	63%	37%
Finance, insurance, and real estate	59%	41%
Health Care and social assistance	56%	44%
Transportation, warehousing, wholesale trade	54%	39%
Retail trade	52%	48%
Professional, scientific, and technical services (engineering, architects, staffing agencies)	51%	49%
Government	50%	50%
Manufacturing	42%	58%
Energy	25%	75%
Education	23%	69%
Utilities	0%	75%



Average Time to Fill Job Postings

Among all survey respondents, 90% fill vacancies in entry level/ support positions within three months, while only around 60% respondents are able to fill the other three job categories (professional positions, technical positions, and skilled trade positions) within this time frame.

Average Time to Fill Job Postings Over the Last Year

	1 day – 45 days	45 days – 3 months	Greater than 3, but less than 4 months	4 months – 6 months	More than 6 months	Not applicable
Entry level/support positions	68%	22%	3%	3%	4%	
Skilled Trade positions	37%	32%	10%	10%	11%	
Technical positions	33%	33%	16%	9%	9%	
Professional positions	32%	33%	10%	11%	15%	

Source: 2016 BillingsWorks Employer Survey

Average Number of Qualified Job Applicants

Across all skill levels, a larger percentage of employers saw the average number of qualified job applicants decrease over the last year.

Average Number of Qualified Job Applicants Compared to the Previous Year

	Increased	Decreased	Remained the same
Entry level/support positions	20%	33%	47%
Skilled trade positions	15%	40%	45%
Technical positions	12%	40%	48%
Professional positions	11%	26%	40%

Source: 2016 BillingsWorks Employer Survey



Employee Retention

Employers reported small improvements in employee retention over the last year. Professional positions had the highest rate of improvement at 29%, while entry-level/support positions saw the lowest rate of improvement at 23%.

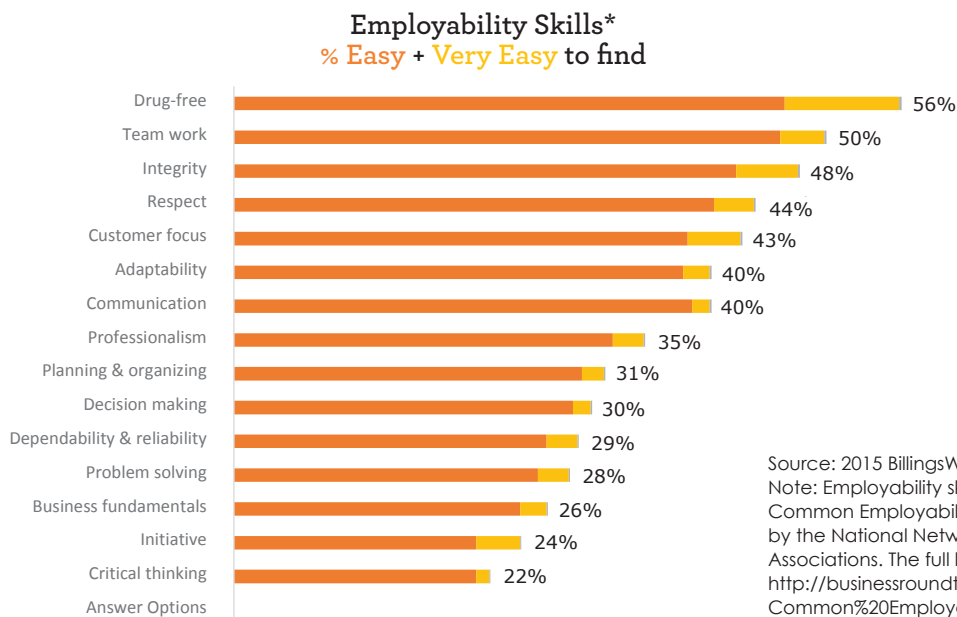
Percent of Employers Reporting Improvements to Employee Retention Compared to Previous Year

	2015	2016	Increase from previous year
Entry level/support positions	14%	23%	9%
Skilled trade positions	14%	25%	11%
Technical positions	18%	22%	4%
Professional positions	26%	29%	3%

Source: 2016 BillingsWorks Employer Survey

Employability Skills

Survey data suggests employers are experiencing a significant challenge finding individuals with employability skills. In 13 out of the 15 categories survey respondents stated that they had problems finding candidates in most of the following employability skills, except drug-free and team work.



Source: 2015 BillingsWorks Employer Survey
Note: Employability skills sourced from the Common Employability Skills framework developed by the National Network of Business and Industry Associations. The full list of skills can be found at http://businessroundtable.org/sites/default/files/Common%20Employability_asingle_fm.pdf.

BillingsWorks Workforce Council Action Plan and Progress Update

MISSION AND VISION

BillingsWorks Workforce Council Mission

Cooperatively identify workforce issues, establish goals, develop and implement strategies, and monitor outcomes to address near and long-term workforce needs to achieve our 2023 workforce vision.

BillingsWorks Workforce Council Vision

We will be the premier business-driven workforce development hub in our economic development region by 2023.

FOUR STRATEGIC GOALS

Goal 1: Position the BillingsWorks Workforce Council as the tool for collaboration, accountability, and reporting related to workforce needs and as the go-to resource for workforce development information, coordination, and connections.

Goal 2: Address the immediate and sector-specific talent development and talent attraction needs of Yellowstone County businesses.

Goal 3: Ensure the alignment of our post-secondary education, career and technical education, and K-12 education and training systems with current and future workforce demand.

Goal 4: Develop a talent attraction campaign that promotes the benefits of living and working in Billings and Yellowstone County.



GOAL 1

Position the BillingsWorks Workforce Council as the tool for collaboration, accountability, and reporting related to workforce needs and as the go-to resource for workforce development information, coordination, and connections

BillingsWorks represents a great network of system partners and resources that can collectively address most talent development needs identified by business and industry. As a one-stop shop for the myriad of resources, programs, and services, BillingsWorks offers employers and community leaders an efficient way of tapping into the broad spectrum of talent development information and resources. It is important to note, however, that BillingsWorks does not duplicate services or resources, but rather exists to complement and connect partners within the system.

This role as the community's "go-to" resource for talent development information and resources needs to be consistently and proactively promoted to state and local officials, businesses, and the community at large. But, maintaining and promoting the network of partners and supporting its key initiatives is no small task. It requires clear organization and dedicated staff in order to be successful.

STRATEGY 1.1 Clarify roles and responsibilities among BillingsWorks members and partner organizations

- Identify the level of commitment from different organizations including commitments of time, in-kind resources, and financial support.
- Execute a Memorandum of Understanding (MOU) among BillingsWorks partners that outlines roles and responsibilities of each partner organization.

Strategy 1.1 Progress Update

- ▶ *A Memorandum of Understanding was established with guidelines as to commitments of time, in-kind resources, and financial support.*
- ▶ *The Memorandum of Understanding was finalized and MOU agreements have been signed with 18 companies and organizations.*

STRATEGY 1.2 Establish BillingsWorks as the voice for talent development information and issues

- Develop a responsive BillingsWorks website that serves as a go-to source for talent development information, connections, and resources.
- Promote BillingsWorks and its mission to new businesses, partners and community organizations, local elected officials, and individuals.

Strategy 1.2 Progress Update

- ▶ *The website www.billingsworks.org was launched in December of 2015 and provides a source for talent attraction, information, connections, and resources.*
- ▶ *Over 40 presentations have been made to area businesses, groups and organizations in the last year promoting BillingsWorks and its efforts. Big Sky Economic Development and the Billings Chamber of Commerce have promoted BillingsWorks to their members through events, emails, board meetings and individual referrals.*



STRATEGY 1.3 Advocate for talent development opportunities and issues within the community

- Collect, compile, and disseminate data and intelligence to inform decision making and policy at the local, state, and federal level.
- Conduct the annual BillingsWorks Employer Survey to gather intelligence on key talent development issues.
- Compile the annual State of the Workforce report to monitor trends and progress on workforce indicators.
- Montana State Workforce Investment Board and the Montana Department of Labor and Industry – to position BillingsWorks as the regional convener and planning entity for local workforce development efforts in alignment with the Workforce Investment and Opportunity Act (WIOA).
- Develop an advocacy agenda which outlines BillingsWorks' key messages and target audiences including, but not limited to:
 - State higher education officials – to encourage key investments into higher education within Yellowstone County aligned with industry needs.
- Local elected officials – to secure their support and leadership for BillingsWorks goals and strategies, particularly related to the strategic imperative to strengthen quality of place.
- Area businesses and industry associations – to encourage their participation with BillingsWorks' efforts.

Strategy 1.3 Progress Update

- ▶ *The Director of BillingsWorks attended the recent State Workforce Innovation Board meeting and provided written comments for the State WIOA (Workforce Innovation and Opportunity Act) plan.*
- ▶ *At the National Workforce Association Board meeting the Director of BillingWorks met with Scott Cheney, Staff Director for the Senate HELP (Health, Education, Labor and Pensions) Subcommittee on Employment and Workplace Safety as well as Amanda Ahlstrand, an Administrator with the Office of Workforce Investment at the US Department of Labor, and other Federal level officials.*
- ▶ *Meetings have taken place with officials from the Montana Department of Labor and Industry (MTDLI). Collaborations with MTDLI are also taking place, such as the TechHire grant proposal, which is currently being evaluated by the U.S. Department of Labor.*
- ▶ *Meetings have taken place with officials from the Montana Department of Labor and Industry (MTDLI). Collaborations with MTDLI are also taking place, such as the TechHire grant proposal, which is currently being evaluated by the U.S. Department of Labor.*
- ▶ *The 2016 State of the Workforce Event was held on April 13, 2016.*
- ▶ *The 2016 State of the Workforce Report was released on May 3, 2016.*
- ▶ *Over 40 presentations have been made to area businesses, groups and organizations in the last year promoting BillingsWorks and its efforts. Emails from Big Sky Economic Development and the Billings Chamber of Commerce to their members has helped spread the word, as well as individual referrals.*
- ▶ *BillingsWorks was represented at the Board of Regents meeting in March of 2016.*
- ▶ *BillingsWorks took part in the CTE (Career and Technical Education) Review for the Billings School District, which assessed the future direction of the Career Center, and career and technical education for School District 2.*



STRATEGY 1.4 Formalize BillingsWorks organizational structure including the staffing and resource development plan

- Develop a sub-committee structure aligned to BillingsWorks four strategic goals including champions and/or co-champions for each sub-committee.
- Secure a full-time staff person to direct BillingsWorks efforts, coordinate resources, and monitor success.
- Develop a resource development plan that explores:
 - Potential federal and state grant opportunities for talent development including the Workforce Innovation and Opportunity Act.
 - Private investments from Yellowstone County businesses for special initiatives.
 - Leveraged resources from BillingsWorks member organizations.

Strategy 1.4 Progress Update

- ▶ **BillingsWorks currently has a Steering Committee and four sub-committees which are aligned to each strategic goal.**
- ▶ **On September 21, 2015 BillingsWorks hired a full time professional dedicated to workforce development. This is the first of its kind in Montana.**
- ▶ **The Director of BillingsWorks attended the National Association of Workforce Boards (NAWB) Conference in Washington D. C and was able to meet with Federal staff and talk about possible opportunities. She is also receiving the email notices from the Federal Government and has reviewed several possible opportunities. One large issue will be funding for grant writing assistance. The writing of the Tech Hire grant was a significant investment of time which displaced other efforts.**
- ▶ **For the Tech Hire grant application, 21 businesses pledged leveraged resources of staff time, training and expertise towards the effort.**



GOAL 2

Address the immediate and sector-specific talent development and talent attraction needs of Yellowstone County businesses

Businesses in Yellowstone County currently have significant talent needs that require immediate attention. While long-term strategies are important for future growth and vitality in the community, the ability of BillingsWorks to be a resource for companies' immediate needs will ensure they remain competitive and poised for growth. Therefore, a mechanism to address these immediate talent needs is necessary.

BillingsWorks has successfully used the WorkNow Resource Team to respond to employers' short-term needs. In the WorkNow Resource Team model, subject matter experts come together to provide a rapid and comprehensive solution for the business that leverages any and all resources that are available from community partners and programs. These WorkNow Resource Teams come together to identify solutions at no cost to the employer.

One of the greatest assets BillingsWorks offers to businesses and the community is its network of partners. There are few, if any, pieces of the talent development system that are not connected to the BillingsWorks Workforce Council and its members. These formal and informal connections are an important element in addressing employers' immediate needs. A mechanism or systematic way of sharing information about workforce needs will facilitate efficient solutions that build on all members' knowledge, resources, and networks.

STRATEGY 2.1

Expand the WorkNow model to other sectors and to include additional partners that can provide access to services or new talent pools

- Review successful WorkNow experiences and define key steps and processes.
- Establish WorkNow resource teams for target industries that are ready to respond as needs arise.
- Provide training to all members of the WorkNow teams based on the steps and processes defined through previous WorkNow successes.
- Map existing resources and services to tap into as immediate business needs arise to increase team member awareness of partners' services and resources.

Strategy 2.1 Progress Update

- ▶ **The WorkNow process was better defined and put into place in December of 2015.**
- ▶ **An addition to the process was the creation of the HR Toolkit and presentation, which helps employers with their recruiting and hiring process. This Toolkit is the first step in the WorkNow process and the referred employers' have expressed their needs were met through this resource.**
- ▶ **The HR Toolkit has been used by other Big Sky Economic Development programs as a resource for businesses with hiring issues.**
- ▶ **Employers are asking for more specific workshops and resources (ex: toolkit, information about job postings) for BillingsWorks to provide. The Director of BillingsWorks has given 3 training workshops focused around HR and recruiting tactics, and additions to the HR Toolkit are planned.**



STRATEGY 2.2

Secure tools and/or technology to equip BillingsWorks and Yellowstone County's talent development system to provide immediate solutions for businesses' workforce needs

- Create an information sharing mechanism and protocols to leverage the network of BillingsWorks partners to connect job seekers to employment opportunities.
- Research and secure software to identify transferrable skills sets among existing talent to broaden the pool of talent available for Yellowstone County businesses.

Strategy 2.2 Progress Update

- ▶ *BillingsWorks has helped promote open jobs on their social media pages, as well as providing links to top job boards, such as the Billings Chamber of Commerce Job Board, from around the Billings area.*
- ▶ *JobsEQ was purchased by Big Sky Economic Development, which provides workforce data and resource information. Training is ongoing to identify how this could be used to assist employers identify transferable skill sets in the local talent pool.*

GOAL 3

Ensure the alignment of our higher education, career and technical education, and K-12 education and training systems with current and future workforce demand

Billings' education and training partners are the community's greatest asset in addressing the long-term needs of business and industry. It is imperative, then, that the programs and curricula offered at these institutions are aligned to current and future workforce demand. As the go-to resource for workforce development information, BillingsWorks will have access to the latest and most in depth intelligence of the workforce needs. This information will be invaluable to the community's education and training providers in developing curriculum, launching new programs, and helping their students prepare for and transition to careers. For example, the training analysis conducted as part of this report found specific training and education gaps for healthcare, IT, and skilled trades positions.

BillingsWorks Workforce Council envisions a state-of-the-art campus for a Career & Talent Academy that promotes synergy among K-12 education, post-secondary education, and adult worker training. The Career & Talent Academy would provide a joint campus for the Billings Career Center, City College, and potentially other community partners such as Job Service or adult education providers.

The Career & Talent Academy concept would allow students to earn a high school diploma, industry-recognized credentials, and an Associate's degree in one location. Further, articulation agreements and dual-credit opportunities will be available to facilitate a seamless transition from K-12 to post-secondary education. This will help individuals accelerate their pathway into careers by eliminating remedial coursework and ensuring all credits align to credentials and/or degrees. Businesses will be engaged to develop industry-specific curriculum that aligns directly with their skill needs and emerging technologies.

Just as students sometimes face challenges transitioning from secondary to postsecondary education and training, the transition from school to work can also be challenging. Work-and-learn opportunities help to smooth a student's connection to the labor market and address a number of opportunities and challenges identified in the State of the Workforce report. They provide career exposure and awareness to emerging talent, allow young people to develop employability skills, connect businesses and talent for future employment opportunities, and provide a mechanism for technical and industry-specific skill development. For these reasons, a "work-and-learn hub" will facilitate more linkages among employers, individuals, and community partners and will result in an increase in meaningful work-and-learn opportunities.



STRATEGY 3.1

Gather and share information to support Yellowstone County's universities, career and technical education providers, and K-12 systems to align with workforce demand and skill needs

- Host quarterly "sector partnership" meetings to gather information about skill gaps, workforce trends, and future education/training needs to inform all levels of education.
- With insights from the annual BillingsWorks Employer Survey and ongoing "sector partnership" meetings, update the Billings training profile and gap analysis annually to identify new or updated degree/certificate programs needed.
- Provide a semi-annual briefing to the community's post-secondary education, K-12, and adult education on the latest workforce intelligence, industry trends, and program needs.
- Working with education and training providers, identify the advocacy, funding, and/or programmatic support that is needed to align programs at the following education levels:
 - Bachelor degrees and above;
 - Associate degrees;
 - Career and technical education and industry recognized credentials; and
 - Foundational academic and employability skills.

Strategy 3.1 Progress Update

- ▶ **Local education leaders have reported using the 2015 State of the Workforce report as a resource in their planning and assessment processes. For the 2016 report, BillingsWorks again held industry focus groups to gather detailed feedback from local employers about the education needs of the IT, Hospitality/Retail, Energy/Manufacturing/Engineering, and Healthcare/Assisted Living industries. Along with the information gathered from the 2016 Employer Survey, this focus group input is compiled into the 2016 State of the Workforce Report. The report will be distributed to all local and state education leaders.**
- ▶ **The State of the Workforce Event was held April 13, 2016 and briefed the community on the latest workforce intelligence gathered through the 2016 Employer Survey and 2016 State of the Workforce Report.**
- ▶ **Several pilot projects are in the beginning stages in the healthcare and IT industries, with the Career Center and City College. In addition, grant funds have been applied for as part of a State of Montana application to the U.S. Department of Labor to assist training needs in the IT industry (Tech Hire Grant).**



STRATEGY 3.2

Establish a campus for a Career & Talent Academy that promotes synergy among City College, Career Center, and state and private sector partners and accelerate the talent pipeline

- Define the program(s) to be offered at the Career & Talent Academy campus
 - Align Billings Career Center and City College programs toward Big Sky Pathways and future program ideas to be offered at the Career & Talent Academy considering:
 - Dual credits and articulations agreements available to accelerate completion.
 - Industry-recognized credentials and/or degrees earned along the career paths.
 - Industry engagement throughout all levels of curriculum design and implementation (i.e. employers should inform the curriculum and participate in implementation by providing work-and-learn opportunities or in-classroom engagements).
 - Embedded work-and-learn opportunities for all students of the Career & Talent Academy (see Strategy 3.3).
 - Identify ways to link elementary and middle schools to the Career & Talent Academy for early exposure to career paths and to promote the Career & Talent Academy as a “cool” place to launch their future careers.
- Conduct due diligence into the feasibility of establishing a campus for the Career & Talent Academy.
 - Research best practices from other communities that have similar academy models.
 - With the programs defined, determine the physical infrastructure that will be needed for the Career & Talent Academy including facility renderings and equipment needs for a joint campus facility(ies).
 - Develop a cost estimate and the return-on-investment (ROI) for the community.
 - Identify potential sources of funding for the Career & Talent Academy campus.
- Garner community buy-in from education partners, local and state officials, business and industry, and the community at-large.
 - Conduct outreach to local companies to understand their willingness to engage with the Career & Talent Academy and hire from this new talent pool for entry-level career opportunities.
 - Secure support from community organizations and partners from tribal communities, local unions, industry associations, and community-based organizations.

Strategy 3.2 Progress Update

- ▶ **BillingsWorks has established a working relationship with the Career Center head, Scott Anderson through pilot-project meetings and discussions. In addition, BillingsWorks convened a special meeting to assist the Career Center with their strategic planning efforts. This meeting provided a starting point for identifying potential future partnerships and programs.**
- ▶ **A relationship has been established with Harold Olsen, the new head of dual enrollment for MSU Billings/City College.**
- ▶ **The Director of BillingsWorks gained knowledge of “best practices” for work and learn opportunities from around the country at the National Association of Workforce Boards Convention. These “best practice” programs have monies to help cover 50% to 90% of the employees’ wages during the training period. In order to implement such programs, BillingsWorks will need to seek out and secure funding for this type of effort (such as the Tech Hire grant). Grant funds are a possibility, but will require additional resources (i.e. grant writer) to be feasible.**
- ▶ **BillingsWorks took part in the CTE (Career and Technical Education) Review for the Billings School District, which assessed the future direction of the Career Center, and career and technical education for School District 2.**



STRATEGY 3.3

Advocate for local education and training programs that align with Yellowstone County's workforce demands

- Utilizing information gathered through Strategy 3.1, advocate to the Montana State University system and the Office of the Commissioner of Higher Education for new and/or updated programs identified through the annual gap analysis. Immediately, pursue the development of the Associate of Science in Nursing (ASN) to Bachelor of Science in Nursing (BSN) completion program at Montana State University – Billings.
- Once the Career & Talent Academy program(s) is defined, meet with the Montana Office of Public Instruction, Montana State University System, and Rocky Mountain College to present plans and seek policy, financial, and/or implementation support.
- Outreach to local elected officials from Yellowstone County and the City of Billings to endorse and potentially provide funding for the Career & Talent Academy campus.

Strategy 3.3 Progress Update

- ▶ **Funding was received by MSU Billings for program planning of the Associate of Science in Nursing (ASN) to Bachelor of Science in Nursing (BSN) program. The program proposal is currently under review.**
- ▶ **Several potential new programs or program updates have been identified in the IT and healthcare field and are in the beginning stages of development with MSU Billings/City College.**
- ▶ **Meetings have been on-going with the leaders of local education institutions, including the Career Center, Schools District #2, MSU Billings, City College and Rocky Mountain College, with the goal of encouraging greater industry alignment.**

STRATEGY 3.4

Provide a “work-and-learn hub” that links employers, individuals, and schools for smooth work-and-learn connections that increase career awareness and connect emerging talent to career opportunities in Yellowstone County

- Build a specialized work-and-learn page within the BillingsWorks website that facilitates connections among businesses, emerging talent, and schools focused on work-and-learn opportunities that increase career awareness.
 - The “work-and-learn hub” will provide the following functionality:
 - Employers can post/advertise work-and-learn opportunities;
 - Individuals can research work-and-learn opportunities well-suited for their career interests and access information about how to apply and/or participate in these work-and-learn opportunities; and
 - Schools and community-partners can identify ways for business and industry to become involved in the classroom and/or access resources to support their work-and-learn opportunities.
 - Establish a commitment from MSU – Billings, Rocky Mountain College, and Billings Career Center to jointly support and utilize the “work-and-learn hub.”
 - Promote the “work-and-learn hub” to the business community, individuals, and all education stakeholders.
- Embed employability skill development into all work-and-learn models provided in Yellowstone County
 - Leverage the National Network of Business and Industry Association's Common Employability Skills framework to establish a common definition of “employability” among all sectors.
 - Enhance learning occurring during work-and-learn experiences by embedding the Common Employability Skills standards in training plans, resources for employers, and by providing best practices via the “work-and-learn hub.”



- Provide resources for employers to develop work-and-learn opportunities at their companies
 - Define work-and-learn models that facilitate career awareness and develop connections between young people and employers in the Billings community. These may include, but are not limited to:
 - Short-term externships and job shadowing experiences;
 - Internships;
 - Co-operative education;
 - Pre-apprenticeships;
 - Apprenticeships; and
 - On-the-job training.
 - Develop an employer toolkit that outlines the steps to launch the work-and-learn model(s) that best suits their objectives and capacities. At a recent City College Advisory board meeting this was chosen as a focus for their efforts. Billings Works will be an active participant in this process.
 - Provide technical assistance to businesses that are launching work-and-learn opportunities via the “work-and-learn hub.” This may include one-on-one coaching for businesses, templates for job descriptions and/or training plans, or videos and webinars on attracting and working with emerging talent.

Strategy 3.4 Progress Update

- ▶ *The Internship program successfully completed its first trial cohort of 6 students in the Spring 2016 semester.*
- ▶ *The internship program has developed community networking events in order to further develop employability skills and opportunities for connections within the Billings business community. The goal is to provide a minimum of 20 networking opportunities each semester.*
- ▶ *A work-and-learn page within the BillingsWorks website that connects businesses and college students for internships was started as a first step in the overall development of the intern portal on the website. The goal is to attract a minimum of 20 businesses per semester with interest in the BillingsWorks intern program; placing 10 interns each semester.*
- ▶ *The Director of BillingsWorks gained knowledge of “best practices” for work and learn opportunities from around the country at the National Association of Workforce Boards Convention. These “best practice” programs have monies to help cover 50% to 90% of the employees’ wages during the training period. BillingsWorks will need to seek out and secure funding for these training funds, such as the Tech Hire grant, in order to implement successful programs. Grant funds are a possibility, but will require additional resources (ie: grant writer) to be feasible.*

VARIOUS WORK-AND-LEARN MODELS

Many stakeholders are familiar with the internship model, but there are a number of different work-and-learn models that help employers and individuals meet their objectives. The different models can range from short-term externships to multi-year approaches.

Externship: Externships are short-term in nature and aimed at career exploration. These can include one-day job shadowing experiences or spending up to a few weeks with a company.

Internship: Interns work at a company for a limited period of time for career exploration and experience, skill development, and networking.

Cooperative Education: Co-ops provide occupational preparation, with classroom-based education and work experience.

On-the-job Training (OJT): OJT is individualized training at a job site aimed at increasing employee skills.

Clinical Training: Tied to occupational study and worksite training with an examination often required for licensure.

Pre-Apprenticeship: Part-time apprenticeship programs through school-based and work-based learning focused on career counseling, occupational and academic instruction.

Apprenticeship: On-the-job training with accompanying study for a trade/profession resulting in a national industry certification with wage increases along the way.



GOAL 4

Launch a talent attraction campaign that promotes the benefits of living and working in Billings and Yellowstone County

The State of the Workforce findings established that the talent pool is shallow in Yellowstone County. It is imperative, then, that Billings and Yellowstone County launch a proactive talent attraction strategy to encourage highly-skilled individuals to move to Billings and bring their talents to the community.

From focus groups and interviews during the strategic planning process, it became clear that individual businesses are already conducting on-going talent recruitment efforts targeted toward individuals not just outside of Yellowstone County, but also targeted toward talent outside of Montana. A collective talent attraction strategy will support these efforts which, over time, will decrease the cost to individual employers and increase the volume of skilled talent available to them.

STRATEGY 4.1

Develop the content and key messages of the talent attraction campaign

- Determine the target audiences and key messages/reasons for locating in Billings/Yellowstone County for each
- Brand the talent attraction campaign to be appealing to target audiences and to ensure consistent promotion by all stakeholders.
 - Determine the marketing and promotional plan for the talent attraction campaign considering:
 - Opportunities to disseminate information to key audiences (i.e. original Montanans looking to return home, specific skill sets/industry experience, etc.),
 - Opportunities to share information to visitors and tourists, and
 - Opportunities to leverage social media.

Strategy 4.1 Progress Update

- ▶ ***In December of 2015 BillingsWorks launched www.YourDreamCareerIsHere.com, in partnership with the Billings Chamber of Commerce. This talent attraction website was the first for a city in the State of Montana. Featured on the site are videos of local residents, giving the personal perspective of what it is like to live and work in Billings, Montana.***
- ▶ ***Based on recruitment trends and demographics the target audience was segmented into:***
 - ***Young adults or those from the Millennial generation: Before individuals buy a house or have children they are very mobile and may move multiple times before settling on a location.***
 - ***Adults that move due to specific job opportunities: Certain industries in Billings (specifically the energy and engineering industries) recruit individuals from out of the area on a consistent basis.***
 - ***Individuals looking to return to Montana to raise their family or be closer to family: While a large segment of individuals who grew up in Montana move away, there often becomes a point they want to return to Montana.***
 - ◆ ***Wanting to raise their children in a similar way and environment to the one they were raised in.***
 - ◆ ***Wanting to be closer to family members, either due to aging parents or to create closer family bonds with their children.***
- ▶ ***The brand “Your Dream Career is Here” was created. Visually the look of the logo is similar to that of the community brand for Billings – staying similar to the “Visit Billings” (Billings Chamber of Commerce – tourism) and “Think Billings” (Big Sky Economic Development – business recruitment).***
 - ***The brand signifies the importance of the work life balance here in Billings, Montana, where your dream career is about more than just your job but also the environment in which you live.***



STRATEGY 4.2

Launch an online talent attraction site that promotes the benefits of living and working in Billings/Yellowstone County

- Research best practices from other communities such as Boise Valley, ID (growideashere.com) and West Michigan (hellowestmichigan.com).
- Secure design and development expertise to develop and launch the site.
- In the site, include linkages to real-time job opportunities available in Yellowstone County.

Strategy 4.2 Progress Update

- ▶ *In December of 2015 BillingsWorks launched www.YourDreamCareersHere.com. This talent attraction website was the first for a city in the State of Montana. Featured on the site are videos of local residents, giving the personal perspective of what it is like to live and work in Billings, Montana.*
- ▶ *Multiple review sessions were held with the BillingsWorks committees to refine the messages in the website. Individuals highlighted in the videos were strategically chosen to represent a range of ages, households and workers. Additional videos and messaging will continue this spring.*
- ▶ *A social media campaign launched with local Millennial “celebrities” highlighted a twist on the brand with “my dream career is here” and personal messages about why they love to live and work in Billings.*

STRATEGY 4.3

Develop a Toolkit for Talent Attraction that all stakeholders, but particularly businesses, can use when recruiting talent to Yellowstone County

- Determine the resources and supportive materials/services that are most needed by employers as they recruit talent from outside the county.
- Develop collateral materials in both print and electronic format for all stakeholders to utilize when promoting Billings and Yellowstone County.
- Share these resources with businesses, local elected officials, education providers, business and industry groups, chamber of commerce, and other stakeholders to encourage wide dissemination.

Strategy 4.3 Progress Update

- ▶ *An HR Toolkit was developed to help employers improve their recruiting and hiring processes. Several presentations and workshops have been given on this topic. Employers have expressed interest for additional training and workshops on how to market their open jobs and attract talent.*
- ▶ *BillingsWorks successfully partnered with the Billings Chamber of Commerce and Next Gen to attend the Montana State University Bozeman Career Fair. At the fair BillingsWorks had over 40 college-graduate entry level jobs to pass out to graduating seniors. The event provided the opportunity to promote not only the job opportunities, but amenities and benefits of living in Billings. The Next Gen representatives were both MSU Alumni which was key in the messaging to students (Millennials put a high value on peer reviews and endorsements) which was key in our recruitment efforts.*
- ▶ *BillingsWorks also helped to promote Billings businesses that were in attendance at the MSU event by helping guide students, based on their career goals, to various businesses.*
- ▶ *Other career fairs will be implemented in the 2017 year.*
- ▶ *BillingsWorks was a premier sponsor of the Billings Job Service Jobs Jamboree, and helped to match job seekers to businesses based on their job interests.*



COMMUNITY STRATEGIC IMPERATIVE: **Develop and implement a vision for the strategic quality of place investments for Yellowstone County that supports talent attraction and talent retention in the community**

The BillingsWorks survey and focus groups confirmed that the talent pool within the Yellowstone County is very shallow. It is imperative, then, that the community is an attractive place to live and work so new talent will relocate to the area and so that existing talent is retained in the community. Investments into a quality of place strategy will position the Billings community for private investment in the future and long-term growth.

A community-wide quality of place strategy is imperative for the overall growth of the City of Billings and Yellowstone County. BillingsWorks strongly and urgently encourages that a quality of place strategy be developed, but also recognizes that a successful strategy will require community-wide buy-in and participation. While BillingsWorks intends to be an active partner in the quality of place strategy, the Council encourages leadership from the City of Billings, Yellowstone County, the Billings Chamber of Commerce, and the Downtown Business Association to lead the development of a comprehensive plan to strengthen quality of place in Yellowstone County.

In doing so, BillingsWorks offers the following activities for consideration:

- Establish a collective vision for local quality of place strategies and investments that is shared by the City of Billings, Yellowstone County, Billings Chamber of Commerce, Big Sky Economic Development, and BillingsWorks.
 - Collect input from multiple stakeholder groups to inform the quality of place strategy which include, but are not limited to:
 - Youth;
 - Young professionals;
 - Households with children; and
 - Established workers and retirees.
 - Identify quality of place projects/initiatives to address infrastructure, housing, and cultural, civic and recreational amenities and realize the collective vision.
- Organize for implementation of the quality of place strategy.
 - Name an organization and/or individual to serve as the champion for each quality of place initiative/project as well as a small leadership team as needed.
 - Identify a funding strategy for each quality of place initiative/project.
 - Identify quality of place indicators to measure progress.
- Craft a marketing and communications plan to share the collective vision for quality of place with both internal and external stakeholders.
 - Brand Billings' quality of place so it is consistently communicated in talent attraction and retention efforts.
 - Identify audiences and key messages related to the quality of place initiatives/projects to maintain community buy-in, promote improvements, and/or attract talent to the community.

Community Strategic Imperative Progress Update:

- ▶ ***“Community Leadership” meetings are now underway with the goal of establishing a collective vision for the continued development of our community. This effort is being led by Rocky Mountain College, Billings Chamber of Commerce, Big Sky Economic Development, Billings Gazette, MSU Billings, and the Downtown Alliance. Meetings will continue through Spring and Summer 2016.***



MEASURING SUCCESS

The talent dashboard and workforce indicators included in the State of the Workforce Report provide long-term metrics of success for this plan. In the short-term, several indicators will be followed to track trends and effectiveness of programs.

Short-term Metrics for Success Employer Survey Metrics

	2015	2016	Change
Increase the overall confidence in the workforce	47%	46%	-1%
Increase the average number of qualified job applicants			
Entry-level/support positions	14%	20%	6%
Skilled trade positions	13%	15%	2%
Technical positions	11%	12%	1%
Professional positions	15%	11%	-4%
Increase availability of employability skills			
Critical thinking	16%	22%	6%
Team work	48%	50%	2%
Communication	34%	40%	6%
Respect	48%	44%	-4%
Integrity	47%	48%	1%
Initiative	21%	24%	3%
Dependability	29%	29%	0%
Adaptability	41%	40%	-1%
Professionalism	36%	35%	-1%
Planning and organizing	31%	31%	0%
Problem solving	21%	28%	7%
Decision making	21%	30%	9%
Customer focus	40%	43%	3%
Business fundamentals	23%	26%	3%
Drug-free	48%	56%	8%

Source: BillingsWorks Employer Survey



Population Metrics

	2014	2015	Change
Increase the population aged 25 – 65 in the community	79,971	80,664	693
Increase educational attainment: Associate degree or higher	36.00%	38.00%	2.00%
Labor Force	80,038	82,451	2,413
Employed	77,041	79,801	2,760
Unemployment Rate	3.7%	3.2%	-0.53%

Source: JobsEQ®



Call To Action

While the development of this State of the Workforce Report and BillingsWorks Workforce Council's Action Plan is complete, the real work for BillingsWorks and its partners is just beginning. In order to see progress on the workforce indicators included herein, all stakeholders in the community must immediately band together, roll up their sleeves, and get to work. BillingsWorks recognizes that, in addition to its workforce development, economic development, and education partners, the goals and strategies outlined in the pages above will require active participation and support from local elected officials, business owners, community-based organizations, and all citizens within the Billings community. With a plan in place to guide its work, BillingsWorks looks to engage everyone in developing a highly-skilled workforce.

In the next year we need our area businesses, individuals, community organizations, local government and education and training providers to help us address our workforce issues.

Business

We need your feedback and participation! Gathering information is often the most difficult and most important step of our process. For example: to align education with workforce demand we need detailed information about your job requirements. Without this information BillingsWorks cannot assess or implement curriculum changes to align education with your needs.

Another key area of focus is our education system, both K-12 and higher education. Business support and involvement with these institutions is key. Without direct connection and collaboration from the business community, these institutions cannot produce programs aligned to local workforce needs.

Business must act as a champion for investment in our local higher education system.

Individuals, Community Organizations and Local Government

Help make our city our best "talent attraction" strategy. Job seekers now choose a place to live first, then begin looking for jobs there. They are attracted to a city's "quality of place": It is safe and clean, has amenities such as parks and walking trails, has high quality schools, a thriving downtown, and outdoor recreation opportunities. Billings is in competition with cities like Boise, Denver and Seattle for these talented job seekers. **Making investments in our city is the best talent attraction strategy we can have!**



Education and Training Providers

The rapid pace of change in today's business environment continues to accelerate each year. As one business owner stated in the industry focus groups "If I don't offer my customers the newest online service with the most up to date technology, they quickly leave and go to my competitor. If I don't keep up, I'll be out of business." Education and training providers must also keep up with these changes in the curriculum they teach. Processes must be put in place for constant curriculum evaluation and improvement. **The ability to change and adapt curriculum to continually evolving business needs will be crucial to ensuring alignment with workforce needs.**

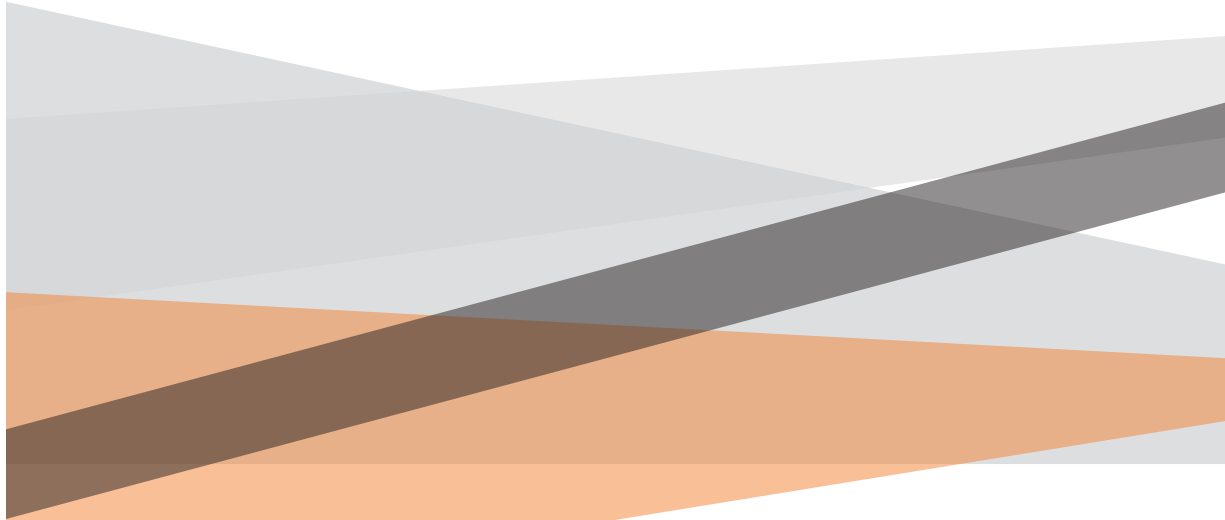


APPENDICES



Appendix A

BillingsWorks Employer Survey Analysis





BILLINGSWORKS 2016 EMPLOYER SURVEY

As part of the BillingsWorks workforce planning and analysis process, businesses in Yellowstone County were surveyed to gather insights on workforce development challenges and opportunities. The survey used was the same as the previous year, which was developed by Thomas P. Miller and Associates, LLC (TPMA) in collaboration with BillingsWorks.

The survey's goal is to identify and track trends in workforce supply and demand from a business perspective and provide participating companies with richer information in order to better plan for talent attraction and retention.

Questions focused on the following areas:

- A. Company Information and Hiring ProjectionsPage 54**
Location, role in organization, industry, number of employees, and hiring projections.
- B. Workforce Availability and QualityPage 58**
Overall workforce quality and availability, knowledge and technical skills, and employability skills.
- C. Attraction and Retention by Job CategoryPage 63**
Supply of talent by job category, length of time to fill job postings, qualified job applicants, employee retention, barriers to workforce attraction and retention.
- D. Alignment of Education and Workforce NeedsPage 72**
Alignment of education providers and workforce needs.

Survey Method

This survey was distributed by email via Survey Monkey to over three thousand businesses in Yellowstone County through Big Sky Economic Development and the Billings Chamber of Commerce.

This survey was conducted from January 4, 2016 to February 15, 2016. A total of 371 of respondents completed the survey, representing a statistically relevant sample size with a 5 percent margin of error at a 95 percent confidence level. To protect the confidentiality of the businesses that responded to the survey, results are presented in the aggregate.



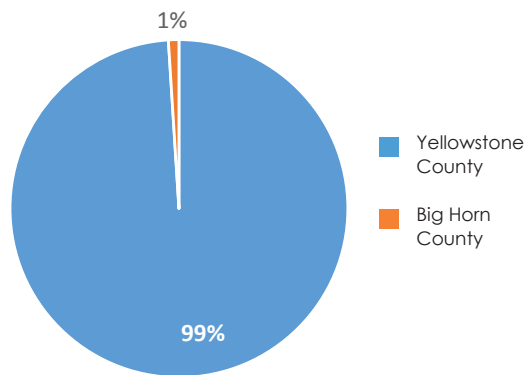
SURVEY RESULTS

A. Company Information and Hiring Projections

A1. LOCATION OF COMPANY

99% of the 371 respondents came from Yellowstone County. The other location was Big Horn County. Many employers noted they had offices in other locations such as Carbon County, Stillwater County, Mussel Shell County, Missoula County, Gallatin County and others.

Where is your company located?



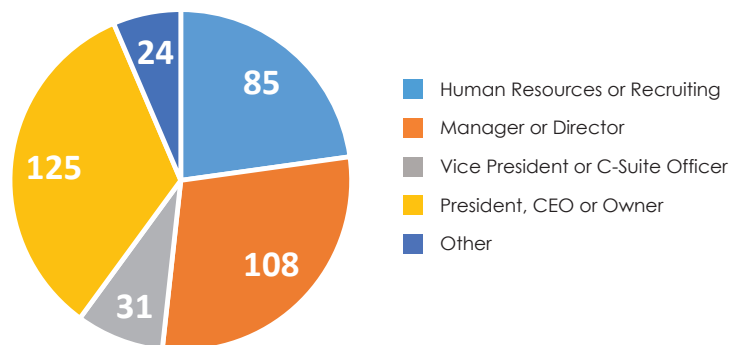
Historical change – Organization location by county

Where is your company located?	2015	2016
Yellowstone County	93%	99%
Other	7%	1%

A2. ROLE IN THE ORGANIZATION

For the first time this year the following question was asked of the person completing the survey: What is your role in the company? The largest response was President, CEO or Owner. This shows a high interest in workforce development issues by top executives.

Survey respondent role in company

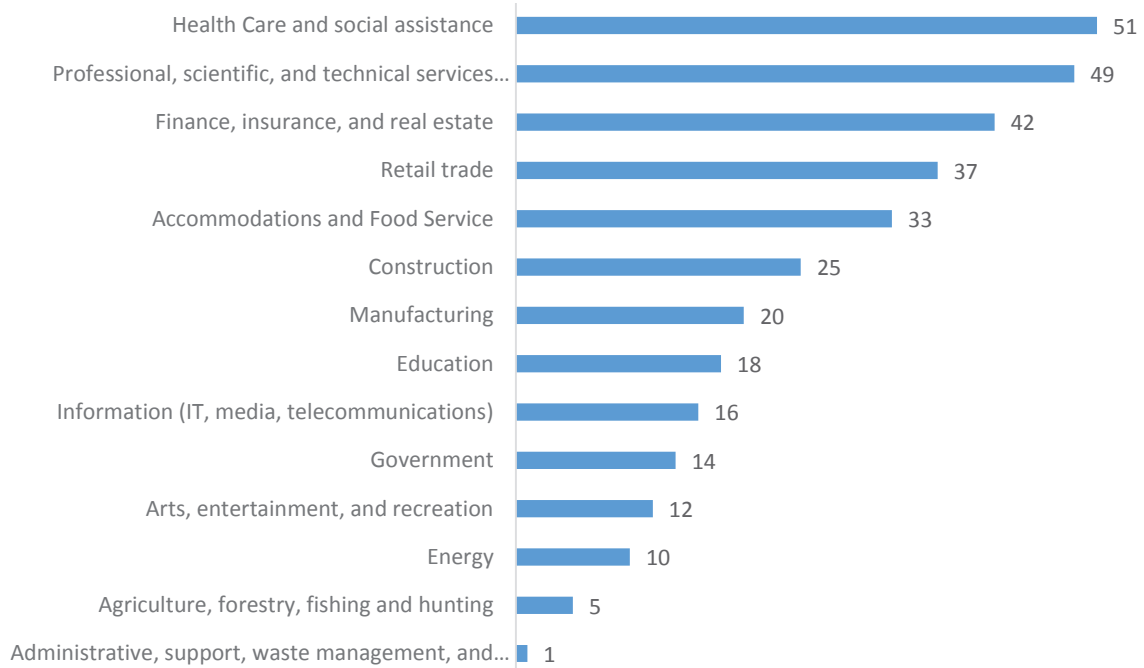




A3. ORGANIZATIONS BY INDUSTRY

The industries that offered the most responses to the survey were: Healthcare and Social Assistance, Professional, Scientific, and Technical services (engineering, architects, staffing agencies), and the Finance, Insurance, and Real Estate. Organizations that selected “other” included firms in Automotive, Commercial service, Architecture, and more (not shown in the figure). Last year only 74% (267) of survey participants answered this question, this year it rose to 100% (371) of participants.

What industry do you represent?





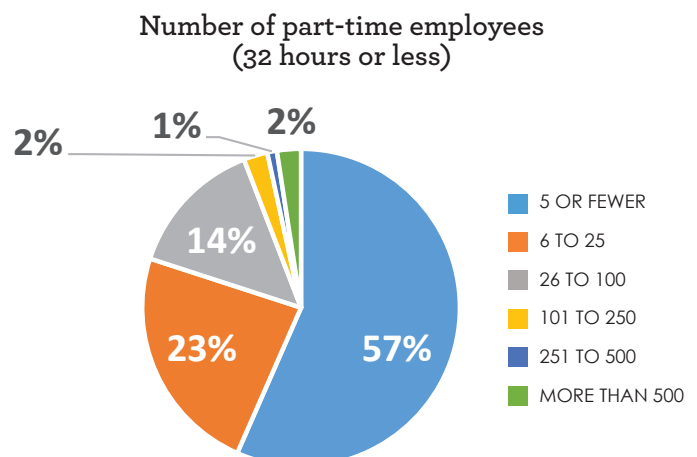
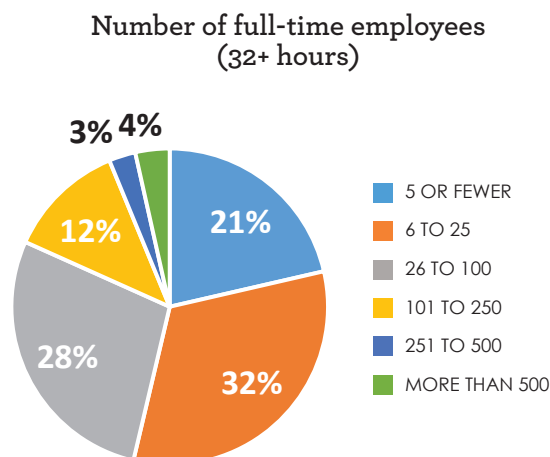
Historical change – What industry do you represent

Industry	2015	2016	Change
Health Care and social assistance	33	51	18
Professional, scientific, and technical services (engineering, architects, staffing agencies)	38	49	11
Finance, insurance, and real estate	42	42	0
Retail trade	18	37	19
Accommodations and Food Service	25	33	8
Transportation, warehousing, wholesale trade	19	32	13
Construction	34	25	-9
Manufacturing	10	20	10
Education	12	18	6
Information (IT, media, telecommunications)	4	16	12
Government	10	14	4
Arts, entertainment, and recreation	5	12	7
Energy	9	10	1
Utilities	5	6	1
Agriculture, forestry, fishing, and hunting	2	5	3
Administrative, support, waste management, and remediation services	1	1	0

A4. RESPONDING ORGANIZATIONS BY NUMBER OF EMPLOYEES

The tables below summarize the size of organizations that responded to the survey. More than half of the respondents reported having 25 or fewer full-time or part-time employees.

The historical change from last year stayed within a small percentage of -3% to 4% change.





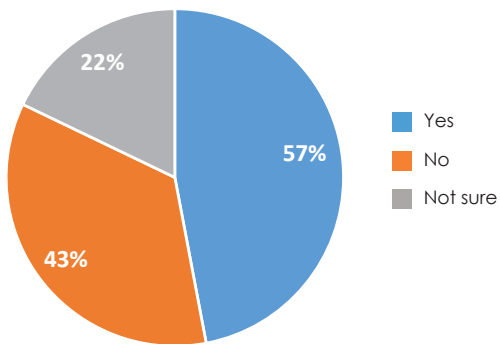
Historical change – Responding organizations by number of employees

Full-time (32+ hours)	5 or fewer	6 to 25	26 to 100	101 to 250	251 to 500	More than 500
2015	21%	31%	31%	9%	6%	3%
2016	21%	32%	28%	12%	3%	4%
Difference	< 1%	1%	-3%	3%	-3%	1%
Part-time (32 hours or less)						
2015	55%	23%	16%	3%	1%	2%
2016	57%	23%	14%	2%	1%	2%
Difference	2%	0%	-2%	1%	0%	< 1%

A5. RESPONDING ORGANIZATIONS BY HIRING PROJECTIONS

The majority (57%) of respondents to this question reported considering hiring new employees in the next year. This is down -11% from last year, however the total number of projected new hires remained the same at around 1,000 new workers. Compared to the previous year, the biggest change was an increase of 13% in hiring projections for 6 to 10 employees. This increase kept the overall projected hiring numbers about equal.

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



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

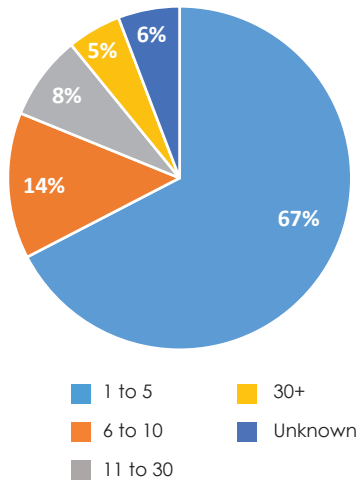
Answer Options:	2015	2016	Difference
Yes	68%	57%	-11%
No	14%	21%	7%
Not sure	18%	22%	4%

Historical change – In the next year is your business considering hiring new employees due to growth?

	2015	2016	Difference
Companies responding "Yes"	211	150	-61
Percentage of total respondents	68%	57%	-11%



If yes, how many employees do you plan to hire?



Historical change – If yes (you are hiring), how many new employees do you plan to hire?

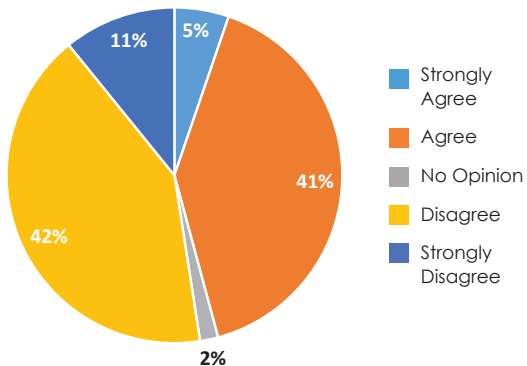
	2015	2016	Difference
1 to 5	64%	67%	3%
6 to 10	1%	14%	13%
11 to 30	17%	8%	-9%
30 +	12%	5%	-7%
Unknown	5%	6%	1%

B. Workforce Quality and Availability

B1. OVERALL WORKFORCE QUALITY

46% of businesses reported they were confident in the overall quality of the workforce, while the other half cited the opposite opinion. This was a -1% decrease from the previous year. There was a 6% increase in the number of individuals who “disagree” or do not have confidence in the overall quality of workforce, as compared to last year’s survey.

I am confident in the overall quality of the workforce that is present in Yellowstone County



Historical change – I am confident in the overall quality of the workforce that is present in Yellowstone County

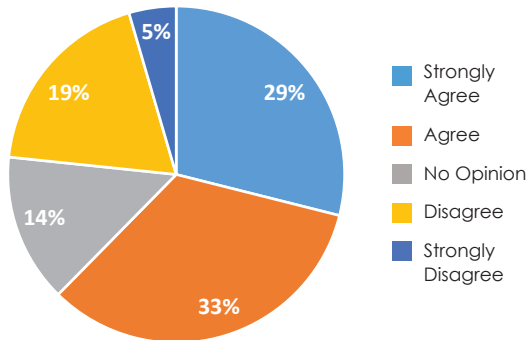
	2015	2016	Difference
Strongly Agree	6%	5%	-1%
Agree	41%	41%	0%
No Opinion	4%	2%	-2%
Disagree	36%	42%	6%
Strongly Disagree	13%	11%	-2%



B2. OVERALL WORKFORCE AVAILABILITY

Regarding workforce availability, 62% of survey respondents stated that the lack of available workers negatively impacts their business growth. This is a decrease of -6% from last year.

A lack of available workers negatively impacts my ability to grow my business in Yellowstone County



Historical change – A lack of available workers negatively impacts my ability to grow my business in Yellowstone County

Total	2015	2016	Change
Strongly Agree + Agree	68%	62%	-6%

Historical change – A lack of available workers negatively impacts my ability to grow my business in Yellowstone County

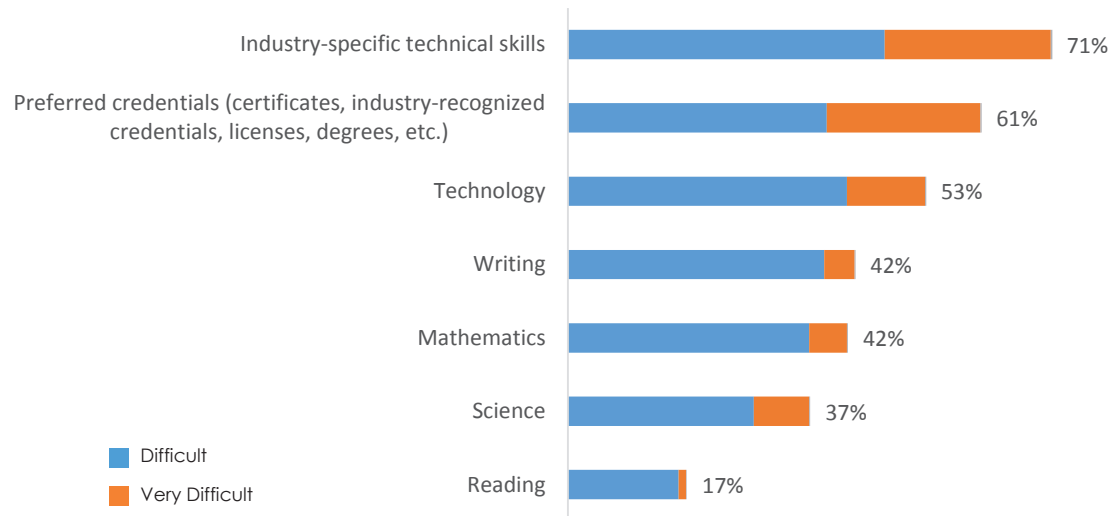
Individual Results	2015	2016	Difference
Strongly Agree	32%	29%	-3%
Agree	36%	33%	-3%
No Opinion	13%	14%	1%
Disagree	15%	19%	4%
Strongly Disagree	4%	5%	1%



B3. KNOWLEDGE AND TECHNICAL SKILLS

Employers continue to find it difficult to find candidates with industry-specific technical skills, preferred credentials and technology skills, which had a majority of respondents (over 50%) reporting they were difficult to find. Writing and mathematics skills rose in difficulty from last year, while preferred credentials and science fell in difficulty to find.

Knowledge and technical skills:
Please rate how difficult it is to find candidates with the following skills
% Difficult + Very Difficult



Historical change – Knowledge and technical skills:
% Difficult + Very Difficult to find candidates with the following skills.

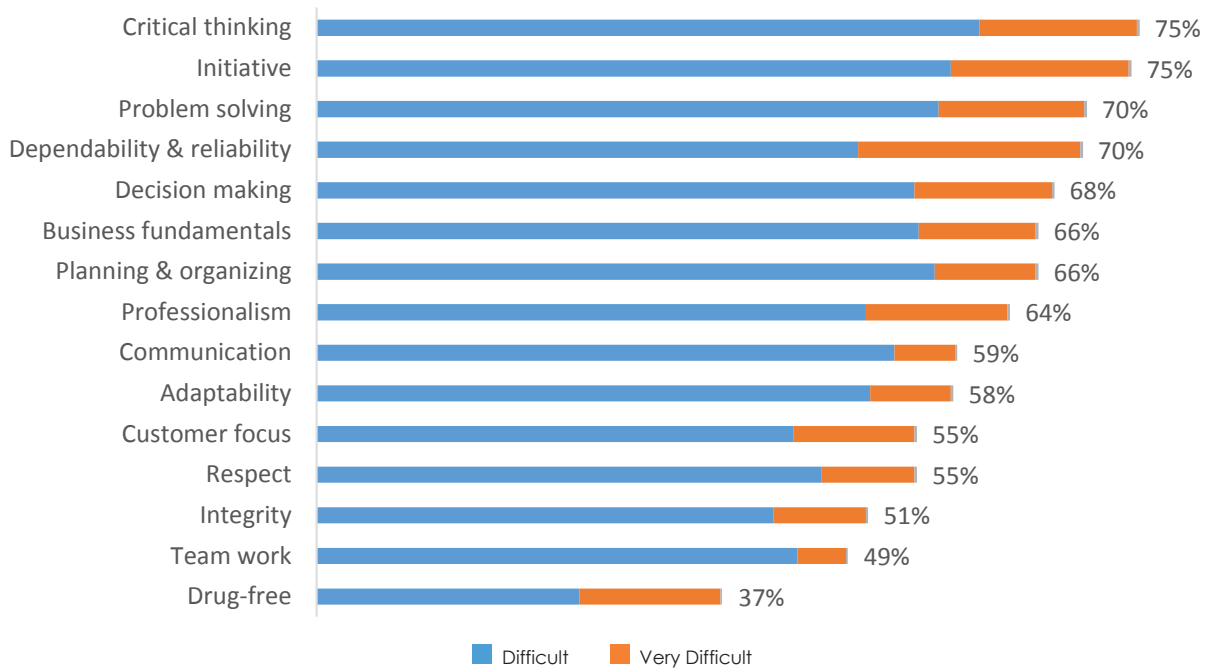
	2015	2016	Difference
Industry-specific technical skills	68%	71%	3%
Preferred credentials (certificates, industry-recognized credentials, licenses, degrees, etc.)	71%	61%	-10%
Technology	53%	53%	0%
Writing	35%	42%	7%
Mathematics	36%	42%	6%
Science	42%	37%	-5%
Reading	15%	17%	2%



B4. EMPLOYABILITY SKILLS

Compared to technical skills, survey data suggested a bigger challenge in employability skills. In 13 out of 15 listed employability skills, more than 50% of survey respondents stated they had problems finding candidates with these skills. The top 3 hardest-to-find employability skills are critical thinking, initiative, and problem solving.

Employability skills: Please rate how difficult it is to find candidates with the following skills
% Difficult + Very Difficult





**Historical change – Employability Skills:
% Difficult + Very Difficult to find candidates with the following skills:**

	2015	2016	Change
Critical thinking	81%	75%	-6%
Initiative	77%	75%	-2%
Problem solving	77%	70%	-7%
Dependability & reliability	69%	70%	1%
Decision making	77%	68%	-9%
Planning & organizing	66%	66%	0%
Business fundamentals	69%	66%	-3%
Professionalism	62%	64%	2%
Communication	64%	59%	-5%
Adaptability	58%	58%	0%
Respect	50%	55%	5%
Customer focus	55%	55%	0%
Integrity	51%	51%	0%
Team work	50%	49%	-1%
Drug-free	44%	37%	-7%

The list of skills is adapted from the report Common Employability Skills: A Foundation for Success in the Workplace.
http://businessroundtable.org/sites/default/files/Common%20Employability_asingle_fm.pdf

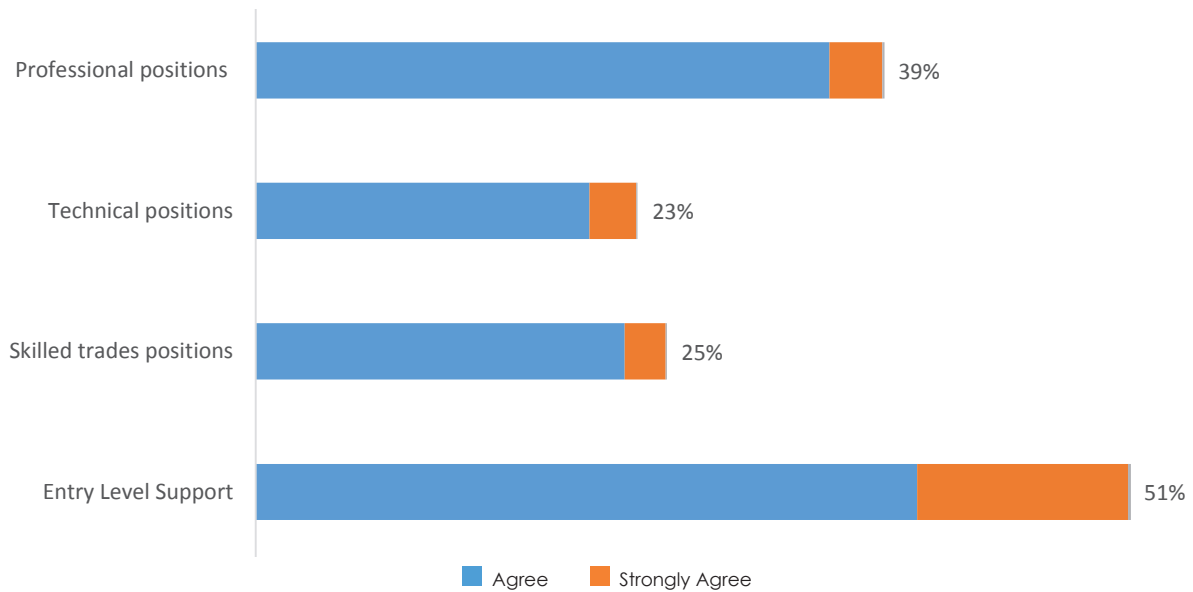


C. Recruitment and Retention by Job Category

C1. SUPPLY OF TALENT

Only entry level positions had a response of over 50% agreeing there was an adequate supply of talent. Comparing data from the previous year, there was an average of 6% increase in responses agreeing there was an adequate supply of talent.

In our community, there is an adequate supply of talent available to fill the following positions at my company: % Agree + Strongly Agree



Historical change – % Agree + Strongly Agree there is an adequate supply of talent available to fill the following positions at my company:

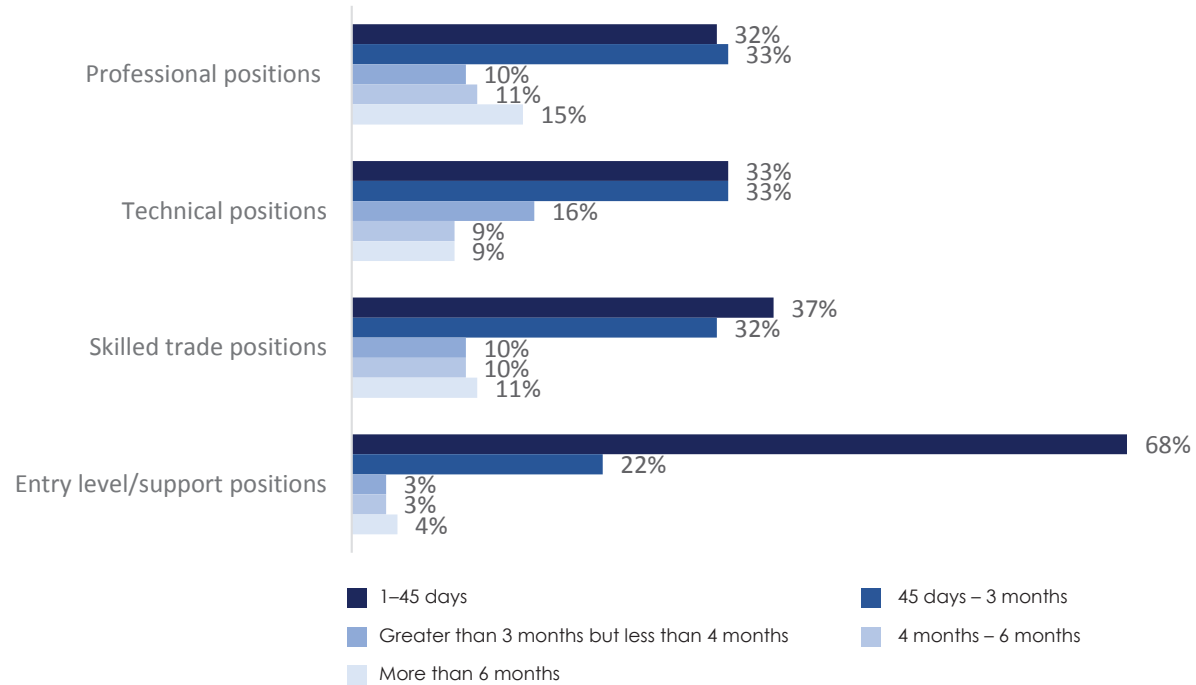
	2015	2016	Change
Professional positions	31%	39%	8%
Technical positions	21%	23%	2%
Skilled trades positions	17%	25%	8%
Entry Level Support	44%	51%	7%



C2. JOB POSTINGS FILLED

Overall the number of positions filled within 1 to 45 days went up from the previous year with more than 60% of jobs are reported to have been filled within that time frame. Additional information is needed to determine if there is a difference between the jobs which are being filled within 45 days and the 40% that are taking longer to fill (for example junior level vs senior level positions).

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





Historical change – On average over the last year, how long has it taken to fill job openings in each of the following job categories?

	2015	2016	Change
Professional positions			
1 – 45 days	27%	32%	5%
45 days – 3 months	32%	33%	1%
Greater than 3 months but less than 4 months	10%	10%	0%
4 months – 6 months	15%	11%	-4%
More than 6 months	17%	15%	-2%
Technical positions			
1 – 45 days	29%	33%	4%
45 days – 3 months	33%	33%	0%
Greater than 3 months but less than 4 months	14%	16%	2%
4 months – 6 months	11%	9%	-2%
More than 6 months	13%	9%	-4%
Skilled trade positions			
1 – 45 days	29%	37%	8%
45 days – 3 months	32%	32%	0%
Greater than 3 months but less than 4 months	14%	10%	-4%
4 months – 6 months	9%	10%	1%
More than 6 months	16%	11%	-5%
Entry level/support positions			
1 – 45 days	60%	68%	8%
45 days – 3 months	28%	22%	-6%
Greater than 3 months but less than 4 months	3%	4%	1%
4 months – 6 months	4%	3%	-1%
More than 6 months	4%	3%	-1%

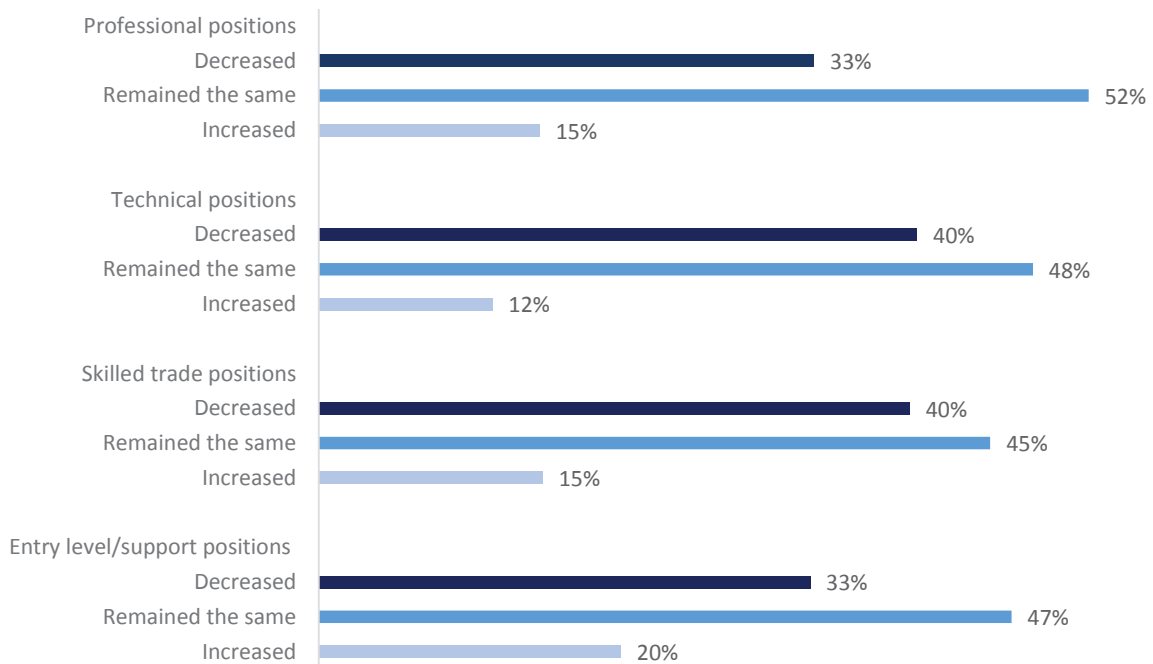


C3. QUALIFIED JOB APPLICANTS

An average of 48% survey respondents reported the number of qualified job applicants remained the same as the previous year, which was an increase of 10% over the 2015 numbers. Comparing data from last year, there was a decrease by an average of -13% in the number of respondents who reported “the number of qualified candidates decreased.”

In comparing this information with the previous question (C2. Job Postings Filled – how many months has it taken to fill your positions) the number of positions filled in 1 to 45 days went up, which typically indicates there are more qualified candidates – the decrease of -13% seems to correlate with this.

Compared to the previous year, did the number of qualified job applicants increase, decrease, or remain the same for the following types of positions?





Historical change – Compared to the previous year, did the number of qualified job applicants increase, decrease, or remain the same for the following types of positions?

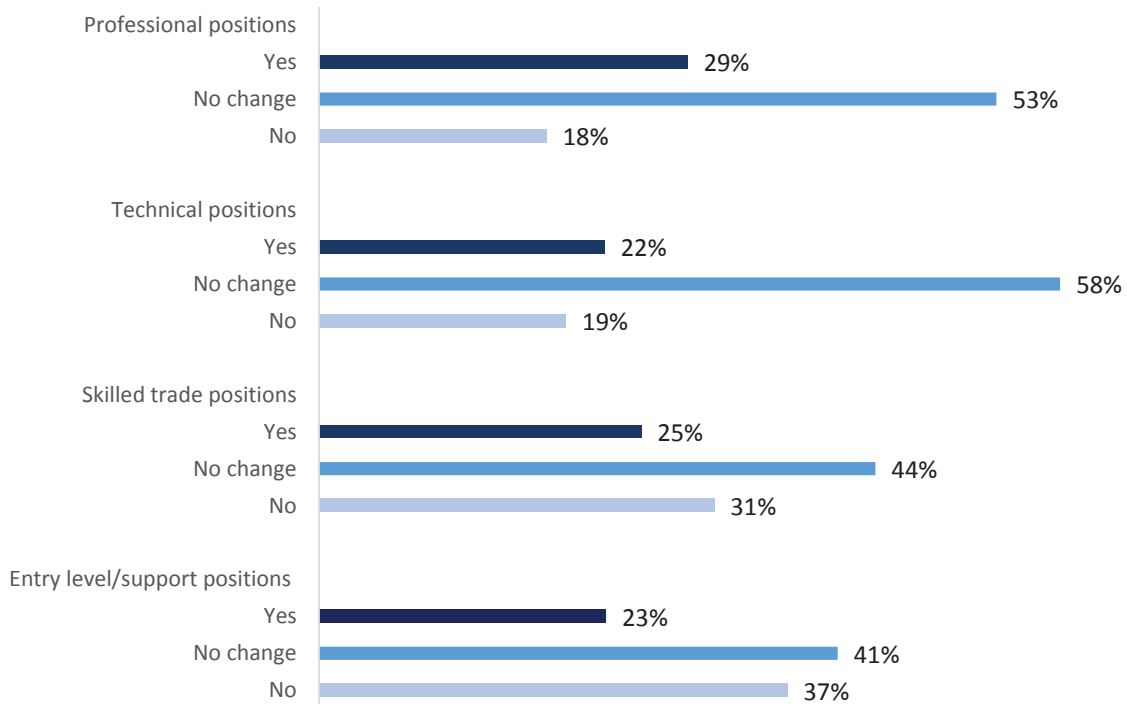
	2015	2016	Change
Professional positions			
Decreased	47%	33%	-14%
Remained the same	38%	52%	14%
Increased	15%	15%	0%
Technical positions			
Decreased	47%	40%	-7%
Remained the same	43%	48%	5%
Increased	11%	12%	1%
Skilled trade positions			
Decreased	57%	40%	-17%
Remained the same	30%	45%	15%
Increased	13%	15%	2%
Entry level/support positions			
Decreased	47%	33%	-14%
Remained the same	39%	47%	8%
Increased	14%	20%	6%



C4. EMPLOYEE RETENTION

An average of 45% of respondents reported no change in employee retention. This was an average increase of 5% over last year. Retention was reported as the greatest challenge for entry level positions.

Compared to the previous year, did employee retention improve for the following types of positions?





Historical change – Compared to the previous year, did employee retention improve for the following types of positions?

	2015*	2016	Change
Professional positions			
Yes	31%	29%	-2%
No change	47%	53%	6%
No	22%	18%	-4%
Technical positions**			
Yes	28%	22%	-6%
No change	47%	58%	11%
No	26%	19%	-7%
Skilled trade positions			
Yes	21%	25%	4%
No change	44%	44%	0%
No	35%	31%	-4%
Entry level/support positions**			
Yes	16%	23%	7%
No change	39%	41%	2%
No	44%	37%	-7%

* Please note the figures from the 2015 State of the Workforce Report chart were incorrect.

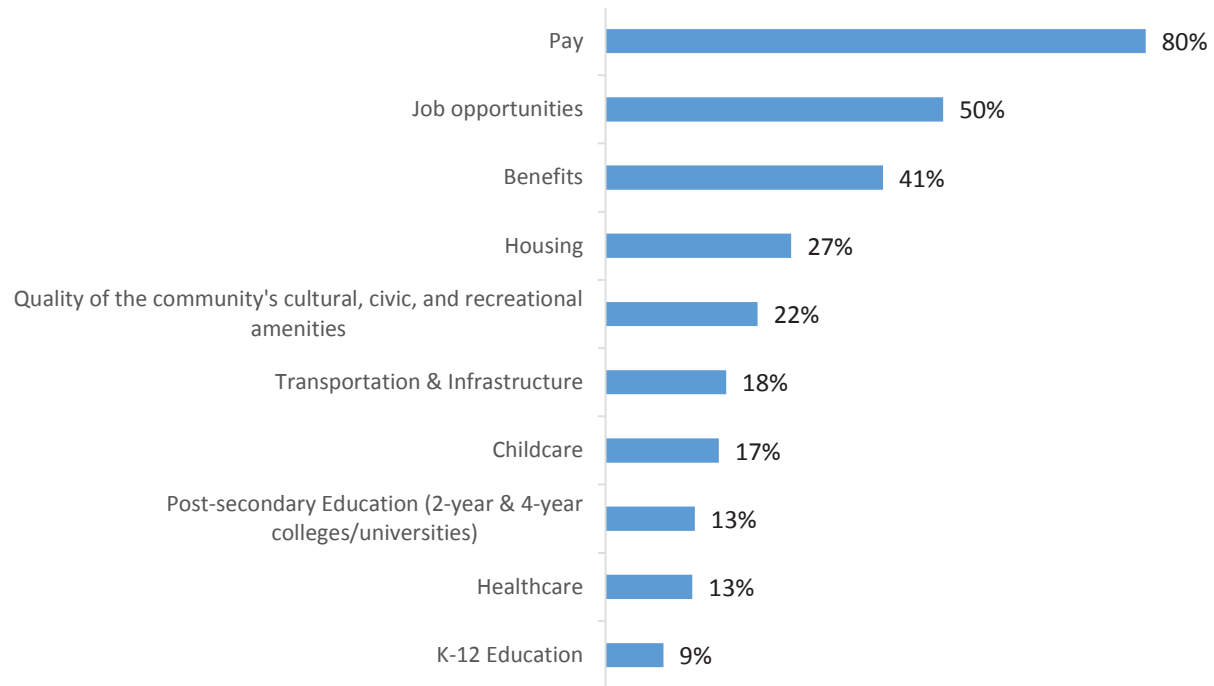
** Due to rounding up these figures may appear off by a point



C5. BARRIERS TO WORKFORCE ATTRACTION AND RETENTION

Pay continued to be the greatest barrier, and increased from 74% to 80%, for this survey. Over 80% (267) of respondent ranked pay as one of their top three barriers, including 150 respondents who ranked pay as their greatest barrier.

Top three greatest barriers to workforce attraction and retention



Top three greatest barriers to workforce attraction and retention

Barriers	Number of Times Ranked as a Top 3 Barriers			Total
	1	2	3	
Pay	150	56	18	224
Job opportunities	40	42	58	140
Benefits	18	56	41	115
Housing	16	25	36	77
Quality of the community's cultural, civic, and recreational amenities	10	25	28	63
Transportation & Infrastructure	6	17	27	50
Childcare	9	18	20	47
Post-secondary Education (2-year & 4-year colleges/universities)	14	14	9	37
Healthcare	7	10	19	36
K-12 Education	6	9	9	24



Historical change – Top three greatest barriers to workforce attraction and retention

Barriers	2015	2016	Change
Pay	74%	80%	6%
Job opportunities	37%	50%	13%
Benefits	41%	41%	0%
Housing	29%	27%	-2%
Quality of the community's cultural, civic, and recreational amenities	21%	22%	1%
Transportation & Infrastructure	13%	18%	5%
Childcare	17%	17%	0%
Post-secondary Education (2-year & 4-year colleges/universities)	12%	13%	1%
Healthcare	9%	13%	4%
K-12 Education	6%	9%	3%

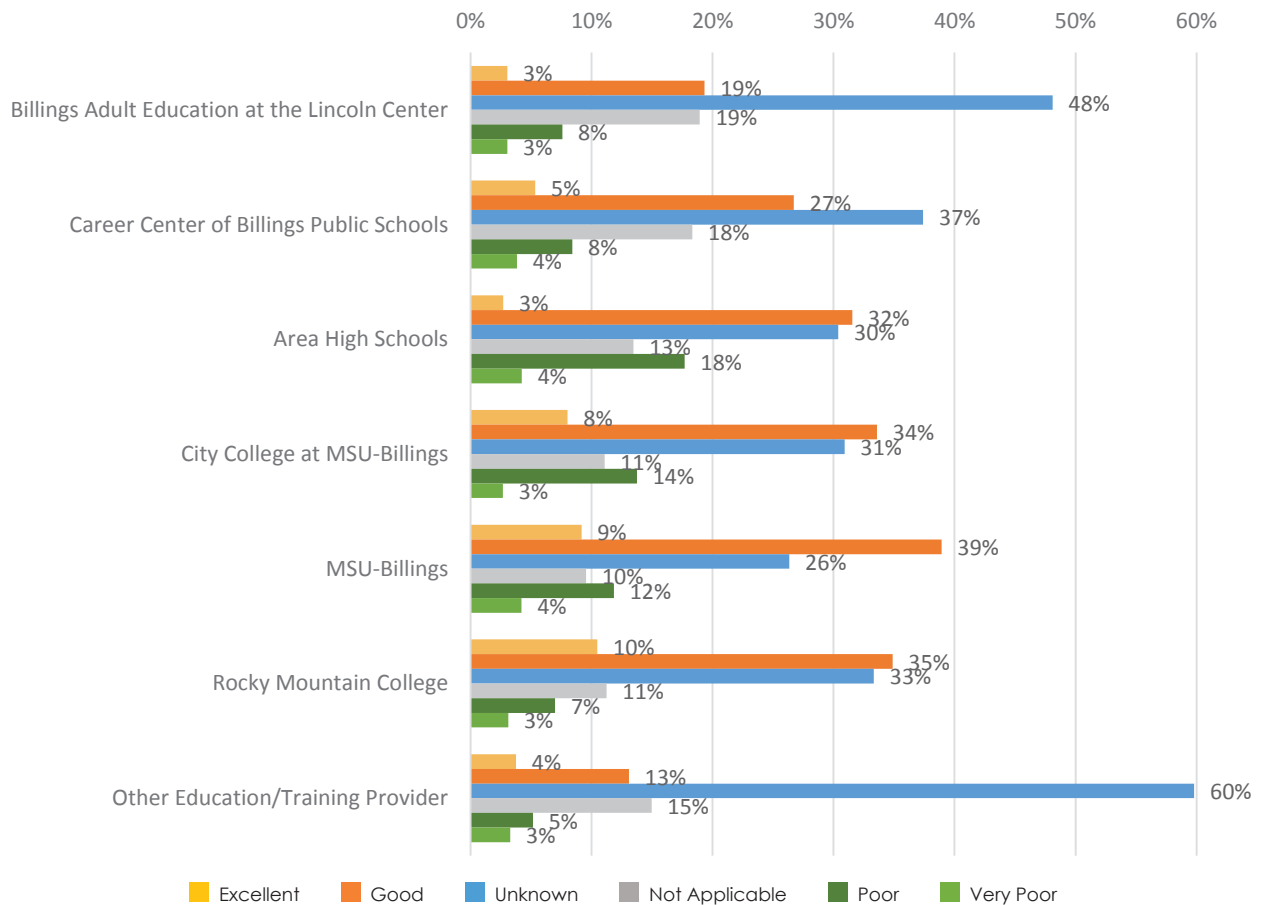


D. Alignment of Education and Workforce Needs

D1. ALIGNMENT OF EDUCATION PROVIDERS AND WORKFORCE NEEDS

In the 2015 Employer Survey, when asked to rate local education and training institutions on their alignment of education offerings and workforce needs, a high number of survey participants expressed they were unaware of the programs these institutions provided. They also did not feel that answers such as "not applicable" correctly identified their opinions. Therefore the survey response "unknown" was added this year to the 2016 Employer Survey. This was the largest category of response for Adult Education, Career Center and other education/training providers. Area High Schools and City College at MSU Billings were almost even with their top scores of good and unknown. This indicates an important opportunity for area schools to educate the community about their programs.

Please rate how well programs from the following education and training providers align to your workforce needs





Historical change – Please rate how well programs from the following education and training providers align to your workforce needs

	2015	2016	Change
Billings Adult Education at the Lincoln Center			
Excellent	3%	3%	0%
Good	25%	19%	-6%
Poor	10%	8%	-2%
Very Poor	6%	3%	-3%
Unknown*		48%	
Not Applicable	55%	19%	-36%
Career Center of Billings Public Schools			
Excellent	5%	5%	0%
Good	30%	27%	-3%
Poor	11%	8%	-3%
Very Poor	9%	4%	-5%
Unknown*		37%	
Not Applicable	46%	18%	-28%
Area High Schools			
Excellent	2%	3%	1%
Good	39%	32%	-7%
Poor	18%	18%	0%
Very Poor	6%	4%	-2%
Unknown*		30%	
Not Applicable	34%	13%	-21%
City College at MSU-Billings			
Excellent	9%	8%	-1%
Good	38%	34%	-4%
Poor	12%	14%	2%
Very Poor	8%	3%	-5%
Unknown*		31%	
Not Applicable	33%	11%	-22%
MSU-Billings			
Excellent	12%	9%	-3%
Good	45%	39%	-6%
Poor	10%	12%	2%
Very Poor	4%	4%	0%
Unknown*		26%	
Not Applicable	29%	10%	-19%

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Historical change – Please rate how well programs from the following education and training providers align to your workforce needs *(continued from previous page)*

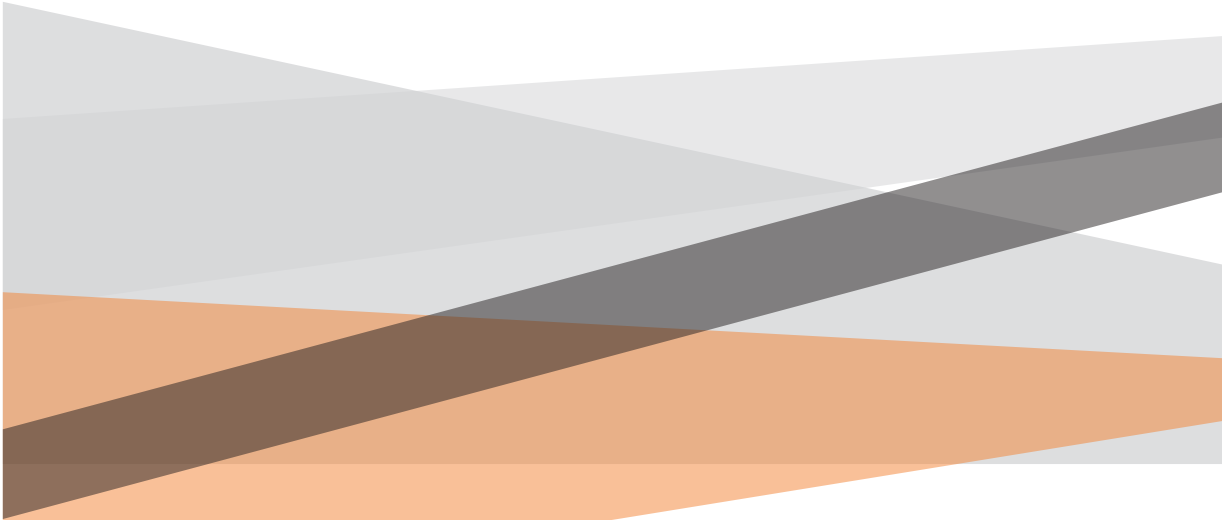
	2015	2016	Change
Rocky Mountain College			
Excellent	14%	10%	-4%
Good	38%	35%	-3%
Poor	11%	7%	-4%
Very Poor	4%	3%	-1%
Unknown*		33%	
Not Applicable	33%	11%	-22%

* In the 2015 survey an “unknown” option was not given; therefore the historical data cannot be compared.



Appendix B

Education and Training Profile and Gap Analysis 2016





The BillingsWorks Training Provider Analysis is a snapshot of the current state of workforce training options within Billings and Yellowstone County. As a community, Billings and Yellowstone County have an enviable network of education and training providers that work to prepare a workforce capable of meeting the area's talent needs. With two universities, a vibrant 2-year college, the state's only separate career and technical education center, a strong K-12 framework, and adult education, Billings is well positioned to harness these educational assets to prepare the area's workforce.

The identification and analysis of an area's current educational capacity provides a baseline to identify deficiencies and to better position the area for growth through a well-stocked, sustainable supply of talent. This inventory of available training assets provides insights into the current capacity and gaps and provides recommendations for increasing Billings' and Yellowstone County's capacity to grow utilizing an educational system capable of keeping up with the demands of area employers.

EDUCATION AND TRAINING PROFILES

Within Yellowstone County there are a myriad of education and training options ranging from short, customized training options to four-year degrees and beyond. In total, these providers offer the capability of spanning the full training and workforce needs for Yellowstone County.

Montana State University – Billings (MSU-B) serves 4,429 students. MSU-B has two campuses – one in the downtown Billings area and the other in the west end of Billings – and offers industry certificates, associate, bachelor's and master's degrees through five colleges: Arts and Science, Business, Allied Health, Education and City College. Additional professional development programs are offered through the University Extended Campus.

Rocky Mountain College, also located in Billings, is a four-year private, not-for-profit institution offering associates, bachelor's and master's degree programs, including the only Physician Assistant program in the State of Montana. Rocky Mountain College serves 1,031 students and offers fifty liberal arts and professionally oriented majors in 24 undergraduate disciplines.

In addition to the two post-secondary education institutions above, Billings Adult Education offers professional training and certifications. Billings Adult Education offers professional certificates such as Administrative Assistant, Paralegal Studies and Pharmacy Technician. Billings Adult Education fulfills the crucial role of offering avenues for adult learning within the Yellowstone community.

The Billings Career Center, part of Billings Public Schools, offers multiple pathways for career and technical education within Yellowstone County. In concert with core educational requirements, students attending Billings Career Center focus on occupational education and pathways. Students attending the Billings Career Center may also receive college credit through dual-credit agreements with the area's secondary institutions.

Finally, Yellowstone County has a robust K-12 system that is comprised of nine high schools, one career center, 13 middle schools, and 37 elementary schools. Billings Public Schools is the largest K-12 educational provider within the area. Billings Public Schools serves 16,328 students with an instructional program encompassing pre-kindergarten through 12th grade, as well as Billings Adult Education and the Billings Career Center.

Within Yellowstone County (but outside School District #2) there are several rural schools and high schools as well as the Billings Catholic School system (K-12).

Collectively, these institutions combine to form the training and educational capacity for the Billings area and its employers.



Profile of Education and Training Providers and Their Graduates

MONTANA STATE UNIVERSITY – BILLINGS

1500 University Drive | Billings, MT 59101 | (406) 657-2011

www.msubillings.edu

Montana State University – Billings is a 4-year public institution offering certificates, associate, bachelor's, and master's degrees. The university is comprised of five colleges: College of Business, College of Arts and Sciences, College of Education, College of Allied Health, and City College. City College at MSU Billings provides the comprehensive two-year college mission including: university transfer education, career preparation, developmental education, GED preparation through a partnership with School District No. 2, and workforce training.

2014 – 2015 Quick Facts

Student Population		
Total Students	4781	Fall 2014 Highlights
Undergraduate	4276	Fall 2014 Highlights
Graduate	505	Fall 2014 Highlights
Retention and Graduation Rates		
Retention Rate (Full-time Students)	56%	IPEDS Fall Enrollment Survey, Fall 2014-15
Retention Rate (Part-time Students)	44%	IPEDS Fall Enrollment Survey, Fall 2014-15
Graduation Rate	25%	IPEDS Graduation Rates Data, Cohort year 2009
Average Age		
University Campus	24.9	Fall 2014 Highlights
City College	23.9	Fall 2014 Highlights
Undergraduate Student Age		
24 and Under	60%	Fall 2014 Highlights
25 and Over	40%	Fall 2014 Highlights
Undergraduate Attendance Status		
Full-time	67%	Fall 2014 Highlights
Part-time	33%	Fall 2014 Highlights
Undergraduate Student Residence		
In State	86%	Fall 2014 Highlights
Out of State	11%	Fall 2014 Highlights
Foreign Countries	3%	Fall 2014 Highlights
Undergraduate Distance Education		
No Distance Education	48%	Online Questions eLearning Update 2015.xls
Some Distance Education	33%	Online Questions eLearning Update 2015.xls
Only Distance Education	19%	Online Questions eLearning Update 2015.xls
Average Time To Graduate (2013 – 2014)	4.77	Complete College America Outcome Metric #4

Source: College Navigator, National Center for Education Statistics; Montana University System, Complete College America Outcome Metric #4; Montana State University Billings



Montana State University – Billings Enrollment by College (Fall 2015)

College	Undergraduate Enrollment	Graduate Enrollment	Total Enrollment
Arts & Sciences	1132	49	1181
Business	673	0	673
Education	321	203	524
Allied Health Professions	423	97	520
City College	1275	0	1275
No College Designated	210	46	256
TOTAL	4034	395	4429

Source: Montana State University Billings, Institutional Research, Fall 2015 Highlights

History of Degrees Awarded by Type

	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
MSU Billings University Campus								
Associate Degrees	29	33	32	40	32	25	33	105
Bachelor's Degrees	502	491	504	492	465	518	469	527
Master's Degrees	121	106	128	125	152	139	127	152
Total Degrees	652	630	664	657	649	682	629	784
City College								
Certificates	31	32	28	29	36	26	26	39
Associates Degrees	203	189	196	211	291	259	240	239
Total Certificates/Degrees	234	221	224	240	327	285	266	278

Source: Montana State University Billings, Institutional Research, National Center for Education Statistics, 1st Major

Employment After Graduation

Post-Graduation Status by College	Number of Graduates	Employed		Continuing Education	Not Seeking Employ.	Military Service	Total Placed*
		In Field	Out of Field				
College of Applied Health	85	20	16	4	3	0	98%
College of Arts and Sciences	267	57	51	18	7	0	92%
College of Business	95	37	5	5	1	0	98%
College of Education	85	34	4	0	0	0	97%
City College	266	82	28	10	2	0	95%

Source: Montana State University Billings, Class of 2014 Graduate Data. (*) Total Placed calculations based on total number of respondents, not number of graduates. Students with double majors/degrees reported twice.



Montana State University Billings – Education and Training Program Completion (2014 – 2015)

Programs/Majors	Certificate	Associate	Bachelor's	Master's
Biological & Biomedical Sciences	-	-	17	-
Business, Management, Marketing & Related Services	5 ^d	28 ^d	154 ^d	-
Communication, Journalism & Related Programs	-	-	24 ^d	9 ^d
Computer & Information Sciences & Support Services	-	25	-	-
Construction Trades	-	1	-	-
Education	-	2	109	87 ^d
Engineering Technology & Engineering Related Fields	-	30	-	-
English Language & Literature/Letters	-	-	6	-
Foreign Languages, Literatures & Linguistics	-	-	3	-
Health Professions and Related Programs	13	104	21 ^d	39 ^d
History, General	-	-	9	-
Homeland Security, Law Enforcement, Firefighting	-	12	28	-
Liberal Arts, Sciences, General Studies, Humanities	-	102 ^d	49 ^d	-
Mathematics & Statistics	-	-	3	-
Mechanic & Repair Technologies & Technicians	21	37	-	-
Multi/Interdisciplinary Studies	-	-	28 ^d	-
Natural Resources & Conservation	-	-	8	-
Parks, Recreation, Leisure & Fitness Studies	-	-	16	6
Physical Sciences	-	-	3	-
Precision Production	-	-	-	-
Psychology	-	3	38	6
Public Administration & Social Service Professions	-	-	-	5
Social Sciences	-	-	3	-
Visual & Performing Public Arts	-	-	8	-
TOTAL	39	344	527	152

Source: College Navigator, National Center for Education Statistics, 1st major

Notes: (-) indicate the program is not offered at this award level. (d) identifies programs and award levels that are offered as a distance education program. For program category totals, (d) is shown if one or more programs in the category are offered as a distance education program.

Montana State University Billings Graduate Outcomes

Location after Graduation	Billings	Other MT	Out-of-State
Total BA/BS Graduates	44%	27%	29%
MA/MS Graduates	34%	36%	29%
City College Graduates	65%	16%	19%

Source: Montana State University Billings, Class of 2014 Graduate Data



ROCKY MOUNTAIN COLLEGE

1511 Poly Drive | Billings, Montana 59102-1796 | (406) 657-1000

rocky.edu

Rocky Mountain College is a four-year, private not-for-profit university that offers associate, bachelor's, and master's degrees to its students.

2014 – 2015 Quick Facts

Student Population	
Total Students	1031
Undergraduate	939
Graduate	92
Retention and Graduation Rates	
Retention Rate (Full-time Students)	71%
Retention Rate (Part-time Students)	N/A
Graduation Rate	42%
Average Age	
Degree Seeking Undergraduate Students	20.87
Non-Degree Seeking Undergraduate Students	23.46
Total (including Graduate students)	22.11
Undergraduate Student Age	
24 and Under	93%
25 and Over	7%
Undergraduate Attendance Status	
Full-time	94%
Part-time	6%
Undergraduate Student Residence	
In State	56%
Out of State	39.8%
Foreign Countries	4.2%
Undergraduate Distance Education	
No Distance Education	100
Some Distance Education	0
Only Distance Education	0
Average Time To Graduate (2014 – 2015)	# years

Source: College Navigator, National Center for Education Statistics; Rocky Mountain College

Non-Degree Seeking undergraduate students include high school students and other students taking college courses for credit, but not toward a degree.



Rocky Mountain College – Education and Training Program Completion (2014 – 2015)

Programs/Majors	Certificate	Associate	Bachelor's	Master's
Agriculture, Ag Operations and Related Sciences	0	0	17	0
Biological & Biomedical Sciences	0	0	18	0
Business, Management, Marketing & Related Support Services	0	0	38	3
Communication, Journalism, and Related Programs	0	0	11	0
Computer and Info Sciences and Support Services	0	0	7	0
Education	0	0	12	12
English Language and Literature/Letters	0	1	6	0
Health Professions and Related Programs	0	0	0	30
History	0	0	2	0
Mathematics and Statistics	0	0	0	0
Natural Resources and Conservation	0	0	9	0
Parks, Recreation, Leisure, and Fitness Studies	0	0	23	0
Philosophy and Religious Studies	0	0	0	0
Physical Sciences	0	0	3	0
Psychology	0	0	9	0
Social Sciences	0	0	4	0
Transportation and Materials Moving	0	0	31	0
Visual and Performing Arts	0	0	12	0
TOTAL	0	1	202	45

Rocky Mountain College Graduate Outcomes Success Rate of Rocky Mountain Graduates (2014)

Full-time Employed or Full-time Graduate Student	86%
Employed Full-time	70%
Employed Part-time	10%
Pursuing further Education	16%
Employed residents working in Montana	66%
Employed residents working in Billings	57%

Source: Rocky Mountain College, Class of 2014 Graduate Report



Post-Graduation Status by Program

Post-Graduation Status by Program	Employed			Continuing Education
	Number of Students	In Field	Out of Field	
Business and Technology				
Aviation	29	22	5	1
Business Administration, Economics, Accounting	33	29	3	1
Computer Science	7	7		
Equestrian Studies	18	15	1	2
Humanities and Fine Arts				
Communications Studies	11	10		
Literary Studies	7	3	2	2
Fine Arts (Art, Music, Theater)	10	2	8	
Natural Sciences and Math				
Biology, Chemistry, Math	18	5	2	9
Environmental Science	9	5	1	2
Geology	3	1	1	
Social Science and Education				
Education	11	7	3	1
History and Political Science	2	1	1	
Physical Education and Health	16	3	5	7
Psychology	7	3	1	2
Sociology	3	3		
TOTAL	184	116	32	28

Source: Rocky Mountain College, Class of 2014 Graduate Report; Note: For post-graduation status by program, numbers are based on survey respondents, not total graduates.



MONTANA UNIVERSITY SYSTEM (MUS)

mus.edu

The Montana University System (MUS) is comprised of sixteen public universities and colleges in Montana, enrolling more than 46,000 students each semester.

Total Billings High School Graduates Enrolled in the Montana University System, Spring 2016

Campus	# Enrolled
City College	414
Dawson CC	6
Gallatin College	14
Great Falls College	9
Helena College	9
Highlands College	2
Miles CC	36
Missoula College	12
MSU-Billings	808
MSU-Bozeman	672
MSU-Northern	6
MT-Tech	48
UM-Missoula	406
UM-Western	22
Grand Total	2464

Note: does not include private colleges, such as Rocky Mountain College
Source: Montana University System



K-12 EDUCATION INSTITUTIONS

Yellowstone County High Schools Yellowstone County High School Student Enrollment by Grade Level

School	Grade 9	Grade 10	Grade 11	Grade 12	Total Enrollment
Billings Senior High School	559	459	422	402	1842
Billings West High School	510	466	428	442	1846
Broadview High School*	12	15	6	20	53
Central Catholic High School*	81	73	87	81	322
Custer High School*	6	9	6	6	27
Huntley Project High School*	69	63	55	71	258
Laurel High School*	180	162	156	151	649
Shepherd High School*	73	63	71	47	254
Skyview High School	391	390	355	353	1489
Total Yellowstone County	1881	1700	1586	1573	6740

Source: National Center for Education Statistics and Billings School District #2

* 2015–2016 data for Billings Schools
2013–2014 data for other schools

High School Graduation Rate

2014 – 2015 High School Graduation Rate	Enrollment	Rate
Billings Senior High School	391	80%
Billings West High School	458	83%
Billings Central Catholic High School	55	100%
Broadview High School	40	87.50%
Custer High School	27	100%
Huntley Project High School	247	96.20%
Laurel High Schools	662	90.70%
Skyview High School	342	83%
Shepherd High School	280	86.60%
State of Montana	41,816	86%

Source: Montana Office of Public Instruction



Free and Reduced Lunch Eligibility

School	Free Lunch Eligible	Reduced-Price Lunch Eligible	Total Eligible for Free & Reduced Lunch	
Billings Senior High School	523	77	600	33%
Billings West High School	306	67	373	21%
Broadview High School*	7	2	9	16%
Central Catholic High School	19	14	33	10%
Custer High School*	5	6	11	40%
Huntley Project High School*	83	17	100	38%
Laurel High School*	74	39	113	17%
Shepherd High School*	51	11	62	24%
Skyview High School	295	64	359	24%
Total Yellowstone County	1363	297	1660	25%

Source: National Center for Education Statistics and School District 2
15-16 data for Billings Schools
* 13-14 data for these schools



Yellowstone County Career and Technical Education Enrollment (2014 – 2015 School Year)

Enrollment by Program	Females	Males	Total
Advanced Shop	0	0	0
Agriculture	98	203	301
Automotive	21	161	182
Business	952	951	1903
Computer Technologies	104	296	400
Construction	20	94	114
Culinary Arts	645	471	1116
Drafting	33	166	199
Early Childhood	173	15	188
Electrical	0	13	13
Engineering	36	141	177
Family and Consumer Science	114	41	155
Family Life/Single Survival	255	151	406
Graphic Design	121	130	251
Interior Design	144	20	164
Medical	151	34	185
Metals	20	96	116
Textiles	135	40	175
Woodworking	98	528	626
Total enrollment (not individual students) in each Category	3120	3551	6671

Source: This included number from the following schools: School District #2, Billings Catholic Schools, Laurel High School, Shepherd High School and Huntley Project High School.



BILLINGS ADULT EDUCATION

415 N 30th St, Billings MT 59101 | (406) 281-5001

<http://www.billingscommunityed.org/>

Billings Adult Education offers students the ability to earn certificates or their high school equivalency.

Billings Adult Education Quick Facts

Number of Students Served	2014 – 2015	2015 – 2016 (so far)
Students Served 12 hours or more	428	323
Students Served Less than 12 hours	147	110
Percentage of Students by Age		
Age 16 – 18	17%	23%
Age 19 – 24	23%	24%
Age 25 – 44	43%	41%
Age 45 – 59	15%	12%
Age 60 and older	< 1%	< 1%
Percentage with Educational Goals (students can have multiple goals)		
Enter Employment	24%	29%
Enter Postsecondary Education or Training	36%	20%
Receipt of HiSET	52%	21%
Retain Employment	38%	42%
Percentage that Achieve Educational Goals		
Enter Employment	no data	no data
Enter Postsecondary Education or Training	no data	no data
Receipt of HiSET	33%	no data
Retain Employment	no data	no data



Billings Adult Education – Programs Offered

		2014 – 2015 Number Completed	2015 – 2016 (so far) Number Completed
High School Equivalency Test	HiSET (formerly the GED)	98	17
Certificate Programs	Accounting	12	8
	Administrative Assistant	23	15
	Certified Nursing Assistant (CNA)	66	67
	Dental Assistant	11	9
	Electrocardiograph (ECG/EKG) Technician	2	1
	Medical Assistant	12	11
	Medical Coding	0	0
	Medical Transcriptionist	1	0
	Paralegal	12	9
	Patient Care Technician	0	0
	Pharmacy Technician	4	4
	Phlebotomy Technician	60	67
	Online Marketing	0	0
	Web Design	0	1
Assessments	Test of Adult Basic Education (TABE)	581	522
	Compass (college entrance)	35	24
	WorkKeys	55	47



TRAINING GAP ANALYSIS

GAP ANALYSIS

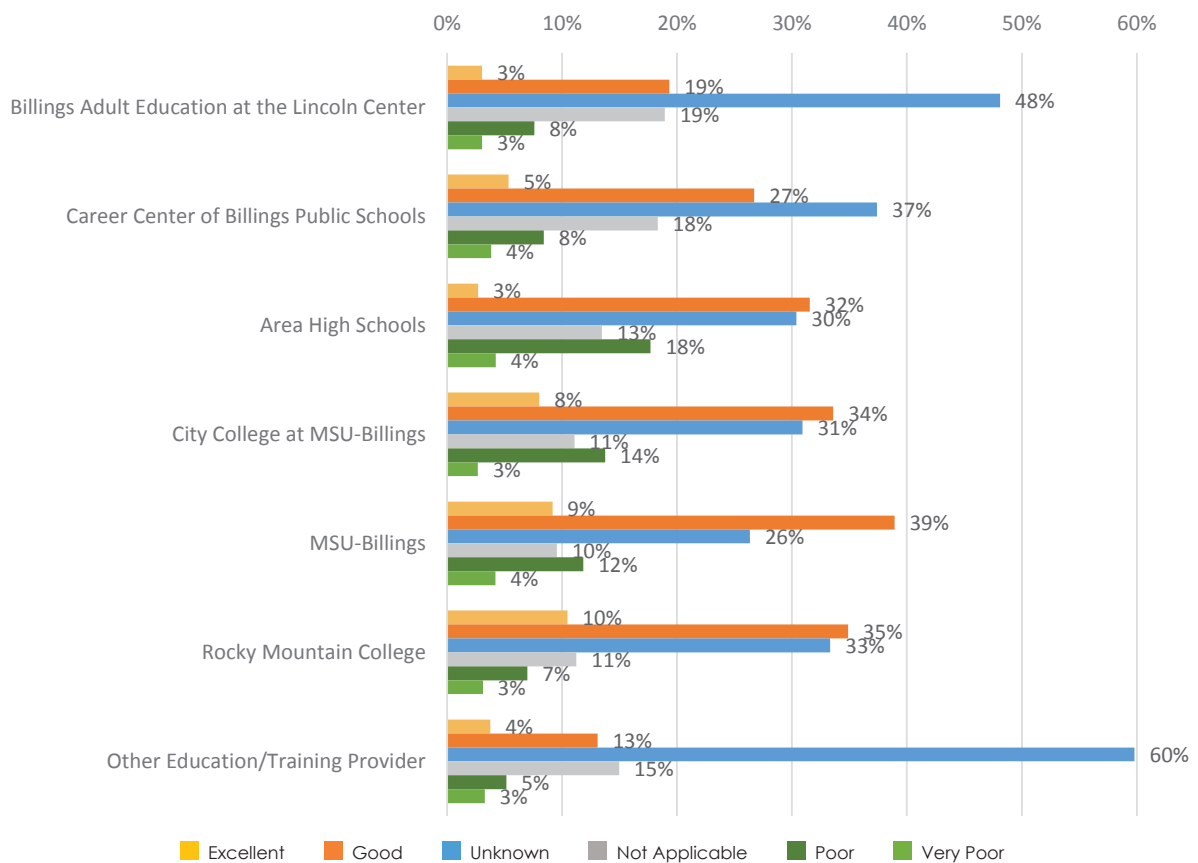
While Billings and Yellowstone County have a robust K-12 education system and multiple post-secondary assets to draw upon, there are still gaps in addressing the talent development needs of employers.

In order to determine what gaps exist in the education and training supply system, data gathered in the State of the Workforce Report was compared to the program offerings and certificate and degree completion data captured in the training inventory.

EMPLOYER TRAINING NEEDS

Due to feedback in last year's survey the category "unknown" was added this year as an option for response. This allowed data collection for those who expressed they were unaware of the programs at the various institutions and did not feel that "not applicable" correctly identified their opinions. The "unknown" response was the largest category for Adult Education, Career Center and other education/training providers. Area High Schools, City College at MSU Billings and Rocky Mountain College had scores of good and unknown that were within 3% of each other. This high response for "unknown" shows an opportunity for area schools to educate the community about their programs and activities.

Please rate how well programs from the following education and training providers align to your workforce needs





INDUSTRY FOCUS GROUPS

The specific education and training needs vary based on industry sectors. A summary of survey data and input from industry-specific focus groups is included below. In addition to the survey data, focus groups were conducted and highlighted several training needs. Focus Group Sectors included: IT, Data, and Communications; Energy, Manufacturing, Engineering, and Transportation; Hospitality, Retail, and Services; and Healthcare and Senior Services.

INFORMATION TECHNOLOGY, DATA, AND COMMUNICATIONS

- Technical positions had only a 2% positive increase and only rose 1% in qualified applicants, showing the least amount of positive change among all industries, while the demand from employers still remains high. Employers in the focus group rated the availability of entry level candidates much higher than senior level candidates. Senior level candidates were reported to be "almost impossible" to find.
- Entry level IT candidates are being hired based on personality, presentation, aptitude and organic interest in IT, rather than education. A lack of trained IT professionals in the Billings market was the primary reason for this hiring method. Another reason identified was existing post-secondary programs at the certificate and associate level provide a broad range of IT knowledge, but not the depth of knowledge needed in specific areas. One proposed solution is a combination of a Certificate of Applied Science degree and concurrent on-the-job training.
- Small businesses expressed their technology needs are different than larger businesses, as they need training specifically for current operating system knowledge: server 2012, active directory, group policy, exchange, basic user administration – adding users permissions, security, knowledge of RAID, virtualization software (VMware and hyper V) – 90% of every server is run on top of virtualization platform.

Technology is developing and changing at a rapid pace. Attendees noted education should pay attention to changes in:

- Cloud computing, and therefore cloud hosting needs in their curriculum, as well as Office 365 and user administration. Few small businesses now have servers due to the cost, benefit and ease of cloud systems.
- Remote monitoring and management (RMN) which these businesses report using for 90% of the work they do with clients. Training is needed in powershell scripting, Command Line, or RMM remote monitoring and management software.
- Phone system integration with active directory and IP based phones.
- For programmers, the need for training on technologies used in mobile devices is increasing (mobile devices are now the majority of internet usage), as well as HTML5, CSS.

Other training opportunities:

- Microsoft Query Analyzer
- Microsoft Application training
- Graphic Design
- SSMS training
- ACI Certification
- Advanced Technology
- 3D Modeling
- Computer Science Program
- Video training



INDUSTRIAL/B2B – OR – MANUFACTURING, ENERGY AND TRANSPORTATION

- Entry level college graduates in engineering were the most available talent pool for this market. Montana State University was highly praised for their engineering program, especially regarding the instruction which provides a “strong sense of actual work in the industry”.
- One challenge identified was providing college interns with actual construction experience, as May through June there is little construction activity. Construction projects are most active July thru September, however students go back to school in August. If the school schedule was adjusted (start fall semester later in September, extend spring semester to June) students would be able to receive more project experience.
- Senior engineers were reported to be more difficult to find than entry level and usually have to come from out of market. They are usually established in their current location and it is difficult for them to uproot to a new market.
- GIS and CAD (AutoCAD and Revit) are becoming very hard to find. Employers reported that during the 2008 downturn these positions were the first to be cut, therefore the demand went down and people left the profession to find employment. Now demand is up and there are few applicants. The challenge is finding someone who can do more than just draft, the ability to do redline and having an understanding of design is desired. Experience working in construction or having a deeper knowledge of construction engineering, which enables an understanding of how the design will be constructed, is also highly desired.
- Project Management was described as a training need in Billings, however it was specified as a program that could enhance someone's potential who already has a degree rather than a stand-alone degree program. Key for this role is having a mindset for tracking projects and staying organized.
- Businesses expressed an interest in creating apprenticeship programs. One had experience working with a program in Casper, Wyoming that developed a curriculum based on employer specified skills.

Specifically, it is difficult to find:

- Engineers:
 - Electrical engineers are harder to find as they typically go into oil & gas and can make more money in that industry.
 - Structural or Civil engineers
 - Industrial hygiene or environmental engineers
 - EIT engineer in training (electrical mechanical refrigeration) are a big challenge as they have to work professionally for several years and pass several tests before they become certified.
- Manual machinist

Other training opportunities:

- Continuing credit for engineering
- Lean manufacturing
- Construction management
- Construction process training: change orders, process creating change order
- Safety and what it means for the whole company
- Automotive, Auto body repair
- Carpentry
- Pre-engineering program
- General mechanical skills
- Welding
- Diesel technology



HEALTHCARE

- Nurses are still in high demand, specifically RNs and LPNs for Senior Living facilities, BSNs for Hospitals.
 - Entry Level: The programs available at City College and Montana State University have limited capacity that is not meeting demand and programs have applicant waiting lists. There is a great need from the healthcare organizations for Registered Nurses who have earned a Bachelor's of Science in Nursing (BSN) due to changes in the healthcare system. This is severely hindering healthcare employers' talent pipeline.
 - Mid or Senior Level: Experienced nurses are very hard to find and have to be recruited from out of market.
- Healthcare organizations are investing in education options, one hospital has 4 employees who work part-time for the hospital and part-time teaching. In this way they help subsidize the professor's salary, which is a huge issue in attracting qualified professors.
- A proposed new program at MSU Billings will allow students with an RN complete a BSN, this program is anticipated to begin in one year. However this will not increase the capacity of the nursing program, it will allow current RNs the opportunity to complete a bachelor of science in nursing.
- Medical Assistants and Certified Nursing Assistants are difficult to find. Although there are training programs at Billings Adult Education and City College, more training capacity is needed. The increase in wages from this profession are not substantial enough for a positive return on investment for private school tuition. There was a consensus that these programs would be well suited for teaching in high schools and one individual commented they had worked with a successful program in another part of the country.
- There are many changes happening in the healthcare field (technology, electronic medical records, patient centered care, Affordable Care Act) that college curriculum must keep pace with.
- Initial training periods for new nurses is 13 to 16 weeks, however it usually takes one year before they are considered fully competent. Attendees suggested the following options for helping to decrease needed training times:
 - Create more real life situations in classroom: Interfacing with a real person is intimidating, even something as simple as asking and answering questions can be beneficial training (role playing for skills building).
 - Teach how to communicate in challenging situations without being confrontational: communicating with doctors can be intimidating.
 - Safety: how to lift patients and reduce injury rate to staff members.

Other training needed:

- Phlebotomy
- Respiratory Therapists
- Medical Coding
- Dental Assistant
- Radiology Technologist
- Pharmacy Technician



HOSPITALITY/RETAIL

- This industry segment employs a large variety of skilled individuals, from formerly incarcerated individuals, to high school graduates to engineers and CPAs.
- The applicant pool for entry level workers is better with the slow-down in the Bakken, however employers are not seeing applicants from former Bakken employees. Business is also down since the Bakken slowdown, so there is also a decrease in demand for business.
- Employee turnover is a constant issue. One employer has created a system of rewards to incentivize positive behavior such as showing up on time and providing good customer service.
- Management level workforce is difficult to find. Local applicants don't understand basic business financials: the ability to read and understand a balance sheet or cash flow statement, understanding labor costs, food costs, and profit margins. They also don't understand how to manage people and teams, through leadership, empathy and coaching.
- One business reported hiring two people for every one opening, as most leave after one year when their training is complete. The business does not break even on a person until they are there for two years.
- Affordable housing, transportation and child care are huge barriers for their workers. Several businesses are looking into buying housing to rent to employees to help with both the affordability and transportation issues (positioning housing close to their place of business).
- Most employers at the focus groups have developed some kind of customer service training program for their workers, as customer service/soft skills/employability skills are not found in the workforce. The employer-designed programs provide an opportunity for the Billings community as they could be replicated, scaled or integrated into other training/education programs.
- Employers would like to see more connection with the high schools and training opportunities as well as programs at the local colleges for the hospitality industry.
- Employers would also like to see downtown safety issues addressed. Businesses are being vandalized and employees have safety issues walking to work.
- Attendees reported a challenge with growing local culinary talent due to liquor license restrictions. Due to the high cost and low number of licenses, the current system prevents culinary graduates from being able to open a restaurant and sell liquor. Having a liquor license was seen as crucial to a successful restaurant.

Training programs:

- Hospitality/customer service – this was the most requested course in the survey comments. Comments addressed both teaching it in high schools and as a certificate or Associates Program.



GENERAL THEMES

These themes were expressed in all the industry focus groups regarding education and training:

- Business and technology are changing at a rapid pace. Curriculum needs to keep pace with industry changes and be updated more regularly.
 - The exception was professors or teachers who still work in their field. Attendees reported higher satisfaction with the training of students who are taught by professors who continue to work in their field as they see their curriculum updated more often and understand “real world” skills.
 - Internships are essential as college instruction. Professors who work closely with industry and refer students to internships were highly praised as producing well trained students.
- Colleges must tailor curriculum to the needs of Montana small businesses, focusing on basic skills and fundamentals that students will be able to use in the local market. Curriculum developed for textbooks and classes typically focus on case studies done on large businesses. Small business needs in Billings, Montana are very different than large corporations.
- Students need an understanding of how their role financially impacts the business they are employed by. For example: how slim profit margins are and how an employee’s actions can financially impact the profitability of a business. This can be anything from a CNA not showing up for a shift, to an engineer not following a change order properly, to an IT tech understanding why a business is losing money when their internet access goes down. This is especially important in small businesses.
- Students need a realistic expectation of their skill level after graduating from college. Students are coming out of college believing they are immediately ready to take on high level assignments on their own.
- College classes need to be taught around business schedules for people who are working and going to school:
 - There is a strong desire for online classes, or classes that teach majority online with some physical classes/labs. Need be accessible to people with transportation and child care issues.
 - Shorter term, one year certificates or stackable credentials, that give people who are working more options - don’t need to go back to school all at once.
- Employability and communication skills continue to be an issue. In addition to customer service skills, how to deal with challenging situations without being confrontational. This could be anything from a mechanic communicating repair options to a customer, to a nurse communicating patient needs to a doctor.



PROJECTED DEMAND FOR OCCUPATIONS In Yellowstone County, Montana

While data gathered through primary research such as the BillingsWorks Employer Survey and industry focus groups is the best indicator of skill needs and industry trends, occupational projections also provide insights into the projected growth of occupational groupings in the area. Reviewing occupational projections for Yellowstone County, Montana suggests there will be an average of 3,100 job openings each year between 2016 and 2021 (this is down slightly from the estimation of 4,253 job openings last year as it included the southeast region).

Occupational groups with the greatest growth will be Sales and Related Occupations (2,260), Food Preparation and Serving Related Occupations (2,066), Office and Administrative Support Occupations (1,727), Transportation and Material Moving Occupations (1,097), Healthcare Practitioners and Technical Occupations (1,041), Management Occupations (1,010), Construction and Extraction Occupations (855), Installation, Maintenance, and Repair Occupations (716).

Occupation Snapshot in Yellowstone County, Montana

SOC	Title	Current 2015 Average		Forecast Over the Next 5 Years			
		Empl	Avg. Annual Wages ¹	Repl* Demand	Growth Demand	Total	Avg. Annual Growth Percent
00-0000	Total – All Occupations	85,526	\$42,200	11,497	4,305	15,802	1.0%
41-0000	Sales and Related Occupations	10,659	\$35,200	1,751	509	2,260	0.9%
35-0000	Food Preparation and Serving Related Occupations	8,612	\$21,000	1,679	387	2,066	0.9%
43-0000	Office and Administrative Support Occupations	12,570	\$33,200	1,421	306	1,727	0.5%
53-0000	Transportation and Material Moving Occupations	6,545	\$36,900	855	242	1,097	0.7%
29-0000	Healthcare Practitioners and Technical Occupations	5,386	\$73,300	586	455	1,041	1.6%
11-0000	Management Occupations	4,826	\$89,900	802	208	1,010	0.8%
47-0000	Construction and Extraction Occupations	4,978	\$43,900	470	385	855	1.5%
49-0000	Installation, Maintenance, and Repair Occupations	4,073	\$44,100	502	214	716	1.0%
39-0000	Personal Care and Service Occupations	3,173	\$25,000	456	234	690	1.4%
13-0000	Business and Financial Operations Occupations	3,567	\$64,000	408	212	620	1.2%
25-0000	Education, Training, and Library Occupations	3,444	\$45,700	379	194	573	1.1%

Source: JobsEQ®

* Replacement demand: jobs which need to be filled based on replacing retiring workers.

While occupational projections are helpful in understanding future demand and average openings, there is reason to believe that growth may already be exceeding these projections in the Billings area. For example, according to projection data, there will be about 455 annual job openings for Healthcare Practitioners and Technical Occupations. However, at the time of writing this report (March 2016), there are over 400 open positions with just two of our healthcare providers.



IDENTIFIED GAPS

In 2015 Thomas P. Miller and Associates conducted an in depth review of training gaps based on the information collected through the training provider profiles, employer survey, focus groups, and interviews.

In the information gathered this year confirms these gaps are still relevant and correct, detailed information is included in the previous individual industry sections. Addressing these gaps will take continued effort and focus to create long term solutions.

Billings education and training gaps have been identified:

HEALTHCARE EDUCATION AND TRAINING

Healthcare education and training programs need to be expanded in Yellowstone County. In particular, wait lists demonstrate demand for existing programs at Rocky Mountain College and nursing programs should be expanded at Montana State University – Billings.

Update: *MSU Billings is currently working on a specific pathway from the Associate of Science in Nursing (ASN) degree program to the Bachelor of Science in Nursing (BSN) degree. However this will not increase the capacity of the nursing program, it will allow current RNs to get a needed credential from a local education provider. Medical Assistants and Certified Nursing Assistants are still in high demand and there are successful programs in other regions that are implemented at the high school level which could be used as a model for Billings.*

DEPTH VS. BREADTH IN IT EDUCATION AND TRAINING

The employer focus group and survey responses from IT employers confirmed the need for more specific IT education and training in Yellowstone County. The existing programs provide a good foundation, but individuals should have the opportunity to develop more specific skills and knowledge.

Update: *Entry level IT candidates are being hired based on personality, presentation, aptitude and organic interest in IT, rather than education. A lack of trained IT professionals in the Billings market was the primary reason for this hiring method. Another reason identified was existing post-secondary programs (at the certificate and associate level) provide a broad range of IT knowledge, but not the depth of knowledge needed in specific areas. One proposed solution is a combination of a Certificate of Applied Science degree and concurrent on-the-job training.*

EDUCATION AND TRAINING PROGRAMS FOR SKILLED TRADES

At MSU-Billings, there were 92 certificates and associate degrees completed in 2013-2014 in engineering-related fields and skilled trades (Engineering Technology & Engineering-Related Fields, Construction Trades, Mechanic & Repair Technologies and Technicians, and Precision Production). With an estimated 802 average annual openings in related occupations between 2012 and 2022, the training and education outputs will not keep up with employer demand. Enrollment and training capacity in these programs need to be significantly increased.

Update: *The skilled trades have seen some improvement in the supply of talent over the last year, however the larger issue of a narrow supply of talent still exists. Increasing the interest and exposure of skilled trade positions to potential students remains a priority. Opportunities identified during the focus groups were: potential apprenticeship programs and increased exposure of the programs offered at the Career Center and City College.*



EMPLOYABILITY SKILLS TRAINING

Employers have voiced loudly the lack of employability skills within the existing workforce. The challenge, however, is that employability skills are not ideally developed through a singular training programs or curriculum. Instead, employability skills training is most successful when it is embedded throughout an entire career pathway and used as a foundation for academic, technical, and industry-specific skills. Therefore, all education and training providers in Yellowstone County should consider embedding employability skills within their curriculum.

Update: The BillingsWorks Employer Survey now has 2 years of data which show job candidates lack of employability skills remain a top issue for employers. Education and training providers must assess their current programs effectiveness and make necessary adjustments to ensure these programs are delivering measureable outcomes.

RETAINING “TALENT IN TRANSITION”

In 2014, approximately 2,352 local students (1,661 high school students and 1,191 post-secondary graduates) transitioned from education. For BillingsWorks and its employer partners, it is critical that this “talent in transition” is transitioned either into a) further education and training within Yellowstone County or b) connected to career opportunities within Yellowstone County. Due to the severity of employer workforce needs, it is important that as many individuals within the talent pipeline are retained within the Billings talent pool.

Of the 2013-2014 class, 50 percent of MSU-Billings baccalaureate graduates, 66 percent of City College graduates, and 51 percent of Rocky Mountain College graduates remained located in the Billings community after graduation. Assuming on average that 50 percent of the postsecondary graduates stay in Billings after matriculating, this means approximately 595 are leaving Billings for employment or further education elsewhere. BillingsWorks and its partners need to increase connections between employers and these emerging graduates and promote the benefits of living and working in the Billings community to them.

Update: Comments from the survey and focus groups spoke to hiring needs that cannot be filled by local training providers (ex: engineers, doctors, etc) and must come from other areas. According to a report from the Montana University System (MUS), there are currently 2,464 Billings High School graduates enrolled at campuses across the MUS system, for example: there are 672 at MSU in Bozeman and 406 at UM in Missoula. These students are another talent pipeline for Billings. Efforts must both keep local talent and attract additional talent to Billings.

CLEAR MECHANISM FOR UNDERSTANDING INDUSTRY NEEDS

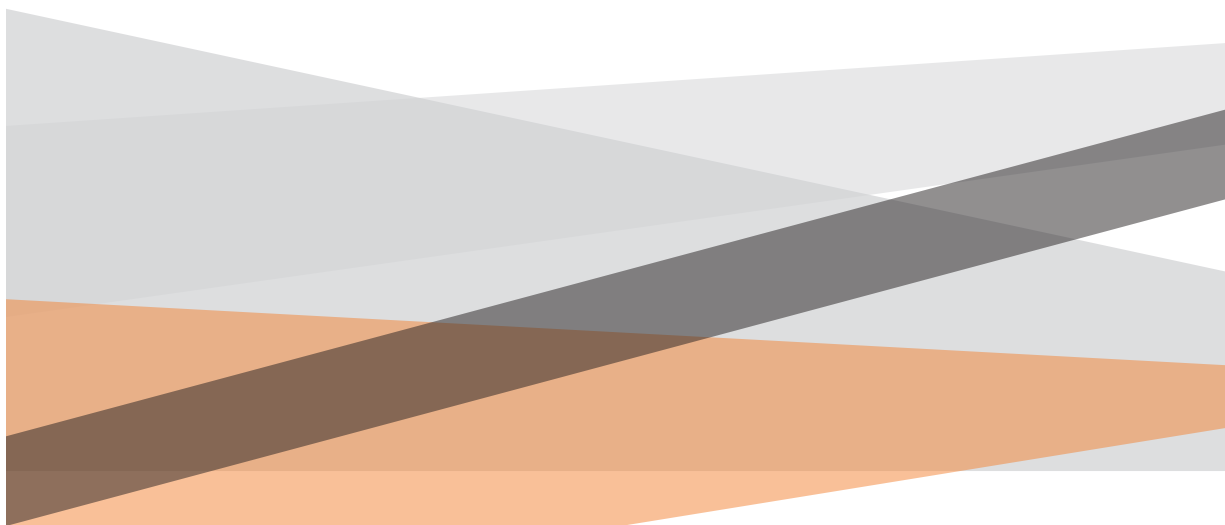
While MSU-Billings and the Billings Career Center have active advisory boards that help to validate curriculum, there is not a clear way for employers to connect with education providers to share their sector-specific training and skill needs. In focus groups, employers talked about a lack of coordination among training providers. Whether this is real or perceived, it speaks to the need to clarify the process for employers to share their industry-specific skill needs with education, which in turn can be used to inform career pathways and curriculum. BillingsWorks can help to facilitate a sector or industry-specific focus group to provide on-going, real-time feedback to the community’s education and training providers.

Update: BillingsWorks currently has both education and business leaders engaged in addressing this issue and there have been several meetings exploring pilot programs with the Career Center and City College. However, a routine mechanism or program needs to be established to address the curriculum development based on employer identified needs and skills.



Appendix C

Workforce Indicators for Peer Communities





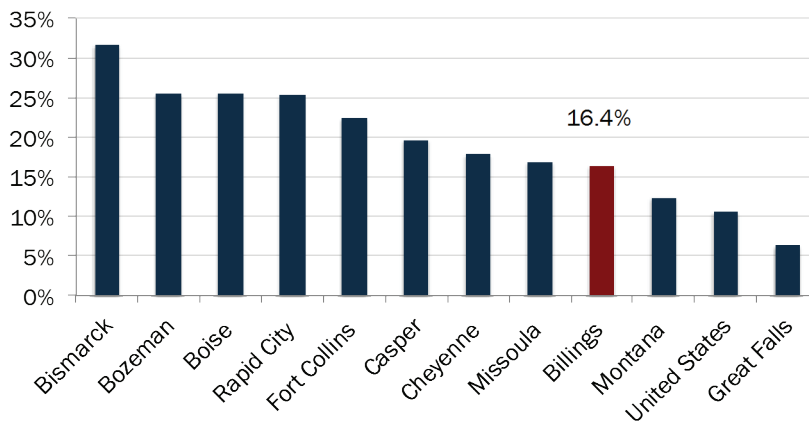
WORKFORCE INDICATORS AND BENCHMARKING DATA

The BillingsWorks Workforce Council is interested in understanding where its peer communities are in regard to the workforce indicators identified in its State of the Workforce Report. Big Sky Economic Development produces a yearly Economic Pulse which follows economic trends in Billings and nine peer communities. Ten of the data points they track relate directly to workforce indicators and provide a regional perspective for talent attraction and workforce issues. The peer communities included are:

- Bismarck, SD
- Boise, ID
- Bozeman, MT
- Casper, WY
- Cheyenne, WY
- Fort Collins, CO
- Great Falls, MT
- Missoula, MT
- Rapid City, SD

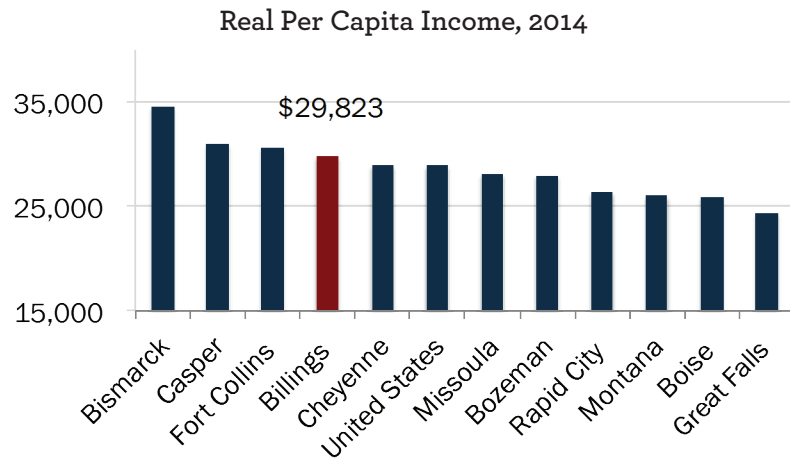
Demographic Indicators

Total Population Growth, 2005 – 2014

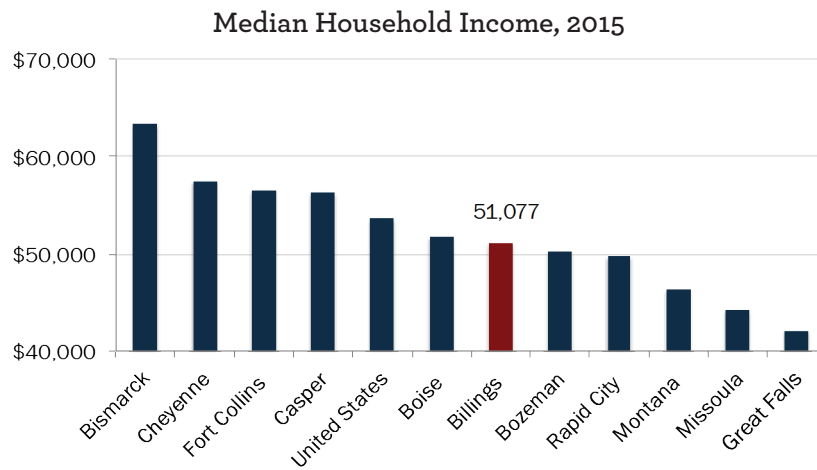




Housing Indicators

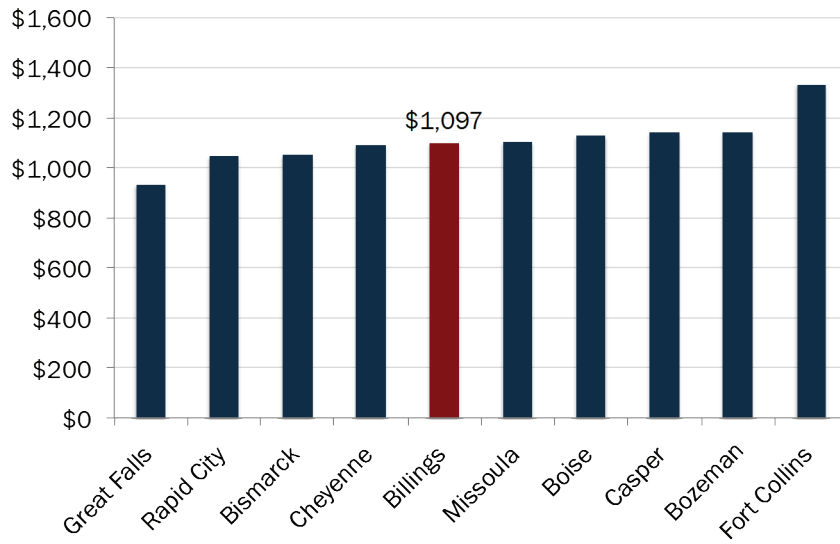


This means the average income per person in a city, region, or country and is used to evaluate quality of life and living conditions for different areas. Can be calculated for example for a country by dividing country's national income by population. – Google

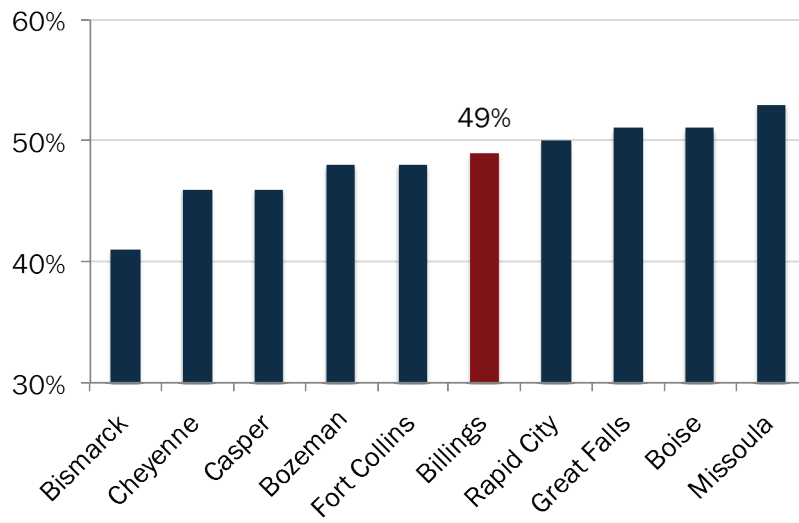




Average Monthly Housing Cost, 2013

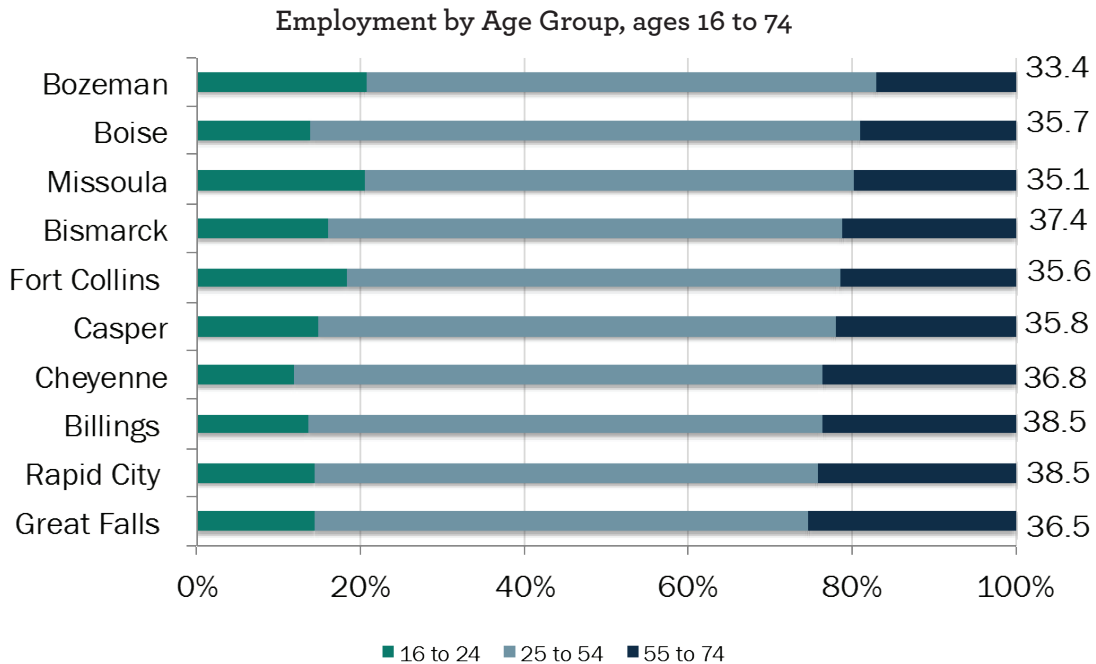
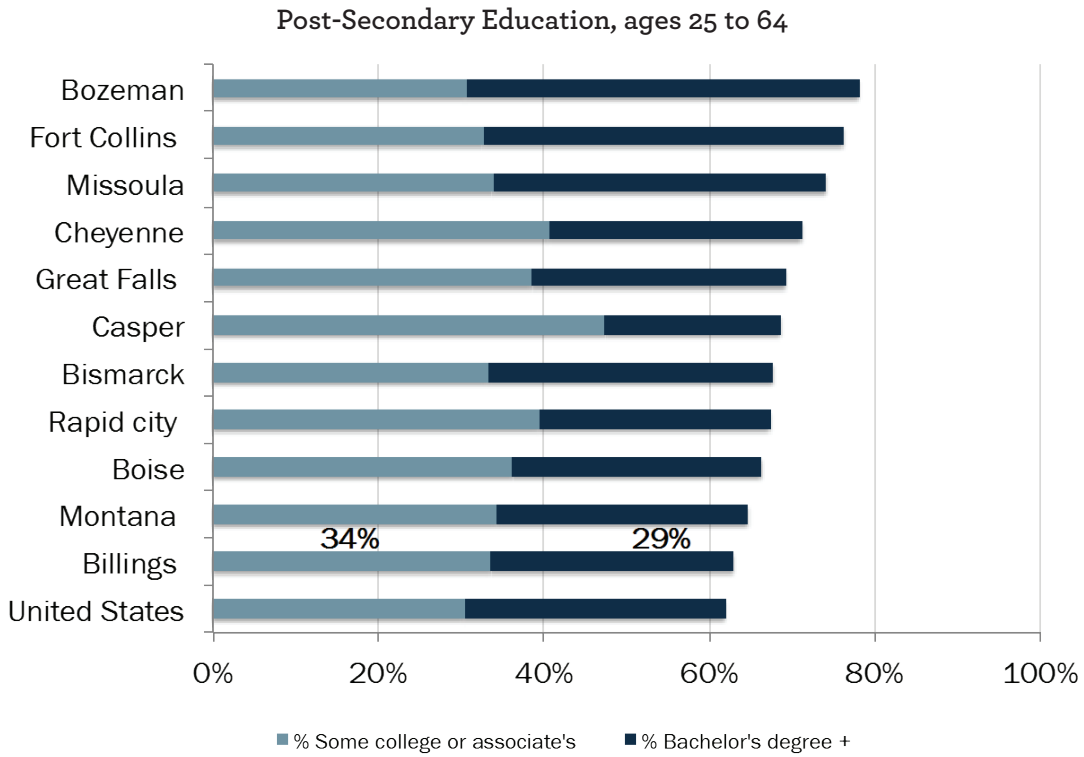


Percent of Income Spent on Housing and Transportation, 2013



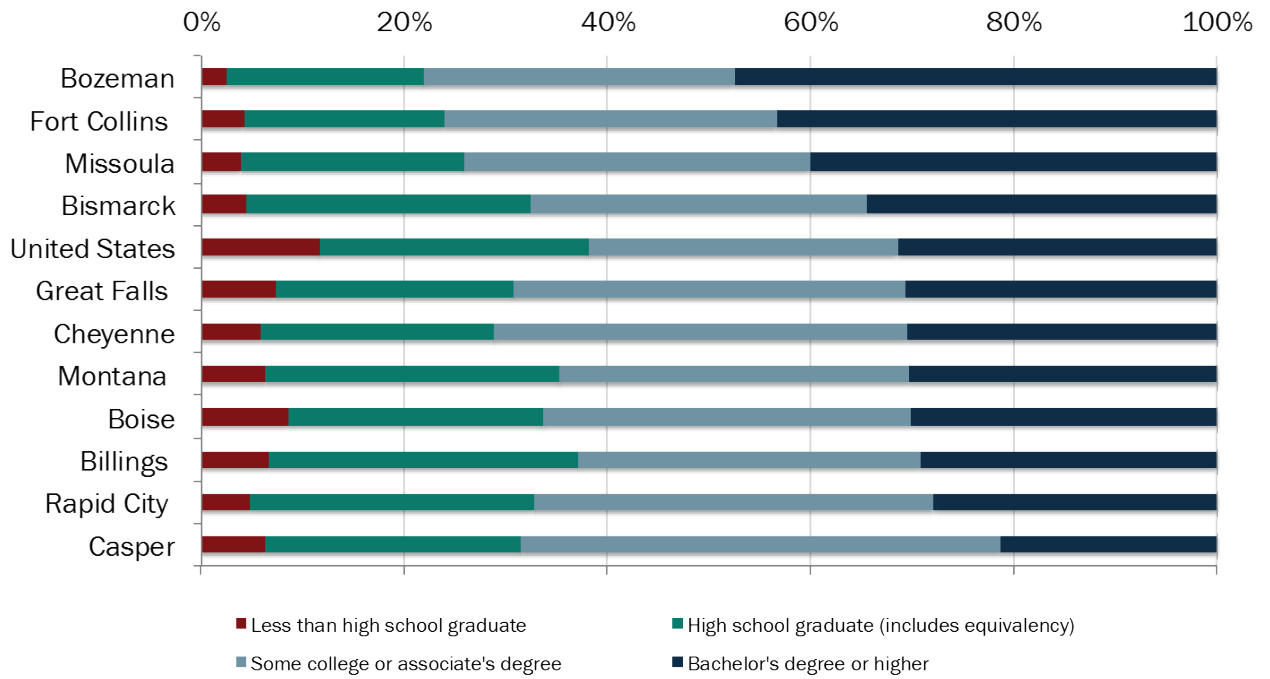


Education Indicators

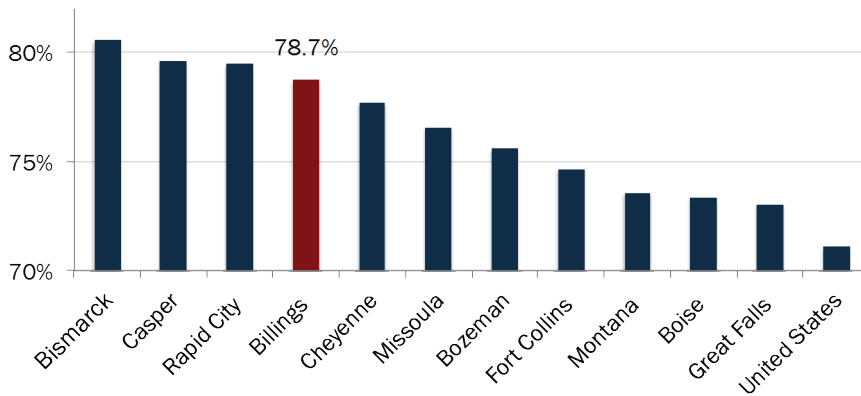




Educational Attainment, ages 25 to 64

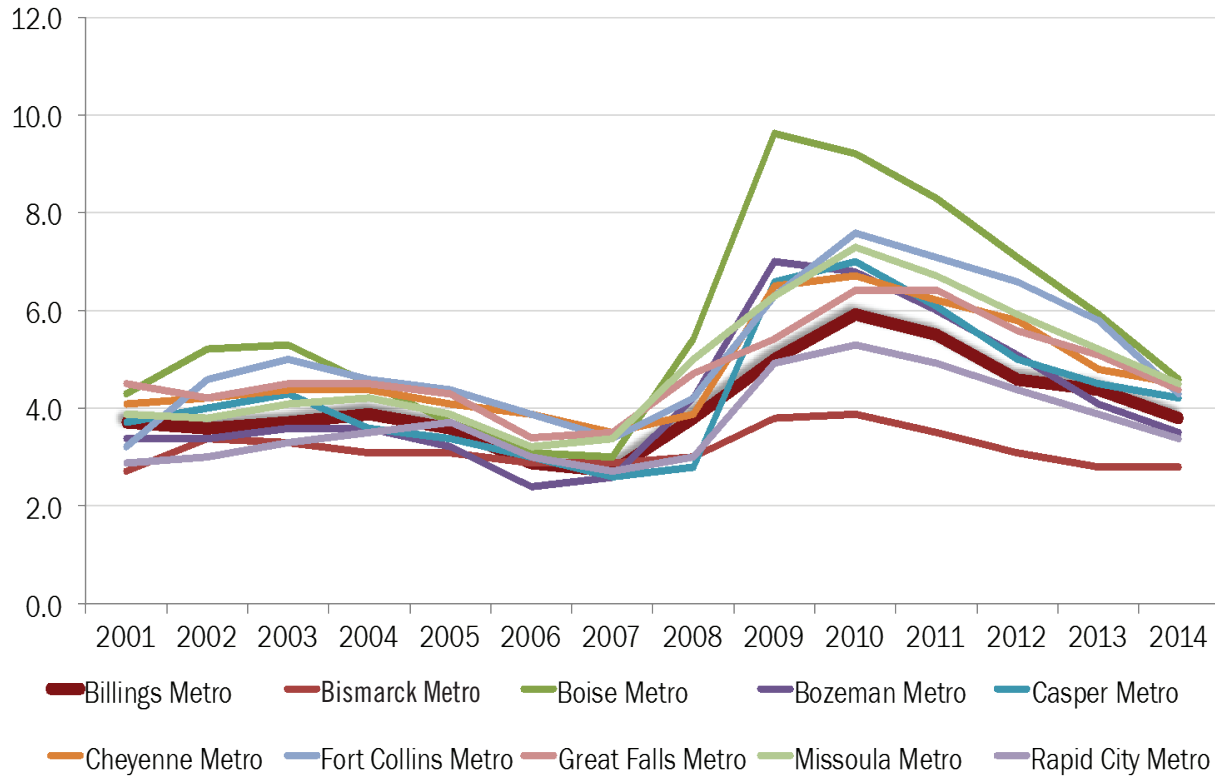


Employment to Population Ratio, 2014





Unemployment Rate, 2001 – 14



2015 Employment by Occupation (for MSAs) Occupation Snapshot, Fourth Quarters Ending with 2015

SOC	Title-Occupation	Billings, MT	Missoula, MT	Boise City, ID	Fort Collins, CO	Bismarck, ND	Rapid City, SD	Casper, WY	Cheyenne, WY	Great Falls, MT	Montana	USA
11-0000	Management Occupations	5,320	3,469	18,892	9,607	4,970	4,303	2,389	2,898	2,265	35,904	9,083,059
13-0000	Business and Financial Operations Occupations	3,674	2,616	14,367	6,997	3,878	3,123	1,700	2,524	1,746	20,798	7,343,841
15-0000	Computer and Mathematical Occupations	1,801	1,207	7,439	4,903	1,719	1,057	552	973	571	8,989	4,123,961
17-0000	Architecture and Engineering Occupations	1,464	740	6,329	3,540	1,312	885	755	706	413	6,871	2,542,390
19-0000	Life, Physical, and Social Science Occupations	587	659	2,244	1,931	633	449	387	514	263	4,230	1,204,787
21-0000	Community and Social Service Occupations	1,365	1,362	5,178	2,196	1,734	1,211	749	1,120	789	9,182	2,392,350
23-0000	Legal Occupations	618	620	2,323	869	617	487	294	589	333	3,820	1,195,825
25-0000	Education, Training, and Library Occupations	3,678	3,633	15,413	11,160	4,831	3,706	2,406	3,539	1,961	27,425	8,539,618
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	1,271	1,236	4,746	3,029	1,144	1,090	541	648	530	7,821	2,620,072
29-0000	Healthcare Practitioners and Technical Occupations	5,514	3,707	18,551	7,715	5,314	4,958	2,410	2,713	2,789	29,188	8,455,969
31-0000	Healthcare Support Occupations	2,617	1,901	9,095	4,288	2,795	1,983	1,197	1,221	1,216	14,282	4,407,068
33-0000	Protective Service Occupations	1,513	973	5,465	3,184	1,598	1,318	734	1,179	794	10,157	2,911,652
35-0000	Food Preparation and Serving Related Occupations	9,064	6,327	24,712	16,467	6,298	7,601	3,929	4,308	3,885	47,403	12,858,677
37-0000	Building and Grounds Cleaning and Maintenance Occupations	3,177	2,345	11,136	5,955	2,740	2,827	1,531	1,705	1,369	19,339	5,449,522
39-0000	Personal Care and Service Occupations	3,326	2,752	11,064	5,534	3,119	2,560	1,398	1,611	1,659	19,346	5,971,158
41-0000	Sales and Related Occupations	10,970	7,479	33,824	17,493	8,269	8,835	5,000	4,848	4,593	54,552	15,776,229
43-0000	Office and Administrative Support Occupations	12,944	9,463	46,882	22,660	11,617	10,592	6,172	7,497	5,768	70,072	22,650,708
45-0000	Farming, Fishing, and Forestry Occupations	366	276	3,849	640	226	240	117	255	155	4,270	982,914
47-0000	Construction and Extraction Occupations	5,246	2,720	15,684	8,926	4,551	4,057	4,147	3,086	2,014	30,379	6,680,685
49-0000	Installation, Maintenance, and Repair Occupations	4,194	2,287	11,653	6,062	3,157	2,945	2,538	2,193	1,622	21,463	5,770,011
51-0000	Production Occupations	3,631	1,949	16,928	8,263	2,543	2,679	2,014	1,543	1,234	18,988	9,412,396
53-0000	Transportation and Material Moving Occupations	6,727	3,811	19,844	8,121	4,724	4,180	3,237	4,137	2,301	31,671	10,135,559
00-0000	Total – All Occupations	89,068	61,534	305,620	159,541	77,788	71,084	44,196	49,808	38,272	496,151	150,508,452

Source: JobsEQ®

Data as of 2015Q4 unless noted otherwise

Note: Figures may not sum due to rounding.

1. Occupation wages are as of 2014 and should be taken as the average for all Covered Employment

Exported on: Wednesday, March 30, 2016 5:54 PM

Note: Data is only available for MSA level; data not available for Bozeman, MT.



BillingsWorks
Workforce Council



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